

Melbourn, Frank@Waterboards

From: Melbourn, Frank@Waterboards
Sent: Monday, February 02, 2015 2:16 PM
To: Keith Garner (KGarner@sheppardmullin.com)
Cc: Arias, Christina@Waterboards (Christina.Arias@waterboards.ca.gov); Becker, Eric@Waterboards (Eric.Becker@waterboards.ca.gov); Gibson, David@Waterboards (David.Gibson@waterboards.ca.gov); Hagan, Catherine@Waterboards (Catherine.Hagan@waterboards.ca.gov); Kelley, Brian@Waterboards (brian.kelley@waterboards.ca.gov); Clemente, Chiara@Waterboards (Chiara.Clemente@waterboards.ca.gov)
Subject: Final Signed Settlement Agreement for Casa Mira View Project
Attachments: 2015-02-02 Settlement Transmittal.pdf; 2014-12-12 Tech analysis.pdf; Exhibits 1-16.pdf; 2015-01-29 Final signed Stip ACL.pdf

Hi Keith,

Attached is the final signed settlement agreement for the Casa Mira View Project along with its attachments.

Please email me confirmation that you received this email, and that you were able to open the attached PDF files and read them.

Thanks,

Frank

Frank Melbourn

Water Resource Control Engineer

California Regional Water Quality Control Board
San Diego Region
2375 Northside Drive, Suite 100
San Diego, CA 92108

Tele (Direct Line): 619-521-3372

Tele (Front Desk): 619-516-1990

E-mail: FMelbourn@waterboards.ca.gov

Office Web Site: www.waterboards.ca.gov/sandiego/





California Regional Water Quality Control Board, San Diego Region

February 2, 2015

Via Email

Mr. Keith Garner, Esq.
Sheppard Mullin Richter & Hampton LLP
Four Embarcadero Center, 17th Floor
San Francisco, California 94111-4109
kgarner@sheppardmullin.com

In reply refer to: SM-727439:FMelbourn

Final Adopted Stipulated Administrative Civil Liability Order No. R9-2014-0044 Scripps Mesa Developers, LLC, Casa Mira View Project

Mr. Garner:

Attached find Settlement Agreement and Stipulation for Entry of Administrative Civil Liability Order No. R9-2014-0044 (Order), Scripps Mesa Developers, LLC, Casa Mira View Project, San Diego County, with attachments. The Order was adopted on January 29, 2015, by the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) by way of Executive Officer approval pursuant to San Diego Water Board Resolution No R9-2014-0046.

As required by the Order, payment of \$286,324 is payable to the California State Water Resources Control Board's Cleanup and Abatement Account. Payment must be submitted to the following address within thirty (30) days of adoption:

State Water Resources Control Board
Accounting Office
Attn: ACL Payment
PO Box 1888
Sacramento, CA 95812-1888

Additionally, upon payment please email me a Portable Document Format (PDF) file copy of the check to both of the email addresses below.

In the subject line of any response, please include the reference number SM-727439:FMelbourn. Written responses shall be sent via email to SanDiego@waterboards.ca.gov. For questions or comments, please contact me by telephone at (619) 521-3372, or by email at fmelbourn@waterboards.ca.gov.

Respectfully,



FRANK T. MELBOURN
Water Resource Control Engineer
Compliance Assurance Unit

FTM:cmc:ftm

Enclosure: Final Adopted Stipulated ACL Order No. R9-2014-0044
Technical Analysis
Exhibits

cc: Christina Arias, San Diego Water Board, carias@waterboard.ca.gov
Eric Becker, San Diego Water Board, ebecker@waterboards.ca.gov
David Gibson, San Diego Water Board, dgibson@waterboards.ca.gov
Catherine Hagan, State Water Resources Control Board, chagan@waterboards.ca.gov
Brian Kelley, San Diego Water Board, bkelly@waterboards.ca.gov

Technical Staff Information & Use	
Order No.	R9-2014-0044
WDID	9 37C353628
SMARTS Enforcement ID	418126

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION**

**SETTLEMENT AGREEMENT AND STIPULATION FOR ENTRY OF
ADMINISTRATIVE CIVIL LIABILITY ORDER NO. R9-2014-0044
IN THE MATTER OF
SCRIPPS MESA DEVELOPERS, LLC**

**CASA MIRA VIEW PROJECT
SAN DIEGO COUNTY**

INTRODUCTION

This Settlement Agreement and Stipulation for Entry of Administrative Civil Liability Order ("Stipulated Order") is entered into by and between the Assistant Executive Officer of the California Regional Water Quality Control Board, San Diego Region ("San Diego Water Board"), on behalf of the San Diego Water Board Prosecution Team ("Prosecution Team"), and Scripps Mesa Developers, LLC ("Discharger") (collectively, "Parties") and is presented to the San Diego Water Board, for adoption as an order, by settlement, pursuant to Government Code section 11415.60.

RECITALS

1. Garden Communities is constructing a 2,200 unit apartment community, referred to as Casa Mira View (Casa Mira View, Project, or Site) located on 41.31 acres within the City of San Diego's Mira Mesa community at 11241, 11267, and 11285 Westview Parkway, San Diego, California 92126.
2. The Project developer is Garden Communities. Scripps Mesa Developers, LLC (Phase 2 and 3) and Scripps Mesa Developers II, LLC (Phase 1) own the properties that make up the Project, and all three entities are owned by the same parent company.
3. On August 19, 1999, the California State Water Resources Control Board (State Water Board) adopted *Order No. 99-08-DWQ, National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000002, Waste Discharge Requirements (WDRs) for Discharges of Storm Water Runoff Associated with Construction Activity*.
4. On October 1, 2008, Stuart Posnock, acting as the property owners' and developer's representative, filed a Notice of Intent (NOI) to comply with the waste discharge requirements of Order No. 99-08-DWQ for the Project with the State Water Board. The NOI stated that construction activities would begin in November 2008.
5. On October 7, 2008, the State Water Board processed the NOI and assigned Waste Discharge Identification (WDID) No. 9 37C353628 to the Project.

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6. On September 2, 2009, the State Water Board adopted *National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, Order No. 2009-0009-DWQ, NPDES No. CAS000002* (Construction Storm Water Permit) and it became effective on July 1, 2010. The Construction Storm Water Permit replaced Order No. 99-08-DWQ. Furthermore, the Construction Storm Water Permit was amended by Order Nos. 2010-0014-DWQ and 2012-0006-DWQ.
7. Construction Storm Water Permit section V.A.2. requires the implementation of best management practices (BMPs), using best available technology economically achievable (BAT) and best conventional pollutant control technology (BCT) to reduce pollution from storm water runoff from construction sites. Furthermore, Construction Storm Water Permit section VIII requires dischargers to calculate the site's Risk Level based upon "the site's sediment risk and receiving water risk during periods of soil exposure (i.e. grading and site stabilization)."
8. On June 30, 2010, Stuart Posnock, the approved signatory of Scripps Mesa Developers, LLC, the Legally Responsible Person (LRP) for the Project, certified the Project under the Construction Storm Water Permit, and characterized the Project as being "Risk Level 3."
9. The Site lies within the Miramar Reservoir Hydrologic Area (HA) (906.10) of the Peñasquitos Hydrologic Unit. Storm water discharges from the Site drain to an unnamed tributary to Los Peñasquitos Creek. Los Peñasquitos Creek is a federal Clean Water Act section 303(d) listed impaired water body for turbidity. Los Peñasquitos Creek discharges into Los Peñasquitos Lagoon, which is a federal Clean Water Act section 303(d) listed impaired water body for sedimentation/silt, and a designated Natural Preserve by the State Park and Recreation Commission. Los Peñasquitos Creek and Los Peñasquitos Lagoon are waters of the United States and waters of the State.
10. The Water Quality Control Plan for the San Diego Basin (Basin Plan) designates the following beneficial uses for the "unnamed tributary 6.10" to Los Peñasquitos Creek:
 1. Agricultural Supply (AGR);
 2. Industrial Service Supply (IND);
 3. Contact Water Recreation (REC-1);
 4. Non-contact Water Recreation (REC-2);
 5. Warm Freshwater Habitat (WARM);
 6. Wildlife Habitat (WILD); and
 7. Rare, Threatened, or Endangered Species (RARE).

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11. The San Diego Water Board inspected the Site on October 25, 2010; November 22, 2010; January 9, 2014; January 14, 2014; and September 30, 2014.
12. The San Diego Water Board issued to the Discharger Notice of Violation (NOV) No. R9-2010-0146 on November 3, 2010; and NOV No. R9-2014-0018 to Garden Communities on February 18, 2014.
13. On March 7, 2014, Garden Communities, at the request of the San Diego Water Board, submitted their weekly Qualified Storm Water Pollution Prevention Plan (SWPPP) Practitioner (QSP) inspection reports from October 2013 through January 2014.
14. The San Diego Water Board invested 152.5 staff hours to investigate, prepare enforcement documents, and consider this action for a total cost of \$10,874.
15. Discharger is alleged to have violated provisions of law for which the San Diego Water Board may impose civil liability pursuant to section 13385 of the California Water Code (Water Code).

The Prosecution Team alleges the following violations, set forth in full in the attached Technical Analysis, by the Discharger:

16. Violation No. 1: Discharge of Sediment Laden Storm Water: (1 day)
Discharger discharged sediment laden storm water from the Site into a Caltrans storm drain inlet on October 25, 2010, in violation of Water Code section 13376; Title 40 Code of Federal Regulations Parts 122, 123, and 124 as required under federal Clean Water Act section 301; Construction Storm Water Permit sections III.A., III.B., J.58., and V.A.2; and Basin Plan Prohibition Numbers 1, 3, 7, 8, and 14. The Discharger ceased the discharge upon the San Diego Water Board's discovery and direction. The Caltrans storm drain inlet is connected and discharges to an unnamed tributary of Los Peñasquitos Creek. Discharger's action resulted in one (1) day of violation.
17. Violation No. 2: Failure to Monitor Storm Water Effluent: (1 day)
Discharger discharged sediment laden storm water into the Caltrans storm drain inlet without sampling first on October 25, 2010. Sampling and analysis of collected storm water runoff is required to characterize the effluent prior to discharge. Therefore Discharger is in violation for one (1) day of Construction Storm Water Permit Attachment E. sections I.5.b. and I.6.b.

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18. Violation No. 3: Failure to Implement Erosion Control BMPs: (2 days)
On October 25, 2010, the San Diego Water Board inspected the Site and observed numerous finished slopes with no erosion control BMPs in violation of Construction Storm Water Permit Attachment E. section D.2. The Discharger corrected the violation on October 27, 2010. Therefore Discharger is in violation for two (2) days; October 25, and 26, 2010.
19. Violation No. 4: Failure to implement Sediment Control BMPs: (3 days)
On October 25, 2010, the San Diego Water Board inspected the Site and observed sediment in the street and on the sidewalk along the unprotected Site perimeter due to the lack of sediment control BMPs (e.g. gravel bags and fiber rolls) in violation of Construction Storm Water Permit Attachment E. section E.1. Furthermore, sediment was observed to be tracked onto the street at the Site construction entrance due to a failure to maintain the entrance gravel. The Discharger corrected the violation on October 28, 2010. Therefore Discharger is in violation for three (3) days; October 25, 26, and 27, 2010.
20. Violation No. 5: Failure to Implement Erosion Control BMPs: (11 days)
The January 2, 2014, QSP Site inspection report documented exterior slopes without erosion control. On January 9, 2014, the San Diego Water Board inspected the Site and observed the same exterior slopes without erosion control. The failure to implement erosion control BMPs is a violation of Construction Storm Water Permit Attachment E. section D.2. The Discharger corrected the violation on January 13, 2014. Therefore Discharger is in violation for eleven (11) days; January 2 through 12, 2014.
21. Violation No. 6: Failure to Maintain Sediment Control BMPs: (14 days)
Site inspection reports by Discharger's QSP documented the failure to maintain silt fencing, inlet protection, and fiber rolls on October 7 and 24, 2013; November 5, 12, 19, and 25, 2013; December 3, 9, 18, and 26, 2013; and January 2 and 8, 2014. Furthermore, the San Diego Water Board documented the failure to maintain silt fencing during a January 9, 2014, inspection; and a lack of entrance sediment control BMPs during a January 14, 2014, inspection. Therefore, Discharger was in violation of Construction Storm Water Permit Attachment E. sections E.1., E.3., and E.6. for fourteen (14) days.

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22. Violation No. 7: Failure to Implement Housekeeping BMPs: (16 days)
Site inspection reports by Discharger's QSP documented uncontrolled debris, uncovered waste dumpsters, dirt tracked into the street at construction entrances, and leaking concrete washout bins on October 7, 15, 24, and 29, 2013; November 5, 12, 19, 22, and 25, 2013; December 3, 9, 18, and 26, 2013; and January 2 and 8, 2014. Furthermore, the San Diego Water Board documented widespread debris during a January 9, 2014, inspection. Therefore, Discharger was in violation of Construction Storm Water Permit Attachment E. sections B.1., B.1.e., B.2.d., and B.2.i. for sixteen (16) days.
23. Violation No. 8: Failure to Complete Inspection Checklist: (12 days)
The submitted QSP inspection reports on the following dates did not include "implementation dates:" October 7, 15, and 24, 2013; November 5, 12, 19, and 25, 2013; December 3, 9, 18, and 26, 2013; and January 2, 2014. Therefore it is unclear whether the recommended corrective actions for noted "failures or other shortcomings" were completed. Discharger was in violation for twelve (12) days of Construction Storm Water Permit Attachment E. sections G.2., G.4. and G.5.g.
24. Pursuant to Water Code section 13385(a), a person that violates Water Code section 13376, a waste discharge requirement, or a requirement of section 301 of the federal Clean Water Act is subject to administrative civil liability pursuant to Water Code section 13385(c) "in an amount not to exceed the sum of both of the following: (1) ten thousand dollars (\$10,000) for each day in which the violation occurs. (2) where there is a discharge, any portion of which is not susceptible to cleanup or is not cleaned up, and the volume discharged but not cleaned up exceeds 1,000 gallons, an additional liability not to exceed ten dollars (\$10) multiplied by the number of gallons by which the volume discharged but not cleaned up exceeds 1,000 gallons."
25. The alleged violations constitute violations subject to Water Code section 13385. Therefore, the maximum liability that the San Diego Water Board may assess pursuant to Water Code section 13385(c) is summarized in Table 1, Maximum and Minimum Liability Amounts.
26. Water Code section 13385(e) requires that when pursuing civil liability under section 13385, "at a minimum, liability shall be assessed at a level that recovers the economic benefit, if any, derived from the acts that constitute the violation." The Enforcement Policy requires that the adjusted Total Base Liability shall be at least ten percent (10%) higher than the economic benefit. Therefore, the minimum liability that the San Diego Water Board shall assess pursuant to Water Code section 13385(e) is summarized in Table 1. Maximum and Minimum Liability Amounts.

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Table 1. Maximum and Minimum Liability Amounts

Violation	Days	Liability	
		Maximum	Minimum
1. Discharge of Sediment Laden Storm Water	1	\$10,000	\$0
2. Failure to Monitor Storm Water Effluent	1	\$10,000	\$2,676
3. Failure to Implement Erosion Control BMPs	2	\$20,000	\$204
4. Failure to implement Sediment Control BMPs	3	\$30,000	\$1,434
5. Failure to Implement Erosion Control BMPs	11	\$110,000	\$21
6. Failure to implement Sediment Control BMPs	14	\$140,000	\$10
7. Failure to Implement Housekeeping BMPs	16	\$160,000	\$484
8. Failure to Complete Inspection Checklist	12	\$120,000	\$1,362

27. To resolve the alleged violations set forth above in this Stipulated Order, without formal administrative proceedings, the Parties have agreed to the final imposition of **two hundred eighty-six thousand three hundred twenty-four dollars (\$286,324)** in liability against the Discharger pursuant to Water Code section 13385 and Government Code section 11415.60. The liability amount includes ten thousand eight hundred seventy-four dollars (\$10,874) in San Diego Water Board staff costs. Table 2. Penalty Summary, provides a breakdown of the liabilities. The Prosecution Team calculated the administrative civil liability penalty under Water Code section 13385 in accordance with the Water Quality Enforcement Policy. A full discussion of the penalty calculation factors can be found in Attachment A, incorporated herein by reference as if set forth in full.

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Table 2. Penalty Summary

Alleged Violation	Days of Violation	Liability Per Day of Violation	Liability Amount
1. Discharge of Sediment Laden Water, October 25, 2010.	1	\$3,300	\$3,300
2. Failure to Monitor Storm Water Effluent, October 25, 2010.	1	\$8,250	\$8,250
3. Failure to Implement Erosion Control BMPs, October 25-26, 2010.	2	\$4,550	\$9,100
4. Failure to Implement Sediment Control BMPs, October 25-27, 2010.	3	\$4,550	\$13,650
5. Failure to Implement Erosion Control BMPs, January 2-12, 2014.	11	\$4,550	\$50,050
6. Failure to Maintain Sediment Control BMPs, October 7, and 24, 2013; November 5, 12, 19, and 25, 2013; December 3, 9, 18, and 26, 2014; January 2, 8, 9, and 14, 2014.	14	\$4,550	\$63,700
7. Failure to Implement Housekeeping BMPs, October 7, 15, 24, and 29, 2013; November 5, 12, 19, 22, and 25, 2013; December 3, 9, 18, and 26, 2014; January 2, 8, and 9, 2014.	16	\$4,550	\$72,800
8. Failure to Complete Inspection Checklist (12 Weekly Reports), October 7, 2013, through January 2, 2014.	12	\$4,550	\$54,600
Total Base Liability Amount			\$275,450
Staff Costs			\$10,874
Total Liability			\$286,324

28. Based on the information in the record, the Prosecution Team determined that the above resolution of the alleged violations is fair and reasonable, and fulfills the enforcement objectives of Water Code sections 13000 et seq., and the *Water Quality Enforcement Policy*, and satisfies the objectives and requirements of the federal Clean Water Act as implemented by the foregoing, and that no further action is warranted concerning the alleged violations except as provided in this Stipulated Order, and that this Stipulated Order is in the best interest of the public.

**Settlement Agreement and
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STIPULATIONS

The Parties stipulate to the following:

29. Party Contact Information:

For the San Diego Water Board: Frank Melbourn
2375 Northside Drive, Suite 100
San Diego, CA 92108
(619) 521-3372
fmelbourn@waterboards.ca.gov

For the Discharger: Keith Garner
Sheppard Mullin Richter & Hampton LLP
Four Embarcadero Center, 17th Floor
San Francisco, CA 94111
(415) 774-2991
kgarner@sheppardmullin.com

30. Administrative Civil Liability: Discharger hereby agrees to the imposition of an administrative civil liability totaling \$286,324 as set forth in Paragraph 27 herein.

31. Payment and Costs: Discharger shall pay the total administrative civil liability amount of two hundred thousand eighty-six three hundred twenty-four dollars (\$286,324) within thirty (30) days of adoption of this Stipulated Order executed by the San Diego Water Board. Payment shall be made by check to the "State Water Board *Cleanup and Abatement Account*". Discharger shall indicate on the check the number of this Stipulated Order (R9-2014-0044) and send it to:

State Water Resources Control Board
Accounting Office
Attn: ACL Payment
PO Box 1888
Sacramento, CA 95812-1888

Discharger shall send a copy of the check to the designated San Diego Water Board Party Contact.

32. Matters Addressed by Stipulation: Upon adoption of this Stipulated Order by the San Diego Water Board, this Stipulated Order represents a final and binding resolution to settle, as set forth herein, all claims, violations, or causes of action as alleged. The provisions of this paragraph are expressly conditioned on the payment of the administrative civil liability as provided herein by the deadlines specified in this Stipulated Order, and the Discharger's full satisfaction of the obligations described in this Stipulated Order.

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33. Compliance with Applicable Laws: Discharger understands that payment of the administrative civil liability in accordance with the terms of this Stipulated Order and/or compliance with the terms of this Stipulated Order is not a substitute for compliance with applicable laws, and that continuing violations of the type alleged in this Stipulated Order may subject them to further enforcement, including additional administrative civil liability.
34. Attorney's Fees and Costs: Except as otherwise provided herein, each Party shall bear its attorney's fees and costs arising from the Party's own counsel in connection with the matters set forth herein.
35. In consideration of Discharger's compliance with this Stipulated Order, the Prosecution Team and the San Diego Water Board hereby covenant not to bring any further administrative or judicial enforcement action against the Discharger, whether under California or federal law, concerning the specific violations alleged in this Stipulated Order.
36. No Admission of Liability if Stipulated Order Does Not Take Effect: If this Stipulated Order does not take effect because it is not approved by the San Diego Water Board, or its delegee, or is vacated in whole or in part by the State Water Resources Control Board or a court, Discharger's signature becomes void and the Discharger does not admit or stipulate to any of the findings or allegations in this Stipulated Order, or that it has been or is in violation of the Water Code, or any other federal, state, or local law or ordinance.
37. Public Notice: Discharger understands that the San Diego Water Board will conduct a thirty (30) day public review and comment period prior to consideration and adoption. If significant new information is received that reasonably affects the propriety of presenting this Stipulated Order to the San Diego Water Board, or its delegate, for adoption, the Assistant Executive Officer may unilaterally declare this Stipulated Order void and decide not to present it to the San Diego Water Board. Discharger agrees that it may not rescind or otherwise withdraw their approval of this Stipulated Order.
38. Addressing Objections Raised During Public Comment Period: The Parties agree that the procedures for adopting this Stipulated Order by the San Diego Water Board and review of this Stipulated Order by the public are lawful and adequate. In the event procedural objections are raised prior to the adoption of this Stipulated Order, the Parties agree to meet and confer concerning any such objections and may agree to revise or adjust the procedure as necessary or advisable under the circumstances.

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39. No Waiver of Right to Enforce: The failure of the Prosecution Team or San Diego Water Board to enforce any provision of this Stipulated Order shall in no way be deemed a waiver of such provision, or in any way affect the validity of this Stipulated Order. The failure of the Prosecution Team or San Diego Water Board to enforce any such provision shall not preclude it from later enforcing the same or any other provision of this Stipulated Order.
40. Interpretation: This Stipulated Order shall be construed as if the Parties prepared it jointly. Any uncertainty or ambiguity shall not be interpreted against any one Party.
41. Modification: This Stipulated Order shall not be modified by any of the Parties by oral representation made before or after its execution. All modifications must be in writing, signed by all Parties, and approved by the San Diego Water Board.
42. If Stipulated Order Does Not Take Effect: In the event that this Stipulated Order does not take effect because it is not approved by the San Diego Water Board, or its delegate, or is vacated in whole or in part by the State Water Resources Control Board or a court, the Parties acknowledge that they expect to proceed to a contested evidentiary hearing before the San Diego Water Board and/or a hearing panel to determine whether to assess administrative civil liabilities for the underlying alleged violations, unless the Parties agree otherwise. The Parties agree that all oral and written statements and agreements made during the course of settlement discussions will not be admissible as evidence in the hearing pursuant to Evidence Code section 1152. The Parties agree to waive any and all objections based on settlement communications in this matter, other than Evidence Code section 1152 evidentiary objections, including, but not limited to:
 - a. Objections related to prejudice or bias of any of the San Diego Water Board members or their advisors and any other objections that are premised in whole or in part on the fact that the San Diego Water Board members or their advisors were exposed to some of the material facts and the Parties' settlement positions as a consequence of reviewing the Order, and therefore may have formed impressions or conclusions prior to any contested evidentiary hearing on the violations alleged in this Stipulated Order; or
 - b. Laches or delay or other equitable defenses based on the time period for administrative or judicial review to the extent this period has been extended by these settlement proceedings.

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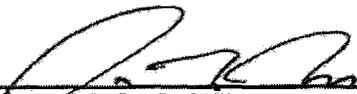
43. Waiver of Hearing: Discharger has been informed of the rights provided by Water Code section 13323(b), and hereby waives its right to a hearing before the San Diego Water Board prior to the adoption of this Stipulated Order by the San Diego Water Board, or its delegate.
44. Waiver of Right to Petition: Discharger hereby waives its right to petition the San Diego Water Board's adoption of this Stipulated Order for review by the State Water Resources Control Board, and further waives its right, if any, to appeal the same to a California Superior Court and/or any California appellate level court.
45. Covenant Not to Sue: Discharger covenants not to sue or pursue any administrative or civil claim(s) against any State Agency or the State of California, its officers, Board Members, employees, representatives, agents, or attorneys arising out of or relating to any matter addressed herein.
46. San Diego Water Board is Not Liable: Neither the San Diego Water Board members nor the San Diego Water Board staff, attorneys, or representatives shall be liable for any injury or damage to persons or property resulting from acts or omissions by the Discharger, its directors, officers, employees, agents, representatives or contractors in carrying out activities pursuant to this Stipulated Order, nor shall the San Diego Water Board, its members or staff be held as parties to or guarantors of any contract entered into by the Discharger, its directors, officers, employees, agents, representatives or contractors in carrying out activities pursuant to this Stipulated Order.
47. Authority to Bind: Each person executing this Stipulated Order in a representative capacity represents and warrants that he or she is authorized to execute this Stipulated Order on behalf of, and to bind the entity on whose behalf he or she executes this Stipulated Order.
48. Necessity for Written Approvals: All approvals and decisions of the San Diego Water Board under the terms of this Stipulated Order shall be communicated to the Discharger in writing. No oral advice, guidance, suggestions or comments by employees or officials of the San Diego Water Board regarding submissions or notices shall be construed to relieve the Discharger of its obligation to obtain any final written approval required by this Stipulated Order.
49. No Third Party Beneficiaries: This Stipulated Order is not intended to confer any rights or obligations on any third party or parties, and no third party or parties shall have any right of action under this Stipulated Order for any cause whatsoever.
50. Effective Date: This Stipulated Order shall be effective and binding on the Parties upon the date the San Diego Water Board adopts this Stipulated Order.

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51. Counterpart Signatures: This Stipulated Order may be executed and delivered in any number of counterparts, each of which when executed and delivered shall be deemed to be an original, but such counterparts shall together constitute one document.
52. Severability: The provisions of this Stipulated Order are severable; should any provision be found invalid the remainder shall remain in full force and effect.

It is so stipulated.

California Regional Water Quality Control Board, San Diego Region, Prosecution Team

By: 

JAMES G. SMITH
Assistant Executive Officer

Date: 12 Dec 2014

Scripps Mesa Developers, LLC

By: _____

Name: _____
Manager

Date: _____

Approved as to Form

By: 

KEITH GARNER
Counsel for Discharger

Date: 12/16/14

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It is so stipulated.

California Regional Water Quality Control Board, San Diego Region, Prosecution Team

By:



JAMES G. SMITH
Assistant Executive Officer

Date:

12 Dec 2014

Scripps Mesa Developers, LLC

By:



Name:

Stuart Posnock
Manager

Date:

December 16, 2014

Approved as to Form

By:

KEITH GARNER
Counsel for Discharger

Date:

**Settlement Agreement and
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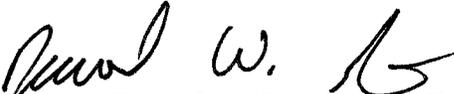
**FINDINGS OF THE CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD,
SAN DIEGO REGION**

53. The terms of the foregoing Stipulation are fully incorporated herein and made part of this Stipulated Order of the San Diego Water Board.
54. The San Diego Water Board finds that the Recitals set forth herein are true.
55. The proposed Stipulated Order was noticed for public comment for a minimum of thirty (30) days prior to San Diego Water Board consideration.
56. This Stipulated Order is severable; should any provision be found invalid the remainder shall remain in full force and effect.
57. In adopting this Stipulated Order, the San Diego Water Board has considered, where applicable, each of the factors prescribed in Water Code sections 13327 and 13385(e). The consideration of these factors is based upon information and comments obtained by the San Diego Water Board's staff in investigating the allegations herein or otherwise provided to the San Diego Water Board or its delegate by the Parties and members of the public. In addition to these factors, this Stipulated Order recovers the costs incurred by the staff of the San Diego Water Board for this matter.
58. This is an action to enforce the laws and regulations administered by the San Diego Water Board. The San Diego Water Board finds that issuance of this Order is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, sections 21000 et seq.), in accordance with section 15321 (a)(2), Title 14, of the California Code of Regulations.
59. The San Diego Water Board's Executive Officer is hereby authorized to refer this matter directly to the Attorney General for enforcement if the Discharger fails to perform any of its obligations under this Stipulated Order.
60. Fulfillment of the Discharger's obligations under this Stipulated Order constitutes full and final satisfaction of any and all liability for each allegation in this Stipulated Order in accordance with the terms of this Stipulated Order.

**Settlement Agreement and
Stipulation for Entry of
ACL Order No. R9-2014-0044
Casa Mira View**

Pursuant to Water Code sections 13323 and 13385, and Government Code section 11415.60, IT IS HEREBY ORDERED by the California Regional Water Quality Control Board, San Diego Region.

I, David W. Gibson, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Diego Region on 29 January 2015.
Date



DAVID W. GIBSON
Executive Officer

29 January 2015
Date

Attachment A: Technical Analysis

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION**

TECHNICAL ANALYSIS

**Order No. R9-2014-0044
Settlement Agreement and Stipulation for Entry of
Administrative Civil Liability Order
Scripps Mesa Developers, LLC,**

Noncompliance with

**State Water Resources Control Board
Order No. 2009-0009-DWQ
*National Pollutant Discharge Elimination System (NPDES)
General Permit for Storm Water Discharges Associated with
Construction and Land Disturbance Activities***

**Water Code section 13376
and
Clean Water Act section 301**

**Prepared
by**

**Frank Melbourn
Water Resource Control Engineer
Compliance Assurance Unit**

December 12, 2014

A. Introduction

This technical analysis provides a summary of factual and analytical evidence that support the findings in Order No. R9-2014-0044, Settlement Agreement and Stipulation for Entry of Order (Stipulated Order) assessing civil liability in the amount of **\$286,324** against Scripps Mesa Developers, LLC (Discharger) for violations of California State Water Resources Control Board (State Water Board) Order No. 2009-0009-DWQ, [as Amended by Order No. 2010-0014-DWQ] National Pollutant Discharge Elimination System, General Permit No. CAS000002, Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction and Land Disturbance Activities (Construction Storm Water Permit or CSWP). See Exhibit 1, Construction Storm Water Permit, and federal Clean Water Act section 301.

The Stipulated Order was entered into because the Discharger failed to comply with the terms and conditions of the Construction Storm Water Permit during the ongoing construction of the 2,200 unit apartment community, referred to as *Casa Mira View* (Casa Mira View or Project or Site) located on 41.31 acres within the City of San Diego's Mira Mesa community. The Site lies within the Miramar Reservoir Hydrologic Area (HA) (906.10) of the Peñasquitos Hydrologic Unit. Storm water discharges from the Site drain to an unnamed tributary to Los Peñasquitos Creek. See Figure 1. Site Location Map.

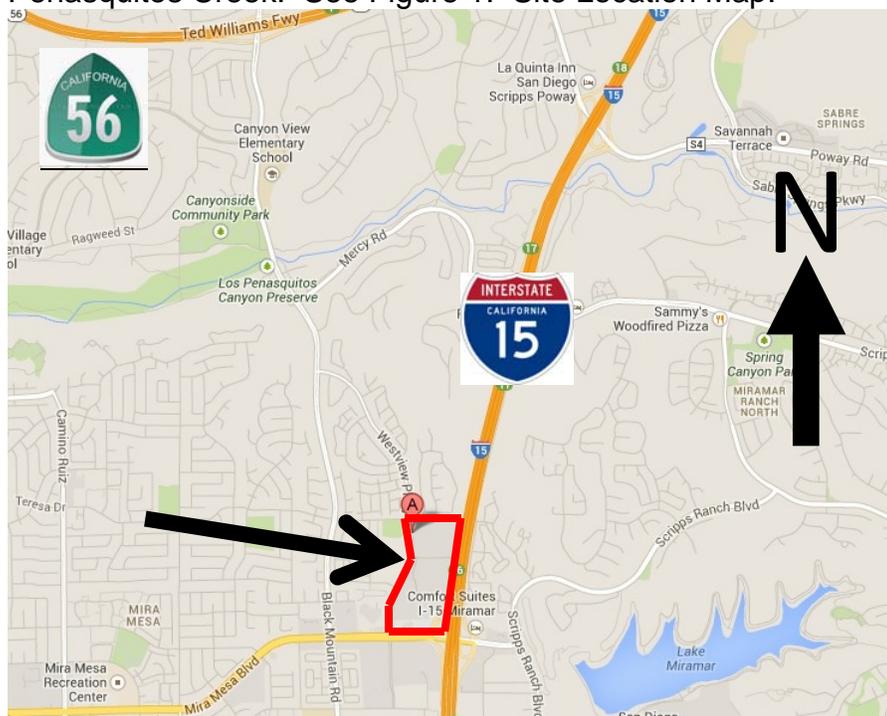


Figure 1. Site Location Map. Location of Casa Mira View Construction site (outlined in red) at 11241, 11267, and 11285 Westview Parkway, San Diego, California 92126.

The Project developer is Garden Communities. Scripps Mesa Developers, LLC (Phase 2 and 3) and Scripps Mesa Developers II, LLC (Phase 1) own the properties that make up the Project, and all three entities are owned by the same parent company. Stuart Posnock is the contact for all three entities. See Exhibit 2, March 31, 2014, Sheppard Mullin letter. On October 1, 2008, Stuart Posnock, acting as the property owners' and developer's representative, filed a Notice of Intent (NOI) to comply with the waste discharge requirements of *Order No. 99-08-DWQ, National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000002, Waste Discharge Requirements (WDRs) for Discharges of Storm Water Runoff Associated with Construction Activity (Order No. 99-08-DWQ)* for the Project with the State Water Board. The NOI stated that construction activities would begin in November 2008. On October 7, 2008, the State Water Board processed the NOI and assigned Waste Discharge Identification (WDID) No. 9 37C353628 to the Project.

On June 30, 2010, Stuart Posnock, the approved signatory of Scripps Mesa Developers, LLC, the Legally Responsible Person (LRP) for the Project, certified the Project under the Construction Storm Water Permit. See Exhibit 3, NOI. In addition, he characterized the Project as being "Risk Level 3." Pursuant to Construction Storm Water Permit section VIII, dischargers "calculate the site's sediment risk and receiving water risk during periods of soil exposure (i.e. grading and site stabilization)." "Risk Level 3" is assigned to "projects with high receiving water risk and high sediment risk." (CSWP Rationale § J.1.a.) Mr. Posnock certified his "Yes" response to the NOI question of whether the Site's disturbed areas discharge directly or indirectly into a 303(d) listed water body impaired by sediment, or that the Site's disturbed areas are located within a sub-watershed draining into a 303(d) listed water body impaired by sediment.

B. Construction Storm Water Permit

The Construction Storm Water Permit authorizes discharges of storm water associated with construction activity as long as the best available technology economically achievable (BAT) and best conventional pollutant control technology (BCT) are implemented to reduce or eliminate pollutants in storm water runoff. BAT/BCT technologies include passive systems such as erosion and sediment control best management practices (BMPs¹) as well as structural controls, as necessary, to achieve compliance with water quality standards. The Construction Storm Water Permit identifies effective erosion control measures such as preserving existing vegetation where feasible, limiting disturbance, and stabilizing and re-vegetating disturbed areas as soon as possible after grading or construction activities.

The Construction Storm Water Permit further identifies erosion control BMPs as the primary means of preventing storm water contamination. The Construction Storm Water Permit identifies sediment controls as the secondary means of preventing storm water contamination. The Construction Storm Water Permit further states that when erosion control techniques are ineffective, sediment control techniques should be used to capture any soil that becomes eroded.

C. Alleged Violations

The following allegations against the Discharger are the basis for assessing administrative civil liability pursuant to Water Code section 13385, and also appear in the Stipulated Order:

1. Discharge of sediment laden storm water runoff into storm drain;
2. Failure to monitor storm water effluent;
3. Failure to implement erosion control BMPs;
4. Failure to implement sediment control BMPs;
5. Failure to implement housekeeping BMPs; and
6. Failure to complete inspection checklist.

¹ Best management practices (BMPs) “means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of ‘waters of the United States.’ BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.” (40 CFR § 122.2)

D. October 25, 2010, Inspection

While inspecting the Site with a Garden Communities employee, San Diego Water Board inspector Christina Arias observed the pumping of highly turbid sediment laden water from the Site into an off-site Caltrans storm drain. She immediately ordered that the discharge be stopped, and she confirmed that it was stopped. She further documented finished slopes without erosion control BMPs, and inadequate perimeter and site entrance sediment control BMPs. The later resulted in observed sediment discharges to the street. On November 3, 2010, the San Diego Water Board issued Notice of Violation (NOV) No. R9-2010-0146 to the Discharger. See Exhibit 4, NOV No. R9-2010-0146.²

On November 16, 2010, Ground Service Technology, Inc., Discharger's Qualified Storm Water Pollution Prevention Plan (SWPPP) Practitioner (QSP) submitted a report documenting the actions taken onsite to correct the violations noted in the San Diego Water Board's inspection report and Notice of Violation No. R9-2010-0146.

E. November 22, 2010, Inspection

On November 22, 2010, Christina Arias inspected the Site and confirmed the corrections. See Exhibit 5, November 22, 2010, Inspection Entry.

F. January 9 and 14, 2014, Inspections

Christina Arias inspected the Site on January 9, 2014. She noted numerous violations of the Construction Storm Water Permit; specifically that trash was strewn throughout the Site, stockpiles were exposed, slopes were unprotected, chemical containers were without secondary containment, and concrete washout bins were leaking. These violations were consistently unaddressed as evidenced by unsigned QSP site inspection reports between October 2013 through December 2013 (See section G below.) and repetition of the same violations.

A follow-up inspection was conducted by Christina Arias on January 14, 2014. She noted that some of the deficiencies had been corrected, but that sediment control BMPs were missing at a construction site entrance and that inadequate sediment BMPs were observed along a paved roadway.

The noted violations from both inspections were written up in inspection reports attached to NOV No. R9-2014-0018 issued to Garden Communities on February 18, 2014. See Exhibit 6, NOV No. R9-2014-0018.

² The NOV transmittal includes a copy of the October 25, 2010, San Diego Water Board inspection report.

G. QSP Site Inspection Reports

Ground Service Technology, Inc. conducted weekly site inspections for the Discharger. These reports documented the failure of the Discharger to implement effective erosion and sediment control BMPs, as well as Housekeeping BMPs. See Exhibit 7, March 7, 2014, Sheppard Mullin letter.

H. September 30, 2014, Inspection

Christina Arias inspected the Site on September 30, 2014, and she found the Site to generally be in compliance with the Construction Storm Water Permit. Ms. Arias advised the Discharger to add additional erosion and sediment control BMPs to the northwest corner of the Site.

I. Beneficial Uses of Affected Waters

The Basin Plan designates beneficial uses for all surface and ground waters in the San Diego Region. These beneficial uses "form the cornerstone of water quality protection under the Basin Plan" (Basin Plan, Chapter 2). Beneficial uses are defined in the Basin Plan as "the uses of the water necessary for the survival or well-being of man, plants and wildlife."

The Basin Plan also designates water quality objectives to protect the designated beneficial uses. Water Code section 13350(h) defines "water quality objectives" as "the limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area."

The Basin Plan designates the following beneficial uses for the "unnamed tributary 6.10" to Los Peñasquitos Creek:

1. Agricultural Supply (AGR);
2. Industrial Service Supply (IND);
3. Contact Water Recreation (REC-1);
4. Non-contact Water Recreation (REC-2);
5. Warm Freshwater Habitat (WARM);
6. Wildlife Habitat (WILD); and
7. Rare, Threatened, or Endangered Species (RARE).

J. Determination of Administration Civil Liability

An administrative civil liability may be imposed pursuant to the procedures in Water Code section 13323. The Stipulated Order alleges the act or failure to act that constitutes a violation of law, the provision of law authorizing civil liability, and the proposed civil liability. Pursuant to the relevant portions of Water Code section 13385(a)

Any person who violates any of the following shall be liable civilly in accordance with this section:

1. Section 13375 or 13376.
2. Any waste discharge requirements or dredged and fill material permit.
3. Any requirements established pursuant to section 13383.

Furthermore, Water Code section 13385 (c) provides that

Civil liability may be imposed administratively by the state board or a regional board pursuant to Article 2.5 (commencing with section 13323) of Chapter 5 in an amount not to exceed the sum of both of the following:

1. Ten thousand dollars (\$10,000) for each day in which the violation occurs.
2. Where there is a discharge, any portion of which is not susceptible to cleanup or is not cleaned up, and the volume discharged but not cleaned up exceeds 1,000 gallons, an additional liability not to exceed ten dollars (\$10) multiplied by the number of gallons by which the volume discharged but not cleaned up exceeds 1,000 gallons.

Water Code section 13385(e) requires the consideration of several factors when determining the amount of civil liability to impose. These factors include: “[T]he nature, circumstances, extent, and gravity of the violation or violations, whether the discharge is susceptible to cleanup or abatement, the degree of toxicity of the discharge, and, with respect to the violator, the ability to pay, the effect on its ability to continue its business, any voluntary cleanup efforts undertaken, any prior history of violations, the degree of culpability, economic benefit or savings, if any, resulting from the violation, and other matters that justice may require. At a minimum, liability shall be assessed at a level that recovers the economic benefits, if any, derived from the acts that constitute the violation.”

K. Alleged Violations

Dischargers are required to ensure that the Project is in compliance with the requirements of the Construction Storm Water Permit. The Stipulated Order alleges the following violations:

1. Discharge of Sediment Laden Water (1 day)

All discharges except for storm water and non-storm water discharges specifically authorized by the Construction Storm Water Permit are prohibited. (CSWP § III.B.) Furthermore “Dischargers shall not violate any discharge prohibitions contained in applicable Basin Plans or statewide water quality control plans.” (CSWP § III.A) San Diego Water Board Basin Plan Prohibition No. 8 prohibits discharges to the storm water conveyance system that are not composed entirely of storm water. “Dischargers shall minimize or prevent pollutants in storm water discharges and authorized non-storm water discharges through the use of controls, structures, and management practices that achieve BAT for toxic and non-conventional pollutants and BCT for conventional pollutants.” (CSWP §§ J.58. and V.A.2.)

While touring the Site on October 25, 2010, Christina Arias and Garden Communities employee Rod Fink observed the pumping of sediment laden water from the Site into a Caltrans storm drain inlet. The Caltrans storm drain inlet is connected and discharges to an unnamed tributary of Los Peñasquitos Creek. Upon closer observation, Ms. Arias documented that storm water runoff ponded on the Site was being pumped directly into the storm water conveyance system via a water pump in the scoop of a front loader. Photographs from the inspection report show the sediment laden water covered an area about the size of a football field with a depth that covered a three inch diameter hose. Therefore at the time of the photograph there was at least 100,000 gallons of ponded sediment laden water. Ms. Arias did not observe any BMPs being implemented to remove or reduce sediment or other pollutants from the ponded storm water. Furthermore, the Caltrans storm drain inlet was not identified in the SWPPP by the Discharger as a discharge location.

Characterization of the ponded sediment laden storm water runoff was required prior to discharge. (CSWP Att. E. § I.4.d.) Mr. Fink discontinued the discharge at Ms. Arias’ direction. See Exhibit 4, NOV No. R9-2010-0146. Discharger’s action resulted in one (1) day of violation on October 25, 2010.

2. Failure to Monitor Storm Water Effluent (1 day)
Sampling and analysis of collected storm water runoff is required to characterize the effluent prior to discharge. “Risk Level 3 dischargers shall collect effluent samples at all discharge points where storm water is discharged off-site.” (CSWP Att. E. § I.5.b.) Furthermore, if required samples are not collected, an explanation is to be included in the SWPPP and Annual Report. (CSWP Att. E. § I.6.b.) After a review of the Discharger’s submitted materials in the Storm Water Multiple Application and Report Tracking System (SMARTS) and Electronic Content Management (ECM) databases, San Diego Water Board staff failed to locate any sample results related to the October 25, 2010, discharge or to locate a written explanation as to why a sample was not collected. Therefore Discharger is in violation for one (1) day, October 25, 2010, of Construction Storm Water Permit Attachment E. sections I.5.b. and I.6.b.
3. Failure to Implement Erosion Control BMPs (2 days)
“Risk Level 3 dischargers shall provide effective soil cover for inactive areas and all finished slopes, open space, utility backfill, and completed lots.” (CSWP Att. E. § D.2.) During Ms. Arias’ Site inspection of October 25, 2010, she observed numerous finished slopes without erosion control BMPs (i.e., hydroseeding, soil binders, mulch, or covers, etc.). See Exhibit 4, NOV No. R9-2010-0146. The Discharger corrected the violation on October 27, 2010. Therefore Discharger is in violation for two (2) days; October 25, and 26, 2010.
4. Failure to Implement Sediment Control BMPs (3 days)
“Risk Level 3 dischargers shall establish and maintain effective perimeter controls and stabilize all construction entrances and exits to sufficiently control erosion and sediment discharges from the site.” (CSWP Att. E. § E.1.) During Ms. Arias’ inspection of October 25, 2010, she noted the discharge of sediment onto the street and sidewalk as a result of inadequate sediment control BMPs. The Site perimeter was not protected with gravel bags and/or fiber rolls, thus allowing sediment to be deposited onto the sidewalk and street. Also, sediment was tracked onto the street at the construction entrance because the gravel entrance was not maintained. See Exhibit 4, NOV No. R9-2010-0146. Discharger corrected the violation on October 28, 2010. Therefore Discharger is in violation for three (3) days; October 25, 26, and 27, 2010.

5. Failure to Implement Erosion Control BMPs (11 days)
“Risk Level 3 dischargers shall provide effective soil cover for inactive areas and all finished slopes, open space, utility backfill, and completed lots.” (CSWP Att. E. § D.2.) Discharger’s QSP conducted weekly storm water inspection reports. The San Diego Water Board requested, received, and reviewed the October 2013 through January 2014 reports. See Exhibit 7, March 7, 2014, Sheppard Mullin letter. These reports documented Site erosion control BMP violations on January 2, 2014 (exterior slopes without erosion control). On January 9, 2014, Christina Arias inspected the Site and noted that the same finished external graded slopes still had no erosion control BMPs. See Exhibit 6, NOV No. R9-2014-0018. The Discharger corrected the violation on January 13, 2014. Therefore Discharger is in violation for eleven (11) days; January 2 through 12, 2014.

6. Failure to Maintain Sediment Control BMPs (14 days)
“Risk Level 3 dischargers shall establish and maintain effective perimeter controls and stabilize all construction entrances and exits to sufficiently control erosion and sediment discharges from the site.” (CSWP Att. E. § E.1.) “Risk Level 3 dischargers shall implement appropriate erosion control BMPs (runoff control and soil stabilization) in conjunction with sediment control BMPs for areas under active construction.” (CSWP Att. E. § E.3.) “Risk Level 3 dischargers shall ensure that all storm drain inlets and perimeter controls, runoff control BMPs, and pollutant controls at entrances and exits (e.g. tire washoff locations) are maintained and protected from activities that reduce their effectiveness).” (CSWP Att. E. § E.6.)

The QSP’s weekly storm water reports documented Site sediment control BMP violations on October 7 (downed silt fence) and 24 (downed silt fence), 2013; November 5 (downed silt fence), 12 (downed silt fence), 19 (downed silt fence) and 25 (downed silt fence), 2013; December 3 (downed silt fence), 9 (downed silt fence, maintenance of inlet protection, and replacement of fiber rolls), 18 (downed silt fence) and 26 (downed silt fence), 2013; January 2 (downed silt fence), and 8, 2014 (maintenance of inlet protection). See Exhibit 7, March 7, 2014, Sheppard Mullin letter. Ms. Arias documented broken and failing perimeter silt fences, and dirt tracked in the street around the Site entrance on January 9, and 14, 2014. See Exhibit 6, NOV No. R9-2014-0018. Therefore, Discharger was in violation of Construction Storm Water Permit Attachment E. sections E.1., E.3., and E.6. for fourteen (14) days.

7. Failure to Implement Housekeeping BMPs (16 days)
“Risk Level 3 dischargers shall implement good site management (i.e., ‘housekeeping’) measures for construction materials that could potentially be a threat to water quality if discharged.” (CSWP Att. E. § B.1.)
“Implement BMPs to prevent the off-site tracking of loose construction and landscape materials.” (CSWP Att. E. § B.1.e.) “Cover waste disposal containers at the end of every business day and during a rain event.” (CSWP Att. E. § B.2.d.) “Ensure the containment of concrete washout areas and other washout areas that may contain additional pollutants so there is no discharge into the underlying soil and onto the surrounding areas.” (CSWP Att. E. § B.2.i.)

The QSP’s weekly storm water reports documented housekeeping BMP violations on October 7 (debris, uncovered dumpsters, and street dirt tracking), 15 (debris, uncovered dumpsters, and street dirt tracking), 24 (debris, uncovered dumpsters, and street dirt tracking), and 29 (debris) 2013; November 5 (debris, uncovered dumpsters, and street dirt tracking), 12 (debris, uncovered dumpsters, street dirt tracking, and maintain concrete washout bins), 19 (debris, uncovered dumpsters, street dirt tracking, and maintain concrete washout bins), 22 (debris and street dirt tracking), and 25 (debris and street dirt tracking), 2013; December 3 (debris and street dirt tracking), 9 (debris and street dirt tracking), 18 (debris, uncovered dumpsters, street dirt tracking, and maintain concrete washout bins), and 26 (debris and street dirt tracking), 2013; and January 2 (debris, uncovered dumpsters, and street dirt tracking) and 8, 2014 (debris). See Exhibit 7, March 7, 2014, Sheppard Mullin letter. Ms. Arias documented trash and construction debris strewn throughout the Site on January 9, 2014. See Exhibit 6, NOV No. R9-2014-0018.

8. Failure to Complete Inspection Checklist (12 days)
The Construction Storm Water Permit requires Risk Level 3 dischargers to perform weekly inspections and observations and to record a checklist of information. (CSWP Att. E. § G.2 and 4) “Risk Level 3 dischargers shall ensure that checklists shall remain onsite with the SWPPP and at a minimum, shall include: ... g. Any corrective actions required, including any necessary changes to the SWPPP and the associated implementation dates.” (CSWP Att. E. § G.5.g.)

The submitted inspection reports on the following dates did not include “implementation dates:” October 7, 15, and 24, 2013; November 5, 12, 19, and 25, 2013; December 3, 9, 18, and 26, 2013; and January 2, 2014. Therefore it is unclear whether the recommended corrective actions for noted “failures or other shortcomings” were completed. See Exhibit 7, March 7, 2014, Sheppard Mullin letter. Failure to correct BMP deficiencies increases the likelihood of a sediment discharge and decreases the pollutant removal effectiveness of the Site’s BMPs.

L. Penalty Calculation

The State Water Board’s Water Quality Enforcement Policy (Enforcement Policy) provides a penalty calculation methodology for the State Water Board and the nine Regional Water Quality Control Boards (collectively Water Boards) to use in administrative civil liability cases. The penalty calculation methodology enables the Water Boards to fairly and consistently implement liability provisions of the Water Code for maximum enforcement impact to address, correct, and deter water quality violations. The penalty calculation methodology provides a consistent approach and analysis of factors to determine liability based on the applicable Water Code section.

Pursuant to the Enforcement Policy, when there is a discharge, Water Boards shall determine an initial liability factor based on the Potential for Harm score and the extent of Deviation from Requirements for the violation. Water Boards shall calculate the Potential for Harm by determining the actual or threatened impact to beneficial uses caused by the violation using a three-factor scoring system to quantify: (1) the potential for harm to beneficial uses; (2) the degree of toxicity of the discharge; and (3) the discharge’s susceptibility to cleanup or abatement. These factors will be used to determine a per day factor using the matrix set forth in the Enforcement Policy that is multiplied by the maximum per day amount allowed under the Water Code. If applicable, the Water Board shall also determine an initial liability amount on a per gallon basis using the Potential for Harm score and the extent of Deviation of Requirement of the violation.

For each non-discharge violation, the Water Boards shall calculate an initial liability factor, considering the Potential for Harm and extent of Deviation from Requirements. Water Boards shall use the matrix set forth in the Enforcement Policy that corresponds to the appropriate Potential for Harm and the Deviation from Requirement categories.

Pursuant to the Enforcement Policy, Water Boards shall use three adjustment factors for modification of the initial liability amount. These factors include: culpability; cleanup and cooperation; and history of violations. The initial liability amount can be increased or decreased based on these adjustment factors. Additional adjustments may be used regarding multiple violations resulting from the same incident and multiple day violations.

Violation No. 1: Discharge of Sediment Laden Water (1 day) October 25, 2010

Step 1 – Potential for Harm for Discharge Violations

Factor 1: Harm or Potential for Harm to Beneficial Uses

This factor evaluates direct or indirect harm or potential for harm from the violation. A score between 0 (negligible) and 5 (major) is assigned in accordance with the statutory factors of the nature, circumstances, extent and gravity of the violation.

The San Diego Water Board Prosecution Team (Prosecution Team) assigns a score of **3 (Moderate)** out of 5 for Factor 1 of the penalty calculation. The Enforcement Policy defines “Moderate” as “moderate threat to beneficial uses (i.e., impacts are observed or reasonably expected and impacts to beneficial uses are moderate and likely to attenuate without appreciable acute or chronic effects). A score of 3 (Moderate) is selected because:

1. Sediment was directly discharged during dry weather into the MS4 connected to the unnamed tributary to Los Peñasquitos Creek, which is being considered for federal Clean Water Act section 303(d) listing as an impaired water body for turbidity;
2. Impacts to the unnamed tributary were likely, due to the high turbidity and large volume of the discharge; resulting in temporary restrictions on beneficial uses;
3. Los Peñasquitos Creek discharges into Los Peñasquitos Lagoon, which is a federal Clean Water Act section 303(d) listed impaired water body for sedimentation/silt, and a designated Natural Preserve by the State Park and Recreation Commission.
4. Sediment discharges negatively impact Contact Water Recreation (REC-1), Warm Freshwater Habitat (WARM), Wildlife Habitat (WILD), and Rare, Threatened, or Endangered Species (RARE) beneficial uses.

Factor 2: Physical, Chemical, Biological or Thermal Characteristics of the Discharge

A score between 0 and 4 is assigned based on a determination of the risk or threat of the discharged material. "Potential receptors" are those identified considering human, environmental and ecosystem health exposure pathways. In this matter, the Prosecution Team assigns the discharge of sediment to receiving waters a score of **2**. The Enforcement Policy defines a score of 2 as "[d]ischarged material poses a moderate risk or threat to potential receptors (i.e., the chemical and/or physical characteristics of the discharged material have some level of toxicity or pose a moderate level of concern regarding receptor protection." A score of 2 is selected because:

1. Sediment discharges diminish the physical quality of in-stream waterways by altering or obstructing flows and affecting existing riparian functions.
2. Sediment acts as a binding carrier to other toxic constituents like metals and organic contaminants (i.e. pesticides and PCBs).
3. Sediment discharges affect the quality of receiving waters and the ability to support habitat related beneficial uses by reducing visibility and impacting biotic feeding and reproduction. Sediment discharges can increase receiving water turbidity levels.
4. Sediment discharges cause acute effects on the invertebrate aquatic community.

Factor 3: Susceptibility to Cleanup and Abatement

Pursuant to the Enforcement Policy a score of 0 is assigned for this factor if 50 percent or more of the discharge is susceptible to cleanup or abatement. A score of 1 is assigned to this factor if less than 50 percent of the discharge is susceptible to cleanup or abatement. Less than 50 percent of the discharge was susceptible to cleanup or abatement. Accordingly, the Prosecution team assigns a score of **1 (one)** to the penalty calculation for Factor 3.

Final Score - "Potential for Harm"

Based on the above determinations, the Potential for Harm final score for this discharge violation is **6 (six)**.

Step 2 - Assessments for Discharge Violations

Water Code section 13385 states that a Regional Water Board may impose civil liability on a daily basis, a per gallon basis, or both. Due to the difficulty in accurately determining the volume of sediment discharged during the discharge event, civil liability was only calculated on a per day basis for the violation.

Per Day Assessments for Discharge Violations

The Water Boards shall calculate an initial liability factor for each discharge violation, considering Potential for Harm and the extent of deviation from applicable requirements.

Deviation from Requirement

The Prosecution Team assigns a Deviation from Requirement score of **Major** because Order No. 2009-0009-DWQ prohibits all discharges other than storm water from construction sites to waters of the United States unless otherwise authorized by an NPDES permit. Pollutants were discharged to waters of the United States from the Project without NPDES Permit authorization. The Enforcement Policy defines major for discharge violations as: The requirement has been rendered ineffective (e.g., discharger disregards the requirement, and/or the requirement is rendered ineffective in its essential functions).

Per Day Factor and Per Day Assessment

Using a "Potential for Harm" factor of 6 and "Deviation from Requirement" factor of "Major," the "Per Day Factor" for discharging sediment from the Project to the MS4/unnamed tributary to Los Peñasquitos Creek, Los Peñasquitos Creek and Los Peñasquitos Lagoon is **0.220** in Table 2 of the Enforcement Policy. Pursuant to Water Code section 13385 the maximum civil liability for these violations is ten thousand dollars (\$10,000) per day of violation (per violation). Calculating the Per Day Assessment is achieved by multiplying:

$$(\text{Per Day Factor}) \times (\text{Statutory Maximum Liability}) = (0.220) \times (\$10,000) = \$2,200$$

Step 3 - Per Day Assessments for Non-Discharge Violations

Step 3 does not apply to discharge violations.

Step 4 -Adjustment Factors

Culpability

The Prosecution Team assigns a culpability multiplier of **1.5** out of a range from 0.5 to 1.5 for these violations for the following reasons:

1. Discharger intentionally discharged sediment laden storm water runoff into a Caltrans storm drain inlet connected to a tributary of Los Peñasquitos Lagoon, a CWA section 303(d) listed impaired water body for sedimentation/silt;

2. Discharger failed to implement BMPs to reduce the sediment in the storm water runoff; and
3. Discharger failed to report the discharge to the San Diego Water Board.
4. Discharger knew the requirements of the Construction Storm Water Permit and agreed to comply with the requirements as evidenced by its certified NOI.

Cleanup and Cooperation

The Prosecution Team assigns a cleanup and cooperation multiplier of **1.0** from a range of .75 to 1.5 for this violation because the Discharger's conduct was reasonable. Discharger ceased discharge upon direction of San Diego Water Board staff.

History of Violation

The Prosecution Team assigns a history of violation multiplier of **1.0** because the Discharger does not have a history of construction storm water violations.

Step 5 - Determination of Total Base Liability Amount

The Total Base Liability amount is determined by multiplying the "Per Day Assessment" by the "Days of Violation" to determine the "Initial Amount of Liability" and then applying the adjustment factors as follows:

$$\begin{array}{l} \text{Total} \\ \text{Base} \\ \text{Liability} \end{array} = \begin{array}{l} \text{Per Day} \\ \text{Assessment} \end{array} \times \begin{array}{l} \text{No. of} \\ \text{Days} \end{array} \times \begin{array}{l} \text{Culpability} \\ \end{array} \times \begin{array}{l} \text{Cleanup \&} \\ \text{Cooperation} \end{array} \times \begin{array}{l} \text{History of} \\ \text{Violations} \end{array}$$

$$\begin{array}{l} \text{Total} \\ \text{Base} \\ \text{Liability} \end{array} = (\$2,200) \times (1) \times (1.5) \times (1.0) \times (1.0) = \$3,300$$

Step 6 -Ability to Pay and Ability to Continue In Business

See Section M. Ability to Pay and Ability to Continue In Business.

Step 7- Other Factors as Justice May Require

See Section N. Other Factors as Justice May Require.

Step 8 - Economic Benefit

The Discharger derived a negligible economic benefit by not pumping the ponded storm water runoff to an onsite sediment basin to settle out the sediment. The benefit was negligible because the Discharger pumped to the storm drain inlet when they should have pumped to the sedimentation basin.

Step 9 - Maximum and Minimum Liability Amounts

Pursuant to Water Code section 13385 the maximum civil liability that the San Diego Water Board may assess for this violation is (a) ten thousand dollars (\$10,000) per day of violation (per violation); and (b) ten dollars (\$10) for every gallon discharged, over one thousand (1,000) gallons discharged, that was not cleaned up. In this instance, the Prosecution Team is only proposing the assessment of civil liability for the discharge of sediment to waters of the United States on a per day basis based on information currently available. Sediment was known to be discharged to waters of the United States on October 25, 2010; therefore, the maximum civil liability that could be assessed for this violation is ten thousand dollars (\$10,000).

Water Code section 13385(e) requires that when pursuing civil liability under section 13385, "at a minimum, liability shall be assessed at a level that recovers the economic benefit, if any, derived from the acts that constitute the violation." The Enforcement Policy requires that the adjusted Total Base Liability shall be at least ten percent (10%) higher than the economic benefit. Therefore there is no minimum liability because the economic benefit was negligible.

Step 10 - Proposed Civil Liability for Violation No. 1

Based on the unique facts of this case, and the penalty calculation methodology within Section VI of the Enforcement Policy, the proposed civil liability for discharging sediment to waters of the United States in violation of the Construction Storm Water Permit and the Basin Plan for one day is three thousand three hundred dollars (\$3,300) plus staff costs. The proposed liability is within the minimum and maximum liability range.

**Violation No. 2: Failure to Monitor Storm Water Effluent (1 day)
October 25, 2010**

Step 1 & 2 – Not Applicable (Non-Discharge Violation Alleged)

Step 3 – Per Day Assessments for Non-Discharge Violations

The Water Boards shall calculate an initial liability factor for each non-discharge violation, considering Potential for Harm and the extent of deviation from applicable requirements. While non-discharge violations may not directly or immediately impact beneficial uses, they harm or undermine the regulatory program.

Potential for Harm

The violation poses either a Minor, Moderate, or Major threat to beneficial uses. The Potential for Harm for this violation was characterized as **Moderate**. The Enforcement Policy defines Moderate Potential for Harm as “[t]he characteristics of the violation present a substantial threat to beneficial uses, and/or the circumstances of the violation indicate a substantial potential for harm. The Prosecution Team selected Moderate because sampling is a necessary tool to determine whether a discharge can meet discharge requirements. See also the Potential for Harm analysis for Violation No. 1.

Deviation from Requirement

The violation is characterized as either a Minor, Moderate, or Major deviation from the requirement. In this case, the Prosecution Team characterized the violation as a **Major** deviation from the requirement. The Enforcement Policy defines a Major “Deviation from Requirement” as “[t]he requirement has been rendered ineffective (e.g., discharger disregards the requirement, and/or the requirement is rendered ineffective in its essential functions).” Major was selected because the Construction Storm Water Permit requires sampling of the discharge and no sampling was done.

Per Day Factor and Per Day Assessment

Using a "Potential for Harm" factor of "Moderate" and "Deviation from Requirement" factor of "Major," the "Per Day Factor" for failing to monitor storm water effluent in Table 3 of the Enforcement Policy is **0.55**.

$$\text{Per Day Assessment} = (\text{Per Day Factor}) \times (\text{Statutory Maximum Liability})$$

$$\text{Per Day Assessment} = (0.55) \times (\$10,000) = \$5,500$$

Step 4 - Adjustment Factors

Three additional factors are considered and can modify the amount of initial liability: Culpability; Cleanup and Cooperation; and History of Violations.

Culpability

The culpability multiplier ranges between 0.5 and 1.5. The Prosecution Team assigns a multiplier of **1.5** for this violation because there was no attempt by the Discharger to monitor the discharge. Also the Discharger knew the requirements of the Construction Storm Water Permit, and it agreed to comply with the requirements as evidenced by its certified NOI.

Cleanup and Cooperation

This is the extent to which the discharger voluntarily cooperated in returning to compliance and correcting environmental damage. Multiplier ranges between 0.75 to 1.5 with the lower multiplier applying where there is a high degree of cleanup and cooperation, and a higher multiplier where this is absent. In this case, the Prosecution Team assigns a multiplier of **1.0** because the Discharger has promised in writing to pump future ponded water to sediment basins, and to sample and report results as required by the Construction Storm Water Permit.

History of Violations

The Prosecution Team assigns a history of violation multiplier of **1.0** because the Discharger does not have a history of construction storm water violations.

Step 5 - Determination of Total Base Liability Amount

The Total Base Liability amount is determined by multiplying the "Per Day Assessment" by the "Days of Violation" to determine the "Initial Amount of Liability" and then applying the adjustment factors as follows:

$$\begin{array}{l} \text{Total} \\ \text{Base} \\ \text{Liability} \end{array} = \begin{array}{l} \text{Per Day} \\ \text{Assessment} \end{array} \times \begin{array}{l} \text{No. of} \\ \text{Days} \end{array} \times \begin{array}{l} \text{Culpability} \\ \end{array} \times \begin{array}{l} \text{Cleanup \&} \\ \text{Cooperation} \end{array} \times \begin{array}{l} \text{History of} \\ \text{Violations} \end{array}$$

$$\begin{array}{l} \text{Total} \\ \text{Base} \\ \text{Liability} \end{array} = (\$5,500) \times (1) \times (1.5) \times (1.0) \times (1.0) = \$8,250$$

Step 6 -Ability to Pay and Ability to Continue In Business

See Section M. Ability to Pay and Ability to Continue In Business.

Step 7- Other Factors as Justice May Require

See Section N. Other Factors as Justice May Require.

Step 8 - Economic Benefit

Discharger achieved an economic benefit of \$2,433 by failing to monitor and analyze the storm water discharge. Sampling and analyzing storm water runoff in the San Diego area costs approximately \$2,000 per sample. Using the U.S. EPA BEN computer model and the date of violation, results in an economic benefit of \$2,433. See Exhibit No. 8, Economic Benefit Calculation Violation No. 2.

Step 9 - Maximum and Minimum Liability Amounts

Pursuant to Water Code section 13385 the maximum civil liability that the San Diego Water Board may assess for this violation is (a) ten thousand dollars (\$10,000) per day of violation (per violation). Water Code section 13385(d) requires that when pursuing civil liability under Water Code section 13385, "[a]t a minimum, liability shall be assessed at a level that recovers the economic benefit, if any, derived from the acts that constitute the violation."

In this instance, the Prosecution Team is proposing the assessment of civil liability for the failure to monitor and analyze the storm water runoff discharge for one day. The maximum civil liability that could be assessed for this violation is ten thousand dollars (\$10,000).

Water Code section 13385(e) requires that when pursuing civil liability under section 13385, "at a minimum, liability shall be assessed at a level that recovers the economic benefit, if any, derived from the acts that constitute the violation." The Enforcement Policy requires that the adjusted Total Base Liability shall be at least ten percent (10%) higher than the economic benefit. Therefore the minimum liability is $(1.1) \times (\$2,433) = \$2,676$.

Step 10 - Proposed Civil Liability for Violation No. 2

Based on the unique facts of this case, and the penalty calculation methodology within Section VI of the Enforcement Policy, the proposed civil liability for failing to monitor and analyze the storm water discharge for one day in violation of the Construction Storm Water Permit is eight thousand two hundred fifty dollars (\$8,250) plus staff costs. The proposed liability is within the minimum and maximum liability range.

Violation No. 3: Failure to Implement Erosion Control BMPs (2 days) October 25 and 26, 2010

Step 1 & 2 – Not Applicable (Non-Discharge Violation Alleged)

Step 3 – Per Day Assessments for Non-Discharge Violations

The Water Boards shall calculate an initial liability factor for each non-discharge violation, considering Potential for Harm and the extent of deviation from applicable requirements. While non-discharge violations may not directly or immediately impact beneficial uses, they harm or undermine the regulatory program.

Potential for Harm

The violation poses either a Minor, Moderate, or Major threat to beneficial uses. The Potential for Harm for this violation was characterized as **Moderate**. The Enforcement Policy defines Moderate Potential for Harm as “[t]he characteristics of the violation present a substantial threat to beneficial uses, and/or the circumstances of the violation indicate a substantial potential for harm. The Prosecution Team selected Moderate for the following reasons:

1. The Site, over 40 acres, characterized as “Risk Level 3,” the highest threat, much of which was graded, poses a substantial threat to discharge sediment given its large sediment load;
2. The ultimate receiving water is a sensitive water body listed as impaired under section 303(d) of the federal Clean Water Act for sedimentation/silt;
3. Sediment is a pollutant that when discharged can be lethal when it smothers benthic communities. Furthermore, sediment can transport toxic materials (e.g., metals and synthetic organics) from the Site and into receiving waters.
4. Unprotected long running slopes have a great potential for erosion.

Deviation from Requirement

The violation is characterized as either a Minor, Moderate, or Major deviation from the requirement. In this case, the Prosecution Team characterized the violation as a **Moderate** deviation from the requirement. The Enforcement Policy defines a Moderate “Deviation from Requirement” as “[t]he intended effectiveness of the requirement has been partially compromised (e.g., the requirement was not met, and the effectiveness of the requirement is only partially achieved).” Moderate was selected because numerous, although not all interior and exterior slopes throughout the Site were without erosion control BMPs. Erosion control BMPs are the first and most valuable BMPs used at a construction site because they prevent erosion from happening in the first place (i.e., it prevents storm water runoff from being polluted with sediment). Furthermore, track walking slopes³ (a.k.a. roughening) “is not intended to be used as a stand-alone BMP.” (EC-15, California Stormwater Construction BMP Handbook)

Per Day Factor and Per Day Assessment

Using a "Potential for Harm" factor of "Moderate" and "Deviation from Requirement" factor of "Moderate," the "Per Day Factor" for failing to implement effective erosion controls in Table 3 of the Enforcement Policy is **0.35**.

$$\text{Per Day Assessment} = (\text{Per Day Factor}) \times (\text{Statutory Maximum Liability})$$

$$\text{Per Day Assessment} = (0.35) \times (\$10,000) = \$3,500$$

Step 4 - Adjustment Factors

Three additional factors are considered and can modify the amount of initial liability: Culpability; Cleanup and Cooperation; and History of Violations.

Culpability

The culpability multiplier ranges between 0.5 and 1.5. The Prosecution Team assigns a multiplier of **1.3** for this violation because the failure to use erosion control BMPs on finished interior and exterior slopes throughout the Site during the rainy season was at a minimum negligent implementation of the Construction Storm Water Permit by the Discharger.

³ The October 16, 2010, Garden Communities response to NOV No. R9-2010-0146, identified “track walking” as the soil stabilization BMP used on slopes.

Cleanup and Cooperation

This is the extent to which the discharger voluntarily cooperated in returning to compliance and correcting environmental damage. Multiplier ranges between 0.75 to 1.5 with the lower multiplier applying where there is a high degree of cleanup and cooperation, and a higher multiplier where this is absent. In this case, the Prosecution Team assigns a multiplier of **1.0** because the Discharger did not fix the violation until instructed to do so by the San Diego Water Board.

History of Violations

The Prosecution Team assigns a history of violation multiplier of **1.0** because the Discharger does not have a history of construction storm water violations.

Step 5 - Determination of Total Base Liability Amount

The Total Base Liability amount is determined by multiplying the “Per Day Assessment” by the “Days of Violation” to determine the “Initial Amount of Liability” and then applying the adjustment factors as follows:

$$\begin{array}{l} \text{Total} \\ \text{Base} \\ \text{Liability} \end{array} = \begin{array}{l} \text{Per Day} \\ \text{Assessment} \end{array} \times \begin{array}{l} \text{No. of} \\ \text{Days} \end{array} \times \begin{array}{l} \text{Culpability} \\ \end{array} \times \begin{array}{l} \text{Cleanup \&} \\ \text{Cooperation} \end{array} \times \begin{array}{l} \text{History of} \\ \text{Violations} \end{array}$$

$$\begin{array}{l} \text{Total} \\ \text{Base} \\ \text{Liability} \end{array} = (\$3,500) \times (2) \times (1.3) \times (1.0) \times (1.0) = \$9,100$$

Step 6 -Ability to Pay and Ability to Continue In Business

See Section M. Ability to Pay and Ability to Continue In Business.

Step 7- Other Factors as Justice May Require

See Section N. Other Factors as Justice May Require.

Step 8 - Economic Benefit

Discharger achieved an economic benefit of \$185 by delaying the application of an erosion control BMP (e.g. spraying of bonded fiber matrix) on the finished slopes. The Discharger sprayed bonded fiber matrix on the slopes on October 27, 2010. Bonded fiber matrix costs approximately \$3,901⁴ per acre to install. Assuming that there were eight acres of exposed slopes the cost would be \$31,208. The savings of delaying the spraying from October 1, 2010, to October 27, 2010, is \$185. See Exhibit No. 9, Economic Benefit Calculation Violation No. 3.

Step 9 - Maximum and Minimum Liability Amounts

Pursuant to Water Code section 13385 the maximum civil liability that the San Diego Water Board may assess for this violation is (a) ten thousand dollars (\$10,000) per day of violation (per violation). Water Code section 13385(d) requires that when pursuing civil liability under Water Code section 13385, "[a]t a minimum, liability shall be assessed at a level that recovers the economic benefit, if any, derived from the acts that constitute the violation."

In this instance, the Prosecution Team is proposing the assessment of civil liability for the failure to implement erosion control BMPs for two days. The maximum civil liability that could be assessed for this violation is twenty thousand dollars (\$20,000).

Water Code section 13385(e) requires that when pursuing civil liability under section 13385, "at a minimum, liability shall be assessed at a level that recovers the economic benefit, if any, derived from the acts that constitute the violation." The Enforcement Policy requires that the adjusted Total Base Liability shall be at least ten percent (10%) higher than the economic benefit. Therefore the minimum liability is $(1.1) \times (\$185) = \204 .

Step 10 - Proposed Civil Liability for Violation No. 3

Based on the unique facts of this case, and the penalty calculation methodology within Section VI of the Enforcement Policy, the proposed civil liability for failing to implement erosion control BMPs for two days in violation of the Construction Storm Water Permit is nine thousand one hundred dollars (\$9,100) plus staff costs. The proposed liability is within the minimum and maximum liability range.

⁴ *Soil Stabilization BMP Research for Erosion and Sediment Controls, Cost Survey Technical Memorandum*, July 2007, Caltrans, Table 3-1, page 7.

Violation No. 4: Failure to Implement Sediment Control BMPs (3 days) October 25 - 27, 2010

Step 1 & 2 – Not Applicable (Non-Discharge Violation Alleged)

Step 3 – Per Day Assessments for Non-Discharge Violations

The Water Boards shall calculate an initial liability factor for each non-discharge violation, considering Potential for Harm and the extent of deviation from applicable requirements. While non-discharge violations may not directly or immediately impact beneficial uses, they harm or undermine the regulatory program.

Potential for Harm

The violation poses either a Minor, Moderate, or Major threat to beneficial uses. The Potential for Harm for this violation was characterized as **Moderate**. The Enforcement Policy defines Moderate Potential for Harm as “[t]he characteristics of the violation present a substantial threat to beneficial uses, and/or the circumstances of the violation indicate a substantial potential for harm. The Prosecution Team selected Moderate because this is a large site (more than 40 acres), it is a Risk Level 3 site, and it discharges into a sensitive water body.

Deviation from Requirement

The violation is characterized as either a Minor, Moderate, or Major deviation from the requirement. In this case, the Prosecution Team characterized the violation as a **Moderate** deviation from the requirement. The Enforcement Policy defines a Moderate “Deviation from Requirement” as “[t]he intended effectiveness of the requirement has been partially compromised (e.g., the requirement was not met, and the effectiveness of the requirement is only partially achieved).” Moderate was selected because although the Discharger implemented sediment control BMPs, it failed to maintain or augment some of the sediment control BMPs which resulted in the discharge of sediment into streets and gutters.

Per Day Factor and Per Day Assessment

Using a "Potential for Harm" factor of "Moderate" and "Deviation from Requirement" factor of "Moderate," the "Per Day Factor" for failing to implement effective sediment controls in Table 3 of the Enforcement Policy is **0.35**.

$$\text{Per Day Assessment} = (\text{Per Day Factor}) \times (\text{Statutory Maximum Liability})$$

$$\text{Per Day Assessment} = (0.35) \times (\$10,000) = \$3,500$$

Step 4 - Adjustment Factors

Three additional factors are considered and can modify the amount of initial liability: Culpability; Cleanup and Cooperation; and History of Violations.

Culpability

The culpability multiplier ranges between 0.5 and 1.5. The Prosecution Team assigns a multiplier of **1.3** for this violation because the Discharger was not maintaining BMPs and also failed to replace or increase the size of ineffective BMPs.

Cleanup and Cooperation

This is the extent to which the discharger voluntarily cooperated in returning to compliance and correcting environmental damage. Multiplier ranges between 0.75 to 1.5 with the lower multiplier applying where there is a high degree of cleanup and cooperation, and a higher multiplier where this is absent. In this case, the Prosecution Team assigns a multiplier of **1.0** because the Discharger did not fix the violation until instructed to do so by the San Diego Water Board.

History of Violations

The Prosecution Team assigns a history of violation multiplier of **1.0** because the Discharger does not have a history of construction storm water violations.

Step 5 - Determination of Total Base Liability Amount

The Total Base Liability amount is determined by multiplying the "Per Day Assessment" by the "Days of Violation" to determine the "Initial Amount of Liability" and then applying the adjustment factors as follows:

$$\begin{array}{l} \text{Total} \\ \text{Base} \\ \text{Liability} \end{array} = \begin{array}{l} \text{Per Day} \\ \text{Assessment} \end{array} \times \begin{array}{l} \text{No. of} \\ \text{Days} \end{array} \times \text{Culpability} \times \begin{array}{l} \text{Cleanup \&} \\ \text{Cooperation} \end{array} \times \begin{array}{l} \text{History of} \\ \text{Violations} \end{array}$$

$$\begin{array}{l} \text{Total} \\ \text{Base} \\ \text{Liability} \end{array} = (\$3,500) \times (3) \times (1.3) \times (1.0) \times (1.0) = \$13,650$$

Step 6 -Ability to Pay and Ability to Continue In Business

See Section M. Ability to Pay and Ability to Continue In Business.

Step 7- Other Factors as Justice May Require

See Section N. Other Factors as Justice May Require.

Step 8 - Economic Benefit

Discharger achieved an economic benefit of \$1,304 by delaying the maintenance of sediment control BMPs, the replacement of ineffective sediment control BMPs, and the installation of sediment control BMPs. Discharger swept the construction entrance after the San Diego Water Board inspection at the end of the work day. The graveled construction entrance was lengthened and additional rock was added. Discharger stated that it added 112 cubic yards of gravel. Gravel of that size weighs approximately 1.2 tons per cubic yard and costs \$30.50 per ton. Therefore, 112 cubic yards costs approximately \$4,099. Using the U.S. EPA BEN computer model the economic benefit of delaying compliance was \$24. Approximately 1,000 feet of slope perimeter was not protected. A 25 foot long 8 inch diameter fiber roll costs \$25. Fiber rolls are installed with a one foot overlap on each side. Therefore 48 25 foot long fibers rolls were needed and would have cost \$1,050. Using the U.S. EPA BEN computer model, Discharger experienced an economic benefit of \$1,280. Combining the two calculated economic benefits results in a total economic benefit of \$1,304. See Exhibit No. 10, Economic Benefit Calculation Violation No. 4.

Step 9 - Maximum and Minimum Liability Amounts

Pursuant to Water Code section 13385 the maximum civil liability that the San Diego Water Board may assess for this violation is (a) ten thousand dollars (\$10,000) per day of violation (per violation). In this instance, the Prosecution Team is proposing the assessment of civil liability for the failure to implement sediment control BMPs for three days. The maximum civil liability that could be assessed for this violation is thirty thousand dollars (\$30,000).

Water Code section 13385(e) requires that when pursuing civil liability under section 13385, "at a minimum, liability shall be assessed at a level that recovers the economic benefit, if any, derived from the acts that constitute the violation." The Enforcement Policy requires that the adjusted Total Base Liability shall be at least ten percent (10%) higher than the economic benefit. Therefore the minimum liability is $(1.1) \times (\$1,304) = \$1,434$.

Step 10 - Proposed Civil Liability for Violation No. 4

Based on the unique facts of this case, and the penalty calculation methodology within Section VI of the Enforcement Policy, the proposed civil liability for failing to implement sediment control BMPs for three days in violation of the Construction Storm Water Permit is thirteen thousand six hundred fifty dollars (\$13,650) plus staff costs. The proposed liability is within the minimum and maximum liability range.

Violation No. 5: Failure to Implement Erosion Control BMPs (11 days) January 2 - 12, 2014

Step 1 & 2 – Not Applicable (Non-Discharge Violation Alleged)

Step 3 – Per Day Assessments for Non-Discharge Violations

The Water Boards shall calculate an initial liability factor for each non-discharge violation, considering Potential for Harm and the extent of deviation from applicable requirements. While non-discharge violations may not directly or immediately impact beneficial uses, they harm or undermine the regulatory program.

Potential for Harm

The violation poses either a Minor, Moderate, or Major threat to beneficial uses. The Potential for Harm for this violation was characterized as **Moderate**. The Enforcement Policy defines Moderate Potential for Harm as “[t]he characteristics of the violation present a substantial threat to beneficial uses, and/or the circumstances of the violation indicate a substantial potential for harm. The Prosecution Team selected Moderate for the following reasons:

1. The Site, over 40 acres, characterized as “Risk Level 3,” the highest threat, much of which was graded, poses a substantial threat to discharge sediment given its large sediment load;
2. The ultimate receiving water is a sensitive water body listed as impaired under section 303(d) of the federal Clean Water Act for sedimentation/silt;
3. Sediment is a pollutant that when discharged can be lethal when it smothers benthic communities. Furthermore, sediment can transport toxic materials (e.g., metals and synthetic organics) from the Site and into receiving waters;
4. Unprotected long running slopes have a great potential for erosion;
5. Documentation showed two different exterior slopes were exposed without erosion control BMPs. Exterior slopes have the potential to quickly contribute large amounts of sediment into the storm water conveyance system and ultimately into receiving waters; and
6. January is historically the second wettest month of the year. Therefore the threat of a discharge is great in January.

Deviation from Requirement

The violation is characterized as either a Minor, Moderate, or Major deviation from the requirement. In this case, the Prosecution Team characterized the violation as a **Moderate** deviation from the requirement. The Enforcement Policy defines a Moderate "Deviation from Requirement" as "[t]he intended effectiveness of the requirement has been partially compromised (e.g., the requirement was not met, and the effectiveness of the requirement is only partially achieved)." The Discharger implemented erosion control BMPs, however some types of BMPs were not being addressed appropriately. Many of the violation notations were for stockpiles. Although stockpiles can be uncovered when actively used during the workday, they should be covered nightly and when not in use to protect from precipitation and wind. It is clear from the January 9, 2014, inspection photograph that stockpiles did not have plastic sheeting nearby to cover them when not in use or for nightly covering, nor did they have berms around them. As to the exterior slopes, they should be sprayed with an erosion control BMP as soon as they are finished.

Per Day Factor and Per Day Assessment

Using a "Potential for Harm" factor of "Moderate" and "Deviation from Requirement" factor of "Moderate," the "Per Day Factor" for failing to implement effective erosion controls in Table 3 of the Enforcement Policy is **0.35**.

$$\text{Per Day Assessment} = (\text{Per Day Factor}) \times (\text{Statutory Maximum Liability})$$

$$\text{Per Day Assessment} = (0.35) \times (\$10,000) = \$3,500$$

Step 4 - Adjustment Factors

Three additional factors are considered and can modify the amount of initial liability: Culpability; Cleanup and Cooperation; and History of Violations.

Culpability

The culpability multiplier ranges between 0.5 and 1.5. The Prosecution Team assigns a multiplier of **1.3** for this violation because these are common construction activities that could have been easily addressed. Also the Discharger failed to correct the deficiencies after repeated notifications by its QSP.

Cleanup and Cooperation

This is the extent to which the discharger voluntarily cooperated in returning to compliance and correcting environmental damage. Multiplier ranges between 0.75 to 1.5 with the lower multiplier applying where there is a high degree of cleanup and cooperation, and a higher multiplier where this is absent. In this case, the Prosecution Team assigns a multiplier of **1.0** because the Discharger corrected the violations upon San Diego Water Board notification.

History of Violations

The Prosecution Team assigns a history of violation multiplier of **1.0** because the Discharger does not have a history of construction storm water violations.

Step 5 - Determination of Total Base Liability Amount

The Total Base Liability amount is determined by multiplying the “Per Day Assessment” by the “Days of Violation” to determine the “Initial Amount of Liability” and then applying the adjustment factors as follows:

$$\begin{array}{l} \text{Total} \\ \text{Base} \\ \text{Liability} \end{array} = \begin{array}{l} \text{Per Day} \\ \text{Assessment} \end{array} \times \begin{array}{l} \text{No.} \\ \text{of} \\ \text{Days} \end{array} \times \text{Culpability} \times \begin{array}{l} \text{Cleanup \&} \\ \text{Cooperation} \end{array} \times \begin{array}{l} \text{History of} \\ \text{Violations} \end{array}$$

$$\begin{array}{l} \text{Total} \\ \text{Base} \\ \text{Liability} \end{array} = (\$3,500) \times (11) \times (1.3) \times (1.0) \times (1.0) = \$50,050$$

Step 6 -Ability to Pay and Ability to Continue In Business

See Section M. Ability to Pay and Ability to Continue In Business.

Step 7- Other Factors as Justice May Require

See Section N. Other Factors as Justice May Require.

Step 8 - Economic Benefit

Discharger achieved an economic benefit of \$19 by delaying the application of erosion control BMPs (e.g. spraying bonded fiber matrix) by eleven days (January 2, 2014 to January 12, 2014). It is estimated that 2.3 acres of slopes were exposed, and that the estimated cost to spray bonded fiber matrix is \$3,901⁵ per acre. Therefore the cost to spray the exposed slopes is estimated to be \$9,200. See Exhibit No. 11, Economic Benefit Calculation Violation No. 5.

Step 9 - Maximum and Minimum Liability Amounts

Pursuant to Water Code section 13385 the maximum civil liability that the San Diego Water Board may assess for this violation is (a) ten thousand dollars (\$10,000) per day of violation (per violation). Water Code section 13385(d) requires that when pursuing civil liability under Water Code section 13385, "[a]t a minimum, liability shall be assessed at a level that recovers the economic benefit, if any, derived from the acts that constitute the violation."

In this instance, the Prosecution Team is proposing the assessment of civil liability for the failure to implement erosion control BMPs for eleven days. The maximum civil liability that could be assessed for this violation is one hundred ten thousand dollars (\$110,000).

Water Code section 13385(e) requires that when pursuing civil liability under section 13385, "at a minimum, liability shall be assessed at a level that recovers the economic benefit, if any, derived from the acts that constitute the violation." The Enforcement Policy requires that the adjusted Total Base Liability shall be at least ten percent (10%) higher than the economic benefit. Therefore the minimum liability is $(1.1) \times (\$19) = \21 .

Step 10 - Proposed Civil Liability for Violation No. 5

Based on the unique facts of this case, and the penalty calculation methodology within Section VI of the Enforcement Policy, the proposed civil liability for failing to implement erosion control BMPs for eleven (11) days in violation of the Construction Storm Water Permit is fifty thousand fifty dollars (\$50,050) plus staff costs. The proposed liability is within the minimum and maximum liability range.

⁵ *Soil Stabilization BMP Research for Erosion and Sediment Controls, Cost Survey Technical Memorandum, July 2007, Caltrans, Table 3-1, page 7.*

Violation No. 6: Failure to Maintain Sediment Control BMPs (14 days) October 7, and 24, 2013; November 5, 12, 19, and 25; December 3, 9, 18, and 26, 2013; January 2, 8, 9, and 14, 2014.

Step 1 & 2 – Not Applicable (Non-Discharge Violation Alleged)

Step 3 – Per Day Assessments for Non-Discharge Violations

The Water Boards shall calculate an initial liability factor for each non-discharge violation, considering Potential for Harm and the extent of deviation from applicable requirements. While non-discharge violations may not directly or immediately impact beneficial uses, they harm or undermine the regulatory program.

Potential for Harm

The violation poses either a Minor, Moderate, or Major threat to beneficial uses. The Potential for Harm for this violation was characterized as **Moderate**. The Enforcement Policy defines Moderate Potential for Harm as “[t]he characteristics of the violation present a substantial threat to beneficial uses, and/or the circumstances of the violation indicate a substantial potential for harm. The Prosecution Team selected Moderate because this is a large site (more than 40 acres), it is a Risk Level 3 site, and it discharges into a sensitive water body.

Deviation from Requirement

The violation is characterized as either a Minor, Moderate, or Major deviation from the requirement. In this case, the Prosecution Team characterized the violation as a **Moderate** deviation from the requirement. The Enforcement Policy defines a Moderate “Deviation from Requirement” as “[t]he intended effectiveness of the requirement has been partially compromised (e.g., the requirement was not met, and the effectiveness of the requirement is only partially achieved).” Although the Discharger implemented sediment control BMPs, there was a consistent theme amongst the violations; failure to maintain/repair damaged sediment control BMPs. The majority of the noted violations were for failure to maintain/repair downed silt fencing. There were also notations for failure to maintain fiber rolls and storm drain inlet protection at the Site.

Silt fences are designed to slow down storm water runoff and retain sediment behind the fence. If the fence is lying down it is ineffective. There were eleven notations of a downed silt fence in need of repair. From the submitted photographs it was clear that it took several weeks for a down silt fence to be repaired and often the condition continued from one week to the next.

Fiber rolls operate in the same manner as silt fencing. If the fiber rolls are not in contact with the slope surface or are no longer running along slope contours, they will not be effective. Furthermore failure to maintain storm drain inlet protection can result in sediment discharges into the storm water conveyance system and ultimately receiving waters.

Per Day Factor and Per Day Assessment

Using a "Potential for Harm" factor of "Moderate" and "Deviation from Requirement" factor of "Moderate," the "Per Day Factor" for failing to maintain effective erosion and sediment controls in Table 3 of the Enforcement Policy is **0.35**.

Per Day Assessment = (Per Day Factor) x (Statutory Maximum Liability)

Per Day Assessment = (0.35) x (\$10,000) = \$3,500

Step 4 - Adjustment Factors

Three additional factors are considered and can modify the amount of initial liability: Culpability; Cleanup and Cooperation; and History of Violations.

Culpability

The culpability multiplier ranges between 0.5 and 1.5. The Prosecution Team assigns a multiplier of **1.3** for this violation because these are common construction activities that could have been easily addressed. Also the Discharger failed to correct the deficiencies after repeated notifications by its QSP.

Cleanup and Cooperation

This is the extent to which the discharger voluntarily cooperated in returning to compliance and correcting environmental damage. Multiplier ranges between 0.75 to 1.5 with the lower multiplier applying where there is a high degree of cleanup and cooperation, and a higher multiplier where this is absent. In this case, the Prosecution Team assigns a multiplier of **1.0** because the Discharger corrected the violations upon San Diego Water Board notification.

History of Violations

The Prosecution Team assigns a history of violation multiplier of **1.0** because the Discharger does not have a history of construction storm water violations.

Step 5 - Determination of Total Base Liability Amount

The Total Base Liability amount is determined by multiplying the "Per Day Assessment" by the "Days of Violation" to determine the "Initial Amount of Liability" and then applying the adjustment factors as follows:

$$\text{Total Base Liability} = \text{Per Day Assessment} \times \text{No. of Days} \times \text{Culpability} \times \text{Cleanup \& Cooperation} \times \text{History of Violations}$$

$$\text{Total Base Liability} = (\$3,500) \times (14) \times (1.3) \times (1.0) \times (1.0) = \$63,700$$

Step 6 -Ability to Pay and Ability to Continue In Business

See Section M. Ability to Pay and Ability to Continue In Business.

Step 7- Other Factors as Justice May Require

See Section N. Other Factors as Justice May Require.

Step 8 - Economic Benefit

Discharger achieved an economic benefit of \$9 by failing to maintain sediment control BMPs (e.g. restaking downed silt fence, restaking fiber rolls, replacing the inlet protection, and installing entrance BMPs). See Exhibit No. 12, Economic Benefit Calculation Violation No. 6.

Step 9 - Maximum and Minimum Liability Amounts

Pursuant to Water Code section 13385 the maximum civil liability that the San Diego Water Board may assess for this violation is (a) ten thousand dollars (\$10,000) per day of violation (per violation). Water Code section 13385(d) requires that when pursuing civil liability under Water Code section 13385, "[a]t a minimum, liability shall be assessed at a level that recovers the economic benefit, if any, derived from the acts that constitute the violation."

In this instance, the Prosecution Team is proposing the assessment of civil liability for the failure to maintain erosion control BMPs for fourteen (14) days. The maximum civil liability that could be assessed for this violation is one hundred and twenty thousand dollars (\$140,000).

Water Code section 13385(e) requires that when pursuing civil liability under section 13385, "at a minimum, liability shall be assessed at a level that recovers the economic benefit, if any, derived from the acts that constitute the violation." The Enforcement Policy requires that the adjusted Total Base Liability shall be at least ten percent (10%) higher than the economic benefit. Therefore the minimum liability is $(1.1) \times (\$9) = \10 .

Step 10 - Proposed Civil Liability for Violation No. 6

Based on the unique facts of this case, and the penalty calculation methodology within Section VI of the Enforcement Policy, the proposed civil liability for failing to maintain sediment control BMPs for fourteen (14) days in violation of the Construction Storm Water Permit is sixty-three thousand seven hundred dollars (\$63,700) plus staff costs. The proposed liability is within the minimum and maximum liability range.

Violation No. 7: Failure to Implement Housekeeping BMPs (16 days) October 7, 15, 24, and 29, 2013; November 5, 12, 19, 22, and 25, 2013; December 3, 9, 18, and 26, 2013; January 2, 8, and 9, 2014.

Step 1 & 2 – Not Applicable (Non-Discharge Violation Alleged)

Step 3 – Per Day Assessments for Non-Discharge Violations

The Water Boards shall calculate an initial liability factor for each non-discharge violation, considering Potential for Harm and the extent of deviation from applicable requirements. While non-discharge violations may not directly or immediately impact beneficial uses, they harm or undermine the regulatory program.

Potential for Harm

The violation poses either a Minor, Moderate, or Major threat to beneficial uses. The Potential for Harm for this violation was characterized as **Moderate**. The Enforcement Policy defines Moderate Potential for Harm as "[t]he characteristics of the violation present a substantial threat to beneficial uses, and/or the circumstances of the violation indicate a substantial potential for harm. The Prosecution Team selected Moderate for the following reasons:

1. The great majority (88 percent) of the QSP's noted housekeeping violations were for the existence of debris and waste throughout the Site. There were also notations for failure to cover waste dumpsters and improper use of concrete washouts.

2. The failure to manage the debris and waste created a threatened discharge from the Site during storm events, and daily due to wind;
3. Construction trash and debris can destroy habitat, harm wildlife, spread contagion, create obstructions and pose swimming hazards for humans and wildlife; and
4. Construction trash and debris interferes with the aesthetic enjoyment of hiking and picnicking along the tributary.

Deviation from Requirement

The violation is characterized as either a Minor, Moderate, or Major deviation from the requirement. In this case, the Prosecution Team characterized the violation as a **Moderate** deviation from the requirement. The Enforcement Policy defines a Moderate "Deviation from Requirement" as "[t]he intended effectiveness of the requirement has been partially compromised (e.g., the requirement was not met, and the effectiveness of the requirement is only partially achieved)." Although the Discharger implemented housekeeping BMPS, there was a consistent theme amongst the violations; failure to collect trash/debris and keep the construction Site clean. There was a clear failure to have enough waste receptacles throughout the Site. Furthermore, there was a failure to educate subcontractors on the proper disposal of trash/debris and the Discharger's expectation that the Site would remain clean and orderly.

Per Day Factor and Per Day Assessment

Using a "Potential for Harm" factor of "Moderate" and "Deviation from Requirement" factor of "Moderate," the "Per Day Factor" for failing to maintain effective erosion and sediment controls in Table 3 of the Enforcement Policy is **0.35**.

Per Day Assessment = (Per Day Factor) x (Statutory Maximum Liability)

Per Day Assessment = (0.35) x (\$10,000) = \$3,500

Step 4 - Adjustment Factors

Three additional factors are considered and can modify the amount of initial liability: Culpability; Cleanup and Cooperation; and History of Violations.

Culpability

The culpability multiplier ranges between 0.5 and 1.5. The Prosecution Team assigns a multiplier of **1.3** for this violation because these are common construction activities that could have been easily addressed. Also the Discharger failed to correct the deficiencies after repeated notifications by its QSP.

Cleanup and Cooperation

This is the extent to which the discharger voluntarily cooperated in returning to compliance and correcting environmental damage. Multiplier ranges between 0.75 to 1.5 with the lower multiplier applying where there is a high degree of cleanup and cooperation, and a higher multiplier where this is absent. In this case, the Prosecution Team assigns a multiplier of **1.0** because the Discharger corrected the violations upon San Diego Water Board notification.

History of Violations

The Prosecution Team assigns a history of violation multiplier of **1.0** because the Discharger does not have a history of construction storm water violations.

Step 5 - Determination of Total Base Liability Amount

The Total Base Liability amount is determined by multiplying the “Per Day Assessment” by the “Days of Violation” to determine the “Initial Amount of Liability” and then applying the adjustment factors as follows:

$$\text{Total Base Liability} = \text{Per Day Assessment} \times \text{No. of Days} \times \text{Culpability} \times \text{Cleanup \& Cooperation} \times \text{History of Violations}$$

$$\text{Total Base Liability} = (\$3,500) \times (16) \times (1.3) \times (1.0) \times (1.0) = \$72,800$$

Step 6 -Ability to Pay and Ability to Continue In Business

See Section M. Ability to Pay and Ability to Continue In Business.

Step 7- Other Factors as Justice May Require

See Section N. Other Factors as Justice May Require.

Step 8 - Economic Benefit

Discharger achieved an economic benefit of \$440 by delaying the collection of trash and debris, street sweeping, and concrete washout bins. See Exhibit No. 13, Economic Benefit Calculation Violation No. 7.

Step 9 - Maximum and Minimum Liability Amounts

Pursuant to Water Code section 13385 the maximum civil liability that the San Diego Water Board may assess for this violation is (a) ten thousand dollars (\$10,000) per day of violation (per violation). Water Code section 13385(d) requires that when pursuing civil liability under Water Code section 13385, "[a]t a minimum, liability shall be assessed at a level that recovers the economic benefit, if any, derived from the acts that constitute the violation."

In this instance, the Prosecution Team is proposing the assessment of civil liability for the failure to implement housekeeping BMPs for sixteen (16) days. The maximum civil liability that could be assessed for this violation is one hundred sixty thousand dollars (\$160,000).

Water Code section 13385(e) requires that when pursuing civil liability under section 13385, "at a minimum, liability shall be assessed at a level that recovers the economic benefit, if any, derived from the acts that constitute the violation." The Enforcement Policy requires that the adjusted Total Base Liability shall be at least ten percent (10%) higher than the economic benefit. Therefore the minimum liability is $(1.1) \times (\$440) = \484 .

Step 10 - Proposed Civil Liability for Violation No. 7

Based on the unique facts of this case, and the penalty calculation methodology within Section VI of the Enforcement Policy, the proposed civil liability for failing to implement housekeeping BMPs for sixteen (16) days in violation of the Construction Storm Water Permit is seventy-two thousand eight hundred dollars (\$72,800) plus staff costs. The proposed liability is within the minimum and maximum liability range.

Violation No. 8: Failure to Complete Inspection Checklist (12 Weekly Reports) October 7 and 24, 2013; November 5, 12, 19, and 25, 2013; December 3, 9, 18, and 26, 2013; and January 2 and 8, 2014.

Step 1 & 2 – Not Applicable (Non-Discharge Violation Alleged)

Step 3 – Per Day Assessments for Non-Discharge Violations

The Water Boards shall calculate an initial liability factor for each non-discharge violation, considering Potential for Harm and the extent of deviation from applicable requirements. While non-discharge violations may not directly or immediately impact beneficial uses, they harm or undermine the regulatory program.

Potential for Harm

The violation poses either a Minor, Moderate, or Major threat to beneficial uses. The Potential for Harm for this violation was characterized as **Moderate**. The Enforcement Policy defines Moderate Potential for Harm as “[t]he characteristics of the violation present a substantial threat to beneficial uses, and/or the circumstances of the violation indicate a substantial potential for harm. The Prosecution Team selected Moderate because failing to complete the inspection checklist allowed problem areas to remain unaddressed and therefore to threaten beneficial uses.

Deviation from Requirement

The violation is characterized as either a Minor, Moderate, or Major deviation from the requirement. In this case, the Prosecution Team characterized the violation as a **Moderate** deviation from the requirement. The Enforcement Policy defines a Moderate “Deviation from Requirement” as “[t]he intended effectiveness of the requirement has been partially compromised (e.g., the requirement was not met, and the effectiveness of the requirement is only partially achieved).” The Discharger employed a QSP that weekly inspected the Site and forwarded a checklist indicating what BMPs were acceptable, missing, or required repair. The Discharger received the checklist; however it failed to fill in the following critical components of the checklist to demonstrate that problem areas had been addressed:

1. Assign the corrective work to someone;
2. Indicate the date that the corrective work was completed;
3. Sign the checklist to indicate the chain of custody/responsibility for the corrective work; and
4. Indicate the date the checklist was received.

Based upon the checklist there is no record whether the deficient and missing BMPs were rectified. Here the Discharger failed to act on a key component of the Construction Storm Water Permit. Weekly inspections can identify vulnerable areas of the site, provide feedback as to the effectiveness of the BMPs, and indicate where use of a different BMP may be called for.

Per Day Factor and Per Day Assessment

Using a "Potential for Harm" factor of "Moderate" and "Deviation from Requirement" factor of "Moderate," the "Per Day Factor" for failing to maintain effective erosion and sediment controls in Table 3 of the Enforcement Policy is **0.35**.

Per Day Assessment = (Per Day Factor) x (Statutory Maximum Liability)

Per Day Assessment = (0.35) x (\$10,000) = \$3,500

Step 4 - Adjustment Factors

Three additional factors are considered and can modify the amount of initial liability: Culpability; Cleanup and Cooperation; and History of Violations.

Culpability

The culpability multiplier ranges between 0.5 and 1.5. The Prosecution Team assigns a multiplier of **1.3** for this violation because the QSP identified problems during the weekly inspections and the Discharger did not document or follow-up. Based upon the QSP's photographs, some BMP problems occurred over several weeks, or that the same type of pollution problem (e.g., debris) occurred over several weeks.

Cleanup and Cooperation

This is the extent to which the discharger voluntarily cooperated in returning to compliance and correcting environmental damage. Multiplier ranges between 0.75 to 1.5 with the lower multiplier applying where there is a high degree of cleanup and cooperation, and a higher multiplier where this is absent. In this case, the Prosecution Team assigns a multiplier of **1.0** because the Discharger's conduct was reasonable. Discharger hired a new QSP, and is now implementing the form.

History of Violations

The Prosecution Team assigns a history of violation multiplier of **1.0** because the Discharger does not have a history of construction storm water violations.

Step 5 - Determination of Total Base Liability Amount

The Total Base Liability amount is determined by multiplying the "Per Day Assessment" by the "Days of Violation" to determine the "Initial Amount of Liability" and then applying the adjustment factors as follows:

$$\text{Total Base Liability} = \text{Per Day Assessment} \times \text{No. of Days} \times \text{Culpability} \times \text{Cleanup \& Cooperation} \times \text{History of Violations}$$

$$\text{Total Base Liability} = (\$3,500) \times (12) \times (1.3) \times (1.0) \times (1.0) = \$54,600$$

Step 6 -Ability to Pay and Ability to Continue In Business

See Section M. Ability to Pay and Ability to Continue In Business.

Step 7- Other Factors as Justice May Require

See Section N. Other Factors as Justice May Require.

Step 8 - Economic Benefit

Discharger achieved an economic benefit of \$1,238 by failing to implement the checklist. See Exhibit No. 14, Economic Benefit Calculation Violation No. 8.

Step 9 - Maximum and Minimum Liability Amounts

Pursuant to Water Code section 13385 the maximum civil liability that the San Diego Water Board may assess for this violation is (a) ten thousand dollars (\$10,000) per day of violation (per violation). Water Code section 13385(d) requires that when pursuing civil liability under Water Code section 13385, "[a]t a minimum, liability shall be assessed at a level that recovers the economic benefit, if any, derived from the acts that constitute the violation."

In this instance, the Prosecution Team is proposing the assessment of civil liability for the failure to implement housekeeping BMPs for twelve (12) days. The maximum civil liability that could be assessed for this violation is one hundred twenty thousand dollars (\$120,000).

Water Code section 13385(e) requires that when pursuing civil liability under section 13385, "at a minimum, liability shall be assessed at a level that recovers the economic benefit, if any, derived from the acts that constitute the violation." The Enforcement Policy requires that the adjusted Total Base Liability shall be at least ten percent (10%) higher than the economic benefit. Therefore the minimum liability is $(1.1 \times \$1,238) = \$1,362$.

Step 10 - Proposed Civil Liability for Violation No. 8

Based on the unique facts of this case, and the penalty calculation methodology within Section VI of the Enforcement Policy, the proposed civil liability for failing to complete inspection checklists for twelve (12) days in violation of the Construction Storm Water Permit is fifty-four thousand six hundred dollars (\$54,600) plus staff costs. The proposed liability is within the minimum and maximum liability range.

M. Ability to Pay and Ability to Continue In Business

The Total Base Liability Amount may be adjusted to address the violator's ability to pay or continue in business. To do so, however, the San Diego Water Board must have sufficient financial information necessary to assess the violator's ability to pay the Total Base Liability Amount or to assess the effect of the Total Base Liability Amount on the violator's ability to continue in business. In this matter the San Diego Water Board has no information that the Discharger is unable to pay the proposed liability amount.

N. Other Factors as Justice May Require

The Enforcement Policy provides that if the San Diego Water Board believes that the amount determined using the above factors is inappropriate, the liability amount may be adjusted under the provision for "other factors as justice may require," if express findings are made. Examples of circumstances warranting an adjustment under this step are:

1. The discharger has provided, or Water Board staff has identified, other pertinent information not previously considered that indicates a higher or lower amount is justified.
2. A consideration of issues of environmental justice indicates that the amount would have a disproportionate impact on a particular disadvantaged group.
3. The calculated amount is entirely disproportionate to assessments for similar conduct made in the recent past using the Enforcement Policy.

The circumstances in this matter do not warrant an adjustment under this step.

The Enforcement Policy also provides under the “Other Factors as Justice May Require” that the cost of investigation and enforcement should be added to the liability amount. Over the course of trying to resolve this matter with the Discharger, the San Diego Water Board invested 152.5 hours to investigate, prepare enforcement documents, and consider this action. The total investment of the San Diego Water Board to date is \$10,874. A summary of the staff costs incurred to date is provided in Exhibit No. 15, Staff Cost Summary.

O. Total Proposed Liability Amount

The total proposed liability amount for the violations in ACL Complaint No. R9-2014-0044 is \$275,450 plus staff costs of \$10,874 for a total of \$286,324. A summary of the methodology used by the Prosecution Team to calculate the proposed civil liability is provided in Exhibit No.16, Penalty Methodology Summary. Below is a tabular summary of the total proposed liability, Table No. 1. Penalty Summary.

Table 1. Penalty Summary

Alleged Violation	Days of Violation	Liability Per Day of Violation	Liability Amount
1. Discharge of Sediment Laden Water, October 25, 2010	1	\$3,300	\$3,300
2. Failure to Monitor Storm Water Effluent, October 25, 2010	1	\$8,250	\$8,250
3. Failure to Implement Erosion Control BMPs, October 25 and 26, 2010	2	\$4,550	\$9,100
4. Failure to Implement Sediment Control BMPs, October 25, 26, and 27, 2010	3	\$4,550	\$13,650
5. Failure to Implement Erosion Control BMPs, October 24, 2013; November 5, and 19, 2013; January 2 - 12, 2014.	11	\$4,550	\$50,050
6. Failure to Maintain Sediment Control BMPs, October 7, and 24, 2013; November 5, 12, 19, and 25, 2013; December 3, 9, 18, and 26, 2013; January 2, 8, 9, and 14, 2014.	14	\$4,550	\$63,700
7. Failure to Implement Housekeeping BMPs, October 7, 15, 24, and 29, 2013; November 5, 12, 19, 22, and 25, 2013; December 3, 9, 18, and 26, 2013; January 2, 8, and 9, 2014.	16	\$4,550	\$72,800
8. Failure to Complete Inspection Checklist (12 Weekly Reports), October 7, 2013, through January 2, 2014.	12	\$4,550	\$54,600
Total Base Liability Amount			\$275,450
Staff Costs to Date			\$10,874
Total Proposed Liability			\$286,324

**Technical Analysis for
Settlement Agreement and Stipulation for
Entry of ACL Order No. R9-2014-0044
Casa Mira View**

December 12, 2014

Exhibits

1. Construction Storm Water Permit.
2. March 31, 2014, Sheppard Mullin letter.
3. NOI
4. NOV No. R9-2010-0146
5. November 22, 2010, Inspection Entry
6. NOV No. R9-2014-0018
7. March 7, 2014, Sheppard Mullin letter
8. Economic Benefit Calculation Violation No. 2.
9. Economic Benefit Calculation Violation No. 3.
10. Economic Benefit Calculation Violation No. 4.
11. Economic Benefit Calculation Violation No. 5.
12. Economic Benefit Calculation Violation No. 6.
13. Economic Benefit Calculation Violation No. 7.
14. Economic Benefit Calculation Violation No. 8.
15. Staff Cost Summary
16. Penalty Methodology Summary



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Arnold Schwarzenegger
Governor

Exhibit No. 1
Construction Storm Water Permit

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I. BACKGROUND

A. History

In 1972, the Federal Water Pollution Control Act (also referred to as the Clean Water Act [CWA]) was amended to provide that the discharge of pollutants to waters of the United States from any point source is unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. The 1987 amendments to the CWA added Section 402(p), which establishes a framework for regulating municipal and industrial storm water discharges under the NPDES Program. On November 16, 1990, the U.S. Environmental Protection Agency (USEPA) published final regulations that established storm water permit application requirements for specified categories of industries. The regulations provide that discharges of storm water to waters of the United States from construction projects that encompass five or more acres of soil disturbance are effectively prohibited unless the discharge is in compliance with an NPDES Permit. Regulations (Phase II Rule) that became final on December 8, 1999 lowered the permitting threshold from five acres to one acre.

While federal regulations allow two permitting options for storm water discharges (Individual Permits and General Permits), the State Water Board has elected to adopt only one statewide General Permit at this time that will apply to most storm water discharges associated with construction activity.

On August 19, 1999, the State Water Board reissued the General Construction Storm Water Permit (Water Quality Order 99-08-DWQ). On December 8, 1999 the State Water Board amended Order 99-08-DWQ to apply to sites as small as one acre.

The General Permit accompanying this fact sheet regulates storm water runoff from construction sites. Regulating many storm water discharges under one permit will greatly reduce the administrative burden associated with permitting individual storm water discharges. To obtain coverage under this General Permit, dischargers shall electronically file the Permit Registration Documents (PRDs), which includes a Notice of Intent (NOI), Storm Water Pollution Prevention Plan (SWPPP), and other compliance related documents required by this General Permit and mail the appropriate permit fee to the State Water Board. It is expected that as the storm water program develops, the Regional Water Quality Control Boards (Regional Water Boards) may issue General Permits or Individual Permits containing more specific permit provisions. When this occurs, this General Permit will no longer regulate those dischargers.

B. Legal Challenges and Court Decisions

1. Early Court Decisions

Shortly after the passage of the CWA, the USEPA promulgated regulations exempting most storm water discharges from the NPDES permit requirements. (See 40 C.F.R. § 125.4 (1975); see also *Natural Resources Defense Council v. Costle* (D.C. Cir. 1977) 568 F.2d 1369, 1372 (*Costle*); *Defenders of Wildlife v. Browner* (9th Cir. 1999) 191 F.3d 1159, 1163 (*Defenders of Wildlife*)). When environmental groups challenged this exemption in federal court, the District of Columbia Court of Appeals invalidated the regulation, holding that the USEPA “does not have authority to exempt categories of point sources from the permit requirements of [CWA] § 402.” (*Costle*, 568 F.2d at 1377.) The *Costle* court rejected the USEPA’s argument that effluent-based storm sewer regulation was administratively infeasible because of the variable nature of storm water pollution and the number of affected storm sewers throughout the country. (*Id.* at 1377-82.) Although the court acknowledged the practical problems relating to storm sewer regulation, the court found the USEPA had the flexibility under the CWA to design regulations that would overcome these problems. (*Id.* at 1379-83.) In particular, the court pointed to general permits and permits based on requiring best management practices (BMPs).

During the next 15 years, the USEPA made numerous attempts to reconcile the statutory requirement of point source regulation with the practical problem of regulating possibly millions of diverse point source discharges of storm water. (See *Defenders of Wildlife*, 191 F.3d at 1163; see also Gallagher, Clean Water Act in Environmental Law Handbook (Sullivan, edit., 2003) p. 300 (Environmental Law Handbook); Eisen, *Toward a Sustainable Urbanism: Lessons from Federal Regulation of Urban Storm Water Runoff* (1995) 48 Wash. U.J. Urb. & Contemp. L.1, 40-41 [Regulation of Urban Storm Water Runoff].)

In 1987, Congress amended the CWA to require NPDES permits for storm water discharges. (See CWA § 402(p), 33 U.S.C. § 1342(p); *Defenders of Wildlife*, 191 F.3d at 1163; *Natural Resources Defense Council v. USEPA* (9th Cir. 1992) 966 F.2d 1292, 1296.) In these amendments, enacted as part of the Water Quality Act of 1987, Congress distinguished between industrial and municipal storm water discharges. With respect to industrial storm water discharges, Congress provided that NPDES permits "shall meet all applicable provisions of this section and section 1311 [requiring the USEPA to establish effluent limitations under specific timetables]." (CWA § 402(p)(3)(A), 33 U.S.C. § 1342(p)(3)(A); see also *Defenders of Wildlife*, 191 F.3d at 1163-64.)

In 1990, USEPA adopted regulations specifying what activities were considered "industrial" and thus required discharges of storm water associated with those activities to obtain coverage under NPDES permits. (55 Fed. Reg. 47,990 (1990); 40 C.F.R. § 122.26(b)(14).) Construction activities, deemed a subset of the industrial activities category, must also be regulated by an NPDES permit. (40 C.F.R. § 122.26(b)(14)(x)). In 1999, USEPA issued regulations for "Phase II" of storm water regulation, which required most small construction sites (1-5 acres) to be regulated under the NPDES program. (64 Fed. Reg. 68,722; 40 C.F.R. § 122.26(b)(15)(i).)

2. Court Decisions on Public Participation

Two recent federal court opinions have vacated USEPA rules that denied meaningful public review of NPDES permit conditions. On January 14, 2003, the Ninth Circuit Court of Appeals held that certain aspects of USEPA's Phase II regulations governing MS4s were invalid primarily because the general permit did not contain express requirements for public participation. (*Environmental Defense Center v. USEPA* (9th Cir. 2003) 344 F.3d 832.) Specifically, the court determined that applications for general permit coverage (including the Notice of Intent (NOI) and Storm Water Management Program (SWMP)) must be made available to the public, the applications must be reviewed and determined to meet the applicable standard by the permitting authority before coverage commences, and there must be a process to accommodate public hearings. (*Id.* at 852-54.) Similarly, on February 28, 2005, the Second Circuit Court of Appeals held that the USEPA's confined animal feeding operation (CAFO) rule violated the CWA because it allowed dischargers to write their own nutrient management plans without public review. (*Waterkeeper Alliance v. USEPA* (2d Cir. 2005) 399 F.3d 486.) Although neither decision involved the issuance of construction storm water permits, the State Water Board's Office of Chief Counsel has recommended that the new General Permit address the courts' rulings where feasible¹.

¹ In *Texas Independent Producers and Royalty Owners Assn. v. USEPA* (7th Cir. 2005) 410 F.3d 964, the Seventh Circuit Court of Appeals held that the USEPA's construction general permit was not required to provide the public with the opportunity for a public hearing on the Notice of Intent or Storm Water Pollution Prevention Plan. The Seventh Circuit briefly discussed why it agreed with the Ninth Circuit's dissent in *Environmental Defense Center*, but

The CWA and the USEPA's regulations provide states with the discretion to formulate permit terms, including specifying best management practices (BMPs), to achieve strict compliance with federal technology-based and water quality-based standards. (*Natural Resources Defense Council v. USEPA* (9th Cir. 1992) 966 F.2d 1292, 1308.) Accordingly, this General Permit has developed specific BMPs as well as numeric action levels (NALs) in order to achieve these minimum federal standards. In addition, the General Permit requires a SWPPP and REAP (another dynamic, site-specific plan) to be developed but has removed all language requiring the discharger to implement these plans – instead, the discharger is required to comply with specific requirements. By requiring the dischargers to implement these specific BMPs and NALs, this General Permit ensures that the dischargers do not “write their own permits.” As a result this General Permit does not require each discharger's SWPPP and REAP to be reviewed and approved by the Regional Water Boards.

This General Permit also requires dischargers to electronically file all permit-related compliance documents. These documents include, but are not limited to, NOIs, SWPPPs, annual reports, Notice of Terminations (NOTs), and numeric action level (NAL) exceedance reports. Electronically submitted compliance information is immediately available to the public, as well as the Regional Water Quality Control Board (Regional Water Board) offices, via the Internet. In addition, this General Permit enables public review and hearings on permit applications when appropriate. Under this General Permit, the public clearly has a meaningful opportunity to participate in the permitting process.

generally did not discuss the substantive holdings in *Environmental Defense Center and Waterkeeper Alliance*, because neither court addressed the initial question of whether the plaintiffs had standing to challenge the permits at issue. However, notwithstanding the Seventh Circuit's decision, it is not binding or controlling on the State Water Board because California is located within the Ninth Circuit.

C. Blue Ribbon Panel of Experts and Feasibility of Numeric Effluent Limitations

In 2005 and 2006, the State Water Board convened an expert panel (panel) to address the feasibility of numeric effluent limitations (NELs) in California's storm water permits. Specifically, the panel was asked to address:

"Is it technically feasible to establish numeric effluent limitations, or some other quantifiable limit, for inclusion in storm water permits? How would such limitations or criteria be established, and what information and data would be required?"

"The answers should address industrial general permits, construction general permits, and area-wide municipal permits. The answers should also address both technology-based limitations or criteria and water quality-based limitations or criteria. In evaluating establishment of any objective criteria, the panel should address all of the following:

The ability of the State Water Board to establish appropriate objective limitations or criteria;

How compliance determinations would be made;

The ability of dischargers and inspectors to monitor for compliance; and

The technical and financial ability of dischargers to comply with the limitations or criteria."

Through a series of public participation processes (State Water Board meetings, State Water Board workshops, and the solicitation of written comments), a number of water quality, public process and overall program effectiveness problems were identified. Some of these problems are addressed through this General Permit.

D. Summary of Panel Findings on Construction Activities

The panel's final report can be downloaded and viewed through links at www.waterboards.ca.gov or by clicking [here](#)².

The panel made the following observations:

"Limited field studies indicate that traditional erosion and sediment controls are highly variable in performance, resulting in highly variable turbidity levels in the site discharge."

"Site-to-site variability in runoff turbidity from undeveloped sites can also be quite large in many areas of California, particularly in more arid regions with less natural vegetative cover and steep slopes."

² http://www.waterboards.ca.gov/stormwtr/docs/numeric/swpanel_final_report.pdf

“Active treatment technologies involving the use of polymers with relatively large storage systems now exist that can provide much more consistent and very low discharge turbidity. However, these technologies have as yet only been applied to larger construction sites, generally five acres or greater. Furthermore, toxicity has been observed at some locations, although at the vast majority of sites, toxicity has not occurred. There is also the potential for an accidental large release of such chemicals with their use.”

“To date most of the construction permits have focused on TSS and turbidity, but have not addressed other, potentially significant pollutants such as phosphorus and an assortment of chemicals used at construction sites.”

“Currently, there is no required training or certification program for contractors, preparers of soil erosion and sediment control Storm Water Pollution Prevention Plans, or field inspectors.”

“The quality of storm water discharges from construction sites that effectively employ BMPs likely varies due to site conditions such as climate, soil, and topography.”

“The States of Oregon and Washington have recently adopted similar concepts to the Action Levels described earlier.”

In addition, the panel made the following conclusions:

“It is the consensus of the Panel that active treatment technologies make Numeric Limits technically feasible for pollutants commonly associated with storm water discharges from construction sites (e.g. TSS and turbidity) for larger construction sites. Technical practicalities and cost-effectiveness may make these technologies less feasible for smaller sites, including small drainages within a larger site, as these technologies have seen limited use at small construction sites. If chemical addition is not permitted, then Numeric Limits are not likely feasible.”

“The Board should consider Numeric Limits or Action Levels for other pollutants of relevance to construction sites, but in particular pH. It is of particular concern where fresh concrete or wash water from cement mixers/equipment is exposed to storm water.”

“The Board should consider the phased implementation of Numeric Limits and Action Levels, commensurate with the capacity of the dischargers and support industry to respond.”

E. How the Panel’s Findings are Used in this General Permit

The State Water Board carefully considered the findings of the panel and related public comments. The State Water Board also reviewed and considered the comments regarding statewide storm water policy and the reissuance of the Industrial General Permit. From the input received the State Water Board identified some permit and program performance gaps that are addressed in this General Permit. The Summary of Significant Changes (below) in this General Permit are a direct result of this process.

F. Summary of Significant Changes in This General Permit

The State Water Board has significant changes to Order 99-08-DWQ. This General Permit differs from Order 99-08-DWQ in the following significant ways:

Rainfall Erosivity Waiver: this General Permit includes the option allowing a small construction site (>1 and <5 acres) to self-certify if the rainfall erosivity value (R value) for their site's given location and time frame compute to be less than or equal to 5.

Technology-Based Numeric Action Levels: this General Permit includes NALs for pH and turbidity.

Risk-Based Permitting Approach: this General Permit establishes three levels of risk possible for a construction site. Risk is calculated in two parts: 1) Project Sediment Risk, and 2) Receiving Water Risk.

Minimum Requirements Specified: this General Permit imposes more minimum BMPs and requirements that were previously only required as elements of the SWPPP or were suggested by guidance.

Project Site Soil Characteristics Monitoring and Reporting: this General Permit provides the option for dischargers to monitor and report the soil characteristics at their project location. The primary purpose of this requirement is to provide better risk determination and eventually better program evaluation.

Effluent Monitoring and Reporting: this General Permit requires effluent monitoring and reporting for pH and turbidity in storm water discharges. The purpose of this monitoring is to evaluate whether NALs and NELs for Active Treatment Systems included in this General Permit are exceeded.

Receiving Water Monitoring and Reporting: this General Permit requires some Risk Level 3 and LUP Type 3 dischargers to monitor receiving waters and conduct bioassessments.

Post-Construction Storm Water Performance Standards: this General Permit specifies runoff reduction requirements for all sites not covered by a Phase I or Phase II MS4 NPDES permit, to avoid, minimize and/or mitigate post-construction storm water runoff impacts.

Rain Event Action Plan: this General Permit requires certain sites to develop and implement a Rain Event Action Plan (REAP) that must be designed to protect all exposed portions of the site within 48 hours prior to any likely precipitation event.

Annual Reporting: this General Permit requires all projects that are enrolled for more than one continuous three-month period to submit information and annually certify that their site is in compliance with these requirements. The primary purpose of this requirement is to provide information needed for overall program evaluation and public information.

Certification/Training Requirements for Key Project Personnel: this General Permit requires that key personnel (e.g., SWPPP preparers, inspectors, etc.) have specific training or certifications to ensure their level of knowledge and skills are adequate to ensure their ability to design and evaluate project specifications that will comply with General Permit requirements.

Linear Underground/Overhead Projects: this General Permit includes requirements for all Linear Underground/Overhead Projects (LUPs).

II. RATIONALE

A. General Permit Approach

A general permit for construction activities is an appropriate permitting approach for the following reasons:

1. A general permit is an efficient method to establish the essential regulatory requirements for a broad range of construction activities under differing site conditions;
2. A general permit is the most efficient method to handle the large number of construction storm water permit applications;
3. The application process for coverage under a general permit is far less onerous than that for individual permit and hence more cost effective;
4. A general permit is consistent with USEPA's four-tier permitting strategy, the purpose of which is to use the flexibility provided by the CWA in designing a workable and efficient permitting system; and
5. A general permit is designed to provide coverage for a group of related facilities or operations of a specific industry type or group of industries. It is appropriate when the discharge characteristics are sufficiently similar, and a standard set of permit requirements can effectively provide environmental protection and comply with water quality standards for discharges. In most cases, the general permit will provide sufficient and appropriate management requirements to protect the quality of receiving waters from discharges of storm water from construction sites.

There may be instances where a general permit is not appropriate for a specific construction project. A Regional Water Board may require any discharger otherwise covered under the General Permit to apply for and obtain an Individual Permit or apply for coverage under a more specific General Permit. The Regional Water Board must determine that this General Permit does not provide adequate assurance that water quality will be protected, or that there is a site-specific reason why an individual permit should be required.

B. Construction Activities Covered

1. Construction activity subject to this General Permit:

Any construction or demolition activity, including, but not limited to, clearing, grading, grubbing, or excavation, or any other activity that results in a land disturbance of equal to or greater than one acre.

Construction activity that results in land surface disturbances of less than one acre if the construction activity is part of a larger common plan of development or sale of one or more acres of disturbed land surface.

Construction activity related to residential, commercial, or industrial development on lands currently used for agriculture including, but not limited to, the construction of buildings related to agriculture that are considered industrial pursuant to USEPA regulations, such as dairy barns or food processing facilities.

Construction activity associated with LUPs including, but not limited to, those activities necessary for the installation of underground and overhead linear facilities (e.g., conduits, substructures, pipelines, towers, poles, cables, wires, connectors, switching, regulating and transforming equipment and associated ancillary facilities) and include, but are not limited to, underground utility mark-out, potholing, concrete

and asphalt cutting and removal, trenching, excavation, boring and drilling, access road and pole/tower pad and cable/wire pull station, substation construction, substructure installation, construction of tower footings and/or foundations, pole and tower installations, pipeline installations, welding, concrete and/or pavement repair or replacement, and stockpile/borrow locations.

Discharges of sediment from construction activities associated with oil and gas exploration, production, processing, or treatment operations or transmission facilities.³

Storm water discharges from dredge spoil placement that occur outside of U.S. Army Corps of Engineers jurisdiction⁴ (upland sites) and that disturb one or more acres of land surface from construction activity are covered by this General Permit. Construction projects that intend to disturb one or more acres of land within the jurisdictional boundaries of a CWA § 404 permit should contact the appropriate Regional Water Board to determine whether this permit applies to the project.

2. Linear Underground/Overhead Projects (LUPs) subject to this General Permit:

Underground/overhead facilities typically constructed as LUPs include, but are not limited to, any conveyance, pipe, or pipeline for the transportation of any gaseous, liquid (including water, wastewater for domestic municipal services), liquescent, or slurry substance; any cable line or wire for the transmission of electrical energy; any cable line or wire for communications (e.g., telephone, telegraph, radio or television messages); and associated ancillary facilities. Construction activities associated with LUPs include, but are not limited to, those activities necessary for the installation of underground and overhead linear facilities (e.g., conduits, substructures, pipelines, towers, poles, cables, wires, connectors, switching, regulating and transforming equipment and associated ancillary facilities) and include, but are not limited to, underground utility mark-out, potholing, concrete and asphalt cutting and removal, trenching, excavation, boring and drilling, access road and pole/tower pad and cable/wire pull station, substation construction, substructure installation, construction of tower footings and/or foundations, pole and tower installations, pipeline installations, welding, concrete and/or pavement repair or replacement, and stockpile/borrow locations.

Water Quality Order 2003-0007-DWQ regulated construction activities associated with small LUPs that resulted in land disturbances greater than one acre, but less than five acres. These projects were considered non-traditional construction projects. Attachment A of this Order now regulates all construction activities from LUPs resulting in land disturbances greater than one acre.

3. Common Plan of Development or Sale

USEPA regulations include the term “common plan of development or sale” to ensure that acreage within a common project does not artificially escape the permit requirements because construction activities are phased, split among smaller parcels, or completed by different owners/developers. In the absence of an

³ Pursuant to the Ninth Circuit Court of Appeals' decision in *NRDC v. EPA* (9th Cir. 2008) 526 F.3d 591, and subsequent denial of the USEPA's petition for reconsideration in November 2008, oil and gas construction activities discharging storm water contaminated only with sediment are no longer exempt from the NPDES program.

⁴ A construction site that includes a dredge and/or fill discharge to any water of the United States (e.g., wetland, channel, pond, or marine water) requires a CWA Section 404 permit from the U.S. Army Corps of Engineers and a CWA Section 401 Water Quality Certification from the Regional Water Board or State Water Board.

exact definition of “common plan of development or sale,” the State Water Board is required to exercise its regulatory discretion in providing a common sense interpretation of the term as it applies to construction projects and permit coverage. An overbroad interpretation of the term would render meaningless the clear “one acre” federal permitting threshold and would potentially trigger permitting of almost any construction activity that occurs within an area that had previously received area-wide utility or road improvements.

Construction projects generally receive grading and/or building permits (Local Permits) from local authorities prior to initiating construction activity. These Local Permits spell out the scope of the project, the parcels involved, the type of construction approved, etc. Referring to the Local Permit helps define “common plan of development or sale.” In cases such as tract home development, a Local Permit will include all phases of the construction project including rough grading, utility and road installation, and vertical construction. All construction activities approved in the Local Permit are part of the common plan and must remain under the General Permit until construction is completed. For custom home construction, Local Permits typically only approve vertical construction as the rough grading, utilities, and road improvements were already independently completed under the a previous Local Permit. In the case of a custom home site, the homeowner must submit plans and obtain a distinct and separate Local Permit from the local authority in order to proceed. It is not the intent of the State Water Board to require permitting for an individual homeowner building a custom home on a private lot of less than one acre if it is subject to a separate Local Permit. Similarly, the installation of a swimming pool, deck, or landscaping that disturbs less than one acre that was not part of any previous Local Permit are not required to be permitted.

The following are several examples of construction activity of less than one acre that would require permit coverage:

- a. A landowner receives a building permit(s) to build tract homes on a 100-acre site split into 200 one-third acre parcels, (the remaining acreage consists of streets and parkways) which are sold to individual homeowners as they are completed. The landowner completes and sells all the parcels except for two. Although the remaining two parcels combined are less than one acre, the landowner must continue permit coverage for the two parcels.
- b. One of the parcels discussed above is sold to another owner who intends to complete the construction as already approved in the Local Permit. The new landowner must file Permit Registration Documents (PRDs) to complete the construction even if the new landowner is required to obtain a separate Local Permit.
- c. Landowner in (1) above purchases 50 additional one half-acre parcels adjacent to the original 200-acre project. The landowner seeks a Local Permit (or amendment to existing Local permit) to build on 20 parcels while leaving the remaining 30 parcels for future development. The landowner must amend PRDs to include the 20 parcels 14 days prior to commencement of construction activity on those parcels.

C. Construction Activities Not Covered

1. Traditional Construction Projects Not Covered

This General Permit does not apply to the following construction activity:

- a. Routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of the facility.

- b. Disturbances to land surfaces solely related to agricultural operations such as disking, harrowing, terracing and leveling, and soil preparation.
- c. Discharges of storm water from areas on tribal lands; construction on tribal lands is regulated by a federal permit.
- d. Discharges of storm water within the Lake Tahoe Hydrologic Unit. The Lahontan Regional Water Board has adopted its own permit to regulate storm water discharges from construction activity in the Lake Tahoe Hydrologic Unit (Regional Water Board 6SLT). Owners of construction projects in this watershed must apply for the Lahontan Regional Water Board permit rather than the statewide Construction General Permit. Construction projects within the Lahontan region must also comply with the Lahontan Region Project Guideline for Erosion Control (R6T-2005-0007 Section), which can be found at http://www.waterboards.ca.gov/lahontan/Adopted_Orders/2005/r6t_2005_0007.pdf
- e. Construction activity that disturbs less than one acre of land surface, unless part of a larger common plan of development or the sale of one or more acres of disturbed land surface.
- f. Construction activity covered by an individual NPDES Permit for storm water discharges.
- g. Landfill construction activity that is subject to the Industrial General Permit.
- h. Construction activity that discharges to Combined Sewer Systems.
- i. Conveyances that discharge storm water runoff combined with municipal sewage.
- j. Discharges of storm water identified in CWA § 402(l)(2), 33 U.S.C. § 1342(l)(2).

2. Linear Projects Not Covered

- a. LUP construction activity does not include linear routine maintenance projects. Routine maintenance projects are projects associated with operations and maintenance activities that are conducted on existing lines and facilities and within existing right-of-way, easements, franchise agreements, or other legally binding agreements of the discharger. Routine maintenance projects include, but are not limited to projects that are conducted to:
 - i. Maintain the original purpose of the facility or hydraulic capacity.
 - ii. Update existing lines⁵ and facilities to comply with applicable codes, standards, and regulations regardless if such projects result in increased capacity.
 - iii. Repairing leaks.

⁵Update existing lines includes replacing existing lines with new materials or pipes.

Routine maintenance does not include construction of new⁶ lines or facilities resulting from compliance with applicable codes, standards, and regulations.

Routine maintenance projects do not include those areas of maintenance projects that are outside of an existing right-of-way, franchise, easements, or agreements. When a project must secure new areas, those areas may be subject to this General Permit based on the area of disturbed land outside the original right-of-way, easement, or agreement.

- b. LUP construction activity does not include field activities associated with the planning and design of a project (e.g., activities associated with route selection).
- c. Tie-ins conducted immediately adjacent to “energized” or “pressurized” facilities by the discharger are not considered construction activities where all other LUP construction activities associated with the tie-in are covered by an NOI and SWPPP of a third party or municipal agency.

3. EPA’s Small Construction Rainfall Erosivity Waiver

EPA’s Storm Water Phase II Final Rule provides the option for a Small Construction Rainfall Erosivity Waiver. This waiver applies to small construction sites between 1 and 5 acres, and allows permitting authorities to waive those sites that do not have adverse water quality impacts.

Dischargers eligible for this waiver are exempt from Construction General Permit Coverage. In order to obtain the waiver, the discharger must certify to the State Water Board that small construction activity will occur only when the rainfall erosivity factor is less than 5 (“R” in the Revised Universal Soil Loss Equation). The period of construction activity begins at initial earth disturbance and ends with final stabilization. Where vegetation will be used for final stabilization, the date of installation of a practice that provides interim non-vegetative stabilization can be used for the end of the construction period. The operator must agree (as a condition waiver eligibility) to periodically inspect and properly maintain the area until the criteria for final stabilization as defined in the General Permit have been met. If use of this interim stabilization eligibility condition was relied on to qualify for the waiver, signature on the waiver with a certification statement constitutes acceptance of and commitment to complete the final stabilization process. The discharger must submit a waiver certification to the State Board prior to commencing construction activities.

USEPA funded a cooperative agreement with Texas A&M University to develop an online rainfall erosivity calculator. Dischargers can access the calculator from EPA’s website at: www.epa.gov/npdes/stormwater/cgp. Use of the calculator allows the discharger to determine potential eligibility for the rainfall erosivity waiver. It may also be useful in determining the time periods during which construction activity could be waived from permit coverage.

⁶New lines are those that are not associated with existing facilities and are not part of a project to update or replace existing lines.

D. Obtaining and Terminating Permit Coverage

The appropriate Legally Responsible Person (LRP) must obtain coverage under this General Permit. To obtain coverage, the LRP or the LRP's Approved Signatory must file Permit Registration Documents (PRDs) prior to the commencement of construction activity. Failure to obtain coverage under this General Permit for storm water discharges to waters of the United States is a violation of the CWA and the California Water Code.

To obtain coverage under this General Permit, LRPs must electronically file the PRDs, which include a Notice of Intent (NOI), Storm Water Pollution Prevention Plan (SWPPP), and other documents required by this General Permit, and mail the appropriate permit fee to the State Water Board. It is expected that as the storm water program develops, the Regional Water Boards may issue General Permits or Individual Permits that contain more specific permit provisions. When this occurs, this General Permit will no longer regulate those dischargers that obtain coverage under Individual Permits.

Any information provided to the Regional Water Board shall comply with the Homeland Security Act and any other federal law that concerns security in the United States; any information that does not comply should not be submitted.

The application requirements of the General Permit establish a mechanism to clearly identify the responsible parties, locations, and scope of operations of dischargers covered by the General Permit and to document the discharger's knowledge of the General Permit's requirements.

This General Permit provides a grandfathering exception to existing dischargers subject to Water Quality Order No. 99-08-DWQ. Construction projects covered under Water Quality Order No. 99-08-DWQ shall obtain permit coverage at Risk Level 1. LUP projects covered under Water Quality Order No. 2003-0007-DWQ shall obtain permit coverage at LUP Type 1. The Regional Water Boards have the authority to require Risk Determination to be performed on projects currently covered under Water Quality Order No. 99-08-DWQ and 2003-0007-DWQ where they deem necessary.

LRPs must file a Notice of Termination (NOT) with the Regional Water Board when construction is complete and final stabilization has been reached or ownership has been transferred. The discharger must certify that all State and local requirements have been met in accordance with this General Permit. In order for construction to be found complete, the discharger must install post-construction storm water management measures and establish a long-term maintenance plan. This requirement is intended to ensure that the post-construction conditions at the project site do not cause or contribute to direct or indirect water quality impacts (i.e., pollution and/or hydromodification) upstream and downstream. Specifically, the discharger must demonstrate compliance with the post-construction standards set forth in this General Permit (Section XIII). The discharger is responsible for all compliance issues including all annual fees until the NOT has been filed and approved by the local Regional Water Board.

E. Discharge Prohibitions

This General Permit authorizes the discharge of storm water to surface waters from construction activities that result in the disturbance of one or more acres of land, provided that the discharger satisfies all permit conditions set forth in the Order. This General Permit prohibits the discharge of pollutants other than storm water and non-storm water discharges authorized by this General Permit or another NPDES permit. This General Permit also prohibits all discharges which contain a hazardous substance in excess of reportable quantities established in 40 C.F.R. §§ 117.3 and 302.4, unless a separate NPDES Permit has been issued to regulate those discharges. In addition, this General Permit incorporates discharge prohibitions contained in water quality control plans, as implemented by the nine Regional Water Boards. Discharges to Areas of Special Biological Significance (ASBS) are prohibited unless covered by an exception that the State Water Board has approved.

Non-storm water discharges include a wide variety of sources, including improper dumping, spills, or leakage from storage tanks or transfer areas. Non-storm water discharges may contribute significant pollutant loads to receiving waters. Measures to control spills, leakage, and dumping, and to prevent illicit connections during construction must be addressed through structural as well as non-structural BMPs. The State Water Board recognizes, however, that certain non-storm water discharges may be necessary for the completion of construction projects. Authorized non-storm water discharges may include those from de-chlorinated potable water sources such as: fire hydrant flushing, irrigation of vegetative erosion control measures, pipe flushing and testing, water to control dust, uncontaminated ground water dewatering, and other discharges not subject to a separate general NPDES permit adopted by a region. Therefore this General Permit authorizes such discharges provided they meet the following conditions.

These authorized non-storm water discharges must:

1. be infeasible to eliminate;
2. comply with BMPs as described in the SWPPP;
3. filter or treat, using appropriate technology, all dewatering discharges from sedimentation basins;
4. meet the NALs for pH and turbidity; and
5. not cause or contribute to a violation of water quality standards.

Additionally, authorized non-storm water discharges must not be used to clean up failed or inadequate construction or post-construction BMPs designed to keep materials onsite. Authorized non-storm water dewatering discharges may require a permit because some Regional Water Boards have adopted General Permits for dewatering discharges.

This General Permit prohibits the discharge of storm water that causes or threatens to cause pollution, contamination, or nuisance.

F. Effluent Standards for All Types of Discharges

1. Technology-Based Effluent Limitations

Permits for storm water discharges associated with construction activity must meet all applicable provisions of Sections 301 and 402 of the CWA. These provisions require controls of pollutant discharges that utilize best available technology economically achievable (BAT) for toxic pollutants and non conventional pollutants and best conventional pollutant control technology (BCT) for conventional pollutants. Additionally, these provisions require controls of pollutant discharges to reduce pollutants and any more stringent controls necessary to meet water quality standards. The USEPA has already established such limitations, known as effluent limitation guidelines (ELGs), for some industrial categories. This is not the case with construction discharges. In instances where there are no ELGs the permit writer is to use best professional judgment (BPJ) to establish requirements that the discharger must meet using BAT/BCT technology. This General Permit contains only narrative effluent limitations and does not contain numeric effluent limitations, except for Active Treatment Systems (ATS).

Order No. 2009-0009-DWQ, as originally adopted by the State Water Board on September 2, 2009, contained numeric effluent limitations for pH (within the range of 6.0 and 9.0 pH units) and turbidity (500 NTU) that applied only to Risk Level 3 and LUP Type 3 construction sites. The State Water Board adopted the numeric effluent limitations as technology-based effluent limitations based upon its best professional judgment. The California Building Industry Association, the Building Industry Legal Defense

Foundation, and the California Business Properties Association (petitioners) challenged Order No. 2009-0009-DWQ in *California Building Industry Association et al. v. State Water Resources Control Board*. On December 27, 2011, the Superior Court issued a judgment and writ of mandamus. The Superior Court ruled in favor of the State Water Board on almost all of the issues the petitioners raised, but the Superior Court invalidated the numeric effluent limitations for pH and turbidity for Risk Level 3 and LUP Type 3 sites because it determined that the State Water Board did not have sufficient BMP performance data to support those numeric effluent limitations. Therefore, the Superior Court concluded that the State Water Board did not comply with the federal regulations that apply to the use of best professional judgment. In invalidating the numeric effluent limitations, the Superior Court also suspended two ancillary requirements (a compliance storm event provision and receiving water monitoring at Risk Level 3 and LUP Type 3 sites that violated the numeric effluent limitations) that related solely to the invalidated numeric effluent limitations.

As a result of the Superior Court's writ of mandamus, this Order no longer contains numeric effluent limitations for pH and turbidity, except for ATS. In addition, as a result of the Superior Court's writ of mandamus, the receiving water monitoring requirements for Risk Level 3 and LUP Type 3 sites were suspended until the State Water Board amended this Order to restore the receiving water monitoring requirements. As amended, this Order now requires Risk Level 3 and LUP Type 3 Dischargers with direct discharges to surface waters to conduct receiving water monitoring whenever their effluent exceeds specified receiving water monitoring triggers. The receiving water monitoring triggers were established at the same levels as the previous numeric effluent limitations (effluent pH outside the range of 6.0 and 9.0 pH units or turbidity exceeding 500 NTU). In restoring the receiving water monitoring requirements, the State Water Board determined that it was appropriate to require receiving water monitoring for these types of sites with direct discharges to surface waters that exceeded the receiving water monitoring triggers under any storm event scenarios, because these sites represent the highest threat to receiving water quality. An exceedance of a receiving water monitoring trigger does not constitute a violation of this General Permit. These receiving water monitoring requirements take effect on the effective date of the amendment to this Order.

BAT/BCT technologies not only include passive systems such as conventional runoff and sediment control, but also treatment systems such as coagulation/flocculation using sand filtration, when appropriate. Such technologies allow for effective treatment of soil particles less 0.02 mm (medium silt) in diameter. The discharger must install structural controls, as necessary, such as erosion and sediment controls that meet BAT and BCT to achieve compliance with water quality standards. The narrative effluent limitations constitute compliance with the requirements of the CWA.

Because the permit is an NPDES permit, there is no legal requirement to address the factors set forth in Water Code sections 13241 and 13263, unless the permit is more stringent than what federal law requires. (See *City of Burbank v. State Water Resources Control Bd.* (2005) 35 Cal.4th 613, 618, 627.) None of the requirements in this permit are more stringent than the minimum federal requirements, which include technology-based requirements achieving BAT/BCT and strict compliance with water quality standards. The inclusion of numeric effluent limitations (NELs) in the permit for Active Treatment Systems does not cause the permit to be more stringent than current federal law. NELs and best management practices are simply two different methods of achieving the same federal requirement: strict compliance with state water quality standards. Federal law authorizes both narrative and numeric effluent limitations to meet state water quality standards. The use of NELs to achieve compliance with water quality standards is not a more stringent requirement than the use of BMPs. (State Water Board Order No. WQ 2006-0012 (*Boeing*)). Accordingly, the State Water Board does not need to take into account the factors in Water Code sections 13241 and 13263.

The State Water Board has concluded that the establishment of BAT/BCT will not create or aggravate other environmental problems through increases in air pollution, solid waste generation, or energy consumption.—While there may be a slight increase in non-water quality impacts due to the implementation of additional monitoring or the construction of additional BMPs, these impacts will be negligible in comparison with the construction activities taking place on site and would be justified by the water quality benefits associated with compliance.

pH Receiving Water Monitoring Trigger

Given the potential contaminants, the minimum standard method for control of pH in runoff requires the use of preventive measures such as avoiding concrete pours during rainy weather, covering concrete and directing flow away from fresh concrete if a pour occurs during rain, covering scrap drywall and stucco materials when stored outside and potentially exposed to rain, and other housekeeping measures. If necessary, pH-impaired storm water from construction sites can be treated in a filter or settling pond or basin, with additional natural or chemical treatment required to meet pH limits set forth in this permit. The basin or pond acts as a collection point and holds storm water for a sufficient period for the contaminants to be settled out, either naturally or artificially, and allows any additional treatment to take place. The State Water Board considers these techniques to be equivalent to BCT. In determining the pH concentration trigger for discharges, the State Water Board used BPJ to set these limitations.

The chosen trigger was established by calculating three standard deviations above and below the mean pH of runoff from highway construction sites⁷ in California. Proper implementation of BMPs should result in discharges that are within the range of 6.0 to 9.0 pH Units.

Turbidity Receiving Water Monitoring Trigger

The Turbidity receiving water monitoring trigger of 500 NTU is a technology-based trigger and was developed using three different analyses aimed at finding the appropriate threshold to set the technology-based limit to ensure environmental protection, effluent quality and cost-effectiveness. The analyses fell into three, main types: (1) an ecoregion-specific dataset developed by Simon et. al. (2004)⁸; (2) Statewide Regional Water Quality Control Board enforcement data; and (3) published, peer-reviewed studies and reports on in-situ performance of best management practices in terms of erosion and sediment control on active construction sites.

A 1:3 relationship between turbidity (expressed as NTU) and suspended sediment concentration (expressed as mg/L) is assumed based on a review of suspended sediment and turbidity data from three gages used in the USGS National Water Quality Assessment Program:

USGS 11074000 SANTA ANA R BL PRADO DAM CA
USGS 11447650 SACRAMENTO R A FREEPORT CA
USGS 11303500 SAN JOAQUIN R NR VERNALIS CA

The receiving water monitoring trigger represents staff determination that the trigger value is the most practicable based on available data. The turbidity receiving water monitoring trigger represents a bridge between the narrative effluent limitations and receiving water limitations. To support this receiving water monitoring trigger, State Water Board staff analyzed construction site discharge information (monitoring data, estimates) and receiving water monitoring information.

Since the turbidity receiving water monitoring trigger represents an appropriate threshold level expected at a site, compliance with this value does not necessarily represent compliance with either the narrative effluent limitations (as enforced through the BAT/BCT standard) or the receiving water limitations. In the San Diego region, some inland surface waters have a receiving water objective for turbidity equal to 20 NTU. Obviously a discharge up to, but not exceeding, the turbidity receiving water monitoring trigger of

⁷ Caltrans Construction Sites Runoff Characterization Study, 2002. Available at: <http://www.dot.ca.gov/hq/env/stormwater/pdf/CTSW-RT-02-055.pdf>.

500 NTU may still cause or contribute to the exceedance of the 20 NTU standard. Most of the waters of the State are protected by turbidity objectives based on background conditions.

Table 1 - Regional Water Board Basin Plans, Water Quality Objectives for Turbidity

REGIONAL WATER BOARD	WQ Objective	Background/Natural Turbidity	Maximum Increase
1	Based on background	All levels	20%
2	Based on background	> 50 NTU	10%
3	Based on background	0-50 JTU 50-100 JTU > 100 JTU	20% 10 NTU 10%
4	Based on background	0-50 NTU > 50 NTU	20% 10%
5	Based on background	0-5 NTU 5-50 NTU 50-100 NTU >100 NTU	1 NTU 20% 10 NTU 10%
6	Based on background	All levels	10%
7	Based on background	N/A	N/A
8	Based on background	0-50 NTU 50-100 NTU >100 NTU	20% 10 NTU 10%
9	Inland Surface Waters, 20 NTU All others, based on background	 0-50 NTU 50-100 NTU >100 NTU	 20% 10 NTU 10%

Table 2 shows the suspended sediment concentrations at the 1.5 year flow recurrence interval for the 12 ecoregions in California from Simon et. al (2004).

Table 2 - Results of Ecoregion Analysis

Ecoregion	Percent of California Land Area	Median Suspended Sediment Concentration (mg/L)
1	9.1	874
4	0.2	120
5	8.8	35.6
6	20.7	1530
7	7.7	122
8	3.0	47.4
9	9.4	284
13	5.2	143
14	21.7	5150
78	8.1	581
80	2.4	199
81	3.7	503
Area-weighted average		1633

If a 1:3 relationship between turbidity and suspended sediment is assumed, the median turbidity is 544 NTU.

The following table is composed of turbidity readings measured in NTUs from administrative civil liability (ACL) actions for construction sites from 2003 - 2009. This data was derived from the complete listing of construction-related ACLs for the six year period. All ACLs were reviewed and those that included turbidimeter readings at the point of storm water discharge were selected for this dataset.

Table 3 – ACL Sampling Data taken by Regional Water Board Staff

WDID#	Region	Discharger	Turbidity (NTU)
5S34C331884	5S	Bradshaw Interceptor Section 6B	1800
5S05C325110	5S	Bridalwood Subdivision	1670
5S48C336297	5S	Cheyenne at Browns Valley	1629
5R32C314271	5R	Grizzly Ranch Construction	1400
6A090406008	6T	El Dorado County Department of Transportation, Angora Creek	97.4
5S03C346861	5S	TML Development, LLC	1600
6A31C325917	6T	Northstar Village	See Subdata Set

Subdata Set - Turbidity for point of storm water runoff discharge at Northstar Village

Date	Turbidity (NTU)	Location
10/5/2006	900	Middle Martis Creek
11/2/2006	190	Middle Martis Creek
01/04/2007	36	West Fork, West Martis Creek
02/08/2007	180	Middle Martis Creek
02/09/2007	130	Middle Martis Creek
02/09/2007	290	Middle Martis Creek
02/09/2007	100	West Fork, West Martis Creek
02/10/2007	28	Middle Martis Creek
02/10/2007	23	Middle Martis Creek
02/10/2007	32	Middle Martis Creek
02/10/2007	12	Middle Martis Creek
02/10/2007	60	West Fork, West Martis Creek
02/10/2007	34	West Fork, West Martis Creek

A 95% confidence interval for mean turbidity in an ACL order was constructed. The data set used was a small sample size, so the 500 NTU (the value derived as the receiving water monitoring trigger for this General Permit) needed to be verified as a possible population mean. In this case, the population refers to a hypothetical population of turbidity measurements of which our sample of 20 represents. A t-distribution was assumed due to the small sample size:

Mean: 512.23 NTU Standard Deviation: 686.85 Margin of Error: 321.45 Confidence Interval: 190.78 NTU (Low) 833.68 NTU (High)

Based on a constructed 95% confidence interval, an ACL order turbidity measurement will be between 190.78 – 833.68 NTU. 500 NTU falls within this range. Using the same data set, a small-sample hypothesis test was also performed to test if the ACL turbidity data set contains enough information to cast doubt on choosing a 500 NTU as a mean. 500 NTU was again chosen due to its proposed use as an acceptable value. The test was carried out using a 95% confidence interval. Results indicated that the ACL turbidity data set *does not* contain significant sample evidence to reject the claim of 500 NTU as an acceptable mean for the ACL turbidity population.

There are not many published, peer-reviewed studies and reports on in-situ performance of best management practices in terms of erosion and sediment control on active construction sites. The most often cited study is a report titled, “Improving the Cost Effectiveness of Highway Construction Site Erosion and Pollution Control” (Horner, Guedry, and Kortenof 1990, <http://www.wsdot.wa.gov/Research/Reports/200/200.1.htm>). In a comment letter summarizing this report sent to the State Water Board, the primary author, Dr. Horner, states:

“The most effective erosion control product was wood fiber mulch applied at two different rates along with a bonding agent and grass seed in sufficient time before the tests to achieve germination. Plots treated in this way reduced influent turbidity by more than 97 percent and discharged effluent exhibiting mean and maximum turbidity values of 21 and 73 NTU, respectively. Some other mulch and blanket materials performed nearly as well. These tests demonstrated the control ability of widely available BMPs over a very broad range of erosion potential.”

Other technologies studied in this report produced effluent quality at or near 100 NTU. It is the BPJ of the State Water Board staff that erosion control, while preferred, is not always an option on construction sites and that technology performance in a controlled study showing effluent quality directly leaving a BMP is always easier and cheaper to control than effluent being discharged from the project (edge of property, etc.). As a result, it is the BPJ of the State Water Board staff that it is not cost effective or feasible, at this time, for all risk level and type 3 sites in California to achieve effluent discharges with turbidity values that are less than 100 NTU.

To summarize, the analysis showed that: (1) results of the Simon et. al dataset reveals turbidity values in background receiving water in California’s ecoregions range from 16 NTU to 1716 NTU (with a mean of 544 NTU); (2) based on a constructed 95% confidence interval, construction sites will be subject to administrative civil liability (ACL) when their turbidity measurement falls between 190.78 – 833.68 NTU; and (3) sites with highly controlled discharges employing and maintaining good erosion control practices can discharge effluent from the BMP with turbidity values less than 100 NTU. State Water Board staff has determined, using its BPJ, that it is most cost effective to set the receiving water monitoring trigger for turbidity at 500 NTU.

i. Compliance Storm Event

While this General Permit no longer contains “compliance storm event” exceptions from technology-based NELs, the “compliance storm event” exception from the ATS NELs remain in effect. See Section K of this Fact Sheet, and Attachment F of this General Permit for more information.

a. TMDLs and Waste Load Allocations

Dischargers located within the watershed of a CWA § 303(d) impaired water body, for which a TMDL for sediment has been adopted by the Regional Water Board or USEPA, must comply with the approved TMDL if it identifies “construction activity” or land disturbance as a source of sediment. If it does, the

TMDL should include a specific waste load allocation for this activity/source. The discharger, in this case, may be required by a separate Regional Water Board order to implement additional BMPs, conduct additional monitoring activities, and/or comply with an applicable waste load allocation and implementation schedule. If a specific waste load allocation has been established that would apply to a specific discharge, the Regional Water Board may adopt an order requiring specific implementation actions necessary to meet that allocation. In the instance where an approved TMDL has specified a general waste load allocation to construction storm water discharges, but no specific requirements for construction sites have been identified in the TMDL, dischargers must consult with the state TMDL authority⁹ to confirm that adherence to a SWPPP that meets the requirements of the General Permit will be consistent with the approved TMDL.

2. Determining Compliance with Effluent Standards

a. Technology-Based Numeric Action Levels (NALs)

This General Permit contains technology-based NALs for pH and turbidity, and requirements for effluent monitoring at all Risk level 2 & 3, and LUP Type 2 & 3 sites. Numeric action levels are essentially numeric benchmark values for certain parameters that, if exceeded in effluent sampling, trigger the discharger to take actions. Exceedance of an NAL does not itself constitute a violation of the General Permit. If the discharger fails to take the corrective action required by the General Permit, though, that may constitute a violation.

The primary purpose of NALs is to assist dischargers in evaluating the effectiveness of their on-site measures. Construction sites need to employ many different systems that must work together to achieve compliance with the permit's requirements. The NALs chosen should indicate whether the systems are working as intended.

Another purpose of NALs is to provide information regarding construction activities and water quality impacts. This data will provide the State and Regional Water Boards and the rest of the storm water community with more information about levels and types of pollutants present in runoff and how effective the dischargers BMPs are at reducing pollutants in effluent. The State Water Board also hopes to learn more about the linkage between effluent and receiving water quality. In addition, these requirements will provide information on the mechanics needed to establish compliance monitoring programs at construction sites in future permit deliberations.

i. *pH*

The chosen limits were established by calculating one standard deviation above and below the mean pH of runoff from highway construction sites¹⁰ in California. Proper implementation of BMPs should result in discharges that are within the range of 6.5 to 8.5 pH Units.

⁹ <http://www.waterboards.ca.gov/tmdl/tmdl.html>.

¹⁰ Caltrans Construction Sites Runoff Characterization Study, 2002. Available at: <http://www.dot.ca.gov/hq/env/stormwater/pdf/CTSW-RT-02-055.pdf>.

The Caltrans study included 33 highway construction sites throughout California over a period of four years, which included 120 storm events. All of these sites had BMPs in place that would be generally implemented at all types of construction sites in California.

ii. *Turbidity*

BPJ was used to develop an NAL that can be used as a learning tool to help dischargers improve their site controls, and to provide meaningful information on the effectiveness of storm water controls. A statewide turbidity NAL has been set at 250 NTU.

G. Receiving Water Limitations

Construction-related activities that cause or contribute to an exceedance of water quality standards must be addressed. The dynamic nature of construction activity gives the discharger the ability to quickly identify and monitor the source of the exceedances. This is because when storm water mobilizes sediment, it provides visual cues as to where corrective actions should take place and how effective they are once implemented.

This General Permit requires that storm water discharges and authorized non-storm water discharges must not contain pollutants that cause or contribute to an exceedance of any applicable water quality objective or water quality standards. The monitoring requirements in this General Permit for sampling and analysis procedures will help determine whether BMPs installed and maintained are preventing pollutants in discharges from the construction site that may cause or contribute to an exceedance of water quality standards.

Water quality standards consist of designated beneficial uses of surface waters and the adoption of ambient criteria necessary to protect those uses. When adopted by the State Water Board or a Regional Water Board, the ambient criteria are termed “water quality objectives.” If storm water runoff from construction sites contains pollutants, there is a risk that those pollutants could enter surface waters and cause or contribute to an exceedance of water quality standards. For that reason, dischargers should be aware of the applicable water quality standards in their receiving waters. (The best method to ensure compliance with receiving water limitations is to implement BMPs that prevent pollutants from contact with storm water or from leaving the construction site in runoff.)

In California, water quality standards are published in the Basin Plans adopted by each Regional Water Board, the California Toxics Rule (CTR), the National Toxics Rule (NTR), and the Ocean Plan.

Dischargers can determine the applicable water quality standards by contacting Regional Water Board staff or by consulting one of the following sources. The actual Basin Plans that contain the water quality standards can be viewed at the website of the appropriate Regional Water Board. (<http://www.waterboards.ca.gov/regions.html>), the State Water Board site for statewide plans (<http://www.waterboards.ca.gov/plnspols/index.html>), or the USEPA regulations for the NTR and CTR (40 C.F.R. §§ 131.36-38). Basin Plans and statewide plans are also available by mail from the appropriate Regional Water Board or the State Water Board. The USEPA regulations are available at <http://www.epa.gov/>. Additional information concerning water quality standards can be accessed through http://www.waterboards.ca.gov/stormwtr/gen_const.html.

H. Training Qualifications and Requirements

The Blue Ribbon Panel (BRP) made the following observation about the lack of industry-specific training requirements:

“Currently, there is no required training or certification program for contractors, preparers of soil erosion and sediment control Storm Water Pollution Prevention Plans, or field inspectors.”

Order 99-08-DWQ required that all dischargers train their employees on how to comply with the permit, but it did not specify a curriculum or certification program. This has resulted in inconsistent implementation by all affected parties - the dischargers, the local governments where the construction activity occurs, and the regulators required to enforce 99-08-DWQ. This General Permit requires Qualified SWPPP Developers and practitioners to obtain appropriate training, and makes this curriculum mandatory two years after adoption, to allow time for course completion. The State and Regional Water Board are working with many stakeholders to develop the curriculum and mechanisms needed to develop and deliver the courses.

To ensure that the preparation, implementation, and oversight of the SWPPP is sufficient for effective pollution prevention, the Qualified SWPPP Developer and Qualified SWPPP Practitioners responsible for creating, revising, overseeing, and implementing the SWPPP must attend a State Water Board-sponsored or approved Qualified SWPPP Developer and Qualified SWPPP Practitioner training course.

I. Sampling, Monitoring, Reporting and Record Keeping

1. Traditional Construction Monitoring Requirements

This General Permit requires visual monitoring at all sites, and effluent water quality at all Risk Level 2 & 3 sites. It requires receiving water monitoring at some Risk Level 3 sites. All sites are required to submit annual reports, which contain various types of information, depending on the site characteristics and events. A summary of the monitoring and reporting requirements is found in Table 4.

Table 4 - Required Monitoring Elements for Risk Levels

	Visual	Non-visible Pollutant	Effluent	Receiving Water
Risk Level 1			where applicable	not required
Risk Level 2			pH, turbidity	not required
Risk Level 3	three types required for all Risk Levels: non-storm water, pre-rain and post-rain	As needed for all Risk Levels (see below)	pH, turbidity	(if Receiving Water Monitoring Trigger exceeded) pH, turbidity and SSC. Bioassessment for sites 30 acres or larger.

a. Visual

All dischargers are required to conduct quarterly, non-storm water visual inspections. For these inspections, the discharger must visually observe each drainage area for the presence of (or indications of prior) unauthorized and authorized non-storm water discharges and their sources. For storm-related inspections, dischargers must visually observe storm water discharges at all discharge locations within two business days after a qualifying event. For this requirement, a qualifying rain event is one producing precipitation of ½ inch or more of discharge. Dischargers must conduct a post-storm event inspection to (1) identify whether BMPs were adequately designed, implemented, and effective, and (2) identify any additional BMPs necessary and revise the SWPPP accordingly. Dischargers must maintain on-site records of all visual observations, personnel performing the observations, observation dates, weather conditions, locations observed, and corrective actions taken in response to the observations.

b. Non-Visible Pollutant Monitoring

This General Permit requires that all dischargers develop a sampling and analysis strategy for monitoring pollutants that are not visually detectable in storm water. Monitoring for non-visible pollutants must be required at any construction site when the exposure of construction materials occurs and where a discharge can cause or contribute to an exceedance of a water quality objective.

Of significant concern for construction discharges are the pollutants found in materials used in large quantities at construction sites throughout California and exposed throughout the rainy season, such as cement, flyash, and other recycled materials or by-products of combustion. The water quality standards that apply to these materials will depend on their composition. Some of the more common storm water pollutants from construction activity are not CTR pollutants. Examples of non-visible pollutants include glyphosate (herbicides), diazinon and chlorpyrifos (pesticides), nutrients (fertilizers), and molybdenum (lubricants). The use of diazinon and chlorpyrifos is a common practice among landscaping professionals and may trigger sampling and analysis requirements if these materials come into contact with storm water. High pH values from cement and gypsum, high pH and SSC from wash waters, and chemical/fecal contamination from portable toilets, also are not CTR pollutants. Although some of these constituents do have numeric water quality objectives in individual Basin Plans, many do not and are subject only to narrative water quality standards (i.e. not causing toxicity). Dischargers are encouraged to discuss these issues with Regional Water Board staff and other storm water quality professionals.

The most effective way to avoid the sampling and analysis requirements, and to ensure permit compliance, is to avoid the exposure of construction materials to precipitation and storm water runoff. Materials that are not exposed do not have the potential to enter storm water runoff, and therefore receiving waters sampling is not required. Preventing contact between storm water and construction materials is one of the most important BMPs at any construction site.

Preventing or eliminating the exposure of pollutants at construction sites is not always possible. Some materials, such as soil amendments, are designed to be used in a manner that will result in exposure to storm water. In these cases, it is important to make sure that these materials are applied according to the manufacturer's instructions and at a time when they are unlikely to be washed away. Other construction materials can be exposed when storage, waste disposal or the application of the material is done in a manner not protective of water quality. For these situations, sampling is required unless there is capture and containment of all storm water that has been exposed. In cases where construction materials may be exposed to storm water, but the storm water is contained and is not allowed to run off the site, sampling will only be required when inspections show that the containment failed or is breached, resulting in potential exposure or discharge to receiving waters.

The discharger must develop a list of potential pollutants based on a review of potential sources, which will include construction materials soil amendments, soil treatments, and historic contamination at the site. The discharger must review existing environmental and real estate documentation to determine the potential for pollutants that could be present on the construction site as a result of past land use activities.

Good sources of information on previously existing pollution and past land uses include:

- i. Environmental Assessments;
- ii. Initial Studies;
- iii. Phase 1 Assessments prepared for property transfers; and
- iv. Environmental Impact Reports or Environmental Impact Statements prepared under the requirements of the National Environmental Policy Act or the California Environmental Quality Act.

In some instances, the results of soil chemical analyses may be available and can provide additional information on potential contamination.

The potential pollutant list must include all non-visible pollutants that are known or should be known to occur on the construction site including, but not limited to, materials that:

- i. are being used in construction activities;
- ii. are stored on the construction site;
- iii. were spilled during construction operations and not cleaned up;
- iv. were stored (or used) in a manner that created the potential for a release of the materials during past land use activities;
- v. were spilled during previous land use activities and not cleaned up; or
- vi. were applied to the soil as part of past land use activities.

C. Effluent Monitoring

Federal regulations¹¹ require effluent monitoring for discharges subject to NALs. Subsequently, all Risk Level 2 and 3 dischargers must perform sampling and analysis of effluent discharges to characterize discharges associated with construction activity from the entire area disturbed by the project. Dischargers must collect samples of stored or contained storm water that is discharged subsequent to a storm event producing precipitation of ½ inch or more at the time of discharge.

Table 5 - Storm Water Effluent Monitoring Requirements by Risk Level

	Frequency	Effluent Monitoring (Section E, below)
Risk Level 1	when applicable	non-visible pollutant parameters (if applicable)
Risk Level 2	Minimum of 3 samples per day during qualifying rain event characterizing discharges associated with construction activity from the entire project disturbed area.	pH, turbidity, and non-visible pollutant parameters (if applicable)
Risk Level 3	Minimum of 3 samples per day during qualifying rain event characterizing discharges associated with construction activity from the entire project disturbed area.	pH, turbidity, and non-visible pollutant parameters if applicable

Risk Level 1 dischargers must analyze samples for:

- i. any parameters indicating the presence of pollutants identified in the pollutant source assessment required in Attachment C contained in the General Permit.

¹¹ 40 C.F.R. § 122.44.

Risk Level 2 dischargers must analyze samples for:

- i. pH and turbidity;
- ii. any parameters indicating the presence of pollutants identified in the pollutant source assessment required in Attachment D contained in the General Permit, and
- iii. any additional parameters for which monitoring is required by the Regional Water Board.

Risk Level 3 dischargers must analyze samples for:

- i. pH, turbidity;
- ii. any parameters indicating the presence of pollutants identified in the pollutant source assessment required in Attachment E contained in the General Permit, and
- iii. any additional parameters for which monitoring is required by the Regional Water Board.

2. Linear Monitoring and Sampling Requirements

Attachment A, establishes minimum monitoring and reporting requirements for all LUPs. It establishes different monitoring requirements depending on project complexity and risk to water quality. The monitoring requirements for Type 1 LUPs are less than Type 2 & 3 projects because Type 1 projects have a lower potential to impact water quality.

A discharger shall prepare a monitoring program prior to the start of construction and immediately implement the program at the start of construction for LUPs. The monitoring program must be implemented at the appropriate level to protect water quality at all times throughout the life of the project.

a. Type 1 LUP Monitoring Requirements

A discharger must conduct daily visual inspections of Type 1 LUPs during working hours while construction activities are occurring. Inspections are to be conducted by qualified personnel and can be conducted in conjunction with other daily activities. Inspections will be conducted to ensure the BMPs are adequate, maintained, and in place at the end of the construction day. The discharger will revise the SWPPP, as appropriate, based on the results of the daily inspections. Inspections can be discontinued in non-active construction areas where soil disturbing activities have been completed and final stabilization has been achieved (e.g., trench has been paved, substructures have been installed, and successful final vegetative cover or other stabilization criteria have been met).

A discharger shall implement the monitoring program for inspecting Type 1 LUPs. This program requires temporary and permanent stabilization BMPs after active construction is completed. Inspection activities will continue until adequate permanent stabilization has been established and will continue in areas where re-vegetation is chosen until minimum vegetative coverage has been established. Photographs shall be taken during site inspections and submitted to the State Water Board.

b. Type 2 & 3 LUP Monitoring Requirements

A discharger must conduct daily visual inspections of Type 2 & 3 LUPs during working hours while construction activities are occurring. Inspections are to be conducted by qualified personnel and can be in conjunction with other daily activities.

All dischargers of Type 2 & 3 LUPs are required to conduct inspections by qualified personnel of the construction site during normal working hours prior to all anticipated storm events and after actual storm events. During extended storm events, the discharger shall conduct inspections during normal working hours for each 24-hour period. Inspections can be discontinued in non-active construction areas where soil disturbing activities have been completed and final stabilization has been achieved (e.g., trench has been paved, substructures installed, and successful vegetative cover or other stabilization criteria have been met).

The goals of these inspections are (1) to identify areas contributing to a storm water discharge; (2) to evaluate whether measures to reduce pollutant loadings identified in the SWPPP are adequate and properly installed and functioning in accordance with the terms of the General Permit; and (3) to determine whether additional control practices or corrective maintenance activities are needed. Equipment, materials, and workers must be available for rapid response to failures and emergencies. All corrective maintenance to BMPs shall be performed as soon as possible, depending upon worker safety.

All dischargers shall develop and implement a monitoring program for inspecting Type 2 & 3 LUPs that require temporary and permanent stabilization BMPs after active construction is completed. Inspections will be conducted to ensure the BMPs are adequate and maintained. Inspection activities will continue until adequate permanent stabilization has been established and will continue in areas where revegetation is chosen until minimum vegetative coverage has been established.

A log of inspections conducted before, during, and after the storm events must be maintained in the SWPPP. The log will provide the date and time of the inspection and who conducted the inspection. Photographs must be taken during site inspections and submitted to the State Water Board.

C. Sampling Requirements for all LUP Project Types

LUPs are also subject to sampling and analysis requirements for visible pollutants (i.e., sedimentation/siltation, turbidity) and for non-visible pollutants.

Sampling for visible pollutants is required for Type 2 & 3 LUPs.

Non-visible pollutant monitoring is required for pollutants associated with construction sites and activities that (1) are not visually detectable in storm water discharges, and (2) are known or should be known to occur on the construction site, and (3) could cause or contribute to an exceedance of water quality objectives in the receiving waters. Sample collection for non-visible pollutants must only be required (1) during a storm event when pollutants associated with construction activities may be discharged with storm water runoff due to a spill, or in the event there was a breach, malfunction, failure, and/or leak of any BMP, and (2) when the discharger has failed to adequately clean the area of material and pollutants. Failure to implement appropriate BMPs will trigger the same sampling requirements as those required for a breach, malfunction and/or leak, or when the discharger has failed to implement appropriate BMPs prior to the next storm event.

Additional monitoring parameters may be required by the Regional Water Boards.

It is not anticipated that many LUPs will be required to collect samples for pollutants not visually detected in runoff due to the nature and character of the construction site and activities as previously described in this fact sheet. Most LUPs are constructed in urban areas with public access (e.g., existing roadways, road shoulders, parking areas, etc.). This raises a concern regarding the potential contribution of pollutants from vehicle use and/or from normal activities of the public (e.g., vehicle washing, landscape fertilization, pest spraying, etc.) in runoff from the project site. Since the dischargers are not the land owners of the project area and are not able to control the presence of these pollutants in the storm water that runs through their projects, it is not the intent of this General Permit to require dischargers to sample for these pollutants. This General Permit does not require the discharger to sample for these types of pollutants except where the discharger has brought materials onsite that contain these pollutants and when a condition (e.g., breach, failure, etc.) described above occurs.

3. Receiving Water Monitoring

In order to ensure that receiving water limitations are met, discharges subject to receiving water monitoring triggers (i.e., Risk Level 3 and LUP Type 3 sites) or numeric effluent limitations (i.e., Risk Level 3 and LUP Type 3 sites utilizing ATS with direct discharges into receiving waters) must also monitor the downstream receiving water(s) for turbidity, SSC, and pH (if applicable) when a receiving water monitoring trigger or NEL is exceeded.

a. Bioassessment Monitoring

This General Permit requires a bioassessment of receiving waters for dischargers of Risk Level 3 or LUP Type 3 construction projects equal to or larger than 30 acres with direct discharges into receiving waters. Benthic macroinvertebrate samples will be taken upstream and downstream of the site's discharge point in the receiving water. Bioassessments measure the quality of the stream by analyzing the aquatic life present. Higher levels of appropriate aquatic species tend to indicate a healthy stream; whereas low levels of organisms can indicate stream degradation. Active construction sites have the potential to discharge large amounts of sediment and pollutants into receiving waters. Requiring a bioassessment for large project sites, with the most potential to impact water quality, provides a snapshot of the health of the receiving water prior to initiation of construction activities. This snapshot can be used in comparison to the health of the receiving water after construction has commenced.

Each ecoregion (biologically and geographically related area) in the State has a specific yearly peak time where stream biota is in a stable and abundant state. This time of year is called an Index Period. The bioassessment requirements in this General Permit, requires benthic macroinvertebrate sampling within a sites index period. The State Water Board has developed a map designating index periods for the ecoregions in the State (see State Water Board Website).

This General Permit requires the bioassessment methods to be in accordance with the Surface Water Ambient Monitoring Program (SWAMP) in order to provide data consistency within the state as well as generate useable biological stream data.

Table 6 - Receiving Water Monitoring Requirements

	Receiving Water Monitoring Parameters
Risk Level 1 /LUP Type 1	not required
Risk Level 2 / LUP Type 2	not required
Risk Level 3 / LUP Type 3	If Receiving Water Monitoring Trigger exceeded: pH (if applicable), turbidity, and SSC. Bioassessment for sites 30 acres or larger.

4. Reporting Requirements

a. NAL Exceedance Report

All Risk Level 3 and LUP Type 3 dischargers must electronically submit all storm event sampling results to the State And Regional Boards, via the electronic data system, no later than 10 days after the conclusion of the storm event.

b. Annual Report

All dischargers must prepare and electronically submit an annual report no later than September 1 of each year using the Storm water Multi-Application Reporting and Tracking System (SMARTS). The

Annual Report must include a summary and evaluation of all sampling and analysis results, original laboratory reports, chain of custody forms, a summary of all corrective actions taken during the compliance year, and identification of any compliance activities or corrective actions that were not implemented.

5. Record Keeping

According to 40 C.F.R. Parts 122.21(p) and 122.41(j), the discharger is required to retain paper or electronic copies of all records required by this General Permit for a period of at least three years from the date generated or the date submitted to the State Water Board or Regional Water Boards. A discharger must retain records for a period beyond three years as directed by Regional Water Board.

J. Risk Determination

1. Traditional Projects

a. Overall Risk Determination

There are two major requirements related to site planning and risk determination in this General Permit. The project's overall risk is broken up into two elements – (1) project sediment risk (the relative amount of sediment that can be discharged, given the project and location details) and (2) receiving water risk (the risk sediment discharges pose to the receiving waters).

Project Sediment Risk:

Project Sediment Risk is determined by multiplying the R, K, and LS factors from the Revised Universal Soil Loss Equation (RUSLE) to obtain an estimate of project-related bare ground soil loss expressed in tons/acre. The RUSLE equation is as follows:

$$A = (R)(K)(LS)(C)(P)$$

Where: A = the rate of sheet and rill erosion

R = rainfall-runoff erosivity factor

K = soil erodibility factor

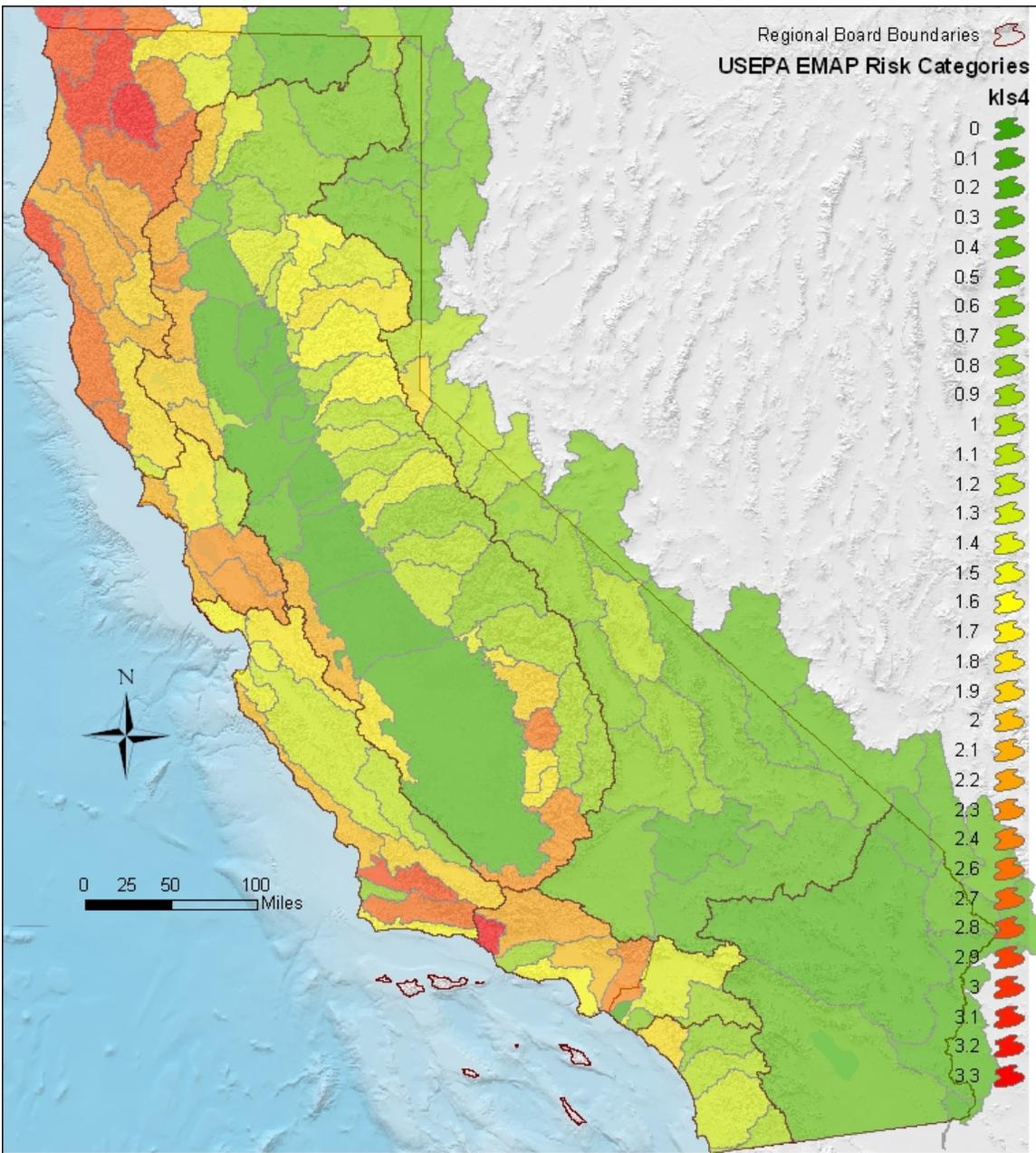
LS = length-slope factor

C = cover factor (erosion controls)

P = management operations and support practices (sediment controls)

The C and P factors are given values of 1.0 to simulate bare ground conditions.

There is a map option and a manual calculation option for determining soil loss. For the map option, the R factor for the project is calculated using the online calculator at <http://cfpub.epa.gov/npdes/stormwater/LEW/lewCalculator.cfm>. The product of K and LS are shown on Figure 1. To determine soil loss in tons per acre, the discharger multiplies the R factor times the value for K times LS from the map.



State Water Resources Control Board, January 15, 2008

Figure 1 -Statewide Map of K * LS

For the manual calculation option, the R factor for the project is calculated using the online calculator at <http://cfpub.epa.gov/npdes/stormwater/LEW/lewCalculator.cfm>. The K and LS factors are determined using Appendix 1.

Soil loss of less than 15 tons/acre is considered **low** sediment risk.
 Soil loss between 15 and 75 tons/acre is **medium** sediment risk.
 Soil loss over 75 tons/acre is considered **high** sediment risk.

The soil loss values and risk categories were obtained from mean and standard deviation RKLS values from the USEPA EMAP program. High risk is the mean RKLS value plus two standard deviations. Low risk is the mean RKLS value minus two standard deviations.

Receiving Water Risk:

Receiving water risk is based on whether a project drains to a sediment-sensitive waterbody. A sediment-sensitive waterbody is either

- on the most recent 303d list for waterbodies impaired for sediment;
- has a USEPA-approved Total Maximum Daily Load implementation plan for sediment; **or**
- has the beneficial uses of COLD, SPAWN, and MIGRATORY.

A project that meets at least one of the three criteria has a high receiving water risk. A list of sediment-sensitive waterbodies will be posted on the State Water Board’s website. It is anticipated that an interactive map of sediment sensitive water bodies in California will be available in the future.

The Risk Levels have been altered by eliminating the possibility of a Risk Level 4, and expanding the constraints for Risk Levels 1, 2, and 3. Therefore, projects with high receiving water risk and high sediment risk will be considered a Risk Level 3 risk to water quality.

In response to public comments, the Risk Level requirements have also been changed such that Risk Level 1 projects will be subject to minimum BMP and visual monitoring requirements, Risk Level 2 projects will be subject to NALs and some additional monitoring requirements, and Risk Level 3 projects will be subject to NALs, and more rigorous monitoring requirements such as receiving water monitoring and in some cases bioassessment.

Table 7 - Combined Risk Level Matrix

Combined Risk Level Matrix			
Receiving Water Risk		Sediment Risk	
		Low	Medium
	Low	Level 1	Level 2
High	Level 2		Level 3

b. Effluent Standards

All dischargers are subject to the narrative effluent limitations specified in the General Permit. The narrative effluent limitations require storm water discharges associated with construction activity to meet all applicable provisions of Sections 301 and 402 of the CWA. These provisions require controls of pollutant discharges that utilize BAT and BCT to reduce pollutants and any more stringent controls necessary to meet water quality standards.

Risk Level 2 dischargers that pose a medium risk to water quality are subject to technology-based NALs for pH and turbidity. Risk Level 3 dischargers that pose a high risk to water quality are also subject to technology-based NALs for pH and turbidity.

c. Good Housekeeping

Proper handling and managing of construction materials can help minimize threats to water quality. The discharger must consider good housekeeping measures for: construction materials, waste management, vehicle storage & maintenance, landscape materials, and potential pollutant sources. Examples include; conducting an inventory of products used, implementing proper storage & containment, and properly cleaning all leaks from equipment and vehicles.

d. Non-Storm Water Management

Non-storm water discharges directly connected to receiving waters or the storm drain system have the potential to negatively impact water quality. The discharger must implement measures to control all non-storm water discharges during construction, and from dewatering activities associated with construction. Examples include; properly washing vehicles in contained areas, cleaning streets, and minimizing irrigation runoff.

e. Erosion Control

The best way to minimize the risk of creating erosion and sedimentation problems during construction is to disturb as little of the land surface as possible by fitting the development to the terrain. When development is tailored to the natural contours of the land, little grading is necessary and, consequently, erosion potential is lower.¹⁴ Other effective erosion control measures include: preserving existing vegetation where feasible, limiting disturbance, and stabilizing and re-vegetating disturbed areas as soon as possible after grading or construction activities. Particular attention must be paid to large, mass-graded sites where the potential for soil exposure to the erosive effects of rainfall and wind is great and where there is potential for significant sediment discharge from the site to surface waters. Until permanent vegetation is established, soil cover is the most cost-effective and expeditious method to protect soil particles from detachment and transport by rainfall. Temporary soil stabilization can be the single most important factor in reducing erosion at construction sites. The discharger is required to consider measures such as: covering disturbed areas with mulch, temporary seeding, soil stabilizers, binders, fiber rolls or blankets, temporary vegetation, and permanent seeding. These erosion control measures are only examples of what should be considered and should not preclude new or innovative approaches currently available or being developed. Erosion control BMPs should be the primary means of preventing storm water contamination, and sediment control techniques should be used to capture any soil that becomes eroded.¹²

Risk Level 3 dischargers pose a higher risk to water quality and are therefore additionally required to ensure that post-construction soil loss is equivalent to or less than the pre-construction levels.

f. Sediment Control

Sediment control BMPs should be the secondary means of preventing storm water contamination. When erosion control techniques are ineffective, sediment control techniques should be used to capture any soil that becomes eroded. The discharger is required to consider perimeter control measures such as: installing silt fences or placing straw wattles below slopes. These sediment control measures are only

¹² U.S. Environmental Protection Agency. 2007. Developing Your Storm Water Pollution Prevention Plan: A Guide for Construction Sites.

examples of what should be considered and should not preclude new or innovative approaches currently available or being developed.

Because Risk Level 2 and 3 dischargers pose a higher risk to water quality, additional requirements for the application of sediment controls are imposed on these projects. This General Permit also authorizes the Regional Water Boards to require Risk Level 3 dischargers to implement additional site-specific sediment control requirements if the implementation of other erosion or sediment controls are not adequately protecting the receiving waters.

g. Run-on and Runoff Control

Inappropriate management of run-on and runoff can result in excessive physical impacts to receiving waters from sediment and increased flows. The discharger is required to manage all run-on and runoff from a project site. Examples include: installing berms and other temporary run-on and runoff diversions.

Risk Level 1 dischargers with lower risks to impact water quality are not subject to the run-on and runoff control requirements unless an evaluation deems them necessary or visual inspections show that such controls are required.

h. Inspection, Maintenance and Repair

All measures must be periodically inspected, maintained and repaired to ensure that receiving water quality is protected. Frequent inspections coupled with thorough documentation and timely repair is necessary to ensure that all measures are functioning as intended.

i. Rain Event Action Plan (REAP)

A Rain Event Action Plan (REAP) is a written document, specific for each rain event. A REAP should be designed that when implemented it protects all exposed portions of the site within 48 hours of any likely precipitation event forecast of 50% or greater probability.

This General Permit requires Risk Level 2 and 3 dischargers to develop and implement a REAP designed to protect all exposed portions of their sites within 48 hours prior to any likely precipitation event. The REAP requirement is designed to ensure that the discharger has adequate materials, staff, and time to implement erosion and sediment control measures that are intended to reduce the amount of sediment and other pollutants generated from the active site. A REAP must be developed when there is likely a forecast of 50% or greater probability of precipitation in the project area. (The National Oceanic and Atmospheric Administration (NOAA) defines a chance of precipitation as a probability of precipitation of 30% to 50% chance of producing precipitation in the project area.¹³ NOAA defines the probability of precipitation (PoP) as the likelihood of occurrence (expressed as a percent) of a measurable amount (0.01 inch or more) of liquid precipitation (or the water equivalent of frozen precipitation) during a specified period of time at any given point in the forecast area.) Forecasts are normally issued for 12-hour time periods. Descriptive terms for uncertainty and aerial coverage are used as follows:

Table 8 -National Oceanic and Atmospheric Administration (NOAA) Definition of Probability of Precipitation (PoP)

¹³ <http://www.crh.noaa.gov/lot/severe/wxterms.php>.

PoP	Expressions of Uncertainty	Aerial Coverage
0%	none used	none used
10%	none used	isolated
20%	slight chance	isolated
30-50%	chance	scattered
60-70%	likely	numerous
80-100%	none used	none used

The discharger must obtain the precipitation forecast information from the National Weather Service Forecast Office (<http://www.srh.noaa.gov/>).

2. Linear Projects

a. Linear Risk Determination

LUPs vary in complexity and water quality concerns based on the type of project. This General Permit has varying application requirements based on the project's risk to water quality. Factors that lead to the characterization of the project include location, sediment risk, and receiving water risk.

Based on the location and complexity of a project area or project section area, LUPs are separated into project types. As described below, LUPs have been categorized into three project types.

i. *Type 1 LUPs*

Type 1 LUPs are those construction projects where:

- (1) 70 percent or more of the construction activity occurs on a paved surface and where areas disturbed during construction will be returned to preconstruction conditions or equivalent protection established at the end of the construction activities for the day, or
- (2) greater than 30 percent of construction activities occur within the non-paved shoulders or land immediately adjacent to paved surfaces, or where construction occurs on unpaved improved roads, including their shoulders or land immediately adjacent to them where:

Areas disturbed during construction will be returned to pre-construction conditions or equivalent protection established at the end of the construction activities for the day to minimize the potential for erosion and sediment deposition, and

Areas where established vegetation was disturbed during construction will be stabilized and re-vegetated by the end of project. When required, adequate temporary stabilization Best Management Practices (BMPs) will be installed and maintained until vegetation is established to meet minimum cover requirements established in this General Permit for final stabilization.

Type 1 LUPs typically do not have a high potential to impact storm water quality because (1) these construction activities are not typically conducted during a rain event, (2) these projects are normally constructed over a short period of time¹⁴, minimizing the duration that pollutants could potentially be exposed to rainfall; and (3) disturbed soils such as those from trench excavation are required to be hauled away, backfilled into the trench, and/or covered (e.g., metal plates, pavement, plastic covers over spoil piles) at the end of the construction day.

Type 1 LUPs are determined during the risk assessment found in Attachment A.1 to be 1) low sediment risk and low receiving water risk; 2) low sediment risk and medium receiving water risk; and 3) medium sediment risk and low receiving water risk.

This General Permit requires the discharger to ensure a SWPPP is developed for these construction activities that is specific to project type, location and characteristics.

ii. Type 2 LUPs:

Type 2 projects are determined to have a combination of High, Medium, and Low project sediment risk along with High, Medium, and Low receiving water risk. Like Type 1 projects, Type 2 projects are typically constructed over a short period of time. However, these projects have a higher potential to impact water quality because they:

- (1) typically occur outside the more urban/developed areas;
- (2) have larger areas of soil disturbance that are not closed or restored at the end of the day;
- (3) may have onsite stockpiles of soil, spoil and other materials;
- (4) cross or occur in close proximity to a wide variety of sensitive resources that may include, but are not limited to, steep topography and/or water bodies; and
- (5) have larger areas of disturbed soils that may be exposed for a longer time interval before final stabilization, cleanup and/or reclamation occurs.

This General Permit requires the discharger to develop and implement a SWPPP for these construction activities that are specific for project type, location and characteristics.

iii. Type 3 LUPs:

¹⁴ Short period of time refers to a project duration of weeks to months, but typically less than one year in duration.

Type 3 projects are determined to have a combination of High and Medium project sediment risk along with High and Medium receiving water risk. Similar to Type 2 projects, Type 3 projects have a higher potential to impact water quality because they:

- (1) typically occur outside of the more urban/developed areas;
- (2) have larger areas of soil disturbance that are not closed or restored at the end of the day;
- (3) may have onsite stockpiles of soil, spoil and other materials;
- (4) cross or occur in close proximity to a wide variety of sensitive resources that may include, but are not limited to, steep topography and/or water bodies; and
- (5) have larger areas of disturbed soils that may be exposed for a longer time interval before final stabilization, cleanup and/or reclamation occurs.

This General Permit requires the discharger to develop and implement a SWPPP for these construction activities that are specific for project type, location, and characteristics.

b. Linear Effluent Standards

All LUPs are subject to the narrative effluent limitations specified in the General Permit.

Type 2 and Type 3 projects are subject to technology-based NALs for pH and turbidity.

c. Linear Good Housekeeping

Improper use and handling of construction materials could potentially cause a threat to water quality. In order to ensure proper site management of these construction materials, all LUP dischargers must comply with a minimum set of Good Housekeeping measures specified in Attachment A of this General Permit.

d. Linear Non-Storm Water Management

In order to ensure control of all non-storm water discharges during construction, all LUP dischargers must comply with the Non-Storm Water Management measures specified in Attachment A of this General Permit.

e. Linear Erosion Control

This General Permit requires all LUP dischargers to implement effective wind erosion control measures, and soil cover for inactive areas. Type 3 LUPs posing a higher risk to water quality are additionally required to ensure the post-construction soil loss is equivalent to or less than the pre-construction levels.

f. Linear Sediment Control

In order to ensure control and containment of all sediment discharges, all LUP dischargers must comply with the general Sediment Control measures specified in Attachment A or this General Permit. Additional requirements for sediment controls are imposed on Type 2 & 3 LUPs due to their higher risk to water quality.

g. Linear Run-on and Runoff Control

Discharges originating outside of a project's perimeter and flowing onto the property can adversely affect the quantity and quality of discharges originating from a project site. In order to ensure proper management of run-on and runoff, all LUPs must comply with the run-on and runoff control measures specified in Attachment A of this General Permit. Due to the lower risk of impacting water quality, Type 1 LUPs are not required to implement run-on and runoff controls unless deemed necessary by the discharger.

h. Linear Inspection, Maintenance and Repair

Proper inspection, maintenance, and repair activities are important to ensure the effectiveness of on-site measures to control water quality. In order to ensure that inspection, maintenance, and repair activities are adequately performed, the all LUP dischargers are required to comply with the Inspection, Maintenance, and Repair requirements specified in Attachment A of this General Permit.

K. ATS¹⁵ Requirements

There are instances on construction sites where traditional erosion and sediment controls do not effectively control accelerated erosion. Under such circumstances, or under circumstances where storm water discharges leaving the site may cause or contribute to an exceedance of a water quality standard, the use of an Active Treatment System (ATS) may be necessary. Additionally, it may be appropriate to use an ATS when site constraints inhibit the ability to construct a correctly sized sediment basin, when clay and/or highly erosive soils are present, or when the site has very steep or long slope lengths.¹⁶

Although treatment systems have been in use in some form since the mid-1990s, the ATS industry in California is relatively young, and detailed regulatory standards have not yet been developed. Many developers are using these systems to treat storm water discharges from their construction sites. The new ATS requirements set forth in this General Permit are based on those in place for small wastewater treatment systems, ATS regulations from the Central Valley Regional Water Quality Control Board (September 2005 memorandum "2005/2006 Rainy Season – Monitoring Requirements for Storm Water Treatment Systems that Utilize Chemical Additives to Enhance Sedimentation"), the Construction Storm Water Program at the State of Washington's Department of Ecology, as well as recent advances in technology and knowledge of coagulant performance and aquatic safety.

The effective design of an ATS requires a detailed survey and analysis of site conditions. With proper planning, ATS performance can provide exceptional water quality discharge and prevent significant impacts to surface water quality, even under extreme environmental conditions.

These systems can be very effective in reducing the sediment in storm water runoff, but the systems that use additives/polymers to enhance sedimentation also pose a potential risk to water quality (e.g., operational failure, equipment failure, additive/polymer release, etc.). The State Water Board is concerned about the potential acute and chronic impacts that the polymers and other chemical additives may have on fish and aquatic organisms if released in sufficient quantities or concentrations. In addition

¹⁵ An ATS is a treatment system that employs chemical coagulation, chemical flocculation, or electrocoagulation in order to reduce turbidity caused by fine suspended sediment.

¹⁶ Pitt, R., S. Clark, and D. Lake. 2006. Construction Site Erosion and Sediment Controls: Planning, Design, and Performance. DEStech Publications. Lancaster, PA. 370pp.

to anecdotal evidence of polymer releases causing aquatic toxicity in California, the literature supports this concern.¹⁷ For example, cationic polymers have been shown to bind with the negatively charged gills of fish, resulting in mechanical suffocation.¹⁸ Due to the potential toxicity impacts, which may be caused by the release of additives/polymers into receiving waters, this General Permit establishes residual polymer monitoring and toxicity testing requirements have been established in this General Permit for discharges from construction sites that utilize an ATS in order to protect receiving water quality and beneficial uses.

The primary treatment process in an ATS is coagulation/flocculation. ATS's operate on the principle that the added coagulant is bound to suspended sediment, forming floc, which is gravitationally settled in tanks or a basin, or removed by sand filters. A typical installation utilizes an injection pump upstream from the clarifier tank, basin, or sand filters, which is electronically metered to both flow rate and suspended solids level of the influent, assuring a constant dose. The coagulant mixes and reacts with the influent, forming a dense floc. The floc may be removed by gravitational setting in a clarifier tank or basin, or by filtration. Water from the clarifier tank, basin, or sand filters may be routed through cartridge(s) and/or bag filters for final polishing. Vendor-specific systems use various methods of dose control, sediment/floc removal, filtration, etc., that are detailed in project-specific documentation. The particular coagulant/flocculant to be used for a given project is determined based on the water chemistry of the site because the coagulants are specific in their reactions with various types of sediments. Appropriate selection of dosage must be carefully matched to the characteristics of each site.

ATS's are operated in two differing modes, either Batch or Flow-Through. Batch treatment can be defined as Pump-Treat-Hold-Test-Release. In Batch treatment, water is held in a basin or tank, and is not discharged until treatment is complete. Batch treatment involves holding or recirculating the treated water in a holding basin or tank(s) until treatment is complete or the basin or storage tank(s) is full. In Flow-Through treatment, water is pumped into the ATS directly from the runoff collection system or storm water holding pond, where it is treated and filtered as it flows through the system, and is then directly discharged. "Flow-Through Treatment" is also referred to as "Continuous Treatment."

1. Effluent Standards

This General Permit establishes NELs for discharges from construction sites that utilize an ATS. These systems lend themselves to NELs for turbidity and pH because of their known reliable treatment. Advanced systems have been in use in some form since the mid-1990s. An ATS is considered reliable, can consistently produce a discharge of less than 10 NTU, and has been used successfully at many sites in several states since 1995 to reduce turbidity to very low levels.¹⁹

This General Permit contains "compliance storm event" exceptions from the technology-based NELs for ATS discharges. The rationale is that technology-based requirements are developed assuming a certain design storm. In the case of ATS the industry-standard design storm is 10-year, 24-hour (as stated in

¹⁷ Romøen, K., B. Thu, and Ø. Evensen. 2002. Immersion delivery of plasmid DNA II. A study of the potentials of a chitosan based delivery system in rainbow trout (*Oncorhynchus mykiss*) fry. *Journal of Controlled Release* **85**: 215-225.

¹⁸ Bullock, G., V. Blazer, S. Tsukuda, and S. Summerfelt. 2000. Toxicity of acidified chitosan for cultured rainbow trout (*Oncorhynchus mykiss*). *Aquaculture* **185**:273-280.

¹⁹ Currier, B., G. Minton, R. Pitt, L. Roesner, K. Schiff, M. Stenstrom, E. Strassler, and E. Strecker. 2006. The Feasibility of Numeric Effluent Limits Applicable to Discharges of Storm Water Associated with Municipal, Industrial and Construction Activities.

Attachment F of this General Permit), so the compliance storm event has been established as the 10-year 24-hour event as well to provide consistency.

2. Training

Operator training is critical to the safe and efficient operation and maintenance of the ATS, and to ensure that all State Water Board monitoring and sampling requirements are met. The General Permit requires that all ATS operators have training specific to using ATS's liquid coagulants.

L. Post-Construction Requirements

Under past practices, new and redevelopment construction activities have resulted in modified natural watershed and stream processes. This is caused by altering the terrain, modifying the vegetation and soil characteristics, introducing impervious surfaces such as pavement and buildings, increasing drainage density through pipes and channels, and altering the condition of stream channels through straightening, deepening, and armoring. These changes result in a drainage system where sediment transport capacity is increased and sediment supply is decreased. A receiving channel's response is dependent on dominant channel materials and its stage of adjustment.

Construction activity can lead to impairment of beneficial uses in two main ways. First, during the actual construction process, storm water discharges can negatively affect the chemical, biological, and physical properties of downstream receiving waters. Due to the disturbance of the landscape, the most likely pollutant is sediment, however pH and other non-visible pollutants are also of great concern. Second, after most construction activities are completed at a construction site, the finished project may result in significant modification of the site's response to precipitation. New development and redevelopment projects have almost always resulted in permanent post-construction water quality impacts because more precipitation ends up as runoff and less precipitation is intercepted, evapotranspired, and infiltrated.

General Permit 99-08-DWQ required the SWPPP to include a description of all post-construction BMPs on a site and a maintenance schedule. An effective storm water management strategy must address the full suite of storm events (water quality, channel protection, overbank flood protection, extreme flood protection) (Figure 2).

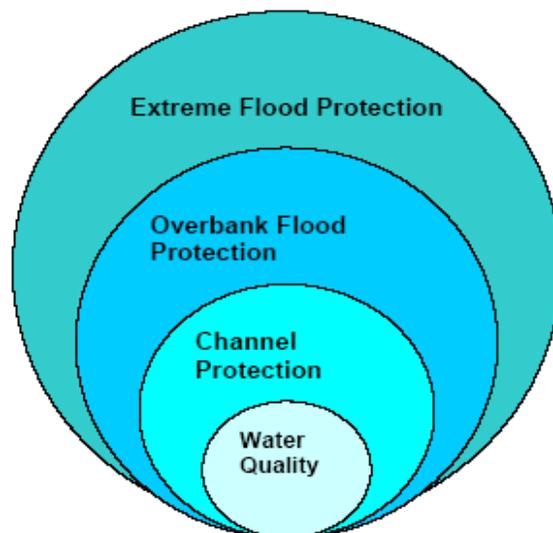


Figure 2 - Suite of Storm Events

The post-construction storm water performance standards in this General Permit specifically address water quality and channel protection events. Overbank flood protection and extreme flood protection events are traditionally dealt with in local drainage and flood protection ordinances. However, measures in this General Permit to address water quality and channel protection also reduce overbank and extreme flooding impacts. This General Permit aims to match post-construction runoff to pre-construction runoff for the 85th percentile storm event, which not only reduces the risk of impact to the receiving water's channel morphology but also provides some protection of water quality.

This General Permit clarifies that its runoff reduction requirements only apply to projects that lie outside of jurisdictions covered by a Standard Urban Storm water Management Plan (SUSMP) (or other more protective) post-construction requirements in either Phase I or Phase II permits.

Figures 3 and 4, below, show the General Permit enrollees (to Order 99-08-DWQ, as of March 10, 2008) overlaid upon a map with SUSMP (or more protective) areas in blue and purple. Areas without blue or purple indicate where the General Permit's runoff reduction requirements would actually apply.

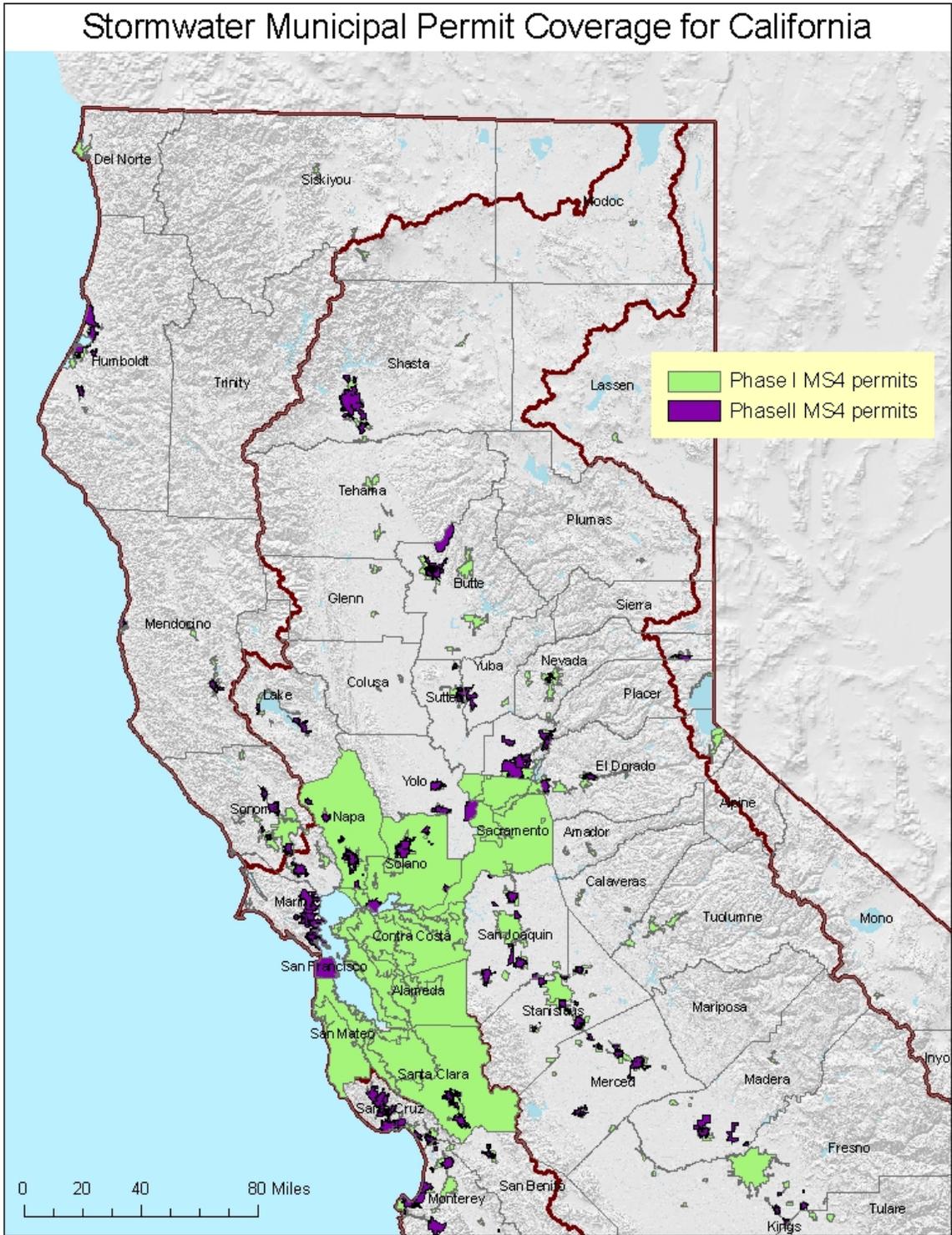
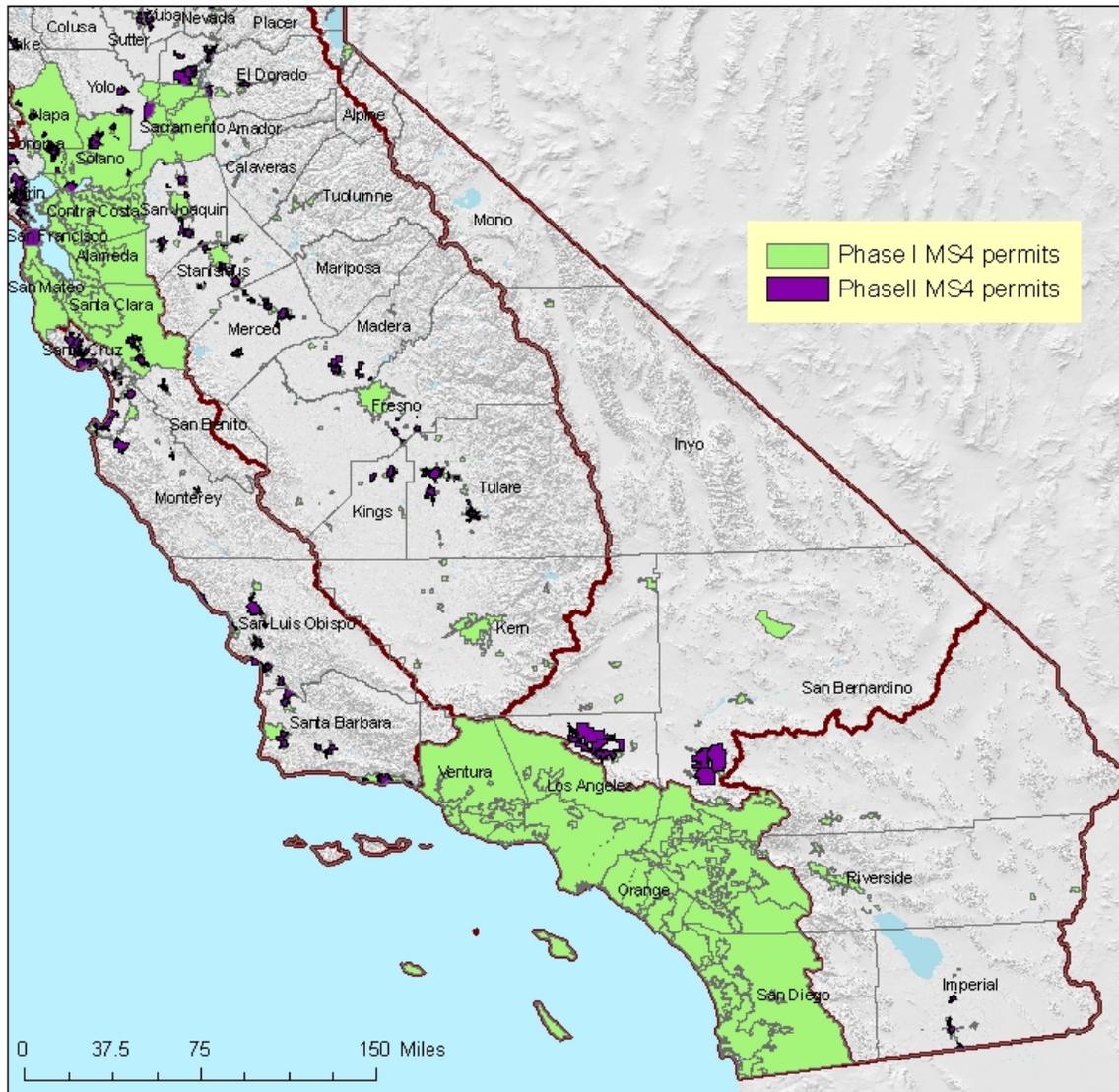


Figure 3 - Northern CA (2009) Counties / Cities With SUSMP-Plus Coverage



Stormwater Municipal Permit Coverage for California

Figure 4 - Southern CA (2009) Counties / Cities With SUSMP-Plus Coverage

Water Quality:

This General Permit requires dischargers to replicate the pre-project runoff water balance (defined as the amount of rainfall that ends up as runoff) for the smallest storms up to the 85th percentile storm event, or the smallest storm event that generates runoff, whichever is larger. Contemporary storm water management generally routes these flows directly to the drainage system, increasing pollutant loads and potentially causing adverse effects on receiving waters. These smaller water quality events happen much more frequently than larger events and generate much higher pollutant loads on an annual basis. There are other adverse hydrological impacts that result from not designing according to the site's pre-construction water balance. In Maryland, Klein²⁰ noted that baseflow decreases as the extent of urbanization increases. Ferguson and Suckling²¹ noted a similar relation in watersheds in Georgia. On Long Island, Spinello and Simmons²² noted substantial decreases in base flow in intensely urbanized watersheds.

The permit emphasizes runoff reduction through on-site storm water reuse, interception, evapotranspiration and infiltration through non-structural controls and conservation design measures (e.g., downspout disconnection, soil quality preservation/enhancement, interceptor trees). Employing these measures close to the source of runoff generation is the easiest and most cost-effective way to comply with the pre-construction water balance standard. Using low-tech runoff reduction techniques close to the source is consistent with a number of recommendations in the literature.²³ In many cases, BMPs implemented close to the source of runoff generation cost less than end-of the pipe measures.²⁴ Dischargers are given the option of using Appendix 2 to calculate the required runoff volume or a watershed process-based, continuous simulation model such as the EPA's Storm Water Management Model (SWMM) or Hydrologic Simulation Program Fortran (HSPF). Such methods used by the discharger will be reviewed by the Regional Water Board upon NOT application.

Channel Protection:

In order to address channel protection, a basic understanding of fluvial geomorphic concepts is necessary. A dominant paradigm in fluvial geomorphology holds that streams adjust their channel dimensions (width and depth) in response to long-term changes in sediment supply and bankfull discharge (1.5 to 2 year recurrence interval). The bankfull stage corresponds to the discharge at which channel maintenance is the most effective, that is, the discharge at which the moving sediment, forming or removing bars, forming or changing bends and meanders, and generally doing work that results in the average morphologic characteristics of channels.²⁵ Lane (1955 as cited in Rosgen 1996²⁶) showed the generalized relationship between sediment load, sediment size, stream discharge and stream slope in

²⁰ Klein 1979 as cited in Delaware Department of Natural Resources (DDNR). 2004. Green Technology: The Delaware Urban Runoff Management Approach. Dover, DE. 117 pp.

²¹ Ferguson and Suckling 1990 as cited Delaware Department of Natural Resources (DDNR). 2004. Green Technology: The Delaware Urban Runoff Management Approach. Dover, DE. 117 pp.

²² Center for Watershed Protection (CWP). 2000. The Practice of Watershed Protection: Techniques for protecting our nation's streams, lakes, rivers, and estuaries. Ellicott City, MD. 741 pp.

²³ Bay Area Storm Water Management Agencies Association (BASMAA). 1997. Start at the Source: Residential Site Planning and Design Guidance Manual for Storm Water Quality Protection. Palo Alto, CA;

McCuen, R.H. 2003 Smart Growth: hydrologic perspective. Journal of Professional Issues in Engineering Education and Practice. Vol (129), pp.151-154;

Moglen, G.E. and S. Kim. 2007. Impervious imperviousness-are threshold based policies a good idea? Journal of the American Planning Association, Vol 73 No. 2. pp 161-171.

²⁴ Delaware Department of natural Resources (DDNR). 2004. Green technology: The Delaware urban Runoff Management Approach. Dover, DE. 117 pp.

²⁵ Dunne, T and L.B. Leopold. 1978. Water in Environmental Planning. San Francisco W.H. Freeman and Company

²⁶ Rosgen. D.L. 1996. Applied River Morphology. Pagosa Springs. Wildland Hydrology

Figure 5. A change in any one of these variables sets up a series of mutual adjustments in the companion variables with a resulting direct change in the physical characteristics of the stream channel.

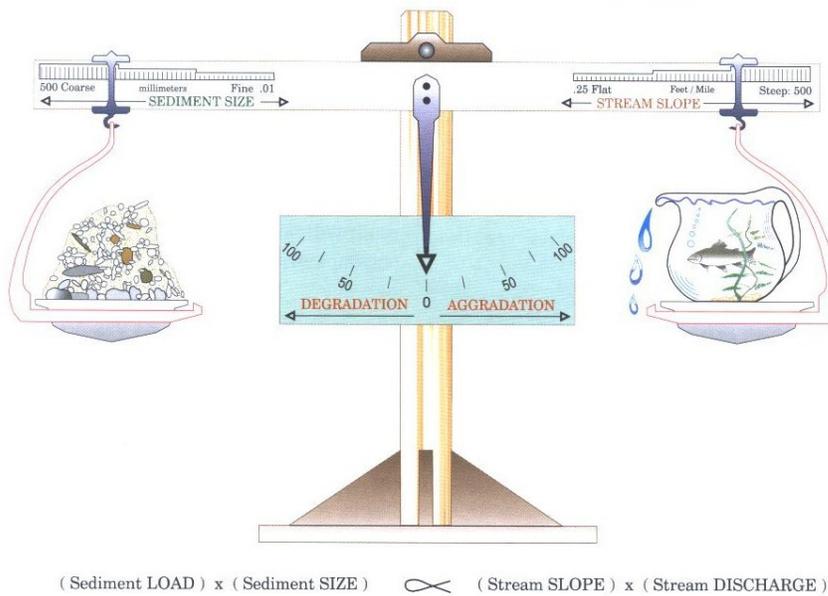


Figure 5 - Schematic of the Lane Relationship
After Lane (1955) as cited in Rosgen (1996)

Stream slope multiplied by stream discharge (the right side of the scale) is essentially an approximation of stream power, a unifying concept in fluvial geomorphology (Bledsoe 1999). Urbanization generally increases stream power and affects the resisting forces in a channel (sediment load and sediment size represented on the left side of the scale).

During construction, sediment loads can increase from 2 to 40,000 times over pre-construction levels.²⁷ Most of this sediment is delivered to stream channels during large, episodic rain events.²⁸ This increased sediment load leads to an initial aggradation phase where stream depths may decrease as sediment fills the channel, leading to a decrease in channel capacity and increase in flooding and overbank deposition. A degradation phase initiates after construction is completed.

Schumm et. al (1984) developed a channel evolution model that describes the series of adjustments from initial downcutting, to widening, to establishing new floodplains at lower elevations (Figure 6).

²⁷ Goldman S.J., K. Jackson, and T.A. Bursztynsky. 1986. Erosion and Sediment Control Handbook. McGraw Hill. San Francisco.

²⁸ Wolman 1967 as cited in Paul, M.P. and J.L. Meyer. 2001. Streams in the Urban Landscape. *Annu. Rev.Ecol. Syst.* 32: 333-365.

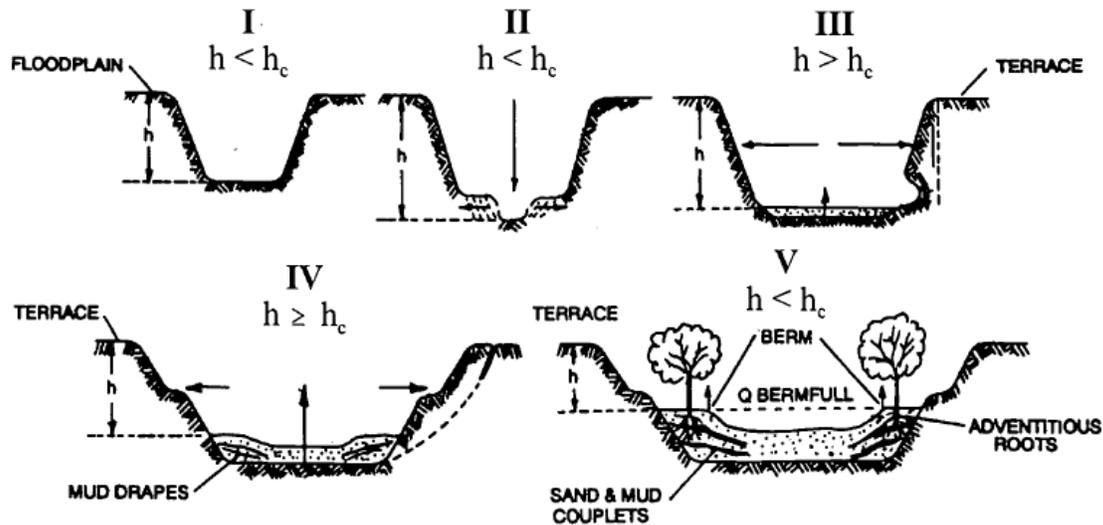


Figure 6 - Channel Changes Associated with Urbanization

After Incised Channel Evolution Sequence in Schumm et. al 1984

Channel incision (Stage II) and widening (Stages III and to a lesser degree, Stage IV) are due to a number of fundamental changes on the landscape. Connected impervious area and compaction of pervious surfaces increase the frequency and volume of bankfull discharges.²⁹ Increased drainage density (miles of stream length per square mile of watershed) also negatively impacts receiving stream channels.³⁰ Increased drainage density and hydraulic efficiency leads to an increase in the frequency and volume of bankfull discharges because the time of concentration is shortened. Flows from engineered pipes and channels are also often “sediment starved” and seek to replenish their sediment supply from the channel.

Encroachment of stream channels can also lead to an increase in stream slope, which leads to an increase in stream power. In addition, watershed sediment loads and sediment size (with size generally represented as the median bed and bank particle size, or d_{50}) decrease during urbanization.³¹ This means

²⁹ Booth, D. B. and C. R. Jackson. 1997. Urbanization of Aquatic Systems: Degradation Thresholds, Storm Water Detection, and the Limits of Mitigation. *Journal of the American Water Resources Association* Vol. 33, No.5, pp. 1077-1089.

³⁰ May, C.W. 1998. Cumulative effects of urbanization on small streams in the Puget Sound Lowland ecoregion. Conference proceedings from Puget Sound Research '98 held March 12, 13 1998 in Seattle, WA;

Santa Clara Valley Urban Runoff Pollution Prevention Program. 2002. Hydromodification Management Plan Literature Review. 80 pp.

³¹ Finkenbine, J.K., D.S. Atwater, and D.S. Mavinic. 2000. Stream health after urbanization. *J. Am. Water Resour. Assoc.* 36:1149-60;

that even if pre- and post-development stream power are the same, more erosion will occur in the post-development stage because the smaller particles are less resistant (provided they are non-cohesive).

As shown in Stages II and III, the channel deepens and widens to accommodate the increased stream power³² and decrease in sediment load and sediment size. Channels may actually narrow as entrained sediment from incision is deposited laterally in the channel. After incised channels begin to migrate laterally (Stage III), bank erosion begins, which leads to general channel widening.³³ At this point, a majority of the sediment that leaves a drainage area comes from within the channel, as opposed to the background and construction related hillslope contribution. Stage IV is characterized by more aggradation and localized bank instability. Stage V represents a new quasi-equilibrium channel morphology in balance with the new flow and sediment supply regime. In other words, stream power is in balance with sediment load and sediment size.

The magnitude of the channel morphology changes discussed above varies along a stream network as well as with the age of development, slope, geology (sand-bedded channels may cycle through the evolution sequence in a matter of decades whereas clay-dominated channels may take much longer), watershed sediment load and size, type of urbanization, and land use history. It is also dependent on a channel's stage in the channel evolution sequence when urbanization occurs. Management strategies

Pizzuto, J.E. W.S. Hession, and M. McBride. 2000. Comparing gravel-bed rivers in paired urban and rural catchments of southeastern Pennsylvania. *Geology* 28:79-82.

³² Hammer 1973 as cited in Delaware Department of Natural Resources (DDNR). 2004. Green Technology: The Delaware Urban Runoff Management Approach. Dover, DE. 117 pp;

Booth, D.B. 1990. Stream Channel Incision Following Drainage Basin Urbanization. *Water Resour. Bull.* 26:407-417.

³³ Trimble, S.W. 1997. Contribution of Stream Channel Erosion to Sediment Yield from an Urbanizing Watershed. *Science*: Vol. 278 (21), pp. 1442-1444.

must take into account a channel's stage of adjustment and account for future changes in the evolution of channel form (Stein and Zaleski 2005).³⁴

Traditional structural water quality BMPs (e.g. detention basins and other devices used to store volumes of runoff) unless they are highly engineered to provide adequate flow duration control, do not adequately protect receiving waters from accelerated channel bed and bank erosion, do not address post-development increases in runoff volume, and do not mitigate the decline in benthic macroinvertebrate communities in the receiving waters³⁵ suggest that structural BMPs are not as effective in protecting aquatic communities as a continuous riparian buffer of native vegetation. This is supported by the findings of Zucker and White³⁶, where instream biological metrics were correlated with the extent of forested buffers.

This General Permit requires dischargers to maintain pre-development drainage densities and times of concentration in order to protect channels and encourages dischargers to implement setbacks to reduce channel slope and velocity changes that can lead to aquatic habitat degradation.

There are a number of other approaches for modeling fluvial systems, including statistical and physical models and simpler stream power models.³⁷ The use of these models in California is described in Stein and Zaleski (2005).³⁸ Rather than prescribe a specific one-size-fits-all modeling method in this permit, the State Water Board intends to develop a stream power and channel evolution model-based framework to assess channels and develop a hierarchy of suitable analysis methods and management strategies. In time, this framework may become a State Water Board water quality control policy.

Permit Linkage to Overbank and Extreme Flood Protection

Site design BMPs (e.g. rooftop and impervious disconnection, vegetated swales, setbacks and buffers) filter and settle out pollutants and provide for more infiltration than is possible for traditional centralized structural BMPs placed at the lowest point in a site. They provide source control for runoff and lead to a reduction in pollutant loads. When implemented, they also help reduce the magnitude and volume of larger, less frequent storm events (e.g., 10-yr, 24-hour storm and larger), thereby reducing the need for expensive flood control infrastructure. Nonstructural BMPs can also be a landscape amenity, instead of a large isolated structure requiring substantial area for ancillary access, buffering, screening and maintenance facilities.²⁵ The multiple benefits of using non-structural benefits will be critically important as the state's population increases and imposes strains upon our existing water resources.

Maintaining predevelopment drainage densities and times of concentration will help reduce post-development peak flows and volumes in areas not covered under a municipal permit. The most effective way to preserve drainage areas and maximize time of concentration is to implement landform grading,

³⁴ Stein, E.S. and S. Zaleski. 2005. Managing runoff to protect natural stream: the latest developments on investigation and management of hydromodification in California. Southern California Coastal Water Research Project Technical Report 475. 26 pp.

³⁵ Horner, R.R. 2006. Investigation of the Feasibility and Benefits of Low-Impact Site Design Practices (LID) for the San Diego Region. Available at: http://www.projectcleanwater.org/pdf/permit/case-study_lid.pdf.

³⁶ Delaware Department of Natural Resources (DDNR). 2004. Green Technology: The Delaware Urban Runoff Management Approach. Dover, DE. 117 pp.

³⁷ Finlayson, D.P. and D.R. Montgomery. 2003. Modeling large-scale fluvial erosion in geographic information systems. *Geomorphology* (53), pp. 147-164).

³⁸ Stein, E.S. and S. Zaleski. 2005. Managing runoff to protect natural stream: the latest developments on investigation and management of hydromodification in California. Southern California Coastal Water Research Project Technical Report 475. 26 pp.

incorporate site design BMPs and implement distributed structural BMPs (e.g., bioretention cells, rain gardens, rain cisterns).

M. Storm Water Pollution Prevention Plans

USEPA's Construction General Permit requires that qualified personnel conduct inspections. USEPA defines qualified personnel as "a person knowledgeable in the principles and practice of erosion and sediment controls who possesses the skills to assess conditions at the construction site that could impact storm water quality and to assess the effectiveness of any sediment and erosion control measures selected to control the quality of storm water discharges from the construction activity."³⁹ USEPA also suggests that qualified personnel prepare SWPPPs and points to numerous states that require certified professionals to be on construction sites at all times. States that currently have certification programs are Washington, Georgia, Florida, Delaware, Maryland, and New Jersey. The Permit 99-08-DWQ did not require that qualified personnel prepare SWPPPs or conduct inspections. However, to ensure that water quality is being protected, this General Permit requires that all SWPPPs be written, amended, and certified by a Qualified SWPPP Developer. A Qualified SWPPP Developer must possess one of the eight certifications and or registrations specified in this General Permit and effective two years after the adoption date of this General Permit, must have attended a State Water Board-sponsored or approved Qualified SWPPP Developer training course. Table 9 provides an overview of the criteria used in determining qualified certification titles for a QSD and QSP.

39 US Environmental Protection Agency. Stormwater Pollution Prevention Plans for Construction Activities. <<http://cfpub.epa.gov/npdes/stormwater/swppp.cfm>> and <http://www.epa.gov/npdes/pubs/sw_swppp_guide.pdf>.

Table 9 - Qualified SWPPP Developer/ Qualified SWPPP Practitioner Certification Criteria

Certification/ Title	Registered By	QSD/QSP	Certification Criteria
Professional Civil Engineer	California	Both	1. Approval Process 2. Code of Ethics 3. Accountability 4. Pre-requisites
Professional Geologist or Engineering Geologist	California	Both	1. Approval Process 2. Code of Ethics 3. Accountability 4. Pre-requisites
Landscape Architect	California	Both	1. Approval Process 2. Code of Ethics 3. Accountability 4. Pre-requisites
Professional Hydrologist	American Institute of Hydrology	Both	1. Approval Process 2. Code of Ethics 3. Accountability 4. Pre-requisites
Certified Professional in Erosion and Sediment Control™ (CPESC)	Enviro Cert International Inc.	Both	1. Approval Process 2. Code of Ethics 3. Accountability 4. Pre-requisites 5. Continuing Education
Certified Inspector of Sediment and Erosion Control™ (CISEC)	Certified Inspector of Sediment and Erosion Control, Inc.	QSP	1. Approval Process 2. Code of Ethics 3. Accountability 4. Pre-requisites 5. Continuing Education
Certified Erosion, Sediment and Storm Water Inspector™ (CESSWI)	Enviro Cert International Inc.	QSP	1. Approval Process 2. Code of Ethics 3. Accountability 4. Pre-requisites 5. Continuing Education
Certified Professional in Storm Water Quality™ (CPSWQ)	Enviro Cert International Inc.	Both	1. Approval Process 2. Code of Ethics 3. Accountability 4. Pre-requisites 5. Continuing Education

The previous versions of the General Permit required development and implementation of a SWPPP as the primary compliance mechanism. The SWPPP has two major objectives: (1) to help identify the sources of sediment and other pollutants that affect the quality of storm water discharges; and (2) to describe and ensure the implementation of BMPs to reduce or eliminate sediment and other pollutants in storm water and non-storm water discharges. The SWPPP must include BMPs that address source control, BMPs that address pollutant control, and BMPs that address treatment control.

This General Permit shifts some of the measures that were covered by this general requirement to specific permit requirements, each individually enforceable as a permit term. This General Permit emphasizes the use of appropriately selected, correctly installed and maintained pollution reduction BMPs. This approach provides the flexibility necessary to establish BMPs that can effectively address source control of pollutants during changing construction activities. These specific requirements also improve both the clarity and the enforceability of the General Permit so that the dischargers understand, and the public can determine whether the discharges are in compliance with, permit requirements.

The SWPPP must be implemented at the appropriate level to protect water quality at all times throughout the life of the project. The SWPPP must remain on the site during construction activities, commencing with the initial mobilization and ending with the termination of coverage under the General Permit. For LUPs the discharger shall make the SWPPP available at the construction site during working hours while construction is occurring and shall be made available upon request by a State or Municipal inspector. When the original SWPPP is retained by a crewmember in a construction vehicle and is not currently at the construction site, current copies of the BMPs and map/drawing will be left with the field crew and the original SWPPP shall be made available via a request by radio or telephone. Once construction activities are complete, until stabilization is achieved, the SWPPP shall be available from the SWPPP contact listed in the PRDs

A SWPPP must be appropriate for the type and complexity of a project and will be developed and implemented to address project specific conditions. Some projects may have similarities or complexities, yet each project is unique in its progressive state that requires specific description and selection of BMPs needed to address all possible generated pollutants

N. Regional Water Board Authorities

Because this General Permit will be issued to thousands of construction sites across the State, the Regional Water Boards retain discretionary authority over certain issues that may arise from the discharges in their respective regions. This General Permit does not grant the Regional Water Boards any authority they do not otherwise have; rather, it merely emphasizes that the Regional Water Boards can take specific actions related to this General Permit. For example, the Regional Water Boards will be enforcing this General Permit and may need to adjust some requirements for a discharger based on the discharger's compliance history.



Linda S. Adams
Secretary for
Environmental Protection

State Water Resources Control Board

Division of Water Quality

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Arnold Schwarzenegger
Governor

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
GENERAL PERMIT FOR
STORM WATER DISCHARGES
ASSOCIATED WITH CONSTRUCTION AND LAND DISTURBANCE
ACTIVITIES

ORDER NO. 2009-0009-DWQ
NPDES NO. **CAS000002**

This Order was adopted by the State Water Resources Control Board on:	September 2, 2009
This Order shall become effective on:	July 1, 2010
This Order shall expire on:	September 2, 2014

IT IS HEREBY ORDERED, that this Order supersedes Order No. 99-08-DWQ [as amended by Order No. 2010-0014-DWQ] except for enforcement purposes. The Discharger shall comply with the requirements in this Order to meet the provisions contained in Division 7 of the California Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the federal Clean Water Act and regulations and guidelines adopted thereunder.

I, Jeanine Townsend, Clerk to the Board, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the State Water Resources Control Board, on September 2, 2009.

AYE: Vice Chair Frances Spivy-Weber
Board Member Arthur G. Baggett, Jr.
Board Member Tam M. Doduc

NAY: Chairman Charles R. Hoppin

ABSENT: None

ABSTAIN: None

Jeanine Townsend
Clerk to the Board



Linda S. Adams
Secretary for
Environmental Protection

State Water Resources Control Board



Arnold Schwarzenegger
Governor

Division of Water Quality

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NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION AND LAND DISTURBANCE ACTIVITIES

**ORDER NO. 2010-0014-DWQ
NPDES NO. CAS000002**

Order No. 2009-0009-DWQ was adopted by the State Water Resources Control Board on:	September 2, 2009
Order No. 2009-0009-DWQ became effective on:	July 1, 2010
Order No. 2009-0009-DWQ shall expire on:	September 2, 2014
This Order, which amends Order No. 2009-0009-DWQ, was adopted by the State Water Resources Control Board on:	November 16, 2010
This Order shall become effective on:	February 14, 2011

IT IS HEREBY ORDERED that this Order amends Order No. 2009-0009-DWQ. Additions to Order No. 2009-0009-DWQ are reflected in [blue-underline](#) text and deletions are reflected in ~~red-strikeout~~ text.

IT IS FURTHER ORDERED that staff are directed to prepare and post a conformed copy of Order No. 2009-0009-DWQ incorporating the revisions made by this Order.

I, Jeanine Townsend, Clerk to the Board, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the State Water Resources Control Board, on **November 16, 2010**.

AYE: Chairman Charles R. Hoppin
Vice Chair Frances Spivy-Weber
Board Member Arthur G. Baggett, Jr.
Board Member Tam M. Doduc

NAY: None

ABSENT: None

ABSTAIN: None

Jeanine Townsend
Clerk to the Board



State Water Resources Control Board

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
GENERAL PERMIT FOR
STORM WATER DISCHARGES
ASSOCIATED WITH CONSTRUCTION AND LAND DISTURBANCE ACTIVITIES

ORDER NO. 2012-0006-DWQ
NPDES NO. CAS000002

Table with 2 columns: Description of order changes and Effective dates. Rows include: Order No. 2009-0009-DWQ adopted on September 2, 2009; Order No. 2009-0009-DWQ became effective on July 1, 2010; Order No. 2010-0014-DWQ became effective on February 14, 2011; Order No. 2009-0009-DWQ as amended by 2010-0014-DWQ shall expire on September 2, 2014; This Order, which amends Order No. 2009-0009-DWQ as amended by 2010-0014-DWQ, was adopted by the State Water Resources Control Board on July 17, 2012; This Order No. 2012-0006-DWQ shall become effective on July 17, 2012.

IT IS HEREBY ORDERED that this Order amends Order No. 2009-0009-DWQ. Additions to Order No. 2009-0009-DWQ are reflected in blue-underline text and deletions are reflected in red-strikeout text.

IT IS FURTHER ORDERED that staff are directed to prepare and post a conformed copy of Order No. 2009-000-DWQ incorporating the revisions made by this Order.

I, Jeanine Townsend, Clerk to the Board, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the State Water Resources Control Board, on July 17, 2012.

AYE: Chairman Charles R. Hoppin
Vice Chair Frances Spivy-Weber
Board Member Tam M. Doduc
Board Member Steven Moore
Board Member Felicia Marcus

NAY: None

ABSENT: None

ABSTAIN: None

Jeanine Townsend (handwritten signature)
Jeanine Townsend
Clerk to the Board

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LIST OF APPENDICES

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**STATE WATER RESOURCES CONTROL BOARD
ORDER NO. 2009-0009-DWQ
[AS AMENDED BY ORDER NO. 2010-0014-DWQ]
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
GENERAL PERMIT NO. CAS000002**

**WASTE DISCHARGE REQUIREMENTS
FOR
DISCHARGES OF STORM WATER RUNOFF ASSOCIATED WITH
CONSTRUCTION AND LAND DISTURBANCE ACTIVITIES**

I. FINDINGS

A. General Findings

The State Water Resources Control Board (State Water Board) finds that:

1. The federal Clean Water Act (CWA) prohibits certain discharges of storm water containing pollutants except in compliance with a National Pollutant Discharge Elimination System (NPDES) permit (Title 33 United States Code (U.S.C.) §§ 1311 and 1342(p); also referred to as Clean Water Act (CWA) §§ 301 and 402(p)). The U.S. Environmental Protection Agency (U.S. EPA) promulgates federal regulations to implement the CWA's mandate to control pollutants in storm water runoff discharges. (Title 40 Code of Federal Regulations (C.F.R.) Parts 122, 123, and 124). The federal statutes and regulations require discharges to surface waters comprised of storm water associated with construction activity, including demolition, clearing, grading, and excavation, and other land disturbance activities (except operations that result in disturbance of less than one acre of total land area and which are not part of a larger common plan of development or sale), to obtain coverage under an NPDES permit. The NPDES permit must require implementation of Best Available Technology Economically Achievable (BAT) and Best Conventional Pollutant Control Technology (BCT) to reduce or eliminate pollutants in storm water runoff. The NPDES permit must also include additional requirements necessary to implement applicable water quality standards.
2. This General Permit authorizes discharges of storm water associated with construction activity so long as the dischargers comply with all requirements, provisions, limitations and prohibitions in the permit. In addition, this General Permit regulates the discharges of storm water associated with construction activities from all Linear

Underground/Overhead Projects resulting in the disturbance of greater than or equal to one acre (Attachment A).

3. This General Permit regulates discharges of pollutants in storm water associated with construction activity (storm water discharges) to waters of the United States from construction sites that disturb one or more acres of land surface, or that are part of a common plan of development or sale that disturbs more than one acre of land surface.
4. This General Permit does not preempt or supersede the authority of local storm water management agencies to prohibit, restrict, or control storm water discharges to municipal separate storm sewer systems or other watercourses within their jurisdictions.
5. This action to adopt a general NPDES permit is exempt from the provisions of Chapter 3 of the California Environmental Quality Act (CEQA) (Public Resources Code Section 21100, et seq.), pursuant to Section 13389 of the California Water Code.
6. Pursuant to 40 C.F.R. § 131.12 and State Water Board [Resolution No. 68-16](#),¹ which incorporates the requirements of § 131.12 where applicable, the State Water Board finds that discharges in compliance with this General Permit will not result in the lowering of water quality standards, and are therefore consistent with those provisions. Compliance with this General Permit will result in improvements in water quality.
7. This General Permit serves as an NPDES permit in compliance with CWA § 402 and will take effect on July 1, 2010 by the State Water Board provided the Regional Administrator of the U.S. EPA has no objection. If the U.S. EPA Regional Administrator objects to its issuance, the General Permit will not become effective until such objection is withdrawn.
8. Following adoption and upon the effective date of this General Permit, the Regional Water Quality Control Boards (Regional Water Boards) shall enforce the provisions herein.
9. Regional Water Boards establish water quality standards in Basin Plans. The State Water Board establishes water quality standards in various statewide plans, including the California Ocean Plan. U.S. EPA establishes water quality standards in the National Toxic Rule (NTR) and the California Toxic Rule (CTR).

¹ Resolution No. 68-16 generally requires that existing water quality be maintained unless degradation is justified based on specific findings.

10. This General Permit does not authorize discharges of fill or dredged material regulated by the U.S. Army Corps of Engineers under CWA § 404 and does not constitute a waiver of water quality certification under CWA § 401.
11. The primary storm water pollutant at construction sites is excess sediment. Excess sediment can cloud the water, which reduces the amount of sunlight reaching aquatic plants, clog fish gills, smother aquatic habitat and spawning areas, and impede navigation in our waterways. Sediment also transports other pollutants such as nutrients, metals, and oils and greases.
12. Construction activities can impact a construction site's runoff sediment supply and transport characteristics. These modifications, which can occur both during and after the construction phase, are a significant cause of degradation of the beneficial uses established for water bodies in California. Dischargers can avoid these effects through better construction site design and activity practices.
13. This General Permit recognizes four distinct phases of construction activities. The phases are Grading and Land Development Phase, Streets and Utilities Phase, Vertical Construction Phase, and Final Landscaping and Site Stabilization Phase. Each phase has activities that can result in different water quality effects from different water quality pollutants. This General Permit also recognizes inactive construction as a category of construction site type.
14. Compliance with any specific limits or requirements contained in this General Permit does not constitute compliance with any other applicable requirements.
15. Following public notice in accordance with State and Federal laws and regulations, the State Water Board heard and considered all comments and testimony in a public hearing on 06/03/2009. The State Water Board has prepared written responses to all significant comments.
16. Construction activities obtaining coverage under the General Permit may have multiple discharges subject to requirements that are specific to general, linear, and/or active treatment system discharge types.
17. The State Water Board may reopen the permit if the U.S. EPA adopts a final effluent limitation guideline for construction activities.

B. Activities Covered Under the General Permit

18. Any construction or demolition activity, including, but not limited to, clearing, grading, grubbing, or excavation, or any other activity that results in a land disturbance of equal to or greater than one acre.
19. Construction activity that results in land surface disturbances of less than one acre if the construction activity is part of a larger common plan of development or the sale of one or more acres of disturbed land surface.
20. Construction activity related to residential, commercial, or industrial development on lands currently used for agriculture including, but not limited to, the construction of buildings related to agriculture that are considered industrial pursuant to U.S. EPA regulations, such as dairy barns or food processing facilities.
21. Construction activity associated with Linear Underground/Overhead Utility Projects (LUPs) including, but not limited to, those activities necessary for the installation of underground and overhead linear facilities (e.g., conduits, substructures, pipelines, towers, poles, cables, wires, connectors, switching, regulating and transforming equipment and associated ancillary facilities) and include, but are not limited to, underground utility mark-out, potholing, concrete and asphalt cutting and removal, trenching, excavation, boring and drilling, access road and pole/tower pad and cable/wire pull station, substation construction, substructure installation, construction of tower footings and/or foundations, pole and tower installations, pipeline installations, welding, concrete and/or pavement repair or replacement, and stockpile/borrow locations.
22. Discharges of sediment from construction activities associated with oil and gas exploration, production, processing, or treatment operations or transmission facilities.²
23. Storm water discharges from dredge spoil placement that occur outside of U.S. Army Corps of Engineers jurisdiction (upland sites) and that disturb one or more acres of land surface from construction activity are covered by this General Permit. Construction sites that intend to disturb one or more acres of land within the jurisdictional boundaries of

² Pursuant to the Ninth Circuit Court of Appeals' decision in *NRDC v. EPA* (9th Cir. 2008) 526 F.3d 591, and subsequent denial of the U.S. EPA's petition for reconsideration in November 2008, oil and gas construction activities discharging storm water contaminated only with sediment are no longer exempt from the NPDES program.

a CWA § 404 permit should contact the appropriate Regional Water Board to determine whether this permit applies to the site.

C. Activities Not Covered Under the General Permit

24. Routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of the facility.
25. Disturbances to land surfaces solely related to agricultural operations such as disking, harrowing, terracing and leveling, and soil preparation.
26. Discharges of storm water from areas on tribal lands; construction on tribal lands is regulated by a federal permit.
27. Construction activity and land disturbance involving discharges of storm water within the Lake Tahoe Hydrologic Unit. The Lahontan Regional Water Board has adopted its own permit to regulate storm water discharges from construction activity in the Lake Tahoe Hydrologic Unit (Regional Water Board 6SLT). Owners of construction sites in this watershed must apply for the Lahontan Regional Water Board permit rather than the statewide Construction General Permit.
28. Construction activity that disturbs less than one acre of land surface, and that is not part of a larger common plan of development or the sale of one or more acres of disturbed land surface.
29. Construction activity covered by an individual NPDES Permit for storm water discharges.
30. Discharges from small (1 to 5 acre) construction activities with an approved Rainfall Erosivity Waiver authorized by U.S. EPA Phase II regulations certifying to the State Board that small construction activity will occur only when the Rainfall Erosivity Factor is less than 5 ("R" in the Revised Universal Soil Loss Equation).
31. Landfill construction activity that is subject to the Industrial General Permit.
32. Construction activity that discharges to Combined Sewer Systems.
33. Conveyances that discharge storm water runoff combined with municipal sewage.
34. Discharges of storm water identified in CWA § 402(l)(2), 33 U.S.C. § 1342(l)(2).

35. Discharges occurring in basins that are not tributary or hydrologically connected to waters of the United States (for more information contact your Regional Water Board).

D. Obtaining and Modifying General Permit Coverage

36. This General Permit requires all dischargers to electronically file all Permit Registration Documents (PRDs), Notices of Termination (NOT), changes of information, annual reporting, and other compliance documents required by this General Permit through the State Water Board's Storm water Multi-Application and Report Tracking System (SMARTS) website.
37. Any information provided to the Regional Water Board shall comply with the Homeland Security Act and any other federal law that concerns security in the United States; any information that does not comply should not be submitted.
38. This General Permit grants an exception from the Risk Determination requirements for existing sites covered under Water Quality Orders No. 99-08-DWQ, and [No. 2003-0007-DWQ](#). For certain sites, adding additional requirements may not be cost effective. Construction sites covered under Water Quality Order No. 99-08-DWQ shall obtain permit coverage at the Risk Level 1. LUPs covered under Water Quality Order No. 2003-0007-DWQ shall obtain permit coverage as a Type 1 LUP. The Regional Water Boards have the authority to require Risk Determination to be performed on sites currently covered under Water Quality Orders No. 99-08-DWQ and No. 2003-0007-DWQ where they deem it necessary. The State Water Board finds that there are two circumstances when it may be appropriate for the Regional Water Boards to require a discharger that had filed an NOI under State Water Board Order No. 99-08-DWQ to recalculate the site's risk level. These circumstances are: (1) when the discharger has a demonstrated history of noncompliance with State Water Board Order No. 99-08-DWQ or; (2) when the discharger's site poses a significant risk of causing or contributing to an exceedance of a water quality standard without the implementation of the additional Risk Level 2 or 3 requirements.

E. Prohibitions

39. All discharges are prohibited except for the storm water and non-storm water discharges specifically authorized by this General Permit or another NPDES permit. Non-storm water discharges include a wide variety of sources, including improper dumping, spills, or leakage from storage tanks or transfer areas. Non-storm water discharges may

contribute significant pollutant loads to receiving waters. Measures to control spills, leakage, and dumping, and to prevent illicit connections during construction must be addressed through structural as well as non-structural Best Management Practices (BMPs)³. The State Water Board recognizes, however, that certain non-storm water discharges may be necessary for the completion of construction.

40. This General Permit prohibits all discharges which contain a hazardous substance in excess of reportable quantities established in 40 C.F.R. §§ 117.3 and 302.4, unless a separate NPDES Permit has been issued to regulate those discharges.
41. This General Permit incorporates discharge prohibitions contained in water quality control plans, as implemented by the State Water Board and the nine Regional Water Boards.
42. Pursuant to the Ocean Plan, discharges to Areas of Special Biological Significance (ASBS) are prohibited unless covered by an exception that the State Water Board has approved.
43. This General Permit prohibits the discharge of any debris⁴ from construction sites. Plastic and other trash materials can cause negative impacts to receiving water beneficial uses. The State Water Board encourages the use of more environmentally safe, biodegradable materials on construction sites to minimize the potential risk to water quality.

F. Training

44. In order to improve compliance with and to maintain consistent enforcement of this General Permit, all dischargers are required to appoint two positions - the Qualified SWPPP Developer (QSD) and the Qualified SWPPP Practitioner (QSP) - who must obtain appropriate training. Together with the key stakeholders, the State and Regional Water Boards are leading the development of this curriculum through a collaborative organization called The Construction General Permit (CGP) Training Team.
45. The Professional Engineers Act (Bus. & Prof. Code section 6700, et seq.) requires that all engineering work must be performed by a California licensed engineer.

³ BMPs are scheduling of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to waters of the United States. BMPs also include treatment requirements, operating procedures, and practice to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

⁴ Litter, rubble, discarded refuse, and remains of destroyed inorganic anthropogenic waste.

G. Determining and Reducing Risk

46. The risk of accelerated erosion and sedimentation from wind and water depends on a number of factors, including proximity to receiving water bodies, climate, topography, and soil type.
47. This General Permit requires dischargers to assess the risk level of a site based on both sediment transport and receiving water risk. This General Permit contains requirements for Risk Levels 1, 2 and 3, and LUP Risk Type 1, 2, and 3 (Attachment A). Risk levels are established by determining two factors: first, calculating the site's sediment risk; and second, receiving water risk during periods of soil exposure (i.e. grading and site stabilization). Both factors are used to determine the site-specific Risk Level(s). LUPs can be determined to be Type 1 based on the flowchart in Attachment A.1.
48. Although this General Permit does not mandate specific setback distances, dischargers are encouraged to set back their construction activities from streams and wetlands whenever feasible to reduce the risk of impacting water quality (e.g., natural stream stability and habitat function). Because there is a reduced risk to receiving waters when setbacks are used, this General Permit gives credit to setbacks in the risk determination and post-construction storm water performance standards. The risk calculation and runoff reduction mechanisms in this General Permit are expected to facilitate compliance with any Regional Water Board and local agency setback requirements, and to encourage voluntary setbacks wherever practicable.
49. Rain events can occur at any time of the year in California. Therefore, a Rain Event Action Plan (REAP) is necessary for Risk Level 2 and 3 traditional construction projects (LUPs exempt) to ensure that active construction sites have adequate erosion and sediment controls implemented prior to the onset of a storm event, even if construction is planned only during the dry season.
50. Soil particles smaller than 0.02 millimeters (mm) (i.e., finer than medium silt) do not settle easily using conventional measures for sediment control (i.e., sediment basins). Given their long settling time, dislodging these soils results in a significant risk that fine particles will be released into surface waters and cause unacceptable downstream impacts. If operated correctly, an Active Treatment System (ATS⁵) can prevent or reduce the release of fine particles from construction sites.

⁵ An ATS is a treatment system that employs chemical coagulation, chemical flocculation, or electro coagulation in order to reduce turbidity caused by fine suspended sediment.

Use of an ATS can effectively reduce a site's risk of impacting receiving waters.

51. Dischargers located in a watershed area where a Total Maximum Daily Load (TMDL) has been adopted or approved by the Regional Water Board or U.S. EPA may be required by a separate Regional Water Board action to implement additional BMPs, conduct additional monitoring activities, and/or comply with an applicable waste load allocation and implementation schedule. Such dischargers may also be required to obtain an individual Regional Water Board permit specific to the area.

H. Effluent Standards

52. The State Water Board convened a blue ribbon panel of storm water experts that submitted a report entitled, "The Feasibility of Numeric Effluent Limits Applicable to Discharges of Storm Water Associated with Municipal, Industrial and Construction Activities," dated June 19, 2006. The panel concluded that numeric limits or action levels are technically feasible to control construction storm water discharges, provided that certain conditions are considered. The panel also concluded that numeric effluent limitations (NELs) are feasible for discharges from construction sites that utilize an ATS. The State Water Board has incorporated the expert panel's suggestions into this General Permit, which includes numeric action levels (NALs) for pH and turbidity, and special numeric limits for ATS discharges.

Determining Compliance with Numeric Limitations

53. This General Permit sets a pH NAL of 6.5 to 8.5, and a turbidity NAL of 250 NTU. The purpose of the NAL and its associated monitoring requirement is to provide operational information regarding the performance of the measures used at the site to minimize the discharge of pollutants and to protect beneficial uses and receiving waters from the adverse effects of construction-related storm water discharges. An exceedance of a NAL does not constitute a violation of this General Permit.
54. This General Permit requires dischargers with NAL exceedances to immediately implement additional BMPs and revise their Storm Water Pollution Prevention Plans (SWPPPs) accordingly to either prevent pollutants and authorized non-storm water discharges from contaminating storm water, or to substantially reduce the pollutants to levels consistently below the NALs. NAL exceedances are reported in the State Water Boards SMARTS system, and the discharger is

required to provide an NAL Exceedance Report when requested by a Regional Water Board.

I. Receiving Water Limitations

55. This General Permit requires all enrolled dischargers to determine the receiving waters potentially affected by their discharges and to comply with all applicable water quality standards, including any more stringent standards applicable to a water body.

J. Sampling, Monitoring, Reporting and Record Keeping

56. Visual monitoring of storm water and non-storm water discharges is required for all sites subject to this General Permit.

57. Records of all visual monitoring inspections are required to remain on-site during the construction period and for a minimum of three years.

58. For all Risk Level 3/LUP Type 3 and Risk Level 2/LUP Type 2 sites, this General Permit requires effluent monitoring for pH and turbidity. Sampling, analysis and monitoring requirements for effluent monitoring for pH and turbidity are contained in this General Permit.

59. Risk Level 3 and LUP Type 3 sites with effluent that exceeds the Receiving Water Monitoring Triggers contained in this General Permit and with direct discharges to receiving water are required to conduct receiving water monitoring. An exceedance of a Receiving Water Monitoring Trigger does not constitute a violation of this General Permit.

60. This General Permit establishes a 5 year, 24 hour (expressed in inches of rainfall) as an exemptions to the receiving water monitoring requirements for Risk Level 3 and LUP Type 3 dischargers.

61. If run-on is caused by a forest fire or any other natural disaster, then receiving water monitoring triggers do not apply.

62. For Risk Level 3 and LUP Type 3 sites larger than 30 acres and with direct discharges to receiving waters, this General Permit requires bioassessment sampling before and after site completion to determine if significant degradation to the receiving water's biota has occurred. Bioassessment sampling guidelines are contained in this General Permit.

63. A summary and evaluation of the sampling and analysis results will be submitted in the Annual Reports.
64. This General Permit contains sampling, analysis and monitoring requirements for non-visible pollutants at all sites subject to this General Permit.
65. Compliance with the General Permit relies upon dischargers to electronically self-report any discharge violations and to comply with any Regional Water Board enforcement actions.
66. This General Permit requires that all dischargers maintain a paper or electronic copy of all required records for three years from the date generated or date submitted, whichever is last. These records must be available at the construction site until construction is completed. For LUPs, these documents may be retained in a crew member's vehicle and made available upon request.

K. Active Treatment System (ATS) Requirements

67. Active treatment systems add chemicals to facilitate flocculation, coagulation and filtration of suspended sediment particles. The uncontrolled release of these chemicals to the environment can negatively affect the beneficial uses of receiving waters and/or degrade water quality (e.g., acute and chronic toxicity). Additionally, the batch storage and treatment of storm water through an ATS' can potentially cause physical impacts on receiving waters if storage volume is inadequate or due to sudden releases of the ATS batches and improperly designed outfalls.
68. If designed, operated and maintained properly an ATS can achieve very high removal rates of suspended sediment (measured as turbidity), albeit at sometimes significantly higher costs than traditional erosion/sediment control practices. As a result, this General Permit establishes NELs consistent with the expected level of typical ATS performance.
69. This General Permit requires discharges of storm water associated with construction activity that undergo active treatment to comply with special operational and effluent limitations to ensure that these discharges do not adversely affect the beneficial uses of the receiving waters or cause degradation of their water quality.
70. For ATS discharges, this General Permit establishes technology-based NELs for turbidity.

71. This General Permit establishes a 10 year, 24 hour (expressed in inches of rainfall) Compliance Storm Event exemption from the technology-based numeric effluent limitations for ATS discharges. Exceedances of the ATS turbidity NEL constitutes a violation of this General Permit.

L. Post-Construction Requirements

72. This General Permit includes performance standards for post-construction that are consistent with State Water Board [Resolution No. 2005-0006](#), "Resolution Adopting the Concept of Sustainability as a Core Value for State Water Board Programs and Directing Its Incorporation," and [2008-0030](#), "Requiring Sustainable Water Resources Management." The requirement for all construction sites to match pre-project hydrology will help ensure that the physical and biological integrity of aquatic ecosystems are sustained. This "runoff reduction" approach is analogous in principle to Low Impact Development (LID) and will serve to protect related watersheds and waterbodies from both hydrologic-based and pollution impacts associated with the post-construction landscape.

73. LUP projects are not subject to post-construction requirements due to the nature of their construction to return project sites to pre-construction conditions.

M. Storm Water Pollution Prevention Plan Requirements

74. This General Permit requires the development of a site-specific SWPPP. The SWPPP must include the information needed to demonstrate compliance with all requirements of this General Permit, and must be kept on the construction site and be available for review. The discharger shall ensure that a QSD develops the SWPPP.

75. To ensure proper site oversight, this General Permit requires a Qualified SWPPP Practitioner to oversee implementation of the BMPs required to comply with this General Permit.

N. Regional Water Board Authorities

76. Regional Water Boards are responsible for implementation and enforcement of this General Permit. A general approach to permitting is not always suitable for every construction site and environmental circumstances. Therefore, this General Permit recognizes that Regional Water Boards must have some flexibility and authority to alter, approve, exempt, or rescind permit authority granted under this

General Permit in order to protect the beneficial uses of our receiving waters and prevent degradation of water quality.

IT IS HEREBY ORDERED that all dischargers subject to this General Permit shall comply with the following conditions and requirements (including all conditions and requirements as set forth in Attachments A, B, C, D, E and F)⁶:

II. CONDITIONS FOR PERMIT COVERAGE

A. Linear Underground/Overhead Projects (LUPs)

1. Linear Underground/Overhead Projects (LUPs) include, but are not limited to, any conveyance, pipe, or pipeline for the transportation of any gaseous, liquid (including water and wastewater for domestic municipal services), liquescent, or slurry substance; any cable line or wire for the transmission of electrical energy; any cable line or wire for communications (e.g. telephone, telegraph, radio or television messages); and associated ancillary facilities. Construction activities associated with LUPs include, but are not limited to, (a) those activities necessary for the installation of underground and overhead linear facilities (e.g., conduits, substructures, pipelines, towers, poles, cables, wires, connectors, switching, regulating and transforming equipment, and associated ancillary facilities); and include, but are not limited to, (b) underground utility mark-out, potholing, concrete and asphalt cutting and removal, trenching, excavation, boring and drilling, access road and pole/tower pad and cable/wire pull station, substation construction, substructure installation, construction of tower footings and/or foundations, pole and tower installations, pipeline installations, welding, concrete and/ or pavement repair or replacement, and stockpile/borrow locations.
2. The Legally Responsible Person is responsible for obtaining coverage under the General Permit where the construction of pipelines, utility lines, fiber-optic cables, or other linear underground/overhead projects will occur across several properties unless the LUP construction activities are covered under another construction storm water permit.
3. Only LUPs shall comply with the conditions and requirements in Attachment A, A.1 & A.2 of this Order. The balance of this Order is not applicable to LUPs except as indicated in Attachment A.

⁶ These attachments are part of the General Permit itself and are not separate documents that are capable of being updated independently by the State Water Board.

B. Obtaining Permit Coverage Traditional Construction Sites

1. The Legally Responsible Person (LRP) (see Special Provisions, Electronic Signature and Certification Requirements, Section IV.I.1) must obtain coverage under this General Permit.
2. To obtain coverage, the LRP must electronically file Permit Registration Documents (PRDs) prior to the commencement of construction activity. Failure to obtain coverage under this General Permit for storm water discharges to waters of the United States is a violation of the CWA and the California Water Code.
3. PRDs shall consist of:
 - a. Notice of Intent (NOI)
 - b. Risk Assessment (Section VIII)
 - c. Site Map
 - d. Storm Water Pollution Prevention Plan (Section XIV)
 - e. Annual Fee
 - f. Signed Certification Statement

Any information provided to the Regional Water Board shall comply with the Homeland Security Act and any other federal law that concerns security in the United States; any information that does not comply should not be submitted.

Attachment B contains additional PRD information. Dischargers must electronically file the PRDs, and mail the appropriate annual fee to the State Water Board.

4. This permit is effective on July 1, 2010.
 - a. **Dischargers Obtaining Coverage On or After July 1, 2010:** All dischargers requiring coverage on or after July 1, 2010, shall electronically file their PRDs prior to the commencement of construction activities, and mail the appropriate annual fee no later than seven days prior to the commencement of construction activities. Permit coverage shall not commence until the PRDs and the annual fee are received by the State Water Board, and a WDID number is assigned and sent by SMARTS.
 - b. **Dischargers Covered Under 99-08-DWQ and 2003-0007-DWQ:** Existing dischargers subject to State Water Board Order No. 99-08-DWQ (existing dischargers) will continue coverage under 99-08-DWQ until July 1, 2010. After July 1, 2010, all NOIs subject to State Water Board Order No. 99-08-DWQ will be terminated.

Existing dischargers shall electronically file their PRDs no later than July 1, 2010. If an existing discharger's site acreage subject to the annual fee has changed, it shall mail a revised annual fee no less than seven days after receiving the revised annual fee notification, **or else lose permit coverage**. All existing dischargers shall be exempt from the risk determination requirements in Section VIII of this General Permit until two years after permit adoption. All existing dischargers are therefore subject to Risk Level 1 requirements regardless of their site's sediment and receiving water risks. However, a Regional Board retains the authority to require an existing discharger to comply with the Section VIII risk determination requirements.

5. The discharger is only considered covered by this General Permit upon receipt of a Waste Discharger Identification (WDID) number assigned and sent by the State Water Board Storm water Multi-Application and Report Tracking System (SMARTS). In order to demonstrate compliance with this General Permit, the discharger must obtain a WDID number and must present documentation of a valid WDID upon demand.
6. During the period this permit is subject to review by the U.S. EPA, the prior permit (State Water Board Order No. 99-08-DWQ) remains in effect. Existing dischargers under the prior permit will continue to have coverage under State Water Board Order No. 99-08-DWQ until this General Permit takes effect on July 1, 2010. Dischargers who complete their projects and electronically file an NOT prior to July 1, 2010, are not required to obtain coverage under this General Permit.
7. Small Construction Rainfall Erosivity Waiver

EPA's Small Construction Erosivity Waiver applies to sites between one and five acres demonstrating that there are no adverse water quality impacts.

Dischargers eligible for a Rainfall Erosivity Waiver based on low erosivity potential shall complete the electronic Notice of Intent (NOI) and Sediment Risk form through the State Water Board's SMARTS system, certifying that the construction activity will take place during a period when the value of the rainfall erosivity factor is less than five. Where the LRP changes or another LRP is added during construction, the new LRP must also submit a waiver certification through the SMARTS system.

If a small construction site continues beyond the projected completion date given on the waiver certification, the LRP shall recalculate the

rainfall erosivity factor for the new project duration and submit this information through the SMARTS system. If the new R factor is below five (5), the discharger shall update through SMARTS all applicable information on the waiver certification and retain a copy of the revised waiver onsite. The LRP shall submit the new waiver certification 30 days prior to the projected completion date listed on the original waiver form to assure exemption from permitting requirements is uninterrupted. If the new R factor is five (5) or above, the LRP shall be required to apply for coverage under this Order.

8. In the case of a public emergency that requires immediate construction activities, a discharger shall submit a brief description of the emergency construction activity within five days of the onset of construction, and then shall submit all PRDs within thirty days.

C. Revising Permit Coverage for Change of Acreage or New Ownership

1. The discharger may reduce or increase the total acreage covered under this General Permit when a portion of the site is complete and/or conditions for termination of coverage have been met (See Section II.D Conditions for Termination of Coverage); when ownership of a portion of the site is sold to a different entity; or when new acreage, subject to this General Permit, is added to the site.
2. Within 30 days of a reduction or increase in total disturbed acreage, the discharger shall electronically file revisions to the PRDs that include:
 - a. A revised NOI indicating the new project size;
 - b. A revised site map showing the acreage of the site completed, acreage currently under construction, acreage sold/transferred or added, and acreage currently stabilized in accordance with the Conditions for Termination of Coverage in Section II.D below.
 - c. SWPPP revisions, as appropriate; and
 - d. Certification that any new landowners have been notified of applicable requirements to obtain General Permit coverage. The certification shall include the name, address, telephone number, and e-mail address of the new landowner.
 - e. If the project acreage has increased, dischargers shall mail payment of revised annual fees within 14 days of receiving the revised annual fee notification.

3. The discharger shall continue coverage under the General Permit for any parcel that has not achieved “Final Stabilization” as defined in Section II.D.
4. When an LRP with active General Permit coverage transfers its LRP status to another person or entity that qualifies as an LRP, the existing LRP shall inform the new LRP of the General Permit’s requirements. In order for the new LRP to continue the construction activity on its parcel of property, the new LRP, or the new LRP’s approved signatory, must submit PRDs in accordance with this General Permit’s requirements.

D. Conditions for Termination of Coverage

1. Within 90 days of when construction is complete or ownership has been transferred, the discharger shall electronically file a Notice of Termination (NOT), a final site map, and photos through the State Water Boards SMARTS system. Filing a NOT certifies that all General Permit requirements have been met. The Regional Water Board will consider a construction site complete only when all portions of the site have been transferred to a new owner, or all of the following conditions have been met:
 - a. For purposes of “final stabilization,” the site will not pose any additional sediment discharge risk than it did prior to the commencement of construction activity;
 - b. There is no potential for construction-related storm water pollutants to be discharged into site runoff;
 - c. Final stabilization has been reached;
 - d. Construction materials and wastes have been disposed of properly;
 - e. Compliance with the Post-Construction Standards in Section XIII of this General Permit has been demonstrated;
 - f. Post-construction storm water management measures have been installed and a long-term maintenance plan⁷ has been established; and
 - g. All construction-related equipment, materials and any temporary BMPs no longer needed are removed from the site.

⁷ For the purposes of this requirement a long-term maintenance plan will be designed for a minimum of five years, and will describe the procedures to ensure that the post-construction storm water management measures are adequately maintained.

2. The discharger shall certify that final stabilization conditions are satisfied in their NOT. Failure to certify shall result in continuation of permit coverage and annual billing.
3. The NOT must demonstrate through photos, RUSLE or RUSLE2, or results of testing and analysis that the site meets all of the conditions above (Section II.D.1) and the final stabilization condition (Section II.D.1.a) is attained by one of the following methods:
 - a. "70% final cover method," no computational proof required

OR:

- b. "RUSLE or RUSLE2 method," computational proof required

OR:

- c. "Custom method", the discharger shall demonstrate in some other manner than a or b, above, that the site complies with the "final stabilization" requirement in Section II.D.1.a.

III. DISCHARGE PROHIBITIONS

- A.** Dischargers shall not violate any discharge prohibitions contained in applicable Basin Plans or statewide water quality control plans. Waste discharges to Areas of Special Biological Significance (ASBS) are prohibited by the California Ocean Plan, unless granted an exception issued by the State Water Board.
- B.** All discharges are prohibited except for the storm water and non-storm water discharges specifically authorized by this General Permit or another NPDES permit.
- C.** Authorized non-storm water discharges may include those from de-chlorinated potable water sources such as: fire hydrant flushing, irrigation of vegetative erosion control measures, pipe flushing and testing, water to control dust, uncontaminated ground water from dewatering, and other discharges not subject to a separate general NPDES permit adopted by a Regional Water Board. The discharge of non-storm water is authorized under the following conditions:
1. The discharge does not cause or contribute to a violation of any water quality standard;
 2. The discharge does not violate any other provision of this General Permit;
 3. The discharge is not prohibited by the applicable Basin Plan;
 4. The discharger has included and implemented specific BMPs required by this General Permit to prevent or reduce the contact of the non-storm water discharge with construction materials or equipment.
 5. The discharge does not contain toxic constituents in toxic amounts or (other) significant quantities of pollutants;
 6. The discharge is monitored and meets the applicable NALs; and
 7. The discharger reports the sampling information in the Annual Report.

If any of the above conditions are not satisfied, the discharge is not authorized by this General Permit. The discharger shall notify the Regional Water Board of any anticipated non-storm water discharges not already authorized by this General Permit or another NPDES permit, to determine whether a separate NPDES permit is necessary.

- D.** Debris resulting from construction activities are prohibited from being discharged from construction sites.

- E.** When soil contamination is found or suspected and a responsible party is not identified, or the responsible party fails to promptly take the appropriate action, the discharger shall have those soils sampled and tested to ensure proper handling and public safety measures are implemented. The discharger shall notify the appropriate local, State, and federal agency(ies) when contaminated soil is found at a construction site, and will notify the appropriate Regional Water Board.

IV. SPECIAL PROVISIONS

A. Duty to Comply

1. The discharger shall comply with all of the conditions of this General Permit. Any permit noncompliance constitutes a violation of the Clean Water Act (CWA) and the Porter-Cologne Water Quality Control Act and is grounds for enforcement action and/or removal from General Permit coverage.
2. The discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if this General Permit has not yet been modified to incorporate the requirement.

B. General Permit Actions

1. This General Permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the discharger for a General Permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not annul any General Permit condition.
2. If any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under Section 307(a) of the CWA for a toxic pollutant which is present in the discharge and that standard or prohibition is more stringent than any limitation on the pollutant in this General Permit, this General Permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition and the dischargers so notified.

C. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this General Permit.

D. Duty to Mitigate

The discharger shall take all responsible steps to minimize or prevent any discharge in violation of this General Permit, which has a reasonable likelihood of adversely affecting human health or the environment.

E. Proper Operation and Maintenance

The discharger shall at all times properly operate and maintain any facilities and systems of treatment and control (and related appurtenances) which are installed or used by the discharger to achieve compliance with the conditions of this General Permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance may require the operation of backup or auxiliary facilities or similar systems installed by a discharger when necessary to achieve compliance with the conditions of this General Permit.

F. Property Rights

This General Permit does not convey any property rights of any sort or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor does it authorize any infringement of Federal, State, or local laws or regulations.

G. Duty to Maintain Records and Provide Information

1. The discharger shall maintain a paper or electronic copy of all required records, including a copy of this General Permit, for three years from the date generated or date submitted, whichever is last. These records shall be available at the construction site until construction is completed.
2. The discharger shall furnish the Regional Water Board, State Water Board, or U.S. EPA, within a reasonable time, any requested information to determine compliance with this General Permit. The discharger shall also furnish, upon request, copies of records that are required to be kept by this General Permit.

H. Inspection and Entry

The discharger shall allow the Regional Water Board, State Water Board, U.S. EPA, and/or, in the case of construction sites which discharge through a municipal separate storm sewer, an authorized representative of the municipal operator of the separate storm sewer system receiving the discharge, upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the discharger's premises at reasonable times where a regulated construction activity is being conducted or where records must be kept under the conditions of this General Permit;

2. Access and copy at reasonable times any records that must be kept under the conditions of this General Permit;
3. Inspect at reasonable times the complete construction site, including any off-site staging areas or material storage areas, and the erosion/sediment controls; and
4. Sample or monitor at reasonable times for the purpose of ensuring General Permit compliance.

I. Electronic Signature and Certification Requirements

1. All Permit Registration Documents (PRDs) and Notices of Termination (NOTs) shall be electronically signed, certified, and submitted via SMARTS to the State Water Board. Either the Legally Responsible Person (LRP), as defined in Appendix 5 – Glossary, or a person legally authorized to sign and certify PRDs and NOTs on behalf of the LRP (the LRP's Approved Signatory, as defined in Appendix 5 - Glossary) must submit all information electronically via SMARTS.
2. Changes to Authorization. If an Approved Signatory's authorization is no longer accurate, a new authorization satisfying the requirements of paragraph (a) of this section must be submitted via SMARTS prior to or together with any reports, information or applications to be signed by an Approved Signatory.
3. All Annual Reports, or other information required by the General Permit (other than PRDs and NOTs) or requested by the Regional Water Board, State Water Board, U.S. EPA, or local storm water management agency shall be certified and submitted by the LRP or the LRP's Approved Signatory.

J. Certification

Any person signing documents under Section IV.I above, shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

K. Anticipated Noncompliance

The discharger shall give advance notice to the Regional Water Board and local storm water management agency of any planned changes in the construction activity, which may result in noncompliance with General Permit requirements.

L. Bypass

Bypass⁸ is prohibited. The Regional Water Board may take enforcement action against the discharger for bypass unless:

1. Bypass was unavoidable to prevent loss of life, personal injury or severe property damage;⁹
2. There were no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated waste, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that could occur during normal periods of equipment downtime or preventative maintenance;
3. The discharger submitted a notice at least ten days in advance of the need for a bypass to the Regional Water Board; or
4. The discharger may allow a bypass to occur that does not cause effluent limitations to be exceeded, but only if it is for essential maintenance to assure efficient operation. In such a case, the above bypass conditions are not applicable. The discharger shall submit notice of an unanticipated bypass as required.

M. Upset

1. A discharger that wishes to establish the affirmative defense of an upset¹⁰ in an action brought for noncompliance shall demonstrate,

⁸ The intentional diversion of waste streams from any portion of a treatment facility

⁹ Severe property damage means substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

¹⁰ An exceptional incident in which there is unintentional and temporary noncompliance the technology based numeric effluent limitations because of factors beyond the reasonable control of the discharger. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.

through properly signed, contemporaneous operating logs, or other relevant evidence that:

- a. An upset occurred and that the discharger can identify the cause(s) of the upset
 - b. The treatment facility was being properly operated by the time of the upset
 - c. The discharger submitted notice of the upset as required; and
 - d. The discharger complied with any remedial measures required
2. No determination made before an action of noncompliance occurs, such as during administrative review of claims that noncompliance was caused by an upset, is final administrative action subject to judicial review.
 3. In any enforcement proceeding, the discharger seeking to establish the occurrence of an upset has the burden of proof

N. Penalties for Falsification of Reports

Section 309(c)(4) of the CWA provides that any person who knowingly makes any false material statement, representation, or certification in any record or other document submitted or required to be maintained under this General Permit, including reports of compliance or noncompliance shall upon conviction, be punished by a fine of not more than \$10,000 or by imprisonment for not more than two years or by both.

O. Oil and Hazardous Substance Liability

Nothing in this General Permit shall be construed to preclude the institution of any legal action or relieve the discharger from any responsibilities, liabilities, or penalties to which the discharger is or may be subject to under Section 311 of the CWA.

P. Severability

The provisions of this General Permit are severable; and, if any provision of this General Permit or the application of any provision of this General Permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this General Permit shall not be affected thereby.

Q. Reopener Clause

This General Permit may be modified, revoked and reissued, or terminated for cause due to promulgation of amended regulations, receipt of U.S. EPA guidance concerning regulated activities, judicial decision, or in accordance with 40 Code of Federal Regulations (CFR) 122.62, 122.63, 122.64, and 124.5.

R. Penalties for Violations of Permit Conditions

1. Section 309 of the CWA provides significant penalties for any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the CWA or any permit condition or limitation implementing any such section in a permit issued under Section 402. Any person who violates any permit condition of this General Permit is subject to a civil penalty not to exceed \$37,500¹¹ per calendar day of such violation, as well as any other appropriate sanction provided by Section 309 of the CWA.
2. The Porter-Cologne Water Quality Control Act also provides for civil and criminal penalties, which in some cases are greater than those under the CWA.

S. Transfers

This General Permit is not transferable.

T. Continuation of Expired Permit

This General Permit continues in force and effect until a new General Permit is issued or the SWRCB rescinds this General Permit. Only those dischargers authorized to discharge under the expiring General Permit are covered by the continued General Permit.

¹¹ May be further adjusted in accordance with the Federal Civil Penalties Inflation Adjustment Act.

V. EFFLUENT STANDARDS & RECEIVING WATER MONITORING

A. Narrative Effluent Limitations

1. Storm water discharges and authorized non-storm water discharges regulated by this General Permit shall not contain a hazardous substance equal to or in excess of reportable quantities established in 40 C.F.R. §§ 117.3 and 302.4, unless a separate NPDES Permit has been issued to regulate those discharges.
2. Dischargers shall minimize or prevent pollutants in storm water discharges and authorized non-storm water discharges through the use of controls, structures, and management practices that achieve BAT for toxic and non-conventional pollutants and BCT for conventional pollutants.

Table 1- Numeric Action Levels, Test Methods, Detection Limits, and Reporting Units

Parameter	Test Method	Discharge Type	Min. Detection Limit	Units	Numeric Action Level
pH	Field test with calibrated portable instrument	Risk Level 2	0.2	pH units	lower NAL = 6.5 upper NAL = 8.5
		Risk Level 3			lower NAL = 6.5 upper NAL = 8.5
Turbidity	EPA 0180.1 and/or field test with calibrated portable instrument	Risk Level 2	1	NTU	250 NTU
		Risk Level 3			250 NTU

B. Numeric Action Levels (NALs)

1. For Risk Level 2 and 3 dischargers, the lower storm event average NAL for pH is 6.5 pH units and the upper storm event average NAL for

pH is 8.5 pH units. The discharger shall take actions as described below if the discharge is outside of this range of pH values.

2. For Risk Level 2 and 3 dischargers, the NAL storm event daily average for turbidity is 250 NTU. The discharger shall take actions as described below if the discharge is outside of this range of turbidity values.
3. Whenever the results from a storm event daily average indicate that the discharge is below the lower NAL for pH, exceeds the upper NAL for pH, or exceeds the turbidity NAL (as listed in Table 1), the discharger shall conduct a construction site and run-on evaluation to determine whether pollutant source(s) associated with the site's construction activity may have caused or contributed to the NAL exceedance and shall immediately implement corrective actions if they are needed.
4. The site evaluation shall be documented in the SWPPP and specifically address whether the source(s) of the pollutants causing the exceedance of the NAL:
 - a. Are related to the construction activities and whether additional BMPs are required to (1) meet BAT/BCT requirements; (2) reduce or prevent pollutants in storm water discharges from causing exceedances of receiving water objectives; and (3) determine what corrective action(s) were taken or will be taken and with a description of the schedule for completion.

AND/OR:

- b. Are related to the run-on associated with the construction site location and whether additional BMPs measures are required to (1) meet BAT/BCT requirements; (2) reduce or prevent pollutants in storm water discharges from causing exceedances of receiving water objectives; and (3) what corrective action(s) were taken or will be taken with a description of the schedule for completion.

C. Receiving Water Monitoring Triggers

1. The receiving water monitoring triggers for Risk Level 3 dischargers with direct discharges to surface waters are triggered when the daily average effluent pH values during any site phase when there is a high risk of pH discharge¹² fall outside of the range of 6.0 and 9.0 pH units, or when the daily average effluent turbidity exceeds 500 NTU.

2. Risk Level 3 dischargers with with direct discharges to surface waters shall conduct receiving water monitoring whenever their effluent monitoring results exceed the receiving water monitoring triggers. If the pH trigger is exceeded, the receiving water shall be monitored for pH for the duration of coverage under this General Permit. If the turbidity trigger is exceeded, the receiving water shall be monitored for turbidity and SSC for the duration of coverage under this general permit.
3. Risk Level 3 dischargers with direct discharges to surfaces waters shall initiate receiving water monitoring when the triggers are exceeded unless the storm event causing the exceedance is determined after the fact to equal to or greater than the 5-year 24-hour storm (expressed in inches of rainfall) as determined by using these maps:

<http://www.wrcc.dri.edu/pcpnfreq/nca5y24.gif>
<http://www.wrcc.dri.edu/pcpnfreq/sca5y24.gif>

Verification of the 5-year 24-hour storm event shall be done by reporting on-site rain gauge readings as well as nearby governmental rain gauge readings.

4. If run-on is caused by a forest fire or any other natural disaster, then receiving water monitoring triggers do not apply.

¹² A period of high risk of pH discharge is defined as a project's complete utilities phase, complete vertical build phase, and any portion of any phase where significant amounts of materials are placed directly on the land at the site in a manner that could result in significant alterations of the background pH of the discharges.

VI. RECEIVING WATER LIMITATIONS

- A.** The discharger shall ensure that storm water discharges and authorized non-storm water discharges to any surface or ground water will not adversely affect human health or the environment.
- B.** The discharger shall ensure that storm water discharges and authorized non-storm water discharges will not contain pollutants in quantities that threaten to cause pollution or a public nuisance.
- C.** The discharger shall ensure that storm water discharges and authorized non-storm water discharges will not contain pollutants that cause or contribute to an exceedance of any applicable water quality objectives or water quality standards (collectively, WQS) contained in a Statewide Water Quality Control Plan, the California Toxics Rule, the National Toxics Rule, or the applicable Regional Water Board's Water Quality Control Plan (Basin Plan).
- D.** Dischargers located within the watershed of a CWA § 303(d) impaired water body, for which a TMDL has been approved by the U.S. EPA, shall comply with the approved TMDL if it identifies "construction activity" or land disturbance as a source of the pollution.

VII. TRAINING QUALIFICATIONS AND CERTIFICATION REQUIREMENTS

A. General

The discharger shall ensure that all persons responsible for implementing requirements of this General Permit shall be appropriately trained in accordance with this Section. Training should be both formal and informal, occur on an ongoing basis, and should include training offered by recognized governmental agencies or professional organizations. Those responsible for preparing and amending SWPPPs shall comply with the requirements in this Section VII.

The discharger shall provide documentation of all training for persons responsible for implementing the requirements of this General Permit in the Annual Reports.

B. SWPPP Certification Requirements

1. **Qualified SWPPP Developer:** The discharger shall ensure that SWPPPs are written, amended and certified by a Qualified SWPPP Developer (QSD). A QSD shall have one of the following registrations or certifications, and appropriate experience, as required for:
 - a. A California registered professional civil engineer;
 - b. A California registered professional geologist or engineering geologist;
 - c. A California registered landscape architect;
 - d. A professional hydrologist registered through the American Institute of Hydrology;
 - e. A Certified Professional in Erosion and Sediment Control (CPESC)TM registered through Enviro Cert International, Inc.;
 - f. A Certified Professional in Storm Water Quality (CPSWQ)TM registered through Enviro Cert International, Inc.; or
 - g. A professional in erosion and sediment control registered through the National Institute for Certification in Engineering Technologies (NICET).

Effective two years after the adoption date of this General Permit, a QSD shall have attended a State Water Board-sponsored or approved QSD training course.

2. The discharger shall list the name and telephone number of the currently designated Qualified SWPPP Developer(s) in the SWPPP.
3. **Qualified SWPPP Practitioner:** The discharger shall ensure that all BMPs required by this General Permit are implemented by a Qualified SWPPP Practitioner (QSP). A QSP is a person responsible for non-storm water and storm water visual observations, sampling and analysis. Effective two years from the date of adoption of this General Permit, a QSP shall be either a QSD or have one of the following certifications:
 - a. A certified erosion, sediment and storm water inspector registered through Enviro Cert International, Inc.; or
 - b. A certified inspector of sediment and erosion control registered through Certified Inspector of Sediment and Erosion Control, Inc.

Effective two years after the adoption date of this General Permit, a QSP shall have attended a State Water Board-sponsored or approved QSP training course.

4. The LRP shall list in the SWPPP, the name of any Approved Signatory, and provide a copy of the written agreement or other mechanism that provides this authority from the LRP in the SWPPP.
5. The discharger shall include, in the SWPPP, a list of names of all contractors, subcontractors, and individuals who will be directed by the Qualified SWPPP Practitioner. This list shall include telephone numbers and work addresses. Specific areas of responsibility of each subcontractor and emergency contact numbers shall also be included.
6. The discharger shall ensure that the SWPPP and each amendment will be signed by the Qualified SWPPP Developer. The discharger shall include a listing of the date of initial preparation and the date of each amendment in the SWPPP.

VIII. RISK DETERMINATION

The discharger shall calculate the site's sediment risk and receiving water risk during periods of soil exposure (i.e. grading and site stabilization) and use the calculated risks to determine a Risk Level(s) using the methodology in

Appendix 1. For any site that spans two or more planning watersheds,¹³ the discharger shall calculate a separate Risk Level for each planning watershed. The discharger shall notify the State Water Board of the site's Risk Level determination(s) and shall include this determination as a part of submitting the PRDs. If a discharger ends up with more than one Risk Level determination, the Regional Water Board may choose to break the project into separate levels of implementation.

IX. RISK LEVEL 1 REQUIREMENTS

Risk Level 1 Dischargers shall comply with the requirements included in Attachment C of this General Permit.

X. RISK LEVEL 2 REQUIREMENTS

Risk Level 2 Dischargers shall comply with the requirements included in Attachment D of this General Permit.

XI. RISK LEVEL 3 REQUIREMENTS

Risk Level 3 Dischargers shall comply with the requirements included in Attachment E of this General Permit.

XII. ACTIVE TREATMENT SYSTEMS (ATS)

Dischargers choosing to implement an ATS on their site shall comply with all of the requirements in Attachment F of this General Permit.

¹³ Planning watershed: defined by the Calwater Watershed documents as a watershed that ranges in size from approximately 3,000 to 10,000 acres <http://cain.ice.ucdavis.edu/calwater/calwfaq.html>, <http://gis.ca.gov/catalog/BrowseRecord.epl?id=22175> .

XIII. POST-CONSTRUCTION STANDARDS

- A.** All dischargers shall comply with the following runoff reduction requirements unless they are located within an area subject to post-construction standards of an active Phase I or II municipal separate storm sewer system (MS4) permit that has an approved Storm Water Management Plan.
1. This provision shall take effect three years from the adoption date of this permit, or later at the discretion of the Executive Officer of the Regional Board.
 2. The discharger shall demonstrate compliance with the requirements of this section by submitting with their NOI a map and worksheets in accordance with the instructions in Appendix 2. The discharger shall use non-structural controls unless the discharger demonstrates that non-structural controls are infeasible or that structural controls will produce greater reduction in water quality impacts.
 3. The discharger shall, through the use of non-structural and structural measures as described in Appendix 2, replicate the pre-project water balance (for this permit, defined as the volume of rainfall that ends up as runoff) for the smallest storms up to the 85th percentile storm event (or the smallest storm event that generates runoff, whichever is larger). Dischargers shall inform Regional Water Board staff at least 30 days prior to the use of any structural control measure used to comply with this requirement. Volume that cannot be addressed using non-structural practices shall be captured in structural practices and approved by the Regional Water Board. When seeking Regional Board approval for the use of structural practices, dischargers shall document the infeasibility of using non-structural practices on the project site, or document that there will be fewer water quality impacts through the use of structural practices.
 4. For sites whose disturbed area exceeds two acres, the discharger shall preserve the pre-construction drainage density (miles of stream length per square mile of drainage area) for all drainage areas within the area serving a first order stream¹⁴ or larger stream and ensure that post-project time of runoff concentration is equal or greater than pre-project time of concentration.

¹⁴ A first order stream is defined as a stream with no tributaries.

- B.** All dischargers shall implement BMPs to reduce pollutants in storm water discharges that are reasonably foreseeable after all construction phases have been completed at the site (Post-construction BMPs).

XIV. SWPPP REQUIREMENTS

- A.** The discharger shall ensure that the Storm Water Pollution Prevention Plans (SWPPPs) for all traditional project sites are developed and amended or revised by a QSD. The SWPPP shall be designed to address the following objectives:
1. All pollutants and their sources, including sources of sediment associated with construction, construction site erosion and all other activities associated with construction activity are controlled;
 2. Where not otherwise required to be under a Regional Water Board permit, all non-storm water discharges are identified and either eliminated, controlled, or treated;
 3. Site BMPs are effective and result in the reduction or elimination of pollutants in storm water discharges and authorized non-storm water discharges from construction activity to the BAT/BCT standard;
 4. Calculations and design details as well as BMP controls for site run-on are complete and correct, and
 5. Stabilization BMPs installed to reduce or eliminate pollutants after construction are completed.
- B.** To demonstrate compliance with requirements of this General Permit, the QSD shall include information in the SWPPP that supports the conclusions, selections, use, and maintenance of BMPs.
- C.** The discharger shall make the SWPPP available at the construction site during working hours while construction is occurring and shall be made available upon request by a State or Municipal inspector. When the original SWPPP is retained by a crewmember in a construction vehicle and is not currently at the construction site, current copies of the BMPs and map/drawing will be left with the field crew and the original SWPPP shall be made available via a request by radio/telephone.

XV. REGIONAL WATER BOARD AUTHORITIES

- A.** In the case where the Regional Water Board does not agree with the discharger's self-reported risk level (e.g., they determine themselves to be a Level 1 Risk when they are actually a Level 2 Risk site), Regional Water Boards may either direct the discharger to reevaluate the Risk Level(s) for their site or terminate coverage under this General Permit.
- B.** Regional Water Boards may terminate coverage under this General Permit for dischargers who fail to comply with its requirements or where they determine that an individual NPDES permit is appropriate.
- C.** Regional Water Boards may require dischargers to submit a Report of Waste Discharge / NPDES permit application for Regional Water Board consideration of individual requirements.
- D.** Regional Water Boards may require additional Monitoring and Reporting Program Requirements, including sampling and analysis of discharges to sediment-impaired water bodies.
- E.** Regional Water Boards may require dischargers to retain records for more than the three years required by this General Permit.

XVI. ANNUAL REPORTING REQUIREMENTS

- A.** All dischargers shall prepare and electronically submit an Annual Report no later than September 1 of each year.
- B.** The discharger shall certify each Annual Report in accordance with the Special Provisions.
- C.** The discharger shall retain an electronic or paper copy of each Annual Report for a minimum of three years after the date the annual report is filed.
- D.** The discharger shall include storm water monitoring information in the Annual Report consisting of:
 - 1. a summary and evaluation of all sampling and analysis results, including copies of laboratory reports;
 - 2. the analytical method(s), method reporting unit(s), and method detection limit(s) of each analytical parameter (analytical results that are less than the method detection limit shall be reported as "less than the method detection limit");
 - 3. a summary of all corrective actions taken during the compliance year;
 - 4. identification of any compliance activities or corrective actions that were not implemented;
 - 5. a summary of all violations of the General Permit;
 - 6. the names of individual(s) who performed the facility inspections, sampling, visual observation (inspections), and/or measurements;
 - 7. the date, place, time of facility inspections, sampling, visual observation (inspections), and/or measurements, including precipitation (rain gauge); and
 - 8. the visual observation and sample collection exception records and reports specified in Attachments C, D, and E.
- E.** The discharger shall provide training information in the Annual Report consisting of:
 - 1. documentation of all training for individuals responsible for all activities associated with compliance with this General Permit;

2. documentation of all training for individuals responsible for BMP installation, inspection, maintenance, and repair; and
3. documentation of all training for individuals responsible for overseeing, revising, and amending the SWPPP.

ATTACHMENT A
Linear Underground/ Overhead Requirements

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All Linear Underground/Overhead project dischargers who submit permit registration documents (PRDs) indicating their intention to be regulated under the provisions of this General Permit shall comply with the following:

A. DEFINITION OF LINEAR UNDERGROUND/OVERHEAD PROJECTS

1. Linear Underground/Overhead Projects (LUPs) include, but are not limited to, any conveyance, pipe, or pipeline for the transportation of any gaseous, liquid (including water and wastewater for domestic municipal services), liquescent, or slurry substance; any cable line or wire for the transmission of electrical energy; any cable line or wire for communications (e.g., telephone, telegraph, radio, or television messages); and associated ancillary facilities. Construction activities associated with LUPs include, but are not limited to, (a) those activities necessary for the installation of underground and overhead linear facilities (e.g., conduits, substructures, pipelines, towers, poles, cables, wires, connectors, switching, regulating and transforming equipment, and associated ancillary facilities); and include, but are not limited to, (b) underground utility mark-out, potholing, concrete and asphalt cutting and removal, trenching, excavation, boring and drilling, access road and pole/tower pad and cable/wire pull station, substation construction, substructure installation, construction of tower footings and/or foundations, pole and tower installations, pipeline installations, welding, concrete and/ or pavement repair or replacement, and stockpile/borrow locations.
2. LUP evaluation shall consist of two tasks:

- a. Confirm that the project or project section(s) qualifies as an LUP. The State Water Board website contains a project determination guidance flowchart.
http://www.waterboards.ca.gov/water_issues/programs/stormwater/constructionpermits.shtml
 - b. Identify which Type(s) (1, 2 or 3 described in Section I below) are applicable to the project or project sections based on project sediment and receiving water risk. (See Attachment A.1)
3. A Legally Responsible Person (LRP) for a Linear Underground/Overhead project is required to obtain CGP coverage under one or more permit registration document (PRD) electronic submittals to the State Water Board's Storm Water Multi-Application and Report Tracking (SMARTs) system. Attachment A.1 contains a flow chart to be used when determining if a linear project qualifies for coverage and to determine LUP Types. Since a LUP may be constructed within both developed and undeveloped locations and portions of LUPs may be constructed by different contractors, LUPs may be broken into logical permit sections. Sections may be determined based on portions of a project conducted by one contractor. Other situations may also occur, such as the time period in which the sections of a project will be constructed (e.g. project phases), for which separate permit coverage is possible. For projects that are broken into separate sections, a description of how each section relates to the overall project and the definition of the boundaries between sections shall be clearly stated.
 4. Where construction activities transverse or enter into different Regional Water Board jurisdictions, LRPs shall obtain permit coverage for each Regional Water Board area involved prior to the commencement of construction activities.
 5. Small Construction Rainfall Erosivity Waiver

EPA's Small Construction Erosivity Waiver applies to sites between one and five acres demonstrating that there are no adverse water quality impacts.

Dischargers eligible for a Rainfall Erosivity Waiver based on low erosivity potential shall complete the electronic Notice of Intent (NOI) and Sediment Risk form through the State Water Board's SMARTS system, certifying that the construction activity will take place during a period when the value of the rainfall erosivity factor is less than five. Where the LRP changes or another LRP is added during construction, the new LRP must also submit a waiver certification through the SMARTS system.

If a small linear construction site continues beyond the projected completion date given on the waiver certification, the LRP shall recalculate the rainfall erosivity factor for the new project duration and submit this information through the SMARTS system. If the new R factor is below five (5), the discharger shall update through SMARTS all applicable information on the waiver certification and retain a copy of the revised waiver onsite. The LRP shall submit the new waiver certification 30 days prior to the projected completion date listed on the original waiver form to assure exemption from permitting requirements is uninterrupted. If the new R factor is five (5) or above, the LRP shall be required to apply for coverage under this Order.

B. LINEAR PROJECT PERMIT REGISTRATION DOCUMENTS (PRDs)

Any information provided to the Regional Water Board shall comply with the Homeland Security Act and any other federal law that concerns security in the United States; any information that does not comply should not be submitted. PRDs shall consist of the following:

1. Notice of Intent (NOI)

Prior to construction activities, the LRP of a proposed linear underground/overhead project shall utilize the processes and methods provided in Attachment A.2, Permit Registration Documents (PRDs) – General Instructions for Linear Underground/Overhead Projects to comply with the Construction General Permit.

2. Site Maps

LRPs submitting PRDs shall include at least 3 maps. The first map will be a zoomed¹ 1000-1500 ft vicinity map that shows the starting point of the project. The second will be a zoomed map of 1000-1500 ft showing the ending location of the project. The third will be a larger view vicinity map, 1000 ft to 2000 ft, displaying the entire project location depending on the project size, and indicating the LUP type (1, 2 or 3) areas within the total project footprint.

3. Drawings

LRPs submitting PRDs shall include a construction drawing(s) or other appropriate drawing(s) or map(s) that shows the locations of storm drain

¹ An image with a close-up/enhanced detailed view of site features that show minute details such as streets and neighboring structures.

Or: An image with a close-up/enhanced detailed view of the site's surrounding infrastructure.

Or: An image with a close up detailed view of the project and its surroundings.

inlets and waterbodies² that may receive discharges from the construction activities and that shows the locations of BMPs to be installed for all those BMPs that can be illustrated on the revisable drawing(s) or map(s). If storm drain inlets, waterbodies, and/or BMPs cannot be adequately shown on the drawing(s) or map(s) they should be described in detail within the SWPPP.

4. Storm Water Pollution Prevention Plan (SWPPP)

LUP dischargers shall comply with the SWPPP Preparation, Implementation, and Oversight requirements in Section K of this Attachment.

5. Contact information

LUP dischargers shall include contact information for all contractors (or subcontractors) responsible for each area of an LUP project. This should include the names, telephone numbers, and addresses of contact personnel. Specific areas of responsibility of each contact, and emergency contact numbers should also be included.

6. In the case of a public emergency that requires immediate construction activities, a discharger shall submit a brief description of the emergency construction activity within five days of the onset of construction, and then shall submit all PRDs within thirty days.

C. LINEAR PROJECT TERMINATION OF COVERAGE REQUIREMENTS

The LRP may terminate coverage of an LUP when construction activities are completed by submitting an electronic notice of termination (NOT) through the State Water Board's SMARTS system. Termination requirements are different depending on the complexity of the LUP. An LUP is considered complete when: (a) there is no potential for construction-related storm water pollution; (b) all elements of the SWPPP have been completed; (c) construction materials and waste have been disposed of properly; (d) the site is in compliance with all local storm water management requirements; and (e) the LRP submits a notice of termination (NOT) and has received approval for termination from the appropriate Regional Water Board office.

1. LUP Stabilization Requirements

The LUP discharger shall ensure that all disturbed areas of the construction site are stabilized prior to termination of coverage under this General Permit. Final stabilization for the purposes of submitting an NOT

² Includes basin(s) that the MS4 storm sewer systems may drain to for Hydromodification or Hydrological Conditional of Concerns under the MS4 permits.

is satisfied when all soil disturbing activities are completed and one of the following criteria is met:

- a. In disturbed areas that were vegetated prior to construction activities of the LUP, the area disturbed must be re-established to a uniform vegetative cover equivalent to 70 percent coverage of the preconstruction vegetative conditions. Where preconstruction vegetation covers less than 100 percent of the surface, such as in arid areas, the 70 percent coverage criteria is adjusted as follows: if the preconstruction vegetation covers 50 percent of the ground surface, 70 percent of 50 percent ($.70 \times .50 = .35$) would require 35 percent total uniform surface coverage; or
- b. Where no vegetation is present prior to construction, the site is returned to its original line and grade and/or compacted to achieve stabilization; or
- c. Equivalent stabilization measures have been employed. These measures include, but are not limited to, the use of such BMPs as blankets, reinforced channel liners, soil cement, fiber matrices, geotextiles, or other erosion resistant soil coverings or treatments.

2. LUP Termination of Coverage Requirements

The LRP shall file an NOT through the State Water Board's SMARTS system. By submitting an NOT, the LRP is certifying that construction activities for an LUP are complete and that the project is in full compliance with requirements of this General Permit and that it is now compliant with soil stabilization requirements where appropriate. Upon approval by the appropriate Regional Water Board office, permit coverage will be terminated.

3. Revising Coverage for Change of Acreage

When the LRP of a portion of an LUP construction project changes, or when a phase within a multi-phase project is completed, the LRP may reduce the total acreage covered by this General Permit. In reducing the acreage covered by this General Permit, the LRP shall electronically file revisions to the PRDs that include:

- a. a revised NOI indicating the new project size;
- b. a revised site map showing the acreage of the project completed, acreage currently under construction, acreage sold, transferred or added, and acreage currently stabilized.
- c. SWPPP revisions, as appropriate; and
- d. certification that any new LRPs have been notified of applicable requirements to obtain General Permit coverage. The certification shall include the name, address, telephone number, and e-mail address (if known) of the new LRP.

If the project acreage has increased, dischargers shall mail payment of revised annual fees within 14 days of receiving the revised annual fee notification.

D. DISCHARGE PROHIBITIONS

1. LUP dischargers shall not violate any discharge prohibitions contained in applicable Basin Plans or statewide water quality control plans. Waste discharges to Areas of Special Biological Significance (ASBS) are prohibited by the California Ocean Plan, unless granted an exception issued by the State Water Board.
2. LUP dischargers are prohibited from discharging non-storm water that is not otherwise authorized by this General Permit. Non-storm water discharges authorized by this General Permit³ may include, fire hydrant flushing, irrigation of vegetative erosion control measures, pipe flushing and testing, water to control dust, street cleaning, dewatering,⁴ uncontaminated groundwater from dewatering, and other discharges not subject to a separate general NPDES permit adopted by a Regional Water Board. Such discharges are allowed by this General Permit provided they are not relied upon to clean up failed or inadequate construction or post-construction BMPs designed to keep materials on site. These authorized non-storm water discharges:

³ Dischargers must identify all authorized non-storm water discharges in the LUP's SWPPP and identify BMPs that will be implemented to either eliminate or reduce pollutants in non-storm water discharges. Regional Water Boards may direct the discharger to discontinue discharging such non-storm water discharges if determined that such discharges discharge significant pollutants or threaten water quality.

⁴Dewatering activities may be prohibited or need coverage under a separate permit issued by the Regional Water Boards. Dischargers shall check with the appropriate Regional Water Boards for any required permit or basin plan conditions prior to initial dewatering activities to land, storm drains, or waterbodies.

- a. Shall not cause or contribute to a violation of any water quality standard;
- b. Shall not violate any other provision of this General Permit;
- c. Shall not violate any applicable Basin Plan;
- d. Shall comply with BMPs as described in the SWPPP;
- e. Shall not contain toxic constituents in toxic amounts or (other) significant quantities of pollutants;
- f. Shall be monitored and meets the applicable NALs; and
- g. Shall be reported by the discharger in the Annual Report.

If any of the above conditions are not satisfied, the discharge is not authorized by this General Permit. The discharger shall notify the Regional Water Board of any anticipated non-storm water discharges not authorized by this General Permit to determine the need for a separate NPDES permit.

Additionally, some LUP dischargers may be required to obtain a separate permit if the applicable Regional Water Board has adopted a General Permit for dewatering discharges. Wherever feasible, alternatives, that do not result in the discharge of non-storm water, shall be implemented in accordance with this Attachment's Section K.2 - SWPPP Implementation Schedule.

3. LUP dischargers shall ensure that trench spoils or any other soils disturbed during construction activities that are contaminated⁵ are not discharged with storm water or non-storm water discharges into any storm drain or water body except pursuant to an NPDES permit.

When soil contamination is found or suspected and a responsible party is not identified, or the responsible party fails to promptly take the appropriate action, the LUP discharger shall have those soils sampled and tested to ensure that proper handling and public safety measures are

⁵ Contaminated soil contains pollutants in concentrations that exceed the appropriate thresholds that various regulatory agencies set for those substances. Preliminary testing of potentially contaminated soils will be based on odor, soil discoloration, or prior history of the site's chemical use and storage and other similar factors. When soil contamination is found or suspected and a responsible party is not identified, or the responsible party fails to promptly take the appropriate action, the discharger shall have those soils sampled and tested to ensure proper handling and public safety measures are implemented. The legally responsible person will notify the appropriate local, State, or federal agency(ies) when contaminated soil is found at a construction site, and will notify the Regional Water Board by submitting an NOT at the completion of the project.

implemented. The LUP discharger shall notify the appropriate local, State, and federal agency(ies) when contaminated soil is found at a construction site, and will notify the appropriate Regional Water Board.

4. Discharging any pollutant-laden water that will cause or contribute to an exceedance of the applicable Regional Water Board's Basin Plan from a dewatering site or sediment basin into any receiving water or storm drain is prohibited.
5. Debris⁶ resulting from construction activities are prohibited from being discharged from construction project sites.

E. SPECIAL PROVISIONS

1. Duty to Comply

- a. The LUP discharger must comply with all of the conditions of this General Permit. Any permit noncompliance constitutes a violation of the Clean Water Act (CWA) and the Porter-Cologne Water Quality Control Act and is grounds for enforcement action and/or removal from General Permit coverage.
- b. The LUP discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if this General Permit has not yet been modified to incorporate the requirement.

2. General Permit Actions

- a. This General Permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the discharger for a General Permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not annul any General Permit condition.

⁶ Litter, rubble, discarded refuse, and remains of something destroyed.

- b. If any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under Section 307(a) of the CWA for a toxic pollutant which is present in the discharge and that standard or prohibition is more stringent than any limitation on the pollutant in this General Permit, this General Permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition and the dischargers so notified.

3. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for an LUP discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this General Permit.

4. Duty to Mitigate

The LUP discharger shall take all responsible steps to minimize or prevent any discharge in violation of this General Permit, which has a reasonable likelihood of adversely affecting human health or the environment.

5. Proper Operation and Maintenance

The LUP discharger shall at all times properly operate and maintain any facilities and systems of treatment and control (and related appurtenances) which are installed or used by the discharger to achieve compliance with the conditions of this General Permit and with the requirements of the Storm Water Pollution Prevention Plan (SWPPP). Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance may require the operation of backup or auxiliary facilities or similar systems installed by a discharger when necessary to achieve compliance with the conditions of this General Permit.

6. Property Rights

This General Permit does not convey any property rights of any sort or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor does it authorize any infringement of Federal, State, or local laws or regulations.

7. Duty to Maintain Records and Provide Information

- a. The LUP discharger shall maintain a paper or electronic copy of all required records, including a copy of this General Permit, for three years from the date generated or date submitted, whichever is last. These records shall be kept at the construction site or in a crew

member's vehicle until construction is completed, and shall be made available upon request.

- b. The LUP discharger shall furnish the Regional Water Board, State Water Board, or USEPA, within a reasonable time, any requested information to determine compliance with this General Permit. The LUP discharger shall also furnish, upon request, copies of records that are required to be kept by this General Permit.

8. Inspection and Entry

The LUP discharger shall allow the Regional Water Board, State Water Board, USEPA, and/or, in the case of construction sites which discharge through a municipal separate storm sewer, an authorized representative of the municipal operator of the separate storm sewer system receiving the discharge, upon the presentation of credentials and other documents as may be required by law, to:

- a. Enter upon the discharger's premises at reasonable times where a regulated construction activity is being conducted or where records must be kept under the conditions of this General Permit;
- b. Access and copy at reasonable times any records that must be kept under the conditions of this General Permit;
- c. Inspect at reasonable times the complete construction site, including any off-site staging areas or material storage areas, and the erosion/sediment controls; and
- d. Sample or monitor at reasonable times for the purpose of ensuring General Permit compliance.

9. Electronic Signature and Certification Requirements

- a. All Permit Registration Documents (PRDs) and Notices of Termination (NOTs) shall be electronically signed, certified, and submitted via SMARTS to the State Water Board. Either the Legally Responsible Person (LRP), as defined in Appendix 5 – Glossary, or a person legally authorized to sign and certify PRDs and NOTs on behalf of the LRP (the LRP's Approved Signatory, as defined in Appendix 5 - Glossary) must submit all information electronically via SMARTS.
- b. Changes to Authorization. If an Approved Signatory's authorization is no longer accurate, a new authorization satisfying the requirements of paragraph (a) of this section must be submitted via SMARTS prior to or

together with any reports, information or applications to be signed by an Approved Signatory.

- c. All SWPPP revisions, annual reports, or other information required by the General Permit (other than PRDs and NOTs) or requested by the Regional Water Board, State Water Board, USEPA, or local storm water management agency shall be certified and submitted by the LRP or the LRP's Approved Signatory.

10. Certification

Any person signing documents under Section E.9 above, shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

11. Anticipated Noncompliance

The LUP discharger shall give advance notice to the Regional Water Board and local storm water management agency of any planned changes in the construction activity, which may result in noncompliance with General Permit requirements.

12. Penalties for Falsification of Reports

Section 309(c)(4) of the CWA provides that any person who knowingly makes any false material statement, representation, or certification in any record or other document submitted or required to be maintained under this General Permit, including reports of compliance or noncompliance shall upon conviction, be punished by a fine of not more than \$10,000 or by imprisonment for not more than two years or by both.

13. Oil and Hazardous Substance Liability

Nothing in this General Permit shall be construed to preclude the institution of any legal action or relieve the discharger from any responsibilities, liabilities, or penalties to which the LUP discharger is or may be subject to under Section 311 of the CWA.

14. Severability

The provisions of this General Permit are severable; and, if any provision of this General Permit or the application of any provision of this General Permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this General Permit shall not be affected thereby.

15. Reopener Clause

This General Permit may be modified, revoked and reissued, or terminated for cause due to promulgation of amended regulations, receipt of USEPA guidance concerning regulated activities, judicial decision, or in accordance with 40 Code of Federal Regulations (CFR) 122.62, 122.63, 122.64, and 124.5.

16. Penalties for Violations of Permit Conditions

- a. Section 309 of the CWA provides significant penalties for any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the CWA or any permit condition or limitation implementing any such section in a permit issued under Section 402. Any person who violates any permit condition of this General Permit is subject to a civil penalty not to exceed \$37,500⁷ per calendar day of such violation, as well as any other appropriate sanction provided by Section 309 of the CWA.
- b. The Porter-Cologne Water Quality Control Act also provides for civil and criminal penalties, which in some cases are greater than those under the CWA.

17. Transfers

This General Permit is not transferable. A new LRP of an ongoing construction activity must submit PRDs in accordance with the requirements of this General Permit to be authorized to discharge under this General Permit. An LRP who is a property owner with active General Permit coverage who sells a fraction or all the land shall inform the new property owner(s) of the requirements of this General Permit.

18. Continuation of Expired Permit

This General Permit continues in force and effect until a new General Permit is issued or the SWRCB rescinds this General Permit. Only those

⁷ May be further adjusted in accordance with the Federal Civil Penalties Inflation Adjustment Act

dischargers authorized to discharge under the expiring General Permit are covered by the continued General Permit.

F. EFFLUENT STANDARDS & RECEIVING WATER MONITORING

1. Narrative Effluent Limitations

- a. LUP dischargers shall ensure that storm water discharges and authorized non-storm water discharges regulated by this General Permit do not contain a hazardous substance equal to or in excess of reportable quantities established in 40 C.F.R. §§ 117.3 and 302.4, unless a separate NPDES Permit has been issued to regulate those discharges.
- b. LUP dischargers shall minimize or prevent pollutants in storm water discharges and authorized non-storm water discharges through the use of structural or non-structural controls, structures, and management practices that achieve BAT for toxic and non-conventional pollutants and BCT for conventional pollutants.

Table 1. Numeric Action Levels, Test Methods, Detection Limits, and Reporting Units

Parameter	Test Method	Discharge Type	Min. Detection Limit	Units	Numeric Action Level
pH	Field test with calibrated portable instrument	LUP Type 2	0.2	pH units	lower NAL = 6.5 upper NAL = 8.5
		LUP Type 3			lower NAL = 6.5 upper NAL = 8.5
Turbidity	EPA 0180.1 and/or field test with calibrated portable instrument	LUP Type 2	1	NTU	250 NTU
		LUP Type 3			250 NTU

2. Numeric Action Levels (NALs)

- a. For LUP Type 2 and 3 dischargers, the lower storm event daily average NAL for pH is 6.5 pH units and the upper storm event daily average NAL for pH is 8.5 pH units. The LUP discharger shall take actions as described below if the storm event daily average discharge is outside of this range of pH values.
- b. For LUP Type 2 and 3 dischargers, the storm event daily average NAL for turbidity is 250 NTU. The discharger shall take actions as described below if the storm event daily average discharge is outside of this range of turbidity values.
- c. Whenever daily average analytical effluent monitoring results indicate that the discharge is below the lower NAL for pH, exceeds the upper NAL for pH, or exceeds the turbidity NAL (as listed in Table 1), the LUP discharger shall conduct a construction site and run-on evaluation to determine whether pollutant source(s) associated with the site's construction activity may have caused or contributed to the NAL exceedance and shall immediately implement corrective actions if they are needed.
- d. The site evaluation will be documented in the SWPPP and specifically address whether the source(s) of the pollutants causing the exceedance of the NAL:
 - i. Are related to the construction activities and whether additional BMPs or SWPPP implementation measures are required to (1) meet BAT/BCT requirements; (2) reduce or prevent pollutants in storm water discharges from causing exceedances of receiving water objectives; and (3) determine what corrective action(s) were taken or will be taken and with a description of the schedule for completion.

AND/OR:

- ii. Are related to the run-on associated with the construction site location and whether additional BMPs or SWPPP implementation measures are required to (1) meet BAT/BCT requirements; (2) reduce or prevent pollutants in storm water discharges from causing exceedances of receiving water objectives; and (3) decide what corrective action(s) were taken or will be taken, including a description of the schedule for completion.

3. Receiving Water Monitoring Triggers

- a. The receiving water monitoring triggers for LUP Type 3 dischargers with direct discharges to surface waters are triggered when the daily average effluent pH values during any site phase when there is a high risk of pH discharge⁸ fall outside of the range of 6.0 and 9.0 pH units, or when the daily average effluent turbidity exceeds 500 NTU.
- b. LUP Type 3 dischargers with direct discharges to surface waters shall conduct receiving water monitoring whenever their effluent monitoring results exceed the receiving water monitoring triggers. If the pH trigger is exceeded, the receiving water shall be monitored for pH for the duration of coverage under this General Permit. If the turbidity trigger is exceeded, the receiving water shall be monitored for turbidity and SSC for the duration of coverage under this General Permit.
- c. LUP Type 3 dischargers with direct discharges to surface waters shall initiate receiving water monitoring when the triggers are exceeded unless the storm event causing the exceedance is determined after the fact to equal to or greater than the 5-year 24-hour storm (expressed in inches of rainfall) as determined by using these maps:

<http://www.wrcc.dri.edu/pcpnfreq/nca5y24.gif>
<http://www.wrcc.dri.edu/pcpnfreq/sca5y24.gif>

 Verification of the 5-year 24-hour storm event shall be done by reporting on-site rain gauge readings as well as nearby governmental rain gauge readings.
- d. If run-on is caused by a forest fire or any other natural disaster, then receiving water monitoring triggers do not apply.

G. RECEIVING WATER LIMITATIONS

1. LUP dischargers shall ensure that storm water discharges and authorized non-storm water discharges to any surface or ground water will not adversely affect human health or the environment.
2. LUP dischargers shall ensure that storm water discharges and authorized non-storm water discharges will not contain pollutants in quantities that threaten to cause pollution or a public nuisance.
3. LUP dischargers shall ensure that storm water discharges and authorized non-storm water discharges will not contain pollutants that cause or

⁸ A period of high risk of pH discharge is defined as a project's complete utilities phase, complete vertical build phase, and any portion of any phase where significant amounts of materials are placed directly on the land at the site in a manner that could result in significant alterations of the background pH of the discharges.

contribute to an exceedance of any applicable water quality objectives or water quality standards (collectively, WQS) contained in a Statewide Water Quality Control Plan, the California Toxics Rule, the National Toxics Rule, or the applicable Regional Water Board's Water Quality Control Plan (Basin Plan).

H. TRAINING QUALIFICATIONS

1. General

All persons responsible for implementing requirements of this General Permit shall be appropriately trained. Training should be both formal and informal, occur on an ongoing basis, and should include training offered by recognized governmental agencies or professional organizations. Persons responsible for preparing, amending and certifying SWPPPs shall comply with the requirements in this Section H.

2. SWPPP Certification Requirements

- a. **Qualified SWPPP Developer:** The LUP discharger shall ensure that all SWPPPs be written, amended and certified by a Qualified SWPPP Developer (QSD). A QSD shall have one of the following registrations or certifications, and appropriate experience, as required for:
 - i A California registered professional civil engineer;
 - ii A California registered professional geologist or engineering geologist;
 - iii A California registered landscape architect;
 - iv A professional hydrologist registered through the American Institute of Hydrology;
 - v A certified professional in erosion and sediment control (CPESC)TM registered through Enviro Cert International, Inc;
 - vi A certified professional in storm water quality (CPSWQ)TM registered through Enviro Cert International, Inc.; or
 - vii A certified professional in erosion and sediment control registered through the National Institute for Certification in Engineering Technologies (NICET).

Effective two years after the adoption date of this General Permit, a QSD shall have attended a State Water Board-sponsored or approved QSD training course.

- b. The LUP discharger shall ensure that the SWPPP is written and amended, as needed, to address the specific circumstances for each construction site covered by this General Permit prior to commencement of construction activity for any stage.
- c. The LUP discharger shall list the name and telephone number of the currently designated Qualified SWPPP Developer(s) in the SWPPP.
- d. **Qualified SWPPP Practitioner:** The LUP discharger shall ensure that all elements of any SWPPP for each project will be implemented by a Qualified SWPPP Practitioner (QSP). A QSP is a person responsible for non-storm water and storm water visual observations, sampling and analysis, and for ensuring full compliance with the permit and implementation of all elements of the SWPPP. Effective two years from the date of adoption of this General Permit, a QSP shall be either a QSD or have one of the following certifications:
 - i A certified erosion, sediment and storm water inspector registered through Certified Professional in Erosion and Sediment Control, Inc.; or
 - ii A certified inspector of sediment and erosion control registered through Certified Inspector of Sediment and Erosion Control, Inc.

Effective two years after the adoption date of this General Permit, a QSP shall have attended a State Water Board-sponsored or approved QSP training course.

- e. The LUP discharger shall ensure that the SWPPP include a list of names of all contractors, subcontractors, and individuals who will be directed by the Qualified SWPPP Practitioner, and who is ultimately responsible for implementation of the SWPPP. This list shall include telephone numbers and work addresses. Specific areas of responsibility of each subcontractor and emergency contact numbers shall also be included.
- f. The LUP discharger shall ensure that the SWPPP and each amendment be signed by the Qualified SWPPP Developer. The LUP discharger shall include a listing of the date of initial preparation and the dates of each amendment in the SWPPP.

I. TYPES OF LINEAR PROJECTS

This attachment establishes three types (Type 1, 2 & 3) of complexity for areas within an LUP or project section based on threat to water quality. Project area Types are determined through Attachment A.1.

The Type 1 requirements below establish the baseline requirements for all LUPs subject to this General Permit. Additional requirements for Type 2 and Type 3 LUPs are labeled.

1. Type 1 LUPs:

LUP dischargers with areas of a LUP designated as Type 1 shall comply with the requirements in this Attachment. Type 1 LUPs are:

- a. Those construction areas where 70 percent or more of the construction activity occurs on a paved surface and where areas disturbed during construction will be returned to preconstruction conditions or equivalent protection established at the end of the construction activities for the day; or
- b. Where greater than 30 percent of construction activities occur within the non-paved shoulders or land immediately adjacent to paved surfaces, or where construction occurs on unpaved improved roads, including their shoulders or land immediately adjacent to them where:
 - i. Areas disturbed during construction will be returned to preconstruction conditions or equivalent protection is established at the end of the construction activities for the day to minimize the potential for erosion and sediment deposition, and
 - ii. Areas where established vegetation was disturbed during construction will be stabilized and re-vegetated by the end of project. When required, adequate temporary stabilization BMPs will be installed and maintained until vegetation is established to meet minimum cover requirements established in this General Permit for final stabilization.
- c. Where the risk determination is as follows:
 - i. Low sediment risk, low receiving water risk, or
 - ii. Low sediment risk, medium receiving water risk, or
 - iii. Medium sediment risk, low receiving water risk

2. Type 2 LUPs:

Type 2 LUPs are determined by the Combined Risk Matrix in Attachment A.1. Type 2 LUPs have the specified combination of risk:

- d. High sediment risk, low receiving water risk, or
- e. Medium sediment risk, medium receiving water risk, or
- f. Low sediment risk, high receiving water risk

Receiving water risk is either considered “Low” for those areas of the project that are not in close proximity to a sensitive receiving watershed, “Medium” for those areas of the project within a sensitive receiving watershed yet outside of the flood plain of a sensitive receiving water body, and “High” where the soil disturbance is within close proximity to a sensitive receiving water body. Project sediment risk is calculated based on the Risk Factor Worksheet in Attachment C of this General Permit.

3. Type 3 LUPs:

Type 3 LUPs are determined by the Combined Risk Matrix in Attachment A.1. Type 3 LUPs have the specified combination of risk:

- a. High sediment risk, high receiving water risk, or
- b. High sediment risk, medium receiving water risk, or
- c. Medium sediment risk, high receiving water risk

Receiving water risk is either considered “Medium” for those areas of the project within a sensitive receiving watershed yet outside of the flood plain of a sensitive receiving water body, or “High” where the soil disturbance is within close proximity to a sensitive receiving water body. Project sediment risk is calculated based on the Risk Factor Worksheet in Attachment C.

J. LUP TYPE-SPECIFIC REQUIREMENTS**1. Effluent Standards**

- a. Narrative – LUP dischargers shall comply with the narrative effluent standards below.

- i Storm water discharges and authorized non-storm water discharges regulated by this General Permit shall not contain a hazardous substance equal to or in excess of reportable quantities established in 40 C.F.R. §§ 117.3 and 302.4, unless a separate NPDES Permit has been issued to regulate those discharges.
 - ii LUP dischargers shall minimize or prevent pollutants in storm water discharges and authorized non-storm water discharges through the use of controls, structures, and management practices that achieve BAT for toxic and non-conventional pollutants and BCT for conventional pollutants.
- b. Numeric – LUP Type 1 dischargers are not subject to a numeric effluent standard
 - c. Numeric –LUP Type 2 dischargers are subject to a pH NAL of 6.5-8.5, and a turbidity NAL of 250 NTU.
 - d. Numeric – LUP Type 3 dischargers are subject to a pH NAL of 6.5-8.5, and a turbidity NAL of 250 NTU.

2. Good Site Management "Housekeeping"

- a. LUP dischargers shall implement good site management (i.e., "housekeeping") measures for construction materials that could potentially be a threat to water quality if discharged. At a minimum, the good housekeeping measures shall consist of the following:
 - i Identify the products used and/or expected to be used and the end products that are produced and/or expected to be produced. This does not include materials and equipment that are designed to be outdoors and exposed to environmental conditions (i.e. poles, equipment pads, cabinets, conductors, insulators, bricks, etc.).
 - ii Cover and berm loose stockpiled construction materials that are not actively being used (i.e. soil, spoils, aggregate, fly-ash, stucco, hydrated lime, etc.).
 - iii Store chemicals in watertight containers (with appropriate secondary containment to prevent any spillage or leakage) or in a storage shed (completely enclosed).
 - iv Minimize exposure of construction materials to precipitation (not applicable to materials designed to be outdoors and exposed to the environment).

- v Implement BMPs to control the off-site tracking of loose construction and landscape materials.
- b. LUP dischargers shall implement good housekeeping measures for waste management, which, at a minimum, shall consist of the following:
 - i Prevent disposal of any rinse or wash waters or materials on impervious or pervious site surfaces or into the storm drain system.
 - ii Ensure the containment of sanitation facilities (e.g., portable toilets) to prevent discharges of pollutants to the storm water drainage system or receiving water.
 - iii Clean or replace sanitation facilities and inspecting them regularly for leaks and spills.
 - iv Cover waste disposal containers at the end of every business day and during a rain event.
 - v Prevent discharges from waste disposal containers to the storm water drainage system or receiving water.
 - vi Contain and securely protect stockpiled waste material from wind and rain at all times unless actively being used.
 - vii Implement procedures that effectively address hazardous and non-hazardous spills.
 - viii Develop a spill response and implementation element of the SWPPP prior to commencement of construction activities. The SWPPP shall require that:
 - (1) Equipment and materials for cleanup of spills shall be available on site and that spills and leaks shall be cleaned up immediately and disposed of properly; and
 - (2) Appropriate spill response personnel are assigned and trained.
 - ix Ensure the containment of concrete washout areas and other washout areas that may contain additional pollutants so there is no discharge into the underlying soil and onto the surrounding areas.

- c. LUP dischargers shall implement good housekeeping for vehicle storage and maintenance, which, at a minimum, shall consist of the following:
- i Prevent oil, grease, or fuel from leaking into the ground, storm drains or surface waters.
 - ii Implement appropriate BMPs whenever equipment or vehicles are fueled, maintained or stored.
 - iii Clean leaks immediately and disposing of leaked materials properly.
- d. LUP dischargers shall implement good housekeeping for landscape materials, which, at a minimum, shall consist of the following:
- i Contain stockpiled materials such as mulches and topsoil when they are not actively being used.
 - ii Contain fertilizers and other landscape materials when they are not actively being used.
 - iii Discontinue the application of any erodible landscape material at least 2 days before a forecasted rain event⁹ or during periods of precipitation.
 - iv Applying erodible landscape material at quantities and application rates according to manufacture recommendations or based on written specifications by knowledgeable and experienced field personnel.
 - v Stacking erodible landscape material on pallets and covering or storing such materials when not being used or applied.
- e. LUP dischargers shall conduct an assessment and create a list of potential pollutant sources and identify any areas of the site where additional BMPs are necessary to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. This potential pollutant list shall be kept with the SWPPP and shall identify all non-visible pollutants which are known, or should be known, to occur on the construction site. At a minimum, when developing BMPs, LUP dischargers shall do the following:

⁹ 50% or greater chance of producing precipitation.

- i Consider the quantity, physical characteristics (e.g., liquid, powder, solid), and locations of each potential pollutant source handled, produced, stored, recycled, or disposed of at the site.
 - ii Consider the degree to which pollutants associated with those materials may be exposed to and mobilized by contact with storm water.
 - iii Consider the direct and indirect pathways that pollutants may be exposed to storm water or authorized non-storm water discharges. This shall include an assessment of past spills or leaks, non-storm water discharges, and discharges from adjoining areas.
 - iv Ensure retention of sampling, visual observation, and inspection records.
 - v Ensure effectiveness of existing BMPs to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges.
- f. LUP dischargers shall implement good housekeeping measures on the construction site to control the air deposition of site materials and from site operations.

3. Non-Storm Water Management

- a. LUP dischargers shall implement measures to control all non-storm water discharges during construction.
- b. LUP dischargers shall wash vehicles in such a manner as to prevent non-storm water discharges to surface waters or MS4 drainage systems.
- c. LUP dischargers shall clean streets in such a manner as to prevent unauthorized non-storm water discharges from reaching surface water or MS4 drainage systems.

4. Erosion Control

- a. LUP dischargers shall implement effective wind erosion control.
- b. LUP dischargers shall provide effective soil cover for inactive¹⁰ areas and all finished slopes, and utility backfill.

¹⁰ Areas of construction activity that have been disturbed and are not scheduled to be re-disturbed for at least 14 days

- c. LUP dischargers shall limit the use of plastic materials when more sustainable, environmentally friendly alternatives exist. Where plastic materials are deemed necessary, the discharger shall consider the use of plastic materials resistant to solar degradation.

5. Sediment Controls

- a. LUP dischargers shall establish and maintain effective perimeter controls as needed, and implement effective BMPs for all construction entrances and exits to sufficiently control erosion and sediment discharges from the site.
- b. On sites where sediment basins are to be used, LUP dischargers shall, at minimum, design sediment basins according to the guidance provided in CASQA’s Construction BMP Handbook.
- c. **Additional LUP Type 2 & 3 Requirement:** LUP Type 2 & 3 dischargers shall apply linear sediment controls along the toe of the slope, face of the slope, and at the grade breaks of exposed slopes to comply with sheet flow lengths¹¹ in accordance with Table 2 below.

Table 2 – Critical Slope/Sheet Flow Length Combinations

Slope Percentage	Sheet flow length not to exceed
0-25%	20 feet
25-50%	15 feet
Over 50%	10 feet

- d. **Additional LUP Type 2 & 3 Requirement:** LUP Type 2 & 3 dischargers shall ensure that construction activity traffic to and from the project is limited to entrances and exits that employ effective controls to prevent off-site tracking of sediment.
- e. **Additional LUP Type 2 & 3 Requirement:** LUP Type 2 & 3 dischargers shall ensure that all storm drain inlets and perimeter controls, runoff control BMPs, and pollutant controls at entrances and exits (e.g. tire washoff locations) are maintained and protected from activities that reduce their effectiveness.
- f. **Additional LUP Type 2 & 3 Requirement:** LUP Type 2 & 3 dischargers shall inspect all immediate access roads. At a minimum daily and prior to any rain event, the discharger shall remove any

¹¹ Sheet flow length is the length that shallow, low velocity flow travels across a site.

sediment or other construction activity-related materials that are deposited on the roads (by vacuuming or sweeping).

- g. **Additional LUP Type 3 Requirement:** The Regional Water Board may require LUP Type 3 dischargers to implement additional site-specific sediment control requirements if the implementation of the other requirements in this section are not adequately protecting the receiving waters.

6. Run-on and Run-off Controls

- a. LUP dischargers shall effectively manage all run-on, all runoff within the site and all runoff that discharges off the site. Run-on from off site shall be directed away from all disturbed areas or shall collectively be in compliance with the effluent limitations in this Attachment.
- b. Run-on and runoff controls are not required for Type 1 LUPs unless the evaluation of quantity and quality of run-on and runoff deems them necessary or visual inspections show that the site requires such controls.

7. Inspection, Maintenance and Repair

- a. All inspection, maintenance repair and sampling activities at the discharger's LUP location shall be performed or supervised by a QSP representing the discharger. The QSP may delegate any or all of these activities to an employee trained to do the task(s) appropriately, but shall ensure adequate deployment.
- b. LUP dischargers shall conduct visual inspections and observations daily during working hours (not recorded). At least once each 24-hour period during extended storm events, **LUP Type 2 & 3 dischargers** shall conduct visual inspections to identify and record BMPs that need maintenance to operate effectively, that have failed, or that could fail to operate as intended. Inspectors shall be the QSP or be trained by the QSP.
- c. Upon identifying failures or other shortcomings, as directed by the QSP, LUP dischargers shall begin implementing repairs or design changes to BMPs within 72 hours of identification and complete the changes as soon as possible.
- d. For each pre- and post-rain event inspection required, LUP dischargers shall complete an inspection checklist, using a form provided by the State Water Board or Regional Water Board or in an alternative format that includes the information described below.

- e. The LUP discharger shall ensure that the checklist remains on-site or with the SWPPP. At a minimum, an inspection checklist should include:
 - i Inspection date and date the inspection report was written.
 - ii Weather information, including presence or absence of precipitation, estimate of beginning of qualifying storm event, duration of event, time elapsed since last storm, and approximate amount of rainfall in inches.
 - iii Site information, including stage of construction, activities completed, and approximate area of the site exposed.
 - iv A description of any BMPs evaluated and any deficiencies noted.
 - v If the construction site is safely accessible during inclement weather, list the observations of all BMPs: erosion controls, sediment controls, chemical and waste controls, and non-storm water controls. Otherwise, list the results of visual inspections at all relevant outfalls, discharge points, downstream locations and any projected maintenance activities.
 - vi Report the presence of noticeable odors or of any visible sheen on the surface of any discharges.
 - vii Any corrective actions required, including any necessary changes to the SWPPP and the associated implementation dates.
 - viii Photographs taken during the inspection, if any.
 - ix Inspector's name, title, and signature.

K. STORM WATER POLLUTION PREVENTION PLAN (SWPPP) REQUIREMENTS

1. Objectives

SWPPPs for all LUPs shall be developed and amended or revised by a QSD. The SWPPP shall be designed to address the following objectives:

- a. All pollutants and their sources, including sources of sediment, associated with construction activities associated with LUP activity are controlled;
- b. All non-storm water discharges are identified and either eliminated, controlled, or treated;
- c. BMPs are effective and result in the reduction or elimination of pollutants in storm water discharges and authorized non-storm water discharges from LUPs during construction; and
- d. Stabilization BMPs installed to reduce or eliminate pollutants after construction is completed are effective and maintained.

2. SWPPP Implementation Schedule

- a. LUPs for which PRDs have been submitted to the State Water Board shall develop a site/project location SWPPP prior to the start of land-disturbing activity in accordance with this Section and shall implement the SWPPP concurrently with commencement of soil-disturbing activities.
- b. For an ongoing LUP involving a change in the LRP, the new LRP shall review the existing SWPPP and amend it, if necessary, or develop a new SWPPP within 15 calendar days to conform to the requirements set forth in this General Permit.

3. Availability

The SWPPP shall be available at the construction site during working hours while construction is occurring and shall be made available upon request by a State or Municipal inspector. When the original SWPPP is retained by a crewmember in a construction vehicle and is not currently at the construction site, copies of the BMPs and map/drawing will be left with the field crew and the original SWPPP shall be made available via a request by radio/telephone.

L. REGIONAL WATER BOARD AUTHORITIES

1. Regional Water Boards shall administer the provisions of this General Permit. Administration of this General Permit may include, but is not limited to, requesting the submittal of SWPPPs, reviewing SWPPPs, reviewing monitoring and sampling and analysis reports, conducting compliance inspections, gathering site information by any medium including sampling, photo and video documentation, and taking enforcement actions.
2. Regional Water Boards may terminate coverage under this General Permit for dischargers who fail to comply with its requirements or where they determine that an individual NPDES permit is appropriate.
3. Regional Water Boards may issue separate permits for discharges of storm water associated with construction activity to individual dischargers, categories of dischargers, or dischargers in a geographic area. Upon issuance of such permits by a Regional Water Board, dischargers subject to those permits shall no longer be regulated by this General Permit.
4. Regional Water Boards may direct the discharger to reevaluate the LUP Type(s) for the project (or elements/areas of the project) and impose the appropriate level of requirements.
5. Regional Water Boards may terminate coverage under this General Permit for dischargers who negligently or with willful intent incorrectly determine or report their LUP Type (e.g., they determine themselves to be a LUP Type 1 when they are actually a Type 2).
6. Regional Water Boards may review PRDs and reject or accept applications for permit coverage or may require dischargers to submit a Report of Waste Discharge / NPDES permit application for Regional Water Board consideration of individual requirements.
7. Regional Water Boards may impose additional requirements on dischargers to satisfy TMDL implementation requirements or to satisfy provisions in their Basin Plans.
8. Regional Water Boards may require additional Monitoring and Reporting Program Requirements, including sampling and analysis of discharges to sediment-impaired water bodies.
9. Regional Water Boards may require dischargers to retain records for more than the three years required by this General Permit.

- 10.** Based on an LUP's threat to water quality and complexity, the Regional Water Board may determine on a case-by-case basis that an LUP, or a portion of an LUP, is not eligible for the linear project requirements contained in this Attachment, and require that the discharger comply with all standard requirements in this General Permit.

- 11.** The Regional Water Board may require additional monitoring and reporting program requirements including sampling and analysis of discharges to CWA § 303(d)-listed water bodies. Additional requirements imposed by the Regional Water Board shall be consistent with the overall monitoring effort in the receiving waters.

M. MONITORING AND REPORTING REQUIREMENTS**Table 3. LUP Summary of Monitoring Requirements**

LUP Type	Visual Inspections				Sample Collection		
	Daily Site BMP	Pre-storm Event	Daily Storm BMP	Post Storm	Storm Water Discharge	Receiving Water	Non-Visible (when applicable)
		Baseline					
1	X						X
2	X	X	X	X	X		X
3	X	X	X	X	X	X	X

1. Objectives

LUP dischargers shall prepare a monitoring and reporting program (M&RP) prior to the start of construction and immediately implement the program at the start of construction for LUPs. The monitoring program must be implemented at the appropriate level to protect water quality at all times throughout the life of the project. The M&RP must be a part of the SWPPP, included as an appendix or separate SWPPP chapter.

2. M&RP Implementation Schedule

- a. LUP dischargers shall implement the requirements of this Section at the time of commencement of construction activity. LUP dischargers are responsible for implementing these requirements until construction activity is complete and the site is stabilized.
- b. LUP dischargers shall revise the M&RP when:
 - i. Site conditions or construction activities change such that a change in monitoring is required to comply with the requirements and intent of this General Permit.
 - ii. The Regional Water Board requires the discharger to revise its M&RP based on its review of the document. Revisions may include, but not be limited to, conducting additional site inspections, submitting reports, and certifications. Revisions shall be submitted via postal mail or electronic e-mail.

- iii The Regional Water Board may require additional monitoring and reporting program requirements including sampling and analysis of discharges to CWA § 303(d)-listed water bodies. Additional requirements imposed by the Regional Water Board shall be consistent with the overall monitoring effort in the receiving waters.

3. LUP Type 1 Monitoring and Reporting Requirements

a. LUP Type 1 Inspection Requirements

- i LUP Type 1 dischargers shall ensure that all inspections are conducted by trained personnel. The name(s) and contact number(s) of the assigned inspection personnel should be listed in the SWPPP.
- ii LUP Type 1 dischargers shall ensure that all visual inspections are conducted daily during working hours and in conjunction with other daily activities in areas where active construction is occurring.
- iii LUP Type 1 dischargers shall ensure that photographs of the site taken before, during, and after storm events are taken during inspections, and submitted through the State Water Board's SMARTS website once every three rain events.
- iv LUP Type 1 dischargers shall conduct daily visual inspections to verify that:
 - (1) Appropriate BMPs for storm water and non-storm water are being implemented in areas where active construction is occurring (including staging areas);
 - (2) Project excavations are closed, with properly protected spoils, and that road surfaces are cleaned of excavated material and construction materials such as chemicals by either removing or storing the material in protective storage containers at the end of every construction day;
 - (3) Land areas disturbed during construction are returned to pre-construction conditions or an equivalent protection is used at the end of each workday to eliminate or minimize erosion and the possible discharge of sediment or other pollutants during a rain event.
- v Inspections may be discontinued in non-active construction areas where soil-disturbing activities are completed and final soil stabilization is achieved (e.g., paving is completed, substructures

are installed, vegetation meets minimum cover requirements for final stabilization, or other stabilization requirements are met).

- vi Inspection programs are required for LUP Type 1 projects where temporary and permanent stabilization BMPs are installed and are to be monitored after active construction is completed. Inspection activities shall continue until adequate permanent stabilization is established and, in areas where re-vegetation is chosen, until minimum vegetative coverage is established in accordance with Section C.1 of this Attachment.

b. LUP Type 1 Monitoring Requirements for Non-Visible Pollutants

LUP Type 1 dischargers shall implement sampling and analysis requirements to monitor non-visible pollutants associated with (1) construction sites; (2) activities producing pollutants that are not visually detectable in storm water discharges; and (3) activities which could cause or contribute to an exceedance of water quality objectives in the receiving waters.

- i Sampling and analysis for non-visible pollutants is only required where the LUP Type 1 discharger believes pollutants associated with construction activities have the potential to be discharged with storm water runoff due to a spill or in the event there was a breach, malfunction, failure and/or leak of any BMP. Also, failure to implement BMPs may require sample collection.
 - (1) Visual observations made during the monitoring program described above will help the LUP Type 1 discharger determine when to collect samples.
 - (2) The LUP Type 1 discharger is not required to sample if one of the conditions described above (e.g., breach or spill) occurs and the site is cleaned of material and pollutants and/or BMPs are implemented prior to the next storm event.
- ii LUP Type 1 dischargers shall collect samples down-gradient from all discharge locations where the visual observations were made triggering the monitoring, and which can be safely accessed. For sites where sampling and analysis is required, personnel trained in water quality sampling procedures shall collect storm water samples.
- iii If sampling for non-visible pollutant parameters is required, LUP Type 1 dischargers shall ensure that samples be analyzed for parameters indicating the presence of pollutants identified in the pollutant source assessment required in Section J.2.a.i.

- iv LUP Type 1 dischargers shall collect samples during the first two hours of discharge from rain events that occur during business hours and which generate runoff.
 - v LUP Type 1 dischargers shall ensure that a sufficiently large sample of storm water that has not come into contact with the disturbed soil or the materials stored or used on-site (uncontaminated sample¹²) will be collected for comparison with the discharge sample. Samples shall be collected during the first two hours of discharge from rain events that occur during daylight hours and which generate runoff.
 - vi LUP Type 1 dischargers shall compare the uncontaminated sample to the samples of discharge using field analysis or through laboratory analysis. Analyses may include, but are not limited to, indicator parameters such as: pH, specific conductance, dissolved oxygen, conductivity, salinity, and Total Dissolved Solids (TDS).
 - vii For laboratory analyses, all sampling, sample preservation, and other analyses must be conducted according to test procedures pursuant to 40 C.F.R. Part 136. LUP Type 1 dischargers shall ensure that field samples are collected and analyzed according to manufacturer specifications of the sampling devices employed. Portable meters shall be calibrated according to manufacturer's specification.
 - viii LUP Type 1 dischargers shall ensure that all field and/or analytical data are kept in the SWPPP document.
- c. LUP Type 1 Visual Observation Exceptions
- i LUP Type 1 dischargers shall be prepared to collect samples and conduct visual observation (inspections) to meet the minimum visual observation requirements of this Attachment. The Type 1 LUP discharger is not required to physically collect samples or conduct visual observation (inspections) under the following conditions:
 - (1) During dangerous weather conditions such as flooding and electrical storms;
 - (2) Outside of scheduled site business hours.
 - (3) When access to the site is unsafe due to storm events.

¹² Sample collected at a location unaffected by construction activities.

- ii If the LUP Type 1 discharger does not collect the required samples or visual observation (inspections) due to these exceptions, an explanation why the sampling or visual observation (inspections) were not conducted shall be included in both the SWPPP and the Annual Report.
- d. Particle Size Analysis for Risk Justification

LUP Type 1 dischargers utilizing justifying an alternative project risk shall report a soil particle size analysis used to determine the RUSLE K-Factor. ASTM D-422 (Standard Test Method for Particle-Size Analysis of Soils), as revised, shall be used to determine the percentages of sand, very fine sand, silt, and clay on the site.

4. LUP Type 2 & 3 Monitoring and Reporting Requirements

- a. LUP Type 2 & 3 Inspection Requirements
- i LUP Type 2 & 3 dischargers shall ensure that all inspections are conducted by trained personnel. The name(s) and contact number(s) of the assigned inspection personnel should be listed in the SWPPP.
 - ii LUP Type 2 & 3 dischargers shall ensure that all visual inspections are conducted daily during working hours and in conjunction with other daily activities in areas where active construction is occurring.
 - iii LUP Type 2 & 3 dischargers shall ensure that photographs of the site taken before, during, and after storm events are taken during inspections, and submitted through the State Water Board's SMARTS website once every three rain events.
 - iv LUP Type 2 & 3 dischargers shall conduct daily visual inspections to verify that appropriate BMPs for storm water and non-storm water are being implemented and in place in areas where active construction is occurring (including staging areas).
 - v LUP Type 2 & 3 dischargers shall conduct inspections of the construction site prior to anticipated storm events, during extended storm events, and after actual storm events to identify areas contributing to a discharge of storm water associated with construction activity. Pre-storm inspections are to ensure that BMPs are properly installed and maintained; post-storm inspections are to assure that BMPs have functioned adequately. During

extended storm events, inspections shall be required during normal working hours for each 24-hour period.

- vi Inspections may be discontinued in non-active construction areas where soil-disturbing activities are completed and final soil stabilization is achieved (e.g., paving is completed, substructures are installed, vegetation meets minimum cover requirements for final stabilization, or other stabilization requirements are met).
- vii LUP Type 2 & 3 dischargers shall implement a monitoring program for inspecting projects that require temporary and permanent stabilization BMPs after active construction is complete. Inspections shall ensure that the BMPs are adequate and maintained. Inspection activities shall continue until adequate permanent stabilization is established and, in vegetated areas, until minimum vegetative coverage is established in accordance with Section C.1 of this Attachment.
- viii If possible, LUP Type 2 & 3 dischargers shall install a rain gauge on-site at an accessible and secure location with readings made during all storm event inspections. When readings are unavailable, data from the closest rain gauge with publically available data may be used.
- ix LUP Type 2 & 3 dischargers shall include and maintain a log of the inspections conducted in the SWPPP. The log will provide the date and time of the inspection and who conducted the inspection.

b. LUP Type 2 & 3 Storm Water Effluent Monitoring Requirements

Table 4. LUP Type 2 & 3 Effluent Monitoring Requirements

LUP Type	Frequency	Effluent Monitoring
2	Minimum of 3 samples per day characterizing discharges associated with construction activity from the project active areas of construction.	Turbidity, pH, and non-visible pollutant parameters (if applicable)
3	Minimum of 3 samples per day characterizing discharges associated with construction activity from the project active areas of construction.	turbidity, pH, and non-visible pollutant parameters (if applicable)

- i LUP Type 2 & 3 dischargers shall collect storm water grab samples from sampling locations characterizing discharges associated with activity from the LUP active areas of construction. At a minimum, 3 samples shall be collected per day of discharge.

- ii LUP Type 2 & 3 dischargers shall collect samples of stored or contained storm water that is discharged subsequent to a storm event producing precipitation of ½ inch or more at the time of discharge.
- iii LUP Type 2 & 3 dischargers shall ensure that storm water grab sample(s) obtained be representative of the flow and characteristics of the discharge.
- iv LUP Type 2 & 3 dischargers shall analyze their effluent samples for:
 - (1) pH and turbidity
 - (2) Any additional parameter for which monitoring is required by the Regional Water Board.

c. LUP Type 2 & 3 Storm Water Effluent Sampling Locations

- i LUP Type 2 & 3 dischargers shall perform sampling and analysis of storm water discharges to characterize discharges associated with construction activity from the entire disturbed project or area.
- ii LUP Type 2 & 3 dischargers may monitor and report run-on from surrounding areas if there is reason to believe run-on may contribute to exceedance of NALs.
- iii LUP Type 2 & 3 dischargers shall select analytical test methods from the list provided in Table 5 below.
- iv LUP Type 2 & 3 dischargers shall ensure that all storm water sample collection preservation and handling shall be conducted in accordance with the “Storm Water Sample Collection and Handling Instructions” below.

d. LUP Type 3 Receiving Water Monitoring Requirements

- i In the event that an LUP Type 3 discharger’s effluent exceeds the receiving water monitoring triggers of 500 NTU turbidity or pH range of 6.0-9.0, contained in this General Permit and has a direct discharge to receiving waters, the LUP discharger shall subsequently sample Receiving Waters (RWs) for turbidity, pH (if applicable) and SSC for the duration of coverage under this General Permit. In the event that an LUP Tupe 3 discharger utilizing ATS with direct discharges into receiving waters discharges effluent that exceeds the NELs in this permit, the discharger shall

subsequently sample RWs for turbidity, pH (if applicable), and SSC for the duration of coverage under this General Permit.

- ii LUP Type 3 dischargers that meet the project criteria in Appendix 3 of this General Permit and have more than 30 acres of soil disturbance in the project area or project section area designated as Type 3, shall comply with the Bioassessment requirements prior to commencement of construction activity.
 - iii LUP Type 3 dischargers shall obtain RW samples in accordance with the requirements of the Receiving Water Sampling Locations section (Section M.4.c. of this Attachment).
- e. LUP Type 3 Receiving Water Sampling Locations
- i **Upstream/up-gradient RW samples:** LUP Type 3 dischargers shall obtain any required upstream/up-gradient receiving water samples from a representative and accessible location as close as possible to and upstream from the effluent discharge point.
 - ii **Downstream/down-gradient RW samples:** LUP Type 3 dischargers shall obtain any required downstream/down-gradient receiving water samples from a representative and accessible location as close as possible to and downstream from the effluent discharge point.
 - iii If two or more discharge locations discharge to the same receiving water, LUP Type 3 dischargers may sample the receiving water at a single upstream and downstream location.

f. LUP Type 2 & 3 Monitoring Requirements for Non-Visible Pollutants

LUP Type 2 & 3 dischargers shall implement sampling and analysis requirements to monitor non-visible pollutants associated with (1) construction sites; (2) activities producing pollutants that are not visually detectable in storm water discharges; and (3) activities which could cause or contribute to an exceedance of water quality objectives in the receiving waters.

- i Sampling and analysis for non-visible pollutants is only required where LUP Type 2 & 3 dischargers believe pollutants associated with construction activities have the potential to be discharged with storm water runoff due to a spill or in the event there was a breach, malfunction, failure and/or leak of any BMP. Also, failure to implement BMPs may require sample collection.

- (1) Visual observations made during the monitoring program described above will help LUP Type 2 & 3 dischargers determine when to collect samples.
 - (2) LUP Type 2 & 3 dischargers are not required to sample if one of the conditions described above (e.g., breach or spill) occurs and the site is cleaned of material and pollutants and/or BMPs are implemented prior to the next storm event.
- ii LUP Type 2 & 3 dischargers shall collect samples down-gradient from the discharge locations where the visual observations were made triggering the monitoring and which can be safely accessed. For sites where sampling and analysis is required, personnel trained in water quality sampling procedures shall collect storm water samples.
 - iii If sampling for non-visible pollutant parameters is required, LUP Type 2 & 3 dischargers shall ensure that samples be analyzed for parameters indicating the presence of pollutants identified in the pollutant source assessment required in Section J.2.a.i.
 - iv LUP Type 2 & 3 dischargers shall collect samples during the first two hours of discharge from rain events that occur during business hours and which generate runoff.
 - v LUP Type 2 & 3 dischargers shall ensure that a sufficiently large sample of storm water that has not come into contact with the disturbed soil or the materials stored or used on-site (uncontaminated sample¹³) will be collected for comparison with the discharge sample. Samples shall be collected during the first two hours of discharge from rain events that occur during daylight hours and which generate runoff.
 - vi LUP Type 2 & 3 dischargers shall compare the uncontaminated sample to the samples of discharge using field analysis or through laboratory analysis. Analyses may include, but are not limited to, indicator parameters such as: pH, specific conductance, dissolved oxygen, conductivity, salinity, and Total Dissolved Solids (TDS).
 - vii For laboratory analyses, all sampling, sample preservation, and other analyses must be conducted according to test procedures pursuant to 40 C.F.R. Part 136. LUP Type 2 & 3 dischargers shall ensure that field samples are collected and analyzed according to manufacturer specifications of the sampling devices employed.

¹³ Sample collected at a location unaffected by construction activities

Portable meters shall be calibrated according to manufacturer's specification.

viii LUP Type 2 & 3 dischargers shall ensure that all field and/or analytical data are kept in the SWPPP document.

g. LUP Type 2 & 3 Visual Observation and Sample Collection Exceptions

i LUP Type 2 & 3 dischargers shall be prepared to collect samples and conduct visual observation (inspections) to meet the minimum visual observation requirements of this Attachment. Type 2 & 3 LUP dischargers are not required to physically collect samples or conduct visual observation (inspections) under the following conditions:

(1) During dangerous weather conditions such as flooding and electrical storms;

(2) Outside of scheduled site business hours.

(3) When access to the site is unsafe due to storm events.

ii If the LUP Type 2 or 3 discharger does not collect the required samples or visual observation (inspections) due to these exceptions, an explanation why the sampling or visual observation (inspections) were not conducted shall be included in both the SWPPP and the Annual Report.

h. LUP Type 2 & 3 Storm Water Sample Collection and Handling Instructions

LUP Type 2 & 3 dischargers shall refer to Table 5 below for test Methods, detection Limits, and reporting Units. During storm water sample collection and handling, the LUP Type 2 & 3 discharger shall:

i Identify the parameters required for testing and the number of storm water discharge points that will be sampled. Request the laboratory to provide the appropriate number of sample containers, types of containers, sample container labels, blank chain of custody forms, and sample preservation instructions.

ii Determine how to ship the samples to the laboratory. The testing laboratory should receive samples within 48 hours of the physical sampling (unless otherwise required by the laboratory). The options are to either deliver the samples to the laboratory, arrange to have the laboratory pick them up, or ship them overnight to the laboratory.

- iii Use only the sample containers provided by the laboratory to collect and store samples. Use of any other type of containers could contaminate your samples.
- iv Prevent sample contamination, by not touching, or putting anything into the sample containers before collecting storm water samples.
- v Not overfilling sample containers. Overfilling can change the analytical results.
- vi Tightly screw the cap of each sample container without stripping the threads of the cap.
- vii Complete and attach a label to each sample container. The label shall identify the date and time of sample collection, the person taking the sample, and the sample collection location or discharge point. The label should also identify any sample containers that have been preserved.
- viii Carefully pack sample containers into an ice chest or refrigerator to prevent breakage and maintain temperature during shipment. Remember to place frozen ice packs into the shipping container. Samples should be kept as close to 4° C (39° F) as possible until arriving at the laboratory. Do not freeze samples.
- ix Complete a Chain of Custody form for each set of samples. The Chain of Custody form shall include the discharger's name, address, and phone number, identification of each sample container and sample collection point, person collecting the samples, the date and time each sample container was filled, and the analysis that is required for each sample container.
- x Upon shipping/delivering the sample containers, obtain both the signatures of the persons relinquishing and receiving the sample containers.
- xi Designate and train personnel to collect, maintain, and ship samples in accordance with the above sample protocols and good laboratory practices.
- xii Refer to the Surface Water Ambient Monitoring Program's (SWAMP) 2008 Quality Assurance Program Plan (QAPrP) for more

information on sampling collection and analysis. See http://www.waterboards.ca.gov/water_issues/programs/swamp/¹⁴

Table 5. Test Methods, Detection Limits, Reporting Units and Applicable NALs

Parameter	Test Method	Discharge Type	Min. Detection Limit	Reporting Units	Numeric Action Levels	(LUP Type 3) Receiving Water Monitoring Trigger
pH	Field test with calibrated portable instrument	Type 2 & 3	0.2	pH units	Lower = 6.5 upper = 8.5	Lower = 6.0 upper = 9.0
Turbidity	EPA 0180.1 and/or field test with calibrated portable instrument	Type 2 & 3	1	NTU	250 NTU	500 NTU
SSC	ASTM Method D 3977-97 ¹⁵	Type 3 if Receiving Water Monitoring Trigger is exceeded	5	Mg/L	N/A	N/A
Bioassessment	(STE) Level I of (SAFIT), ¹⁶ fixed-count of 600 org/sample	Type 3 LUPs > 30 acres	N/A	N/A	N/A	N/A

i. LUP Type 2 & 3 Monitoring Methods

i The LUP Type 2 or 3 discharger’s project M&RP shall include a description of the following items:

- (1) Visual observation locations, visual observation procedures, and visual observation follow-up and tracking procedures.

¹⁴ Additional information regarding SWAMP’s QAPrP can be found at: http://www.waterboards.ca.gov/water_issues/programs/swamp/.

¹⁵ ASTM, 1999, Standard Test Method for Determining Sediment Concentration in Water Samples: American Society of Testing and Materials, D 3977-97, Vol. 11.02, pp. 389-394

¹⁶ The current SAFIT STEs (28 November 2006) list requirements for both the Level I and Level II taxonomic effort, and are located at: http://www.swrcb.ca.gov/swamp/docs/safit/ste_list.pdf. When new editions are published by SAFIT, they will supersede all previous editions. All editions will be posted at the State Water Board’s SWAMP website.

- (2) Sampling locations, and sample collection and handling procedures. This shall include detailed procedures for sample collection, storage, preservation, and shipping to the testing lab to assure that consistent quality control and quality assurance is maintained. Dischargers shall attach to the monitoring program a copy of the Chain of Custody form used when handling and shipping samples.
 - (3) Identification of the analytical methods and related method detection limits (if applicable) for each parameter required in Section M.4.f above.
- ii LUP Type 2 & 3 dischargers shall ensure that all sampling and sample preservation be in accordance with the current edition of "Standard Methods for the Examination of Water and Wastewater" (American Public Health Association). All monitoring instruments and equipment (including a discharger's own field instruments for measuring pH and turbidity) shall be calibrated and maintained in accordance with manufacturers' specifications to ensure accurate measurements. All laboratory analyses shall be conducted according to test procedures under 40 CFR Part 136, unless other test procedures have been specified in this General Permit or by the Regional Water Board. With the exception of field analysis conducted by the discharger for turbidity and pH, all analyses shall be sent to and conducted at a laboratory certified for such analyses by the State Department of Health Services (SSC exception). The LUP discharger shall conduct its own field analysis of pH and may conduct its own field analysis of turbidity if the discharger has sufficient capability (qualified and trained employees, properly calibrated and maintained field instruments, etc.) to adequately perform the field analysis.
- j. LUP Type 2 & 3 Analytical Methods

LUP Type 2 & 3 dischargers shall refer to Table 5 above for test Methods, detection Limits, and reporting Units.

- i **pH:** LUP Type 2 & 3 dischargers shall perform pH analysis on-site with a calibrated pH meter or pH test kit. The LUP discharger shall record pH monitoring results on paper and retain these records in accordance with Section M.4.o, below.
- ii **Turbidity:** LUP Type 2 & 3 dischargers shall perform turbidity analysis using a calibrated turbidity meter (turbidimeter), either on-site or at an accredited lab. Acceptable test methods include Standard Method 2130 or USEPA Method 180.1. The results shall

be recorded in the site log book in Nephelometric Turbidity Units (NTU).

- iii **Suspended sediment concentration (SSC):** LUP Type 3 dischargers exceeding the turbidity Receiving Water Monitoring Trigger, shall perform SSC analysis using ASTM Method D3977-97.
- iv **Bioassessment:** LUP Type 3 dischargers shall perform bioassessment sampling and analysis according to Appendix 3 of this General Permit.

k. Watershed Monitoring Option

If an LUP Type 2 or 3 discharger is part of a qualified regional watershed-based monitoring program the LUP Type 2 or 3 discharger may be eligible for relief from the monitoring requirements in this Attachment. The Regional Water Board may approve proposals to substitute an acceptable watershed-based monitoring program if it determines that the watershed-based monitoring program will provide information to determine each discharger's compliance with the requirements of this General Permit.

l. Particle Size Analysis for Risk Justification

LUP Type 2 & 3 dischargers justifying an alternative project risk shall report a soil particle size analysis used to determine the RUSLE K-Factor. ASTM D-422 (Standard Test Method for Particle-Size Analysis of Soils), as revised, shall be used to determine the percentages of sand, very fine sand, silt, and clay on the site.

m. NAL Exceedance Report

- i In the event that any effluent sample exceeds an applicable NAL, the Regional Water Boards may require LUP Type 2 & 3 dischargers to submit NAL Exceedance Reports.
- ii LUP Type 2 & 3 dischargers shall certify each NAL Exceedance Report in accordance with the Special Provisions for Construction Activity.
- iii LUP Type 2 & 3 dischargers shall retain an electronic or paper copy of each NAL Exceedance Report for a minimum of three years after the date the exceedance report is filed.
- iv LUP Type 2 & 3 dischargers shall include in the NAL Exceedance Report:

- (1) the analytical method(s), method reporting unit(s), and method detection limit(s) of each analytical parameter (analytical results that are less than the method detection limit shall be reported as “less than the method detection limit”); and
- (2) the date, place, time of sampling, visual observation (inspections), and/or measurements, including precipitation.
- (3) Description of the current BMPs associated with the effluent sample that exceeded the NAL and the proposed corrective actions taken.

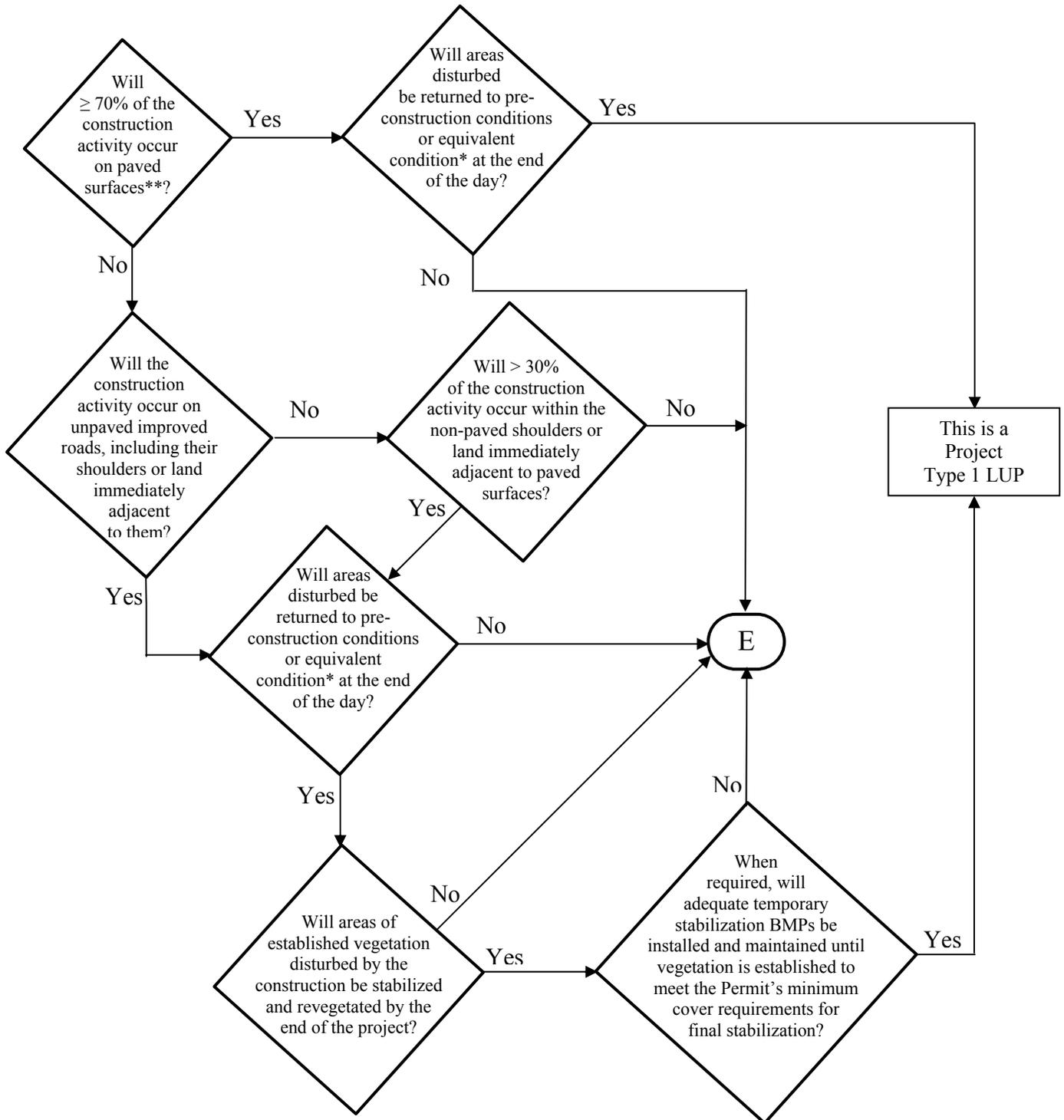
n. Monitoring Records

LUP Type 2 & 3 dischargers shall ensure that records of all storm water monitoring information and copies of all reports (including Annual Reports) required by this General Permit be retained for a period of at least three years. LUP Type 2 & 3 dischargers may retain records off-site and make them available upon request. These records shall include:

- i The date, place, time of facility inspections, sampling, visual observation (inspections), and/or measurements, including precipitation (rain gauge);
- ii The individual(s) who performed the facility inspections, sampling, visual observation (inspections), and or measurements;
- iii The date and approximate time of analyses;
- iv The individual(s) who performed the analyses;
- v A summary of all analytical results from the last three years, the method detection limits and reporting units, the analytical techniques or methods used, and all chain of custody forms;
- vi Quality assurance/quality control records and results;
- vii Non-storm water discharge inspections and visual observation (inspections) and storm water discharge visual observation records (see Section M.4.a above);
- viii Visual observation and sample collection exception records (see Section M.4.g above); and

- ix The records of any corrective actions and follow-up activities that resulted from analytical results, visual observation (inspections), or inspections.

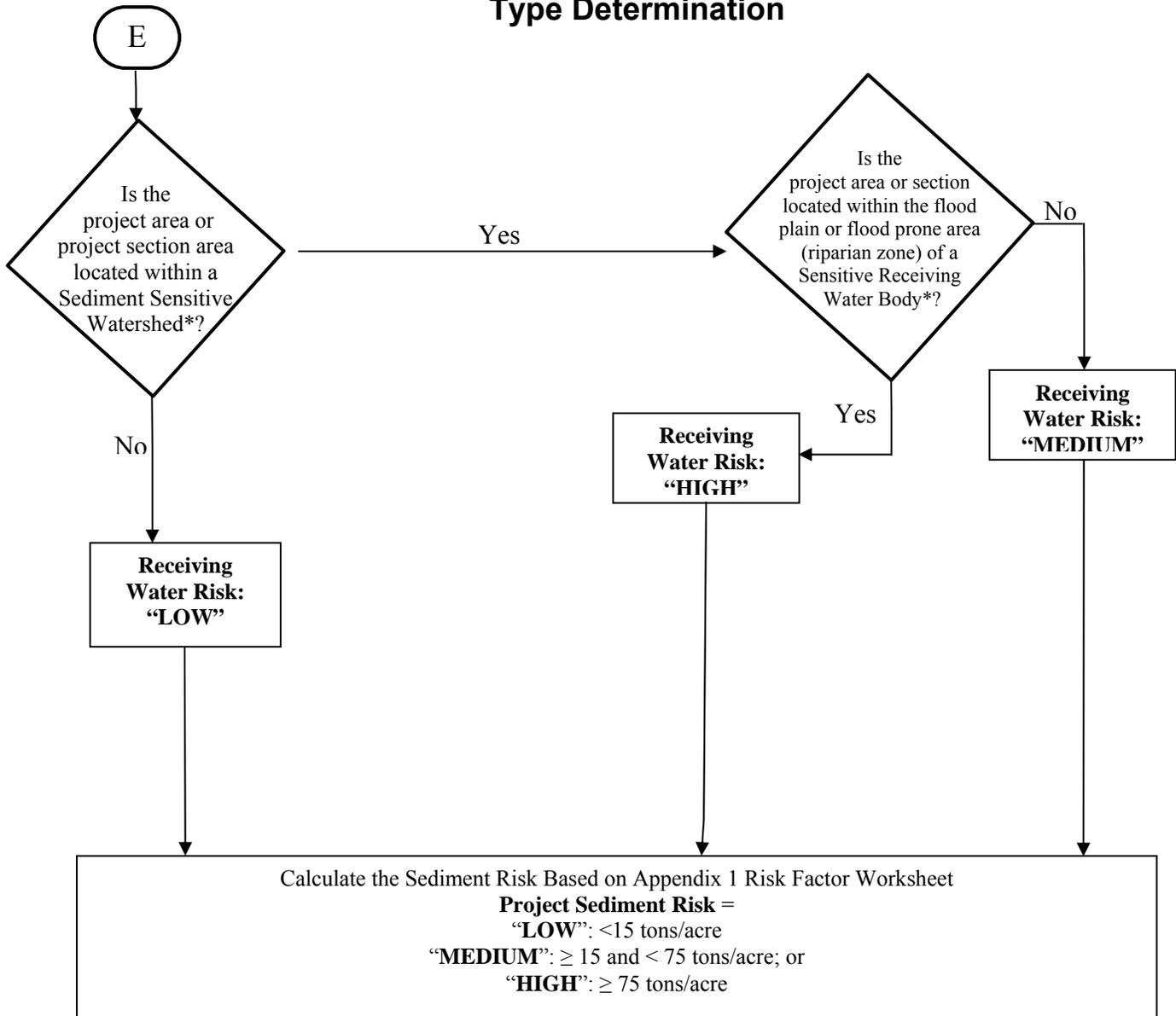
ATTACHMENT A.1 LUP Project Area or Project Section Area Type Determination



*See Definition of Terms

** Or: "Will < 30% of the soil disturbance occur on unpaved surfaces?"

ATTACHMENT A.1 LUP Project Area or Project Section Area Type Determination



* See Definition of Terms

PROJECT SEDIMENT RISK

RECEIVING WATER RISK

	LOW	MEDIUM	HIGH
LOW	Type 1	Type 1	Type 2
MEDIUM	Type 1	Type 2	Type 3
HIGH	Type 2	Type 3	Type 3

ATTACHMENT A.1 Definition of Terms

1. **Equivalent Condition** – Means disturbed soils such as those from trench excavation are required to be hauled away, backfilled into the trench, and/or covered (e.g., metal plates, pavement, plastic covers over spoil piles) at the end of the construction day.
2. **Linear Construction Activity** – Linear construction activity consists of underground/ overhead facilities that typically include, but are not limited to, any conveyance, pipe or pipeline for the transportation of any gaseous, liquid (including water, wastewater for domestic municipal services), liquescent, or slurry substance; any cable line or wire for the transmission of electrical energy; any cable line or wire for communications (e.g., telephone, telegraph, radio or television messages); and associated ancillary facilities. Construction activities associated with LUPs include, but are not limited to those activities necessary for the installation of underground and overhead linear facilities (e.g., conduits, substructures, pipelines, towers, poles, cables, wires, connectors, switching, regulating and transforming equipment and associated ancillary facilities) and include, but are not limited to, underground utility mark-out, potholing, concrete and asphalt cutting and removal, trenching, excavation, boring and drilling, access road and pole/ tower pad and cable/ wire pull station, substation construction, substructure installation, construction of tower footings and/or foundations, pole and tower installations, pipeline installations, welding, concrete and/or pavement repair or replacement, and stockpile/ borrow locations.
3. **Sediment Sensitive Receiving Water Body** – Defined as a water body segment that is listed on EPA's approved CWA 303(d) list for sedimentation/siltation, turbidity, or is designated with beneficial uses of SPAWN, MIGRATORY, and COLD.
4. **Sediment Sensitive Watershed** – Defined as a watershed draining into a receiving water body listed on EPA's approved CWA 303(d) list for sedimentation/siltation, turbidity, or a water body designated with beneficial uses of SPAWN, MIGRATORY, and COLD.

**ATTACHMENT A.2
PERMIT REGISTRATION DOCUMENTS (PRDs)
GENERAL INSTRUCTIONS FOR LINEAR UNDERGROUND/OVERHEAD PROJECTS TO
COMPLY WITH THE CONSTRUCTION GENERAL PERMIT**

GENERAL INSTRUCTIONS

Who Must Submit

This permit is effective on July 1, 2010.

The Legally Responsible Person (LRP) for construction activities associated with linear underground/overhead project (LUP) must electronically apply for coverage under this General Permit on or after July 1, 2010. If it is determined that the LUP construction activities require an NPDES permit, the Legally Responsible Person¹ (LRP) shall submit PRDs for this General Permit in accordance with the following:

LUPs associated with Private or Municipal Development Projects

1. For LUPs associated with pre-development and pre-redevelopment construction activities:

The LRP must obtain coverage² under this General Permit for its pre-development and pre-redevelopment construction activities where the total disturbed land area of these construction activities is greater than 1 acre.

2. For LUPs associated with new development and redevelopment construction projects:

The LRP must obtain coverage under this General Permit for LUP construction activities associated with new development and redevelopment projects where the total disturbed land area of the LUP is greater than 1 acre. Coverage under this permit is not required where the same LUP construction activities are covered by another NPDES permit.

LUPs not associated with private or municipal new development or redevelopment projects:

The LRP must obtain coverage under this General Permit on or after July 1, 2010 for its LUP construction activities where the total disturbed land area is greater than 1 acre.

PRD Submittal Requirements

Prior to the start of construction activities a LRP must submit PRDs and fees to the State Water Board for each LUP.

New and Ongoing LUPs

Dischargers of new LUPs that commence construction activities after the adoption date of this General Permit shall file PRDs prior to the commencement of construction and implement the SWPPP upon the start of construction.

¹ person possessing the title of the land on which the construction activities will occur for the regulated site

² obtain coverage means filing PRDs for the project.

PERMIT REGISTRATION DOCUMENTS (PRDs) GENERAL INSTRUCTIONS (CONTINUED)

Dischargers of ongoing LUPs that are currently covered under State Water Board Order No. 2003-0007 (Small LUP General Permit) shall electronically file Permit Registration Documents no later than July 1, 2010. After July 1, 2010, all NOIs subject to State Water Board Order No. 2003-0007-DWQ will be terminated. All existing dischargers shall be exempt from the risk determination requirements in Attachment A. All existing dischargers are therefore subject to LUP Type 1 requirements regardless of their project's sediment and receiving water risks. However, a Regional Board retains the authority to require an existing discharger to comply with the risk determination requirements in Attachment A.

Where to Apply

The Permit Registration Documents (PRDs) can be found at www.waterboards.ca.gov/water_issues/programs/stormwater/

Fees

The annual fee for storm water permits are established through the State of California Code of Regulations.

When Permit Coverage Commences

To obtain coverage under the General Permit, the LRP must include the complete PRDs and the annual fee. All PRDs deemed incomplete will be rejected with an explanation as to what is required to complete submittal. Upon receipt of complete PRDs and associated fee, each discharger will be sent a waste discharger's identification (WDID) number.

Projects and Activities Not Defined As Construction Activity

1. LUP construction activity does not include routine maintenance projects to maintain original line and grade, hydraulic capacity, or original purpose of the facility. Routine maintenance projects are projects associated with operations and maintenance activities that are conducted on existing lines and facilities and within existing right-of-way, easements, franchise agreements or other legally binding agreements of the discharger. Routine maintenance projects include, but are not limited to projects that are conducted to:
 - Maintain the original purpose of the facility, or hydraulic capacity.
 - Update existing lines³ and facilities to comply with applicable codes, standards and regulations regardless if such projects result in increased capacity.
 - Repairing leaks.

Routine maintenance does not include construction of new⁴ lines or facilities resulting from compliance with applicable codes, standards and regulations.

³ Update existing lines includes replacing existing lines with new materials or pipes.

⁴ New lines are those that are not associated with existing facilities and are not part of a project to update or replace existing lines.

**PERMIT REGISTRATION DOCUMENTS (PRDs)
GENERAL INSTRUCTIONS (CONTINUED)**

Routine maintenance projects do not include those areas of maintenance projects that are outside of an existing right-of-way, franchise, easements, or agreements. When a project must acquire new areas, those areas may be subject to this General Permit based on the area of disturbed land outside the original right-of-way, easement, or agreement.

2. LUP construction activity does not include field activities associated with the planning and design of a project (e.g., activities associated with route selection).
3. Tie-ins conducted immediately adjacent to “energized” or “pressurized” facilities by the discharger are not considered small construction activities where all other LUP construction activities associated with the tie-in are covered by a NOI and SWPPP of a third party or municipal agency.

Calculating Land Disturbance Areas of LUPs

The total land area disturbed for LUPs is the sum of the:

- Surface areas of trenches, laterals and ancillary facilities, plus
- Area of the base of stockpiles on unpaved surfaces, plus
- Surface area of the borrow area, plus
- Areas of paved surfaces constructed for the project, plus
- Areas of new roads constructed or areas of major reconstruction to existing roads (e.g. improvements to two-track surfaces or road widening) for the sole purpose of accessing construction activities or as part of the final project, plus
- Equipment and material storage, staging, and preparation areas (laydown areas) not on paved surfaces, plus
- Soil areas outside the surface area of trenches, laterals and ancillary facilities that will be graded, and/or disturbed by the use of construction equipment, vehicles and machinery during construction activities.

Stockpiling Areas

Stockpiling areas, borrow areas and the removal of soils from a construction site may or may not be included when calculating the area of disturbed soil for a site depending on the following conditions:

- For stockpiling of soils onsite or immediately adjacent to a LUP site and the stockpile is not on a paved surface, the area of the base of the stockpile is to be included in the disturbed area calculation.
- The surface area of borrow areas that are onsite or immediately adjacent to a project site are to be included in the disturbed area calculation.
- For soil that is hauled offsite to a location owned or operated by the discharger that is not a paved surface, the area of the base of the stockpile is to be included in the disturbed area calculation except when the offsite location is already subject to a separate storm water permit.

**PERMIT REGISTRATION DOCUMENTS (PRDs)
GENERAL INSTRUCTIONS (CONTINUED)**

- For soil that is brought to the project from an off-site location owned or operated by the discharger the surface area of the borrow pit is to be included in the disturbed area calculation except when the offsite location is already subject to a separate storm water permit.
- Trench spoils on a paved surface that are either returned to the trench or excavation or hauled away from the project daily for disposal or reuse will not be included in the disturbed area calculation.

If you have any questions concerning submittal of PRDs, please call the State Water Board at (866) 563-3107.

**ATTACHMENT B
PERMIT REGISTRATION DOCUMENTS (PRDs) TO COMPLY WITH THE TERMS
OF THE GENERAL PERMIT TO DISCHARGE STORM WATER
ASSOCIATED WITH CONSTRUCTION ACTIVITY**

GENERAL INSTRUCTIONS

- A.** All Linear Construction Projects shall comply with the PRD requirements in Attachment A.2 of this Order.

B. Who Must Submit

Discharges of storm water associated with construction that results in the disturbance of one acre or more of land must apply for coverage under the General Construction Storm Water Permit (General Permit). Any construction activity that is a part of a larger common plan of development or sale must also be permitted, regardless of size. (For example, if 0.5 acre of a 20-acre subdivision is disturbed by the construction activities of discharger A and the remaining 19.5 acres is to be developed by discharger B, discharger A must obtain a General Storm Water Permit for the 0.5 acre project).

Other discharges from construction activities that are covered under this General Permit can be found in the General Permit Section II.B.

It is the LRP's responsibility to obtain coverage under this General Permit by electronically submitting complete PRDs (Permit Registration Documents).

In all cases, the proper procedures for submitting the PRDs must be completed before construction can commence.

C. Construction Activity Not Covered By This General Permit

Discharges from construction that are not covered under this General Permit can be found in the General Permit Sections II.A & B..

D. Annual Fees and Fee Calculation

Annual fees are calculated based upon the total area of land to be disturbed not the total size of the acreage owned. However, the calculation includes all acres to be disturbed during the duration of the project. For example, if 10 acres are scheduled to be disturbed the first year and 10 in each subsequent year for 5 years, the annual fees would be based upon 50 acres of disturbance. The State Water Board will evaluate adding acreage to an existing Permit Waste Discharge Identification (WDID) number on a case-by-case basis. In general, any acreage to be considered must be contiguous to the permitted land area and the existing

SWPPP must be appropriate for the construction activity and topography of the acreage under consideration. As acreage is built out and stabilized or sold, the Change of Information (COI) form enables the applicant to remove those acres from inclusion in the annual fee calculation. Checks should be made payable to: State Water Board.

The Annual fees are established through regulations adopted by the State Water Board. The total annual fee is the current base fee plus applicable surcharges for all construction sites submitting an NOI, based on the total acreage to be disturbed during the life of the project. Annual fees are subject to change by regulation.

Dischargers that apply for and satisfy the Small Construction Erosivity Waiver requirements shall pay a fee of \$200.00 plus an applicable surcharge, see the General Permit Section II.B.7.

E. When to Apply

LRP's proposing to conduct construction activities subject to this General Permit must submit their PRDs prior to the commencement of construction activity.

F. Requirements for Completing Permit Registration Documents (PRDs)

All dischargers required to comply with this General Permit shall electronically submit the required PRDs for their type of construction as defined below.

G. Standard PRD Requirements (All Dischargers)

1. Notice of Intent
2. Risk Assessment (Standard or Site-Specific)
3. Site Map
4. SWPPP
5. Annual Fee
6. Certification

H. Additional PRD Requirements Related to Construction Type

1. Discharger in unincorporated areas of the State (not covered under an adopted Phase I or II SUSMP requirements) and that are not a linear project shall also submit a completed:
 - a. Post-Construction Water Balance Calculator (Appendix 2).
2. Dischargers who are proposing to implement ATS shall submit:
 - a. Complete ATS Plan in accordance with Attachment F at least 14 days prior to the planned operation of the ATS and a paper copy shall be available onsite during ATS operation.

- b. Certification proof that design done by a professional in accordance with Attachment F.
- 3. Dischargers who are proposing an alternate Risk Justification:
 - a. Particle Size Analysis.

I. Exceptions to Standard PRD Requirements

Construction sites with an R value less than 5 as determined in the Risk Assessment are not required to submit a SWPPP.

J. Description of PRDs

1. Notice of Intent (NOI)
2. Site Map(s) Includes:
 - a. The project's surrounding area (vicinity)
 - b. Site layout
 - c. Construction site boundaries
 - d. Drainage areas
 - e. Discharge locations
 - f. Sampling locations
 - g. Areas of soil disturbance (temporary or permanent)
 - h. Active areas of soil disturbance (cut or fill)
 - i. Locations of all runoff BMPs
 - j. Locations of all erosion control BMPs
 - k. Locations of all sediment control BMPs
 - l. ATS location (if applicable)
 - m. Locations of sensitive habitats, watercourses, or other features which are not to be disturbed
 - n. Locations of all post-construction BMPs
 - o. Locations of storage areas for waste, vehicles, service, loading/unloading of materials, access (entrance/exits) points to construction site, fueling, and water storage, water transfer for dust control and compaction practices
3. **SWPPPs**
A site-specific SWPPP shall be developed by each discharger and shall be submitted with the PRDs.
4. **Risk Assessment**
All dischargers shall use the Risk Assessment procedure as describe in the General Permit Appendix 1.
 - a. The Standard Risk Assessment includes utilization of the following:
 - i. Receiving water Risk Assessment interactive map

- ii. EPA Rainfall Erosivity Factor Calculator Website
 - iii. Sediment Risk interactive map
 - iv. Sediment sensitive water bodies list
- b. The Site-Specific Risk Assessment includes the completion of the hand calculated R value Risk Calculator
5. **Post-Construction Water Balance Calculator**
All dischargers subject to this requirement shall complete the Water Balance Calculator (in Appendix 2) in accordance with the instructions.
6. **ATS Design Document and Certification**
All dischargers using ATS must submit electronically their system design (as well as any supporting documentation) and proof that the system was designed by a qualified ATS design professional (See Attachment F).

To obtain coverage under the General Permit PRDs must be included and completed. If any of the required items are missing, the PRD submittal is considered incomplete and will be rejected. Upon receipt of a complete PRD submittal, the State Water Board will process the application package in the order received and assign a (WDID) number.

Questions?

If you have any questions on completing the PRDs please email stormwater@waterboards.ca.gov or call (866) 563-3107.

ATTACHMENT C RISK LEVEL 1 REQUIREMENTS

A. Effluent Standards

[These requirements are the same as those in the General Permit order.]

1. Narrative – Risk Level 1 dischargers shall comply with the narrative effluent standards listed below:
 - a. Storm water discharges and authorized non-storm water discharges regulated by this General Permit shall not contain a hazardous substance equal to or in excess of reportable quantities established in 40 C.F.R. §§ 117.3 and 302.4, unless a separate NPDES Permit has been issued to regulate those discharges.
 - b. Dischargers shall minimize or prevent pollutants in storm water discharges and authorized non-storm water discharges through the use of controls, structures, and management practices that achieve BAT for toxic and non-conventional pollutants and BCT for conventional pollutants.
2. Numeric – Risk Level 1 dischargers are not subject to a numeric effluent standard.

B. Good Site Management "Housekeeping"

1. Risk Level 1 dischargers shall implement good site management (i.e., "housekeeping") measures for construction materials that could potentially be a threat to water quality if discharged. At a minimum, Risk Level 1 dischargers shall implement the following good housekeeping measures:
 - a. Conduct an inventory of the products used and/or expected to be used and the end products that are produced and/or expected to be produced. This does not include materials and equipment that are designed to be outdoors and exposed to environmental conditions (i.e. poles, equipment pads, cabinets, conductors, insulators, bricks, etc.).
 - b. Cover and berm loose stockpiled construction materials that are not actively being used (i.e. soil, spoils, aggregate, fly-ash, stucco, hydrated lime, etc.).

- c. Store chemicals in watertight containers (with appropriate secondary containment to prevent any spillage or leakage) or in a storage shed (completely enclosed).
 - d. Minimize exposure of construction materials to precipitation. This does not include materials and equipment that are designed to be outdoors and exposed to environmental conditions (i.e. poles, equipment pads, cabinets, conductors, insulators, bricks, etc.).
 - e. Implement BMPs to prevent the off-site tracking of loose construction and landscape materials.
2. Risk Level 1 dischargers shall implement good housekeeping measures for waste management, which, at a minimum, shall consist of the following:
- a. Prevent disposal of any rinse or wash waters or materials on impervious or pervious site surfaces or into the storm drain system.
 - b. Ensure the containment of sanitation facilities (e.g., portable toilets) to prevent discharges of pollutants to the storm water drainage system or receiving water.
 - c. Clean or replace sanitation facilities and inspecting them regularly for leaks and spills.
 - d. Cover waste disposal containers at the end of every business day and during a rain event.
 - e. Prevent discharges from waste disposal containers to the storm water drainage system or receiving water.
 - f. Contain and securely protect stockpiled waste material from wind and rain at all times unless actively being used.
 - g. Implement procedures that effectively address hazardous and non-hazardous spills.
 - h. Develop a spill response and implementation element of the SWPPP prior to commencement of construction activities. The SWPPP shall require that:
 - i. Equipment and materials for cleanup of spills shall be available on site and that spills and leaks shall be cleaned up immediately and disposed of properly; and

- ii. Appropriate spill response personnel are assigned and trained.
 - i. Ensure the containment of concrete washout areas and other washout areas that may contain additional pollutants so there is no discharge into the underlying soil and onto the surrounding areas.
3. Risk Level 1 dischargers shall implement good housekeeping for vehicle storage and maintenance, which, at a minimum, shall consist of the following:
- a. Prevent oil, grease, or fuel to leak in to the ground, storm drains or surface waters.
 - b. Place all equipment or vehicles, which are to be fueled, maintained and stored in a designated area fitted with appropriate BMPs.
 - c. Clean leaks immediately and disposing of leaked materials properly.
4. Risk Level 1 dischargers shall implement good housekeeping for landscape materials, which, at a minimum, shall consist of the following:
- a. Contain stockpiled materials such as mulches and topsoil when they are not actively being used.
 - b. Contain fertilizers and other landscape materials when they are not actively being used.
 - c. Discontinue the application of any erodible landscape material within 2 days before a forecasted rain event or during periods of precipitation.
 - d. Apply erodible landscape material at quantities and application rates according to manufacture recommendations or based on written specifications by knowledgeable and experienced field personnel.
 - e. Stack erodible landscape material on pallets and covering or storing such materials when not being used or applied.
5. Risk Level 1 dischargers shall conduct an assessment and create a list of potential pollutant sources and identify any areas of the site where additional BMPs are necessary to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. This potential pollutant list shall be kept with the SWPPP and shall identify

all non-visible pollutants which are known, or should be known, to occur on the construction site. At a minimum, when developing BMPs, Risk Level 1 dischargers shall do the following:

- a. Consider the quantity, physical characteristics (e.g., liquid, powder, solid), and locations of each potential pollutant source handled, produced, stored, recycled, or disposed of at the site.
 - b. Consider the degree to which pollutants associated with those materials may be exposed to and mobilized by contact with storm water.
 - c. Consider the direct and indirect pathways that pollutants may be exposed to storm water or authorized non-storm water discharges. This shall include an assessment of past spills or leaks, non-storm water discharges, and discharges from adjoining areas.
 - d. Ensure retention of sampling, visual observation, and inspection records.
 - e. Ensure effectiveness of existing BMPs to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges.
6. Risk Level 1 dischargers shall implement good housekeeping measures on the construction site to control the air deposition of site materials and from site operations. Such particulates can include, but are not limited to, sediment, nutrients, trash, metals, bacteria, oil and grease and organics.

C. Non-Storm Water Management

1. Risk Level 1 dischargers shall implement measures to control all non-storm water discharges during construction.
2. Risk Level 1 dischargers shall wash vehicles in such a manner as to prevent non-storm water discharges to surface waters or MS4 drainage systems.
3. Risk Level 1 dischargers shall clean streets in such a manner as to prevent unauthorized non-storm water discharges from reaching surface water or MS4 drainage systems.

D. Erosion Control

1. Risk Level 1 dischargers shall implement effective wind erosion control.
2. Risk Level 1 dischargers shall provide effective soil cover for inactive¹ areas and all finished slopes, open space, utility backfill, and completed lots.
3. Risk Level 1 dischargers shall limit the use of plastic materials when more sustainable, environmentally friendly alternatives exist. Where plastic materials are deemed necessary, the discharger shall consider the use of plastic materials resistant to solar degradation.

E. Sediment Controls

1. Risk Level 1 dischargers shall establish and maintain effective perimeter controls and stabilize all construction entrances and exits to sufficiently control erosion and sediment discharges from the site.
2. On sites where sediment basins are to be used, Risk Level 1 dischargers shall, at minimum, design sediment basins according to the method provided in CASQA's Construction BMP Guidance Handbook.

F. Run-on and Runoff Controls

Risk Level 1 dischargers shall effectively manage all run-on, all runoff within the site and all runoff that discharges off the site. Run-on from off site shall be directed away from all disturbed areas or shall collectively be in compliance with the effluent limitations in this General Permit.

G. Inspection, Maintenance and Repair

1. Risk Level 1 dischargers shall ensure that all inspection, maintenance repair and sampling activities at the project location shall be performed or supervised by a Qualified SWPPP Practitioner (QSP) representing the discharger. The QSP may delegate any or all of these activities to an employee trained to do the task(s) appropriately, but shall ensure adequate deployment.
2. Risk Level 1 dischargers shall perform weekly inspections and observations, and at least once each 24-hour period during extended

¹ Inactive areas of construction are areas of construction activity that have been disturbed and are not scheduled to be re-disturbed for at least 14 days.

storm events, to identify and record BMPs that need maintenance to operate effectively, that have failed, or that could fail to operate as intended. Inspectors shall be the QSP or be trained by the QSP.

3. Upon identifying failures or other shortcomings, as directed by the QSP, Risk Level 1 dischargers shall begin implementing repairs or design changes to BMPs within 72 hours of identification and complete the changes as soon as possible.
4. For each inspection required, Risk Level 1 dischargers shall complete an inspection checklist, using a form provided by the State Water Board or Regional Water Board or in an alternative format.
5. Risk Level 1 dischargers shall ensure that checklists shall remain onsite with the SWPPP and at a minimum, shall include:
 - a. Inspection date and date the inspection report was written.
 - b. Weather information, including presence or absence of precipitation, estimate of beginning of qualifying storm event, duration of event, time elapsed since last storm, and approximate amount of rainfall in inches.
 - c. Site information, including stage of construction, activities completed, and approximate area of the site exposed.
 - d. A description of any BMPs evaluated and any deficiencies noted.
 - e. If the construction site is safely accessible during inclement weather, list the observations of all BMPs: erosion controls, sediment controls, chemical and waste controls, and non-storm water controls. Otherwise, list the results of visual inspections at all relevant outfalls, discharge points, downstream locations and any projected maintenance activities.
 - f. Report the presence of noticeable odors or of any visible sheen on the surface of any discharges.
 - g. Any corrective actions required, including any necessary changes to the SWPPP and the associated implementation dates.
 - h. Photographs taken during the inspection, if any.
 - i. Inspector's name, title, and signature.

H. Rain Event Action Plan

Not required for Risk Level 1 dischargers.

I. Risk Level 1 Monitoring and Reporting Requirements

Table 1- Summary of Monitoring Requirements

Risk Level	Visual Inspections					Sample Collection	
	Quarterly Non-storm Water Discharge	Pre-storm Event		Daily Storm BMP	Post Storm	Storm Water Discharge	Receiving Water
		Baseline	REAP				
1	X	X		X	X		

1. Construction Site Monitoring Program Requirements

- a. Pursuant to Water Code Sections 13383 and 13267, all dischargers subject to this General Permit shall develop and implement a written site-specific Construction Site Monitoring Program (CSMP) in accordance with the requirements of this Section. The CSMP shall include all monitoring procedures and instructions, location maps, forms, and checklists as required in this section. The CSMP shall be developed prior to the commencement of construction activities, and revised as necessary to reflect project revisions. The CSMP shall be a part of the Storm Water Pollution Prevention Plan (SWPPP), included as an appendix or separate SWPPP chapter.
- b. Existing dischargers registered under the State Water Board Order No. 99-08-DWQ shall make and implement necessary revisions to their Monitoring Programs to reflect the changes in this General Permit in a timely manner, but no later than July 1, 2010. Existing dischargers shall continue to implement their existing Monitoring Programs in compliance with State Water Board Order No. 99-08-DWQ until the necessary revisions are completed according to the schedule above.
- c. When a change of ownership occurs for all or any portion of the construction site prior to completion or final stabilization, the new discharger shall comply with these requirements as of the date the ownership change occurs.

2. Objectives

The CSMP shall be developed and implemented to address the following objectives:

- a. To demonstrate that the site is in compliance with the Discharge Prohibitions;

- b. To determine whether non-visible pollutants are present at the construction site and are causing or contributing to exceedances of water quality objectives;
 - c. To determine whether immediate corrective actions, additional Best Management Practice (BMP) implementation, or SWPPP revisions are necessary to reduce pollutants in storm water discharges and authorized non-storm water discharges; and
 - d. To determine whether BMPs included in the SWPPP are effective in preventing or reducing pollutants in storm water discharges and authorized non-storm water discharges.
- 3. Risk Level 1 - Visual Monitoring (Inspection) Requirements for Qualifying Rain Events**
- a. Risk Level 1 dischargers shall visually observe (inspect) storm water discharges at all discharge locations within two business days (48 hours) after each qualifying rain event.
 - b. Risk Level 1 dischargers shall visually observe (inspect) the discharge of stored or contained storm water that is derived from and discharged subsequent to a qualifying rain event producing precipitation of ½ inch or more at the time of discharge. Stored or contained storm water that will likely discharge after operating hours due to anticipated precipitation shall be observed prior to the discharge during operating hours.
 - c. Risk Level 1 dischargers shall conduct visual observations (inspections) during business hours only.
 - d. Risk Level 1 dischargers shall record the time, date and rain gauge reading of all qualifying rain events.
 - e. Within 2 business days (48 hours) prior to each qualifying rain event, Risk Level 1 dischargers shall visually observe (inspect):
 - i. All storm water drainage areas to identify any spills, leaks, or uncontrolled pollutant sources. If needed, the discharger shall implement appropriate corrective actions.
 - ii. All BMPs to identify whether they have been properly implemented in accordance with the SWPPP. If needed, the discharger shall implement appropriate corrective actions.

- iii. Any storm water storage and containment areas to detect leaks and ensure maintenance of adequate freeboard.
- f. For the visual observations (inspections) described in e.i and e.iii above, Risk Level 1 dischargers shall observe the presence or absence of floating and suspended materials, a sheen on the surface, discolorations, turbidity, odors, and source(s) of any observed pollutants.
- g. Within two business days (48 hours) after each qualifying rain event, Risk Level 1 dischargers shall conduct post rain event visual observations (inspections) to (1) identify whether BMPs were adequately designed, implemented, and effective, and (2) identify additional BMPs and revise the SWPPP accordingly.
- h. Risk Level 1 dischargers shall maintain on-site records of all visual observations (inspections), personnel performing the observations, observation dates, weather conditions, locations observed, and corrective actions taken in response to the observations.

4. Risk Level 1 – Visual Observation Exemptions

- a. Risk Level 1 dischargers shall be prepared to conduct visual observation (inspections) until the minimum requirements of Section I.3 above are completed. Risk Level 1 dischargers are not required to conduct visual observation (inspections) under the following conditions:
 - i. During dangerous weather conditions such as flooding and electrical storms.
 - ii. Outside of scheduled site business hours.
- b. If no required visual observations (inspections) are collected due to these exceptions, Risk Level 1 dischargers shall include an explanation in their SWPPP and in the Annual Report documenting why the visual observations (inspections) were not conducted.

5. Risk Level 1 – Monitoring Methods

Risk Level 1 dischargers shall include a description of the visual observation locations, visual observation procedures, and visual observation follow-up and tracking procedures in the CSMP.

6. Risk Level 1 – Non-Storm Water Discharge Monitoring Requirements

- a. Visual Monitoring Requirements:
 - i. Risk Level 1 dischargers shall visually observe (inspect) each drainage area for the presence of (or indications of prior) unauthorized and authorized non-storm water discharges and their sources.
 - ii. Risk Level 1 dischargers shall conduct one visual observation (inspection) quarterly in each of the following periods: January-March, April-June, July-September, and October-December. Visual observation (inspections) are only required during daylight hours (sunrise to sunset).
 - iii. Risk Level 1 dischargers shall ensure that visual observations (inspections) document the presence or evidence of any non-storm water discharge (authorized or unauthorized), pollutant characteristics (floating and suspended material, sheen, discoloration, turbidity, odor, etc.), and source. Risk Level 1 dischargers shall maintain on-site records indicating the personnel performing the visual observation (inspections), the dates and approximate time each drainage area and non-storm water discharge was observed, and the response taken to eliminate unauthorized non-storm water discharges and to reduce or prevent pollutants from contacting non-storm water discharges.

7. Risk Level 1 – Non-Visible Pollutant Monitoring Requirements

- a. Risk Level 1 dischargers shall collect one or more samples during any breach, malfunction, leakage, or spill observed during a visual inspection which could result in the discharge of pollutants to surface waters that would not be visually detectable in storm water.
- b. Risk Level 1 dischargers shall ensure that water samples are large enough to characterize the site conditions.
- c. Risk Level 1 dischargers shall collect samples at all discharge locations that can be safely accessed.
- d. Risk Level 1 dischargers shall collect samples during the first two hours of discharge from rain events that occur during business hours and which generate runoff.
- e. Risk Level 1 dischargers shall analyze samples for all non-visible pollutant parameters (if applicable) - parameters indicating the

presence of pollutants identified in the pollutant source assessment required (Risk Level 1 dischargers shall modify their CSMPs to address these additional parameters in accordance with any updated SWPPP pollutant source assessment).

- f. Risk Level 1 dischargers shall collect a sample of storm water that has not come in contact with the disturbed soil or the materials stored or used on-site (uncontaminated sample) for comparison with the discharge sample.
- g. Risk Level 1 dischargers shall compare the uncontaminated sample to the samples of discharge using field analysis or through laboratory analysis.²
- h. Risk Level 1 dischargers shall keep all field /or analytical data in the SWPPP document.

8. Risk Level 1 – Particle Size Analysis for Project Risk Justification

Risk Level 1 dischargers justifying an alternative project risk shall report a soil particle size analysis used to determine the RUSLE K-Factor. ASTM D-422 (Standard Test Method for Particle-Size Analysis of Soils), as revised, shall be used to determine the percentages of sand, very fine sand, silt, and clay on the site.

9. Risk Level 1 – Records

Risk Level 1 dischargers shall retain records of all storm water monitoring information and copies of all reports (including Annual Reports) for a period of at least three years. Risk Level 1 dischargers shall retain all records on-site while construction is ongoing. These records include:

- a. The date, place, time of facility inspections, sampling, visual observation (inspections), and/or measurements, including precipitation.
- b. The individual(s) who performed the facility inspections, sampling, visual observation (inspections), and or measurements.
- c. The date and approximate time of analyses.
- d. The individual(s) who performed the analyses.

² For laboratory analysis, all sampling, sample preservation, and analyses must be conducted according to test procedures under 40 CFR Part 136. Field discharge samples shall be collected and analyzed according to the specifications of the manufacturer of the sampling devices employed.

- e. A summary of all analytical results from the last three years, the method detection limits and reporting units, and the analytical techniques or methods used.
- f. Rain gauge readings from site inspections.
- g. Quality assurance/quality control records and results.
- h. Non-storm water discharge inspections and visual observation (inspections) and storm water discharge visual observation records (see Sections I.3 and I.6 above).
- i. Visual observation and sample collection exception records (see Section I.4 above).
- j. The records of any corrective actions and follow-up activities that resulted from analytical results, visual observation (inspections), or inspections.

ATTACHMENT D RISK LEVEL 2 REQUIREMENTS

A. Effluent Standards

[These requirements are the same as those in the General Permit order.]

1. Narrative – Risk Level 2 dischargers shall comply with the narrative effluent standards listed below:
 - a. Storm water discharges and authorized non-storm water discharges regulated by this General Permit shall not contain a hazardous substance equal to or in excess of reportable quantities established in 40 C.F.R. §§ 117.3 and 302.4, unless a separate NPDES Permit has been issued to regulate those discharges.
 - b. Dischargers shall minimize or prevent pollutants in storm water discharges and authorized non-storm water discharges through the use of controls, structures, and management practices that achieve BAT for toxic and non-conventional pollutants and BCT for conventional pollutants.
2. Numeric – Risk level 2 dischargers are subject to a pH NAL of 6.5-8.5, and a turbidity NAL of 250 NTU.

B. Good Site Management "Housekeeping"

1. Risk Level 2 dischargers shall implement good site management (i.e., "housekeeping") measures for construction materials that could potentially be a threat to water quality if discharged. At a minimum, Risk Level 2 dischargers shall implement the following good housekeeping measures:
 - a. Conduct an inventory of the products used and/or expected to be used and the end products that are produced and/or expected to be produced. This does not include materials and equipment that are designed to be outdoors and exposed to environmental conditions (i.e. poles, equipment pads, cabinets, conductors, insulators, bricks, etc.).
 - b. Cover and berm loose stockpiled construction materials that are not actively being used (i.e. soil, spoils, aggregate, fly-ash, stucco, hydrated lime, etc.).

- c. Store chemicals in watertight containers (with appropriate secondary containment to prevent any spillage or leakage) or in a storage shed (completely enclosed).
 - d. Minimize exposure of construction materials to precipitation. This does not include materials and equipment that are designed to be outdoors and exposed to environmental conditions (i.e. poles, equipment pads, cabinets, conductors, insulators, bricks, etc.).
 - e. Implement BMPs to prevent the off-site tracking of loose construction and landscape materials.
2. Risk Level 2 dischargers shall implement good housekeeping measures for waste management, which, at a minimum, shall consist of the following:
- a. Prevent disposal of any rinse or wash waters or materials on impervious or pervious site surfaces or into the storm drain system.
 - b. Ensure the containment of sanitation facilities (e.g., portable toilets) to prevent discharges of pollutants to the storm water drainage system or receiving water.
 - c. Clean or replace sanitation facilities and inspecting them regularly for leaks and spills.
 - d. Cover waste disposal containers at the end of every business day and during a rain event.
 - e. Prevent discharges from waste disposal containers to the storm water drainage system or receiving water.
 - f. Contain and securely protect stockpiled waste material from wind and rain at all times unless actively being used.
 - g. Implement procedures that effectively address hazardous and non-hazardous spills.
 - h. Develop a spill response and implementation element of the SWPPP prior to commencement of construction activities. The SWPPP shall require:
 - i. Equipment and materials for cleanup of spills shall be available on site and that spills and leaks shall be cleaned up immediately and disposed of properly.

- ii. Appropriate spill response personnel are assigned and trained.
 - i. Ensure the containment of concrete washout areas and other washout areas that may contain additional pollutants so there is no discharge into the underlying soil and onto the surrounding areas.
3. Risk Level 2 dischargers shall implement good housekeeping for vehicle storage and maintenance, which, at a minimum, shall consist of the following:
 - a. Prevent oil, grease, or fuel to leak in to the ground, storm drains or surface waters.
 - b. Place all equipment or vehicles, which are to be fueled, maintained and stored in a designated area fitted with appropriate BMPs.
 - c. Clean leaks immediately and disposing of leaked materials properly.
4. Risk Level 2 dischargers shall implement good housekeeping for landscape materials, which, at a minimum, shall consist of the following:
 - a. Contain stockpiled materials such as mulches and topsoil when they are not actively being used.
 - b. Contain all fertilizers and other landscape materials when they are not actively being used.
 - c. Discontinue the application of any erodible landscape material within 2 days before a forecasted rain event or during periods of precipitation.
 - d. Apply erodible landscape material at quantities and application rates according to manufacture recommendations or based on written specifications by knowledgeable and experienced field personnel.
 - e. Stack erodible landscape material on pallets and covering or storing such materials when not being used or applied.
5. Risk Level 2 dischargers shall conduct an assessment and create a list of potential pollutant sources and identify any areas of the site where additional BMPs are necessary to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. This potential pollutant list shall be kept with the SWPPP and shall identify

all non-visible pollutants which are known, or should be known, to occur on the construction site. At a minimum, when developing BMPs, Risk Level 2 dischargers shall do the following:

- a. Consider the quantity, physical characteristics (e.g., liquid, powder, solid), and locations of each potential pollutant source handled, produced, stored, recycled, or disposed of at the site.
 - b. Consider the degree to which pollutants associated with those materials may be exposed to and mobilized by contact with storm water.
 - c. Consider the direct and indirect pathways that pollutants may be exposed to storm water or authorized non-storm water discharges. This shall include an assessment of past spills or leaks, non-storm water discharges, and discharges from adjoining areas.
 - d. Ensure retention of sampling, visual observation, and inspection records.
 - e. Ensure effectiveness of existing BMPs to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges.
6. Risk Level 2 dischargers shall implement good housekeeping measures on the construction site to control the air deposition of site materials and from site operations. Such particulates can include, but are not limited to, sediment, nutrients, trash, metals, bacteria, oil and grease and organics.
7. **Additional Risk Level 2 Requirement:** Risk Level 2 dischargers shall document all housekeeping BMPs in the SWPPP and REAP(s) in accordance with the nature and phase of the construction project. Construction phases at traditional land development projects include Grading and Land Development Phase, Streets and Utilities, or Vertical Construction for traditional land development projects.

C. Non-Storm Water Management

1. Risk Level 2 dischargers shall implement measures to control all non-storm water discharges during construction.
2. Risk Level 2 dischargers shall wash vehicles in such a manner as to prevent non-storm water discharges to surface waters or MS4 drainage systems.

3. Risk Level 2 dischargers shall clean streets in such a manner as to prevent unauthorized non-storm water discharges from reaching surface water or MS4 drainage systems.

D. Erosion Control

1. Risk Level 2 dischargers shall implement effective wind erosion control.
2. Risk Level 2 dischargers shall provide effective soil cover for inactive¹ areas and all finished slopes, open space, utility backfill, and completed lots.
3. Risk Level 2 dischargers shall limit the use of plastic materials when more sustainable, environmentally friendly alternatives exist. Where plastic materials are deemed necessary, the discharger shall consider the use of plastic materials resistant to solar degradation.

E. Sediment Controls

1. Risk Level 2 dischargers shall establish and maintain effective perimeter controls and stabilize all construction entrances and exits to sufficiently control erosion and sediment discharges from the site.
2. On sites where sediment basins are to be used, Risk Level 2 dischargers shall, at minimum, design sediment basins according to the method provided in CASQA's Construction BMP Guidance Handbook.
3. **Additional Risk Level 2 Requirement:** Risk Level 2 dischargers shall implement appropriate erosion control BMPs (runoff control and soil stabilization) in conjunction with sediment control BMPs for areas under active² construction.
4. **Additional Risk Level 2 Requirement:** Risk Level 2 dischargers shall apply linear sediment controls along the toe of the slope, face of the slope, and at the grade breaks of exposed slopes to comply with sheet flow lengths³ in accordance with Table 1.

¹ Inactive areas of construction are areas of construction activity that have been disturbed and are not scheduled to be re-disturbed for at least 14 days.

² Active areas of construction are areas undergoing land surface disturbance. This includes construction activity during the preliminary stage, mass grading stage, streets and utilities stage and the vertical construction stage.

³ Sheet flow length is the length that shallow, low velocity flow travels across a site.

Table 1 - Critical Slope/Sheet Flow Length Combinations

Slope Percentage	Sheet flow length not to exceed
0-25%	20 feet
25-50%	15 feet
Over 50%	10 feet

5. **Additional Risk Level 2 Requirement:** Risk Level 2 dischargers shall ensure that construction activity traffic to and from the project is limited to entrances and exits that employ effective controls to prevent offsite tracking of sediment.
6. **Additional Risk Level 2 Requirement:** Risk Level 2 dischargers shall ensure that all storm drain inlets and perimeter controls, runoff control BMPs, and pollutant controls at entrances and exits (e.g. tire washoff locations) are maintained and protected from activities that reduce their effectiveness.
7. **Additional Risk Level 2 Requirement:** Risk Level 2 dischargers shall inspect on a daily basis all immediate access roads daily. At a minimum daily (when necessary) and prior to any rain event, the discharger shall remove any sediment or other construction activity-related materials that are deposited on the roads (by vacuuming or sweeping).

F. Run-on and Run-off Controls

Risk Level 2 dischargers shall effectively manage all run-on, all runoff within the site and all runoff that discharges off the site. Run-on from off site shall be directed away from all disturbed areas or shall collectively be in compliance with the effluent limitations in this General Permit.

G. Inspection, Maintenance and Repair

1. Risk Level 2 dischargers shall ensure that all inspection, maintenance repair and sampling activities at the project location shall be performed or supervised by a Qualified SWPPP Practitioner (QSP) representing the discharger. The QSP may delegate any or all of these activities to an employee appropriately trained to do the task(s).
2. Risk Level 2 dischargers shall perform weekly inspections and observations, and at least once each 24-hour period during extended storm events, to identify and record BMPs that need maintenance to operate effectively, that have failed, or that could fail to operate as intended. Inspectors shall be the QSP or be trained by the QSP.

3. Upon identifying failures or other shortcomings, as directed by the QSP, Risk Level 2 dischargers shall begin implementing repairs or design changes to BMPs within 72 hours of identification and complete the changes as soon as possible.
4. For each inspection required, Risk Level 2 dischargers shall complete an inspection checklist, using a form provided by the State Water Board or Regional Water Board or in an alternative format.
5. Risk Level 2 dischargers shall ensure that checklists shall remain onsite with the SWPPP and at a minimum, shall include:
 - a. Inspection date and date the inspection report was written.
 - b. Weather information, including presence or absence of precipitation, estimate of beginning of qualifying storm event, duration of event, time elapsed since last storm, and approximate amount of rainfall in inches.
 - c. Site information, including stage of construction, activities completed, and approximate area of the site exposed.
 - d. A description of any BMPs evaluated and any deficiencies noted.
 - e. If the construction site is safely accessible during inclement weather, list the observations of all BMPs: erosion controls, sediment controls, chemical and waste controls, and non-storm water controls. Otherwise, list the results of visual inspections at all relevant outfalls, discharge points, downstream locations and any projected maintenance activities.
 - f. Report the presence of noticeable odors or of any visible sheen on the surface of any discharges.
 - g. Any corrective actions required, including any necessary changes to the SWPPP and the associated implementation dates.
 - h. Photographs taken during the inspection, if any.
 - i. Inspector's name, title, and signature.

H. Rain Event Action Plan

1. **Additional Risk Level 2 Requirement:** The discharger shall ensure a QSP develop a Rain Event Action Plan (REAP) 48 hours prior to any

likely precipitation event. A likely precipitation event is any weather pattern that is forecast to have a 50% or greater probability of producing precipitation in the project area. The discharger shall ensure a QSP obtain a printed copy of precipitation forecast information from the National Weather Service Forecast Office (e.g., by entering the zip code of the project's location at <http://www.srh.noaa.gov/forecast>).

2. **Additional Risk Level 2 Requirement:** The discharger shall ensure a QSP develop the REAPs for all phases of construction (i.e., Grading and Land Development, Streets and Utilities, Vertical Construction, Final Landscaping and Site Stabilization).
3. **Additional Risk Level 2 Requirement:** The discharger shall ensure a QSP ensure that the REAP include, at a minimum, the following site information:
 - a. Site Address
 - b. Calculated Risk Level (2 or 3)
 - c. Site Storm Water Manager Information including the name, company, and 24-hour emergency telephone number
 - d. Erosion and Sediment Control Provider information including the name, company, and 24-hour emergency telephone number
 - e. Storm Water Sampling Agent information including the name, company, and 24-hour emergency telephone number
4. **Additional Risk Level 2 Requirement:** The discharger shall ensure a QSP include in the REAP, at a minimum, the following project phase information:
 - a. Activities associated with each construction phase
 - b. Trades active on the construction site during each construction phase
 - c. Trade contractor information
 - d. Suggested actions for each project phase
5. **Additional Risk Level 2 Requirement:** The discharger shall ensure a QSP develop additional REAPs for project sites where construction activities are indefinitely halted or postponed (Inactive Construction). At a minimum, Inactive Construction REAPs must include:
 - a. Site Address
 - b. Calculated Risk Level (2 or 3)
 - c. Site Storm Water Manager Information including the name, company, and 24-hour emergency telephone number

- d. Erosion and Sediment Control Provider information including the name, company, and 24-hour emergency telephone number
 - e. Storm Water Sampling Agent information including the name, company, and 24-hour emergency telephone number
 - f. Trades active on site during Inactive Construction
 - g. Trade contractor information
 - h. Suggested actions for inactive construction sites
6. **Additional Risk Level 2 Requirement:** The discharger shall ensure a QSP begin implementation and make the REAP available onsite no later than 24 hours prior to the likely precipitation event.
7. **Additional Risk Level 2 Requirement:** The discharger shall ensure a QSP maintain onsite a paper copy of each REAP onsite in compliance with the record retention requirements of the Special Provisions in this General Permit.

I. Risk Level 2 Monitoring and Reporting Requirements

Table 2- Summary of Monitoring Requirements

Risk Level	Visual Inspections					Sample Collection	
	Quarterly Non-storm Water Discharge	Pre-storm Event		Daily Storm BMP	Post Storm	Storm Water Discharge	Receiving Water
		Baseline	REAP				
2	X	X	X	X	X	X	

1. Construction Site Monitoring Program Requirements

- a. Pursuant to Water Code Sections 13383 and 13267, all dischargers subject to this General Permit shall develop and implement a written site-specific Construction Site Monitoring Program (CSMP) in accordance with the requirements of this Section. The CSMP shall include all monitoring procedures and instructions, location maps, forms, and checklists as required in this section. The CSMP shall be developed prior to the commencement of construction activities, and revised as necessary to reflect project revisions. The CSMP shall be a part of the Storm Water Pollution Prevention Plan (SWPPP), included as an appendix or separate SWPPP chapter.
- b. Existing dischargers registered under the State Water Board Order No. 99-08-DWQ shall make and implement necessary revisions to their Monitoring Program to reflect the changes in this General Permit in a timely manner, but no later than July 1, 2010. Existing dischargers shall continue to implement their existing Monitoring Programs in compliance with State Water Board Order No. 99-08-DWQ until the necessary revisions are completed according to the schedule above.
- c. When a change of ownership occurs for all or any portion of the construction site prior to completion or final stabilization, the new discharger shall comply with these requirements as of the date the ownership change occurs.

2. Objectives

The CSMP shall be developed and implemented to address the following objectives:

- a. To demonstrate that the site is in compliance with the Discharge Prohibitions and applicable Numeric Action Levels (NALs).

- b. To determine whether non-visible pollutants are present at the construction site and are causing or contributing to exceedances of water quality objectives.
 - c. To determine whether immediate corrective actions, additional Best Management Practice (BMP) implementation, or SWPPP revisions are necessary to reduce pollutants in storm water discharges and authorized non-storm water discharges.
 - d. To determine whether BMPs included in the SWPPP/Rain Event Action Plan (REAP) are effective in preventing or reducing pollutants in storm water discharges and authorized non-storm water discharges.
- 3. Risk Level 2 – Visual Monitoring (Inspection) Requirements for Qualifying Rain Events**
- a. Risk Level 2 dischargers shall visually observe (inspect) storm water discharges at all discharge locations within two business days (48 hours) after each qualifying rain event.
 - b. Risk Level 2 dischargers shall visually observe (inspect) the discharge of stored or contained storm water that is derived from and discharged subsequent to a qualifying rain event producing precipitation of ½ inch or more at the time of discharge. Stored or contained storm water that will likely discharge after operating hours due to anticipated precipitation shall be observed prior to the discharge during operating hours.
 - c. Risk Level 2 dischargers shall conduct visual observations (inspections) during business hours only.
 - d. Risk Level 2 dischargers shall record the time, date and rain gauge reading of all qualifying rain events.
 - e. Within 2 business days (48 hours) prior to each qualifying rain event, Risk Level 2 dischargers shall visually observe (inspect):
 - i. all storm water drainage areas to identify any spills, leaks, or uncontrolled pollutant sources. If needed, the discharger shall implement appropriate corrective actions.
 - ii. all BMPs to identify whether they have been properly implemented in accordance with the SWPPP/REAP. If needed, the discharger shall implement appropriate corrective actions.

- iii. any storm water storage and containment areas to detect leaks and ensure maintenance of adequate freeboard.
- f. For the visual observations (inspections) described in c.i and c.iii above, Risk Level 2 dischargers shall observe the presence or absence of floating and suspended materials, a sheen on the surface, discolorations, turbidity, odors, and source(s) of any observed pollutants.
- g. Within two business days (48 hours) after each qualifying rain event, Risk Level 2 dischargers shall conduct post rain event visual observations (inspections) to (1) identify whether BMPs were adequately designed, implemented, and effective, and (2) identify additional BMPs and revise the SWPPP accordingly.
- h. Risk Level 2 dischargers shall maintain on-site records of all visual observations (inspections), personnel performing the observations, observation dates, weather conditions, locations observed, and corrective actions taken in response to the observations.

4. Risk Level 2 – Water Quality Sampling and Analysis

- a. Risk Level 2 dischargers shall collect storm water grab samples from sampling locations, as defined in Section I.5. The storm water grab sample(s) obtained shall be representative of the flow and characteristics of the discharge.
- b. At minimum, Risk Level 2 dischargers shall collect 3 samples per day of the qualifying event.
- c. Risk Level 2 dischargers shall ensure that the grab samples collected of stored or contained storm water are from discharges subsequent to a qualifying rain event (producing precipitation of ½ inch or more at the time of discharge).

Storm Water Effluent Monitoring Requirements

- d. Risk Level 2 dischargers shall analyze their effluent samples for:
 - i. pH and turbidity.
 - ii. Any additional parameters for which monitoring is required by the Regional Water Board.

5. Risk Level 2 – Storm Water Discharge Water Quality Sampling Locations

Effluent Sampling Locations

- a. Risk Level 2 dischargers shall perform sampling and analysis of storm water discharges to characterize discharges associated with construction activity from the entire project disturbed area.
- b. Risk Level 2 dischargers shall collect effluent samples at all discharge points where storm water is discharged off-site.
- c. Risk Level 2 dischargers shall ensure that storm water discharge collected and observed represent⁴ the effluent in each drainage area based on visual observation of the water and upstream conditions.
- d. Risk Level 2 dischargers shall monitor and report site run-on from surrounding areas if there is reason to believe run-on may contribute to an exceedance of NALs.
- e. Risk Level 2 dischargers who deploy an ATS on their site, or a portion on their site, shall collect ATS effluent samples and measurements from the discharge pipe or another location representative of the nature of the discharge.
- f. Risk Level 2 dischargers shall select analytical test methods from the list provided in Table 3 below.
- g. All storm water sample collection preservation and handling shall be conducted in accordance with Section I.7 “Storm Water Sample Collection and Handling Instructions” below.

6. Risk Level 2 – Visual Observation and Sample Collection Exemptions

- a. Risk Level 2 dischargers shall be prepared to collect samples and conduct visual observation (inspections) until the minimum requirements of Sections I.3 and I.4 above are completed. Risk Level 2 dischargers are not required to physically collect samples or conduct visual observation (inspections) under the following conditions:

⁴ For example, if there has been concrete work recently in an area, or drywall scrap is exposed to the rain, a pH sample shall be taken of drainage from the relevant work area. Similarly, if sediment laden water is flowing through some parts of a silt fence, samples shall be taken of the sediment-laden water even if most water flowing through the fence is clear.

- i. During dangerous weather conditions such as flooding and electrical storms.
 - ii. Outside of scheduled site business hours.
- b. If no required samples or visual observation (inspections) are collected due to these exceptions, Risk Level 2 dischargers shall include an explanation in their SWPPP and in the Annual Report documenting why the sampling or visual observation (inspections) were not conducted.
- 7. Risk Level 2 – Storm Water Sample Collection and Handling Instructions**

- a. Risk Level 2 dischargers shall refer to Table 3 below for test methods, detection limits, and reporting units.
- b. Risk Level 2 dischargers shall ensure that testing laboratories will receive samples within 48 hours of the physical sampling (unless otherwise required by the laboratory), and shall use only the sample containers provided by the laboratory to collect and store samples.
- c. Risk Level 2 dischargers shall designate and train personnel to collect, maintain, and ship samples in accordance with the Surface Water Ambient Monitoring Program's (SWAMP) 2008 Quality Assurance Program Plan (QAPrP).⁵

8. Risk Level 2 – Monitoring Methods

- a. Risk Level 2 dischargers shall include a description of the following items in the CSMP:
 - i. Visual observation locations, visual observation procedures, and visual observation follow-up and tracking procedures.
 - ii. Sampling locations, and sample collection and handling procedures. This shall include detailed procedures for sample collection, storage, preservation, and shipping to the testing lab to assure that consistent quality control and quality assurance is maintained. Dischargers shall attach to the monitoring program

⁵ Additional information regarding SWAMP's QAPrP can be found at http://www.waterboards.ca.gov/water_issues/programs/swamp/.
QAPrP:http://www.waterboards.ca.gov/water_issues/programs/swamp/docs/qapp/swamp_qapp_master090108a.pdf.

an example Chain of Custody form used when handling and shipping samples.

- iii. Identification of the analytical methods and related method detection limits (if applicable) for each parameter required in Section I.4 above.
- b. Risk Level 2 dischargers shall ensure that all sampling and sample preservation are in accordance with the current edition of "Standard Methods for the Examination of Water and Wastewater" (American Public Health Association). All monitoring instruments and equipment (including a discharger's own field instruments for measuring pH and turbidity) should be calibrated and maintained in accordance with manufacturers' specifications to ensure accurate measurements. Risk Level 2 dischargers shall ensure that all laboratory analyses are conducted according to test procedures under 40 CFR Part 136, unless other test procedures have been specified in this General Permit or by the Regional Water Board. With the exception of field analysis conducted by the discharger for turbidity and pH, all analyses should be sent to and conducted at a laboratory certified for such analyses by the State Department of Health Services. Risk Level 2 dischargers shall conduct their own field analysis of pH and may conduct their own field analysis of turbidity if the discharger has sufficient capability (qualified and trained employees, properly calibrated and maintained field instruments, etc.) to adequately perform the field analysis.

9. Risk Level 2 – Analytical Methods

- a. Risk Level 2 dischargers shall refer to Table 3 below for test methods, detection limits, and reporting units.
- b. **pH:** Risk Level 2 dischargers shall perform pH analysis on-site with a calibrated pH meter or a pH test kit. Risk Level 2 dischargers shall record pH monitoring results on paper and retain these records in accordance with Section I.14, below.
- c. **Turbidity:** Risk Level 2 dischargers shall perform turbidity analysis using a calibrated turbidity meter (turbidimeter), either on-site or at an accredited lab. Acceptable test methods include Standard Method 2130 or USEPA Method 180.1. The results will be recorded in the site log book in Nephelometric Turbidity Units (NTU).

10. Risk Level 2 - Non-Storm Water Discharge Monitoring Requirements

- a. Visual Monitoring Requirements:
- i. Risk Level 2 dischargers shall visually observe (inspect) each drainage area for the presence of (or indications of prior) unauthorized and authorized non-storm water discharges and their sources.
 - ii. Risk Level 2 dischargers shall conduct one visual observation (inspection) quarterly in each of the following periods: January-March, April-June, July-September, and October-December. Visual observation (inspections) are only required during daylight hours (sunrise to sunset).
 - iii. Risk Level 2 dischargers shall ensure that visual observations (inspections) document the presence or evidence of any non-storm water discharge (authorized or unauthorized), pollutant characteristics (floating and suspended material, sheen, discoloration, turbidity, odor, etc.), and source. Risk Level 2 dischargers shall maintain on-site records indicating the personnel performing the visual observation (inspections), the dates and approximate time each drainage area and non-storm water discharge was observed, and the response taken to eliminate unauthorized non-storm water discharges and to reduce or prevent pollutants from contacting non-storm water discharges.
- b. Effluent Sampling Locations:
- i. Risk Level 2 dischargers shall sample effluent at all discharge points where non-storm water and/or authorized non-storm water is discharged off-site.
 - ii. Risk Level 2 dischargers shall send all non-storm water sample analyses to a laboratory certified for such analyses by the State Department of Health Services.
 - iii. Risk Level 2 dischargers shall monitor and report run-on from surrounding areas if there is reason to believe run-on may contribute to an exceedance of NALs.

11. Risk Level 2 – Non-Visible Pollutant Monitoring Requirements

- a. Risk Level 2 dischargers shall collect one or more samples during any breach, malfunction, leakage, or spill observed during a visual

inspection which could result in the discharge of pollutants to surface waters that would not be visually detectable in storm water.

- b. Risk Level 2 dischargers shall ensure that water samples are large enough to characterize the site conditions.
- c. Risk Level 2 dischargers shall collect samples at all discharge locations that can be safely accessed.
- d. Risk Level 2 dischargers shall collect samples during the first two hours of discharge from rain events that occur during business hours and which generate runoff.
- e. Risk Level 2 dischargers shall analyze samples for all non-visible pollutant parameters (if applicable) - parameters indicating the presence of pollutants identified in the pollutant source assessment required (Risk Level 2 dischargers shall modify their CSMPs to address these additional parameters in accordance with any updated SWPPP pollutant source assessment).
- f. Risk Level 2 dischargers shall collect a sample of storm water that has not come in contact with the disturbed soil or the materials stored or used on-site (uncontaminated sample) for comparison with the discharge sample.
- g. Risk Level 2 dischargers shall compare the uncontaminated sample to the samples of discharge using field analysis or through laboratory analysis.⁶
- h. Risk Level 2 dischargers shall keep all field /or analytical data in the SWPPP document.

12. Risk Level 2 – Watershed Monitoring Option

Risk Level 2 dischargers who are part of a qualified regional watershed-based monitoring program may be eligible for relief from the requirements in Sections I.5. The Regional Water Board may approve proposals to substitute an acceptable watershed-based monitoring program by determining if the watershed-based monitoring program will provide substantially similar monitoring information in evaluating discharger compliance with the requirements of this General Permit.

⁶ For laboratory analysis, all sampling, sample preservation, and analyses must be conducted according to test procedures under 40 CFR Part 136. Field discharge samples shall be collected and analyzed according to the specifications of the manufacturer of the sampling devices employed.

13. Risk Level 2 – Particle Size Analysis for Project Risk Justification

Risk Level 2 dischargers justifying an alternative project risk shall report a soil particle size analysis used to determine the RUSLE K-Factor. ASTM D-422 (Standard Test Method for Particle-Size Analysis of Soils), as revised, shall be used to determine the percentages of sand, very fine sand, silt, and clay on the site.

14. Risk Level 2 – Records

Risk Level 2 dischargers shall retain records of all storm water monitoring information and copies of all reports (including Annual Reports) for a period of at least three years. Risk Level 2 dischargers shall retain all records on-site while construction is ongoing. These records include:

- a. The date, place, time of facility inspections, sampling, visual observation (inspections), and/or measurements, including precipitation.
- b. The individual(s) who performed the facility inspections, sampling, visual observation (inspections), and or measurements.
- c. The date and approximate time of analyses.
- d. The individual(s) who performed the analyses.
- e. A summary of all analytical results from the last three years, the method detection limits and reporting units, the analytical techniques or methods used, and the chain of custody forms.
- f. Rain gauge readings from site inspections;
- g. Quality assurance/quality control records and results.
- h. Non-storm water discharge inspections and visual observation (inspections) and storm water discharge visual observation records (see Sections I.3 and I.10 above).
- i. Visual observation and sample collection exception records (see Section I.6 above).
- j. The records of any corrective actions and follow-up activities that resulted from analytical results, visual observation (inspections), or inspections.

15. Risk Level 2 – NAL Exceedance Report

- a. In the event that any effluent sample exceeds an applicable NAL, Risk Level 2 dischargers shall electronically submit all storm event sampling results to the State Water Board no later than 10 days after the conclusion of the storm event. The Regional Boards have the authority to require the submittal of an NAL Exceedance Report.
- b. Risk Level 2 dischargers shall certify each NAL Exceedance Report in accordance with the Special Provisions for Construction Activity.
- c. Risk Level 2 dischargers shall retain an electronic or paper copy of each NAL Exceedance Report for a minimum of three years after the date the annual report is filed.
- d. Risk Level 2 dischargers shall include in the NAL Exceedance Report:
 - i. The analytical method(s), method reporting unit(s), and method detection limit(s) of each analytical parameter (analytical results that are less than the method detection limit shall be reported as “less than the method detection limit”).
 - ii. The date, place, time of sampling, visual observation (inspections), and/or measurements, including precipitation.
 - iii. A description of the current BMPs associated with the effluent sample that exceeded the NAL and the proposed corrective actions taken.

Table 3 – Risk Level 2 Test Methods, Detection Limits, Reporting Units and Applicable NALs/NELs

Parameter	Test Method / Protocol	Discharge Type	Min. Detection Limit	Reporting Units	Numeric Action Level
pH	Field test with calibrated portable instrument	Risk Level 2 Discharges	0.2	pH units	lower NAL = 6.5 upper NAL = 8.5
Turbidity	EPA 0180.1 and/or field test with calibrated portable instrument	Risk Level 2 Discharges other than ATS	1	NTU	250 NTU
		For ATS discharges	1	NTU	N/A

ATTACHMENT E RISK LEVEL 3 REQUIREMENTS

A. Effluent Standards

[These requirements are the same as those in the General Permit order.]

1. Narrative – Risk Level 3 dischargers shall comply with the narrative effluent standards listed below:
 - a. Storm water discharges and authorized non-storm water discharges regulated by this General Permit shall not contain a hazardous substance equal to or in excess of reportable quantities established in 40 C.F.R. §§ 117.3 and 302.4, unless a separate NPDES Permit has been issued to regulate those discharges.
 - b. Dischargers shall minimize or prevent pollutants in storm water discharges and authorized non-storm water discharges through the use of controls, structures, and management practices that achieve BAT for toxic and non-conventional pollutants and BCT for conventional pollutants.
2. Numeric –Risk Level 3 dischargers are subject to a pH NAL of 6.5-8.5, and a turbidity NAL of 250 NTU.

B. Good Site Management "Housekeeping"

1. Risk Level 3 dischargers shall implement good site management (i.e., "housekeeping") measures for construction materials that could potentially be a threat to water quality if discharged. At a minimum, Risk Level 3 dischargers shall implement the following good housekeeping measures:
 - a. Conduct an inventory of the products used and/or expected to be used and the end products that are produced and/or expected to be produced. This does not include materials and equipment that are designed to be outdoors and exposed to environmental conditions (i.e. poles, equipment pads, cabinets, conductors, insulators, bricks, etc.).
 - b. Cover and berm loose stockpiled construction materials that are not actively being used (i.e. soil, spoils, aggregate, fly-ash, stucco, hydrated lime, etc.).

- c. Store chemicals in watertight containers (with appropriate secondary containment to prevent any spillage or leakage) or in a storage shed (completely enclosed).
 - d. Minimize exposure of construction materials to precipitation. This does not include materials and equipment that are designed to be outdoors and exposed to environmental conditions (i.e. poles, equipment pads, cabinets, conductors, insulators, bricks, etc.).
 - e. Implement BMPs to prevent the off-site tracking of loose construction and landscape materials.
2. Risk Level 3 dischargers shall implement good housekeeping measures for waste management, which, at a minimum, shall consist of the following:
- a. Prevent disposal of any rinse or wash waters or materials on impervious or pervious site surfaces or into the storm drain system.
 - b. Ensure the containment of sanitation facilities (e.g., portable toilets) to prevent discharges of pollutants to the storm water drainage system or receiving water.
 - c. Clean or replace sanitation facilities and inspecting them regularly for leaks and spills.
 - d. Cover waste disposal containers at the end of every business day and during a rain event.
 - e. Prevent discharges from waste disposal containers to the storm water drainage system or receiving water.
 - f. Contain and securely protecting stockpiled waste material from wind and rain at all times unless actively being used.
 - g. Implement procedures that effectively address hazardous and non-hazardous spills.
 - h. Develop a spill response and implementation element of the SWPPP prior to commencement of construction activities. The SWPPP shall require that:
 - i. Equipment and materials for cleanup of spills shall be available on site and that spills and leaks shall be cleaned up immediately and disposed of properly; and

- ii. Appropriate spill response personnel are assigned and trained.
 - i. Ensure the containment of concrete washout areas and other washout areas that may contain additional pollutants so there is no discharge into the underlying soil and onto the surrounding areas.
3. Risk Level 3 dischargers shall implement good housekeeping for vehicle storage and maintenance, which, at a minimum, shall consist of the following:
 - a. Prevent oil, grease, or fuel to leak in to the ground, storm drains or surface waters.
 - b. Place all equipment or vehicles, which are to be fueled, maintained and stored in a designated area fitted with appropriate BMPs.
 - c. Clean leaks immediately and disposing of leaked materials properly.
4. Risk Level 3 dischargers shall implement good housekeeping for landscape materials, which, at a minimum, shall consist of the following:
 - a. Contain stockpiled materials such as mulches and topsoil when they are not actively being used.
 - b. Contain fertilizers and other landscape materials when they are not actively being used.
 - c. Discontinuing the application of any erodible landscape material within 2 days before a forecasted rain event or during periods of precipitation.
 - d. Applying erodible landscape material at quantities and application rates according to manufacture recommendations or based on written specifications by knowledgeable and experienced field personnel.
 - e. Stacking erodible landscape material on pallets and covering or storing such materials when not being used or applied.
5. Risk Level 3 dischargers shall conduct an assessment and create a list of potential pollutant sources and identify any areas of the site where additional BMPs are necessary to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. This potential pollutant list shall be kept with the SWPPP and shall identify

all non-visible pollutants which are known, or should be known, to occur on the construction site. At a minimum, when developing BMPs, Risk Level 3 dischargers shall do the following:

- a. Consider the quantity, physical characteristics (e.g., liquid, powder, solid), and locations of each potential pollutant source handled, produced, stored, recycled, or disposed of at the site.
 - b. Consider the degree to which pollutants associated with those materials may be exposed to and mobilized by contact with storm water.
 - c. Consider the direct and indirect pathways that pollutants may be exposed to storm water or authorized non-storm water discharges. This shall include an assessment of past spills or leaks, non-storm water discharges, and discharges from adjoining areas.
 - d. Ensure retention of sampling, visual observation, and inspection records.
 - e. Ensure effectiveness of existing BMPs to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges.
6. Risk Level 3 dischargers shall implement good housekeeping measures on the construction site to control the air deposition of site materials and from site operations. Such particulates can include, but are not limited to, sediment, nutrients, trash, metals, bacteria, oil and grease and organics.
7. **Additional Risk Level 3 Requirement:** Risk Level 3 dischargers shall document all housekeeping BMPs in the SWPPP and REAP(s) in accordance with the nature and phase of the construction project. Construction phases at traditional land development projects include Grading and Land Development Phase, Streets and Utilities, or Vertical Construction for traditional land development projects.

C. Non-Storm Water Management

1. Risk Level 3 dischargers shall implement measures to control all non-storm water discharges during construction.
2. Risk Level 3 dischargers shall wash vehicles in such a manner as to prevent non-storm water discharges to surface waters or MS4 drainage systems.

3. Risk Level 3 dischargers shall clean streets in such a manner as to prevent unauthorized non-storm water discharges from reaching surface water or MS4 drainage systems.

D. Erosion Control

1. Risk Level 3 dischargers shall implement effective wind erosion control.
2. Risk Level 3 dischargers shall provide effective soil cover for inactive¹ areas and all finished slopes, open space, utility backfill, and completed lots.
3. Dischargers shall limit the use of plastic materials when more sustainable, environmentally friendly alternatives exist. Where plastic materials are deemed necessary, the discharger shall consider the use of plastic materials resistant to solar degradation.

E. Sediment Controls

1. Risk Level 3 dischargers shall establish and maintain effective perimeter controls and stabilize all construction entrances and exits to sufficiently control erosion and sediment discharges from the site.
2. On sites where sediment basins are to be used, Risk Level 3 dischargers shall, at minimum, design sediment basins according to the method provided in CASQA's Construction BMP Guidance Handbook.
3. **Additional Risk Level 3 Requirement:** Risk Level 3 dischargers shall implement appropriate erosion control BMPs (runoff control and soil stabilization) in conjunction with sediment control BMPs for areas under active² construction.
4. **Additional Risk Level 3 Requirement:** Risk Level 3 dischargers shall apply linear sediment controls along the toe of the slope, face of the slope, and at the grade breaks of exposed slopes to comply with sheet flow lengths³ in accordance with Table 1.

¹ Inactive areas of construction are areas of construction activity that have been disturbed and are not scheduled to be re-disturbed for at least 14 days.

² Active areas of construction are areas undergoing land surface disturbance. This includes construction activity during the preliminary stage, mass grading stage, streets and utilities stage and the vertical construction stage

³ Sheet flow length is the length that shallow, low velocity flow travels across a site.

Table 1 - Critical Slope/Sheet Flow Length Combinations

Slope Percentage	Sheet flow length not to exceed
0-25%	20 feet
25-50%	15 feet
Over 50%	10 feet

5. **Additional Risk Level 3 Requirement:** Risk Level 3 dischargers shall ensure that construction activity traffic to and from the project is limited to entrances and exits that employ effective controls to prevent offsite tracking of sediment.
6. **Additional Risk Level 3 Requirement:** Risk Level 3 dischargers shall ensure that all storm drain inlets and perimeter controls, runoff control BMPs, and pollutant controls at entrances and exits (e.g. tire washoff locations) are maintained and protected from activities that reduce their effectiveness.
7. **Additional Risk Level 3 Requirement:** Risk Level 3 dischargers shall inspect on a daily basis all immediate access roads daily. At a minimum daily (when necessary) and prior to any rain event, the discharger shall remove any sediment or other construction activity-related materials that are deposited on the roads (by vacuuming or sweeping).
8. **Additional Risk Level 3 Requirement:** The Regional Water Board may require Risk Level 3 dischargers to implement additional site-specific sediment control requirements if the implementation of the other requirements in this section are not adequately protecting the receiving waters.

F. Run-on and Run-off Controls

Risk Level 3 dischargers shall effectively manage all run-on, all runoff within the site and all runoff that discharges off the site. Run-on from off site shall be directed away from all disturbed areas or shall collectively be in compliance with the effluent limitations in this General Permit.

G. Inspection, Maintenance and Repair

1. Risk Level 3 dischargers shall ensure that all inspection, maintenance repair and sampling activities at the project location shall be performed or supervised by a Qualified SWPPP Practitioner (QSP) representing the discharger. The QSP may delegate any or all of these activities to an employee appropriately trained to do the task(s).

2. Risk Level 3 dischargers shall perform weekly inspections and observations, and at least once each 24-hour period during extended storm events, to identify and record BMPs that need maintenance to operate effectively, that have failed, or that could fail to operate as intended. Inspectors shall be the QSP or be trained by the QSP.
3. Upon identifying failures or other shortcomings, as directed by the QSP, Risk Level 3 dischargers shall begin implementing repairs or design changes to BMPs within 72 hours of identification and complete the changes as soon as possible.
4. For each inspection required, Risk Level 3 dischargers shall complete an inspection checklist, using a form provided by the State Water Board or Regional Water Board or in an alternative format.
5. Risk Level 3 dischargers shall ensure that checklists shall remain onsite with the SWPPP and at a minimum, shall include:
 - a. Inspection date and date the inspection report was written.
 - b. Weather information, including presence or absence of precipitation, estimate of beginning of qualifying storm event, duration of event, time elapsed since last storm, and approximate amount of rainfall in inches.
 - c. Site information, including stage of construction, activities completed, and approximate area of the site exposed.
 - d. A description of any BMPs evaluated and any deficiencies noted.
 - e. If the construction site is safely accessible during inclement weather, list the observations of all BMPs: erosion controls, sediment controls, chemical and waste controls, and non-storm water controls. Otherwise, list the results of visual inspections at all relevant outfalls, discharge points, downstream locations and any projected maintenance activities.
 - f. Report the presence of noticeable odors or of any visible sheen on the surface of any discharges.
 - g. Any corrective actions required, including any necessary changes to the SWPPP and the associated implementation dates.
 - h. Photographs taken during the inspection, if any.

- i. Inspector's name, title, and signature.

H. Rain Event Action Plan

1. **Additional Risk Level 3 Requirement:** The discharger shall ensure a QSP develop a Rain Event Action Plan (REAP) 48 hours prior to any likely precipitation event. A likely precipitation event is any weather pattern that is forecast to have a 50% or greater probability of producing precipitation in the project area. The QSP shall obtain a printed copy of precipitation forecast information from the National Weather Service Forecast Office (e.g., by entering the zip code of the project's location at <http://www.srh.noaa.gov/forecast>).
2. **Additional Risk Level 3 Requirement:** The discharger shall ensure a QSP develop the REAPs for all phases of construction (i.e., Grading and Land Development, Streets and Utilities, Vertical Construction, Final Landscaping and Site Stabilization).
3. **Additional Risk Level 3 Requirement:** The discharger shall ensure a QSP ensure that the REAP include, at a minimum, the following site information:
 - a. Site Address.
 - b. Calculated Risk Level (2 or 3).
 - c. Site Storm Water Manager Information including the name, company, and 24-hour emergency telephone number.
 - d. Erosion and Sediment Control Provider information including the name, company, and 24-hour emergency telephone number.
 - e. Storm Water Sampling Agent information including the name, company, and 24-hour emergency telephone number.
4. **Additional Risk Level 3 Requirement:** The QSP shall include in the REAP, at a minimum, the following project phase information:
 - a. Activities associated with each construction phase.
 - b. Trades active on the construction site during each construction phase.
 - c. Trade contractor information.
 - d. Suggested actions for each project phase.
5. **Additional Risk Level 3 Requirement:** The QSP shall develop additional REAPs for project sites where construction activities are indefinitely halted or postponed (Inactive Construction). At a minimum, Inactive Construction REAPs must include:

- a. Site Address.
 - b. Calculated Risk Level (2 or 3).
 - c. Site Storm Water Manager Information including the name, company, and 24-hour emergency telephone number.
 - d. Erosion and Sediment Control Provider information including the name, company, and 24-hour emergency telephone number.
 - e. Storm Water Sampling Agent information including the name, company, and 24-hour emergency telephone number.
 - f. Trades active on site during Inactive Construction.
 - g. Trade contractor information.
 - h. Suggested actions for inactive construction sites.
6. **Additional Risk Level 3 Requirement:** The discharger shall ensure a QSP begin implementation and make the REAP available onsite no later than 24 hours prior to the likely precipitation event.
7. **Additional Risk Level 3 Requirement:** The discharger shall ensure a QSP maintain onsite a paper copy of each REAP onsite in compliance with the record retention requirements of the Special Provisions in this General Permit.

I. Risk Level 3 Monitoring and Reporting Requirements

Table 2- Summary of Monitoring Requirements

Risk Level	Visual Inspections					Sample Collection	
	Quarterly Non-storm Water Discharge	Pre-storm Event		Daily Storm BMP	Post Storm	Storm Water Discharge	Receiving Water
		Baseline	REAP				
3	X	X	X	X	X	X	X ⁴

1. Construction Site Monitoring Program Requirements

- a. Pursuant to Water Code Sections 13383 and 13267, all dischargers subject to this General Permit shall develop and implement a written site-specific Construction Site Monitoring Program (CSMP) in accordance with the requirements of this Section. The CSMP shall include all monitoring procedures and instructions, location maps, forms, and checklists as required in this section. The CSMP shall be developed prior to the commencement of construction activities, and revised as necessary to reflect project revisions. The CSMP shall be a part of the Storm Water Pollution Prevention Plan (SWPPP), included as an appendix or separate SWPPP chapter.
- b. Existing dischargers registered under the State Water Board Order No. 99-08-DWQ shall make and implement necessary revisions to their Monitoring Program to reflect the changes in this General Permit in a timely manner, but no later than July 1, 2010. Existing dischargers shall continue to implement their existing Monitoring Program in compliance with State Water Board Order No. 99-08-DWQ until the necessary revisions are completed according to the schedule above.
- c. When a change of ownership occurs for all or any portion of the construction site prior to completion or final stabilization, the new discharger shall comply with these requirements as of the date the ownership change occurs.

2. Objectives

The CSMP shall be developed and implemented to address the following objectives:

⁴ When receiving water monitoring trigger is exceeded

- a. To demonstrate that the site is in compliance with the Discharge Prohibitions and applicable Numeric Action Levels (NALs) of this General Permit.
 - b. To determine whether non-visible pollutants are present at the construction site and are causing or contributing to exceedances of water quality objectives.
 - c. To determine whether immediate corrective actions, additional Best Management Practice (BMP) implementation, or SWPPP revisions are necessary to reduce pollutants in storm water discharges and authorized non-storm water discharges.
 - d. To determine whether BMPs included in the SWPPP/Rain Event Action Plan (REAP) are effective in preventing or reducing pollutants in storm water discharges and authorized non-storm water discharges.
- 3. Risk Level 3 – Visual Monitoring (Inspection) Requirements for Qualifying Rain Events**
- a. Risk Level 3 dischargers shall visually observe (inspect) storm water discharges at all discharge locations within two business days (48 hours) after each qualifying rain event.
 - b. Risk Level 3 dischargers shall visually observe (inspect) the discharge of stored or contained storm water that is derived from and discharged subsequent to a qualifying rain event producing precipitation of ½ inch or more at the time of discharge. Stored or contained storm water that will likely discharge after operating hours due to anticipated precipitation shall be observed prior to the discharge during operating hours.
 - c. Risk Level 3 dischargers shall conduct visual observations (inspections) during business hours only.
 - d. Risk Level 3 dischargers shall record the time, date and rain gauge reading of all qualifying rain events.
 - e. Within 2 business days (48 hours) prior to each qualifying rain event, Risk Level 3 dischargers shall visually observe (inspect):
 - i. all storm water drainage areas to identify any spills, leaks, or uncontrolled pollutant sources. If needed, the discharger shall implement appropriate corrective actions.

- ii. all BMPs to identify whether they have been properly implemented in accordance with the SWPPP/REAP. If needed, the discharger shall implement appropriate corrective actions.
 - iii. any storm water storage and containment areas to detect leaks and ensure maintenance of adequate freeboard.
- f. For the visual observations (inspections) described in c.i. and c.iii above, Risk Level 3 dischargers shall observe the presence or absence of floating and suspended materials, a sheen on the surface, discolorations, turbidity, odors, and source(s) of any observed pollutants.
 - g. Within two business days (48 hours) after each qualifying rain event, Risk Level 3 dischargers shall conduct post rain event visual observations (inspections) to (1) identify whether BMPs were adequately designed, implemented, and effective, and (2) identify additional BMPs and revise the SWPPP accordingly.
 - h. Risk Level 3 dischargers shall maintain on-site records of all visual observations (inspections), personnel performing the observations, observation dates, weather conditions, locations observed, and corrective actions taken in response to the observations.

4. Risk Level 3 – Water Quality Sampling and Analysis

- a. Risk Level 3 dischargers shall collect storm water grab samples from sampling locations, as defined in Section I.5. The storm water grab sample(s) obtained shall be representative of the flow and characteristics of the discharge.
- b. At minimum, Risk Level 3 dischargers shall collect 3 samples per day of the qualifying event.
- c. Risk Level 3 dischargers shall ensure that the grab samples collected of stored or contained storm water are from discharges subsequent to a qualifying rain event (producing precipitation of ½ inch or more at the time of discharge).

Storm Water Effluent Monitoring Requirements

- d. Risk Level 3 dischargers shall analyze their effluent samples for:
 - i. pH and turbidity.

- ii. Any additional parameters for which monitoring is required by the Regional Water Board.
- e. Risk 3 dischargers shall electronically submit all storm event sampling results to the State Water Board no later than 10 days after the conclusion of the storm event.

Receiving Water Monitoring Requirements

- f. In the event that a Risk Level 3 discharger's effluent exceeds the daily average receiving water monitoring trigger of 500 NTU turbidity or the daily average pH range 6.0-9.0 contained in this General Permit and has a direct discharge into receiving waters, the Risk Level 3 discharger shall subsequently sample receiving waters (RWs) for turbidity, pH (if applicable), and SSC for the duration of coverage under this General Permit. If a Risk Level 3 discharger utilizing ATS with direct discharges into receiving waters discharges effluent that exceeds the NELs in this permit, the discharger shall subsequently sample RWs for turbidity, pH (if applicable), and SSC for the duration of coverage under this General Permit.
- g. Risk Level 3 dischargers disturbing 30 acres or more of the landscape and with direct discharges into receiving waters shall conduct or participate in benthic macroinvertebrate bioassessment of RWs prior to commencement of construction activity (See Appendix 3).
- h. Risk Level 3 dischargers shall obtain RW samples in accordance with the Receiving Water sampling location section (Section I.5), below.

5. Risk Level 3 – Storm Water Discharge Water Quality Sampling Locations

Effluent Sampling Locations

- a. Risk Level 3 dischargers shall perform sampling and analysis of storm water discharges to characterize discharges associated with construction activity from the entire project disturbed area.
- b. Risk Level 3 dischargers shall collect effluent samples at all discharge points where storm water is discharged off-site.

- c. Risk Level 3 dischargers shall ensure that storm water discharge collected and observed represent⁵ the effluent in each drainage area based on visual observation of the water and upstream conditions.
- d. Risk Level 3 dischargers shall monitor and report site run-on from surrounding areas if there is reason to believe run-on may contribute to an exceedance of NALs.
- e. Risk Level 3 dischargers who deploy an ATS on their site, or a portion on their site, shall collect ATS effluent samples and measurements from the discharge pipe or another location representative of the nature of the discharge.
- f. Risk Level 3 dischargers shall select analytical test methods from the list provided in Table 3 below.
- g. All storm water sample collection preservation and handling shall be conducted in accordance with Section 1.7 “Storm Water Sample Collection and Handling Instructions” below.

Receiving Water Sampling Locations

- h. **Upstream/up-gradient RW samples:** Risk Level 3 dischargers shall obtain any required upstream/up-gradient receiving water samples from a representative and accessible location as close as possible and upstream from the effluent discharge point.
- i. **Downstream/down-gradient RW samples:** Risk Level 3 dischargers shall obtain any required downstream/down-gradient receiving water samples from a representative and accessible location as close as possible and downstream from the effluent discharge point.
- j. If two or more discharge locations discharge to the same receiving water, Risk Level 3 dischargers may sample the receiving water at a single upstream and downstream location.

⁵ For example, if there has been concrete work recently in an area, or drywall scrap is exposed to the rain, a pH sample shall be taken of drainage from the relevant work area. Similarly, if sediment-laden water is flowing through some parts of a silt fence, samples shall be taken of the sediment laden water even if most water flowing through the fence is clear.

6. Risk Level 3 – Visual Observation and Sample Collection Exemptions

- a. Risk Level 3 dischargers shall be prepared to collect samples and conduct visual observation (inspections) until the minimum requirements of Sections I.3 and I.4 above are completed. Risk Level 3 dischargers are not required to physically collect samples or conduct visual observation (inspections) under the following conditions:
 - i. During dangerous weather conditions such as flooding and electrical storms.
 - ii. Outside of scheduled site business hours.
- b. If no required samples or visual observation (inspections) are collected due to these exceptions, Risk Level 3 dischargers shall include an explanation in their SWPPP and in the Annual Report documenting why the sampling or visual observation (inspections) were not conducted.

7. Risk Level 3 – Storm Water Sample Collection and Handling Instructions

- a. Risk Level 3 dischargers shall refer to Table 3 below for test methods, detection limits, and reporting units.
- b. Risk Level 3 dischargers shall ensure that testing laboratories will receive samples within 48 hours of the physical sampling (unless otherwise required by the laboratory), and shall use only the sample containers provided by the laboratory to collect and store samples.
- c. Risk Level 3 dischargers shall designate and train personnel to collect, maintain, and ship samples in accordance with the Surface Water Ambient Monitoring Program's (SWAMP) 2008 Quality Assurance Program Plan (QAPrP).⁶

⁶ Additional information regarding SWAMP's QAPrP can be found at http://www.waterboards.ca.gov/water_issues/programs/swamp/.

QAPrP:http://www.waterboards.ca.gov/water_issues/programs/swamp/docs/qapp/swamp_qapp_master090108a.pdf

8. Risk Level 3 – Monitoring Methods

- a. Risk Level 3 dischargers shall include a description of the following items in the CSMP:
 - i. Visual observation locations, visual observation procedures, and visual observation follow-up and tracking procedures.
 - ii. Sampling locations, and sample collection and handling procedures. This shall include detailed procedures for sample collection, storage, preservation, and shipping to the testing lab to assure that consistent quality control and quality assurance is maintained. Dischargers shall attach to the monitoring program an example Chain of Custody form used when handling and shipping samples.
 - iii. Identification of the analytical methods and related method detection limits (if applicable) for each parameter required in Section I.4 above.
- b. Risk Level 3 dischargers shall ensure that all sampling and sample preservation are in accordance with the current edition of "Standard Methods for the Examination of Water and Wastewater" (American Public Health Association). All monitoring instruments and equipment (including a discharger's own field instruments for measuring pH and turbidity) should be calibrated and maintained in accordance with manufacturers' specifications to ensure accurate measurements. Risk Level 3 dischargers shall ensure that all laboratory analyses are conducted according to test procedures under 40 CFR Part 136, unless other test procedures have been specified in this General Permit or by the Regional Water Board. With the exception of field analysis conducted by the discharger for turbidity and pH, all analyses should be sent to and conducted at a laboratory certified for such analyses by the State Department of Health Services (SSC exception). Risk Level 3 dischargers shall conduct their own field analysis of pH and may conduct their own field analysis of turbidity if the discharger has sufficient capability (qualified and trained employees, properly calibrated and maintained field instruments, etc.) to adequately perform the field analysis.

9. Risk Level 3 – Analytical Methods

- a. Risk Level 3 dischargers shall refer to Table 3 below for test methods, detection limits, and reporting units.

- b. **pH:** Risk Level 3 dischargers shall perform pH analysis on-site with a calibrated pH meter or a pH test kit. Risk Level 3 dischargers shall record pH monitoring results on paper and retain these records in accordance with Section I.14, below.
- c. **Turbidity:** Risk Level 3 dischargers shall perform turbidity analysis using a calibrated turbidity meter (turbidimeter), either on-site or at an accredited lab. Acceptable test methods include Standard Method 2130 or USEPA Method 180.1. The results will be recorded in the site log book in Nephelometric Turbidity Units (NTU).
- d. **Suspended sediment concentration (SSC):** Risk Level 3 dischargers that exceed the turbidity Receiving Water Monitoring Trigger shall perform SSC analysis using ASTM Method D3977-97.
- e. **Bioassessment:** Risk Level 3 dischargers shall perform bioassessment sampling and analysis according to Appendix 3 of this General Permit.

10. Risk Level 3 - Non-Storm Water Discharge Monitoring Requirements

- a. Visual Monitoring Requirements:
 - i. Risk Level 3 dischargers shall visually observe (inspect) each drainage area for the presence of (or indications of prior) unauthorized and authorized non-storm water discharges and their sources.
 - ii. Risk Level 3 dischargers shall conduct one visual observation (inspection) quarterly in each of the following periods: January-March, April-June, July-September, and October-December. Visual observation (inspections) are only required during daylight hours (sunrise to sunset).
 - iii. Risk Level 3 dischargers shall ensure that visual observations (inspections) document the presence or evidence of any non-storm water discharge (authorized or unauthorized), pollutant characteristics (floating and suspended material, sheen, discoloration, turbidity, odor, etc.), and source. Risk Level 3 dischargers shall maintain on-site records indicating the personnel performing the visual observation (inspections), the dates and approximate time each drainage area and non-storm water discharge was observed, and the response taken to eliminate unauthorized non-storm water discharges and to

reduce or prevent pollutants from contacting non-storm water discharges.

- b. Effluent Sampling Locations:
 - i. Risk Level 3 dischargers shall sample effluent at all discharge points where non-storm water and/or authorized non-storm water is discharged off-site.
 - ii. Risk Level 3 dischargers shall send all non-storm water sample analyses to a laboratory certified for such analyses by the State Department of Health Services.
 - iii. Risk Level 3 dischargers shall monitor and report run-on from surrounding areas if there is reason to believe run-on may contribute to an exceedance of NALs.

11. Risk Level 3 – Non-Visible Pollutant Monitoring Requirements

- a. Risk Level 3 dischargers shall collect one or more samples during any breach, malfunction, leakage, or spill observed during a visual inspection which could result in the discharge of pollutants to surface waters that would not be visually detectable in storm water.
- b. Risk Level 3 dischargers shall ensure that water samples are large enough to characterize the site conditions.
- c. Risk Level 3 dischargers shall collect samples at all discharge locations that can be safely accessed.
- d. Risk Level 3 dischargers shall collect samples during the first two hours of discharge from rain events that occur during business hours and which generate runoff.
- e. Risk Level 3 dischargers shall analyze samples for all non-visible pollutant parameters (if applicable) - parameters indicating the presence of pollutants identified in the pollutant source assessment required (Risk Level 3 dischargers shall modify their CSMPs to address these additional parameters in accordance with any updated SWPPP pollutant source assessment).
- f. Risk Level 3 dischargers shall collect a sample of storm water that has not come in contact with the disturbed soil or the materials stored or used on-site (uncontaminated sample) for comparison with the discharge sample.

- g. Risk Level 3 dischargers shall compare the uncontaminated sample to the samples of discharge using field analysis or through laboratory analysis.⁷
- h. Risk Level 3 dischargers shall keep all field /or analytical data in the SWPPP document.

12. Risk Level 3 – Watershed Monitoring Option

Risk Level 3 dischargers who are part of a qualified regional watershed-based monitoring program may be eligible for relief from the requirements in Sections I.5. The Regional Water Board may approve proposals to substitute an acceptable watershed-based monitoring program by determining if the watershed-based monitoring program will provide substantially similar monitoring information in evaluating discharger compliance with the requirements of this General Permit.

13. Risk Level 3 – Particle Size Analysis for Project Risk Justification

Risk Level 3 dischargers justifying an alternative project risk shall report a soil particle size analysis used to determine the RUSLE K-Factor. ASTM D-422 (Standard Test Method for Particle-Size Analysis of Soils), as revised, shall be used to determine the percentages of sand, very fine sand, silt, and clay on the site.

14. Risk Level 3 – Records

Risk Level 3 dischargers shall retain records of all storm water monitoring information and copies of all reports (including Annual Reports) for a period of at least three years. Risk Level 3 dischargers shall retain all records on-site while construction is ongoing. These records include:

- a. The date, place, time of facility inspections, sampling, visual observation (inspections), and/or measurements, including precipitation.
- b. The individual(s) who performed the facility inspections, sampling, visual observation (inspections), and or measurements.
- c. The date and approximate time of analyses.

⁷ For laboratory analysis, all sampling, sample preservation, and analyses must be conducted according to test procedures under 40 CFR Part 136. Field discharge samples shall be collected and analyzed according to the specifications of the manufacturer of the sampling devices employed.

- d. The individual(s) who performed the analyses.
- e. A summary of all analytical results from the last three years, the method detection limits and reporting units, the analytical techniques or methods used, and the chain of custody forms.
- f. Rain gauge readings from site inspections.
- g. Quality assurance/quality control records and results.
- h. Non-storm water discharge inspections and visual observation (inspections) and storm water discharge visual observation records (see Sections I.3 and I.10 above).
- i. Visual observation and sample collection exception records (see Section I.6 above).
- j. The records of any corrective actions and follow-up activities that resulted from analytical results, visual observation (inspections), or inspections.

15. Risk Level 3 – NAL Exceedance Report

- a. Risk Level 3 dischargers shall electronically submit all storm event sampling results to the State Water Board no later than 10 days after the conclusion of the storm event. The Regional Boards have the authority to require the submittal of an NAL Exceedance Report.
- b. Risk Level 3 dischargers shall certify each NAL Exceedance Report in accordance with the Special Provisions for Construction Activity In this General Permit.
- c. Risk Level 3 dischargers shall retain an electronic or paper copy of each NAL Exceedance Report for a minimum of three years after the date the annual report is filed.
- d. Risk Level 3 dischargers shall include in the NAL Exceedance Report:
 - i. The analytical method(s), method reporting unit(s), and method detection limit(s) of each analytical parameter (analytical results that are less than the method detection limit shall be reported as “less than the method detection limit”).

- ii. The date, place, time of sampling, visual observation (inspections), and/or measurements, including precipitation.
- iii. A description of the current BMPs associated with the effluent sample that exceeded the NAL and the proposed corrective actions taken.

16. Risk Level 3 – Bioassessment

- a. Risk Level 3 dischargers with a total project-related ground disturbance exceeding 30 acres shall:
 - i. Conduct bioassessment monitoring, as described in Appendix 3.
 - ii. Include the collection and reporting of specified in stream biological data and physical habitat.
 - iii. Use the bioassessment sample collection and Quality Assurance & Quality Control (QA/QC) protocols developed by the State of California's Surface Water Ambient Monitoring Program (SWAMP).⁸
 - b. Risk Level 3 dischargers qualifying for bioassessment, where construction commences out of an index period for the site location shall:
 - i. Receive Regional Board approval for the sampling exception.
 - ii. Conduct bioassessment monitoring, as described in Appendix 3.
 - iii. Include the collection and reporting of specified instream biological data and physical habitat.
 - iv. Use the bioassessment sample collection and Quality Assurance & Quality Control (QA/QC) protocols developed by the State of California's Surface Water Ambient Monitoring Program (SWAMP).
- OR
- v. Make a check payable to: Cal State Chico Foundation (SWAMP Bank Account) or San Jose State Foundation (SWAMP Bank Account) and include the WDID# on the check for the amount calculated for the exempted project.

⁸ http://www.waterboards.ca.gov/water_issues/programs/swamp/.

- vi. Send a copy of the check to the Regional Water Board office for the site's region.
- vii. Invest **\$7,500.00 X The number of samples required** into the SWAMP program as compensation (upon regional board approval).

Table 3 – Risk Level 3 Test Methods, Detection Limits, Reporting Units and Applicable NALs

Parameter	Test Method / Protocol	Discharge Type	Min. Detection Limit	Reporting Units	Numeric Action Level	Numeric Effluent Limitation	Receiving Water Monitoring Trigger
pH	Field test with calibrated portable instrument	Risk Level 3 Discharges	0.2	pH units	lower NAL = 6.5 upper NAL = 8.5	N/A	lower limit = 6.0 upper limit = 9.0
Turbidity	EPA 0180.1 and/or field test with calibrated portable instrument	Risk Level 3 Discharges other than ATS	1	NTU	250 NTU	N/A	500 NTU
		For ATS discharges	1	NTU	N/A	10 NTU for Daily Weighted Average & 20 NTU for Any Single Sample	10 NTU for Daily Weighted Average & 20 NTU for Any Single Sample
SSC	ASTM Method D 3977-97 ⁹	Risk Level 3 (if Receiving Water Monitoring Trigger exceeded)	5	mg/L	N/A	N/A	N/A
Bioassessment	(STE) Level I of (SAFIT), ¹⁰ fixed-count of 600 org/sample	Risk Level 3 projects > 30 acres	N/A	N/A	N/A	N/A	N/A

⁹ ASTM, 1999, Standard Test Method for Determining Sediment Concentration in Water Samples: American Society of Testing and Materials, D 3977-97, Vol. 11.02, pp. 389-394.

¹⁰ The current SAFIT STEs (28 November 2006) list requirements for both the Level I and Level II taxonomic effort, and are located at: http://www.swrcb.ca.gov/swamp/docs/safit/ste_list.pdf. When new editions are published by SAFIT, they will supersede all previous editions. All editions will be posted at the State Water Board's SWAMP website.

ATTACHMENT F: Active Treatment System (ATS) Requirements

Table 1 – Numeric Effluent Limitations, Numeric Action Levels, Test Methods, Detection Limits, and Reporting Units

Parameter	Test Method	Discharge Type	Min. Detection Limit	Units	Numeric Action Level	Numeric Effluent Limitation
Turbidity	EPA 0180.1 and/or field test with a calibrated portable instrument	For ATS discharges	1	NTU	N/A	10 NTU for Daily Flow-Weighted Average & 20 NTU for Any Single Sample

A. Dischargers choosing to implement an Active Treatment System (ATS) on their site shall comply with all of the requirements in this Attachment.

B. The discharger shall maintain a paper copy of each ATS specification onsite in compliance with the record retention requirements in the Special Provisions of this General Permit.

C. ATS Design, Operation and Submittals

1. The ATS shall be designed and approved by a Certified Professional in Erosion and Sediment Control (CPESC), a Certified Professional in Storm Water Quality (CPSWQ); a California registered civil engineer; or any other California registered engineer.
2. The discharger shall ensure that the ATS is designed in a manner to preclude the accidental discharge of settled floc¹ during floc pumping or related operations.
3. The discharger shall design outlets to dissipate energy from concentrated flows.
4. The discharger shall install and operate an ATS by assigning a lead person (or project manager) who has either a minimum of five years construction storm

¹ Floc is defined as a clump of solids formed by the chemical action in ATS systems.

water experience or who is a licensed contractors specifically holding a California Class A Contractors license.²

5. The discharger shall prepare an ATS Plan that combines the site-specific data and treatment system information required to safely and efficiently operate an ATS. The ATS Plan shall be electronically submitted to the State Water Board at least 14 days prior to the planned operation of the ATS and a paper copy shall be available onsite during ATS operation. At a minimum, the ATS Plan shall include:
 - a. ATS Operation and Maintenance Manual for All Equipment.
 - b. ATS Monitoring, Sampling & Reporting Plan, including Quality Assurance/Quality Control (QA/QC).
 - c. ATS Health and Safety Plan.
 - d. ATS Spill Prevention Plan.
6. The ATS shall be designed to capture and treat (within a 72-hour period) a volume equivalent to the runoff from a 10-year, 24-hour storm event using a watershed runoff coefficient of 1.0.

D. Treatment – Chemical Coagulation/Flocculation

1. Jar tests shall be conducted using water samples selected to represent typical site conditions and in accordance with ASTM D2035-08 (2003).
2. The discharger shall conduct, at minimum, six site-specific jar tests (per polymer with one test serving as a control) for each project to determine the proper polymer and dosage levels for their ATS.
3. Single field jar tests may also be conducted during a project if conditions warrant, for example if construction activities disturb changing types of soils, which consequently cause change in storm water and runoff characteristics.

E. Residual Chemical and Toxicity Requirements

1. The discharger shall utilize a residual chemical test method that has a method detection limit (MDL) of 10% or less than the maximum allowable threshold

² Business and Professions Code Division 3, Chapter 9, Article 4, Class A Contractor: A general engineering contractor is a contractor whose principal contracting business is in connection with fixed works requiring specialized engineering knowledge and skill. [<http://www.cslb.ca.gov/General-Information/library/licensing-classifications.asp>].

concentration³ (MATC) for the specific coagulant in use and for the most sensitive species of the chemical used.

2. The discharger shall utilize a residual chemical test method that produces a result within one hour of sampling.
3. The discharger shall have a California State certified laboratory validate the selected residual chemical test. Specifically the lab will review the test protocol, test parameters, and the detection limit of the coagulant. The discharger shall electronically submit this documentation as part of the ATS Plan.
4. If the discharger cannot utilize a residual chemical test method that meets the requirements above, the discharger shall operate the ATS in Batch Treatment⁴ mode.
5. A discharger planning to operate in Batch Treatment mode shall perform toxicity testing in accordance with the following:
 - a. The discharger shall initiate acute toxicity testing on effluent samples representing effluent from each batch prior to discharge⁵. All bioassays shall be sent to a laboratory certified by the Department of Health Services (DHS) Environmental Laboratory Accreditation Program (ELAP). The required field of testing number for Whole Effluent Toxicity (WET) testing is E113.⁶
 - b. Acute toxicity tests shall be conducted with the following species and protocols. The methods to be used in the acute toxicity testing shall be those outlined for a 96-hour acute test in "Methods for Measuring the Acute Toxicity of Effluents and Receiving Water to Freshwater and Marine Organisms, USEPA-841-R-02-012" for Fathead minnow, *Pimephales promelas* (fathead minnow). Acute toxicity for *Oncorhynchus mykiss* (Rainbow Trout) may be used as a substitute for testing fathead minnows.
 - c. All toxicity tests shall meet quality assurance criteria and test acceptability criteria in the most recent versions of the EPA test method for WET testing.
 - d. The discharger shall electronically report all acute toxicity testing.

³ The Maximum Allowable Threshold Concentration (MATC) is the allowable concentration of residual, or dissolved, coagulant/flocculant in effluent. The MATC shall be coagulant/flocculant-specific, and based on toxicity testing conducted by an independent, third-party laboratory. A typical MATC would be: The MATC is equal to the geometric mean of the NOEC (No Observed Effect Concentration) and LOEC (Lowest Observed Effect Concentration) Acute and Chronic toxicity results for most sensitive species determined for the specific coagulant. The most sensitive species test shall be used to determine the MATC.

⁴ Batch Treatment mode is defined as holding or recirculating the treated water in a holding basin or tank(s) until treatment is complete or the basin or storage tank(s) is full.

⁵ This requirement only requires that the test be initiated prior to discharge.

⁶ http://www.dhs.ca.gov/ps/ls/elap/pdf/FOT_Desc.pdf.

F. Filtration

1. The ATS shall include a filtration step between the coagulant treatment train and the effluent discharge. This is commonly provided by sand, bag, or cartridge filters, which are sized to capture suspended material that might pass through the clarifier tanks.
2. Differential pressure measurements shall be taken to monitor filter loading and confirm that the final filter stage is functioning properly.

G. Residuals Management

1. Sediment shall be removed from the storage or treatment cells as necessary to ensure that the cells maintain their required water storage (i.e., volume) capability.
2. Handling and disposal of all solids generated during ATS operations shall be done in accordance with all local, state, and federal laws and regulations.

H. ATS Instrumentation

1. The ATS shall be equipped with instrumentation that automatically measures and records effluent water quality data and flow rate.
2. The minimum data recorded shall be consistent with the Monitoring and Reporting requirements below, and shall include:
 - a. Influent Turbidity
 - b. Effluent Turbidity
 - c. Influent pH
 - d. Effluent pH
 - e. Residual Chemical
 - f. Effluent Flow rate
 - g. Effluent Flow volume
3. Systems shall be equipped with a data recording system, such as data loggers or webserver-based systems, which records each measurement on a frequency no longer than once every 15 minutes.

4. Cumulative flow volume shall be recorded daily. The data recording system shall have the capacity to record a minimum of seven days continuous data.
5. Instrumentation systems shall be interfaced with system control to provide auto shutoff or recirculation in the event that effluent measurements exceed turbidity or pH.
6. The system shall also assure that upon system upset, power failure, or other catastrophic event, the ATS will default to a recirculation mode or safe shut down.
7. Instrumentation (flow meters, probes, valves, streaming current detectors, controlling computers, etc.) shall be installed and maintained per manufacturer's recommendations, which shall be included in the QA/QC plan.
8. The QA/QC plan shall also specify calibration procedures and frequencies, instrument method detection limit or sensitivity verification, laboratory duplicate procedures, and other pertinent procedures.
9. The instrumentation system shall include a method for controlling coagulant dose, to prevent potential overdosing. Available technologies include flow/turbidity proportional metering, periodic jar testing and metering pump adjustment, and ionic charge measurement controlling the metering pump.

I. ATS Effluent Discharge

1. ATS effluent shall comply with all provisions and prohibitions in this General Permit, specifically the NELs.
2. NELs for discharges from an ATS:
 - a. Turbidity of all ATS discharges shall be less than 10 NTU for daily flow-weighted average of all samples and 20 NTU for any single sample.
 - b. Residual Chemical shall be < 10% of MATC⁷ for the most sensitive species of the chemical used.

⁷ The Maximum Allowable Threshold Concentration (MATC) is the allowable concentration of residual, or dissolved, coagulant/flocculant in effluent. The MATC shall be coagulant/flocculant-specific, and based on toxicity testing conducted by an independent, third-party laboratory. The MATC is equal to the geometric mean of the NOEC (No Observed Effect Concentration) and LOEC (Lowest Observed Effect Concentration) Acute and Chronic toxicity results for most sensitive species determined for the specific coagulant. The most sensitive species test shall be used to determine the MATC.

3. If an analytical effluent sampling result exceeds the turbidity NEL (as listed in Table 1), the discharger is in violation of this General Permit and shall electronically file the results in violation within 24-hours of obtaining the results.
4. If ATS effluent is authorized to discharge into a sanitary sewer system, the discharger shall comply with any pre-treatment requirements applicable for that system. The discharger shall include any specific criteria required by the municipality in the ATS Plan.
5. Compliance Storm Event:

Discharges of storm water from ATS shall comply with applicable NELs (above) unless the storm event causing the discharges is determined after the fact to be equal to or larger than the Compliance Storm Event (expressed in inches of rainfall). The Compliance Storm Event for ATS discharges is the 10 year, 24 hour storm, as determined using these maps:

<http://www.wrcc.dri.edu/pcpnfreq/nca10y24.gif>
<http://www.wrcc.dri.edu/pcpnfreq/sca10y24.gif>

This exemption is dependent on the submission of rain gauge data verifying the storm event is equal to or larger than the Compliance Storm.

J. Operation and Maintenance Plan

1. Each Project shall have a site-specific Operation and Maintenance (O&M) Manual covering the procedures required to install, operate and maintain the ATS.⁸
2. The O&M Manual shall only be used in conjunction with appropriate project-specific design specifications that describe the system configuration and operating parameters.
3. The O&M Manual shall have operating manuals for specific pumps, generators, control systems, and other equipment.

K. Sampling and Reporting Quality Assurance/ Quality Check (QA/QC) Plan

4. A project-specific QA/QC Plan shall be developed for each project. The QA/QC Plan shall include at a minimum:
 - a. Calibration – Calibration methods and frequencies for all system and field instruments shall be specified.

⁸ The manual is typically in a modular format covering generalized procedures for each component that is utilized in a particular system.

- b. Method Detection Limits (MDLs) – The methods for determining MDLs shall be specified for each residual coagulant measurement method. Acceptable minimum MDLs for each method, specific to individual coagulants, shall be specified.
- c. Laboratory Duplicates – Requirements for monthly laboratory duplicates for residual coagulant analysis shall be specified.

L. Personnel Training

- 1. Operators shall have training specific to using an ATS and liquid coagulants for storm water discharges in California.
- 2. The training shall be in the form of a formal class with a certificate and requirements for testing and certificate renewal.
- 3. Training shall include a minimum of eight hours classroom and 32 hours field training. The course shall cover the following topics:
 - a. Coagulation Basics –Chemistry and physical processes
 - b. ATS System Design and Operating Principles
 - c. ATS Control Systems
 - d. Coagulant Selection – Jar testing, dose determination, etc.
 - e. Aquatic Safety/Toxicity of Coagulants, proper handling and safety
 - f. Monitoring, Sampling, and Analysis
 - g. Reporting and Recordkeeping
 - h. Emergency Response

M. Active Treatment System (ATS) Monitoring Requirements

Any discharger who deploys an ATS on their site shall conduct the following:

- 1. Visual Monitoring
 - a. A designated responsible person shall be on site daily at all times during treatment operations.

- b. Daily on-site visual monitoring of the system for proper performance shall be conducted and recorded in the project data log.
 - i. The log shall include the name and phone number of the person responsible for system operation and monitoring.
 - ii. The log shall include documentation of the responsible person's training.

2. Operational and Compliance Monitoring

- a. Flow shall be continuously monitored and recorded at not greater than 15-minute intervals for total volume treated and discharged.
- b. Influent and effluent pH must be continuously monitored and recorded at not greater than 15-minute intervals.
- c. Influent and effluent turbidity (expressed in NTU) must be continuously monitored and recorded at not greater than 15-minute intervals.
- d. The type and amount of chemical used for pH adjustment, if any, shall be monitored and recorded.
- e. Dose rate of chemical used in the ATS system (expressed in mg/L) shall be monitored and reported 15-minutes after startup and every 8 hours of operation.
- f. Laboratory duplicates – monthly laboratory duplicates for residual coagulant analysis must be performed and records shall be maintained onsite.
- g. Effluent shall be monitored and recorded for residual chemical/additive levels.
- h. If a residual chemical/additive test does not exist and the ATS is operating in a batch treatment mode of operation refer to the toxicity monitoring requirements below.

3. Toxicity Monitoring

A discharger operating in batch treatment mode shall perform toxicity testing in accordance with the following:

- a. The discharger shall initiate acute toxicity testing on effluent samples representing effluent from each batch prior to discharge.⁹ All bioassays shall be sent to a laboratory certified by the Department of Health Services (DHS)

⁹ This requirement only requires that the test be initiated prior to discharge.

Environmental Laboratory Accreditation Program (ELAP). The required field of testing number for Whole Effluent Toxicity (WET) testing is E113.¹⁰

- b. Acute toxicity tests shall be conducted with the following species and protocols. The methods to be used in the acute toxicity testing shall be those outlined for a 96-hour acute test in “Methods for Measuring the Acute Toxicity of Effluents and Receiving Water to Freshwater and Marine Organisms, USEPA-841-R-02-012” for Fathead minnow, *Pimephales promelas* or Rainbow trout *Oncorhynchus mykiss* may be used as a substitute for fathead minnow.
- c. All toxicity tests shall meet quality assurance criteria and test acceptability criteria in the most recent versions of the EPA test method for WET testing.¹¹

4. Reporting and Recordkeeping

At a minimum, every 30 days a LRP representing the discharger shall access the State Water Boards Storm Water Multi-Application and Report Tracking system (SMARTS) and electronically upload field data from the ATS. Records must be kept for three years after the project is completed .

5. Non-compliance Reporting

- a. Any indications of toxicity or other violations of water quality objectives shall be reported to the appropriate regulatory agency as required by this General Permit.
- b. Upon any measurements that exceed water quality standards, the system operator shall immediately notify his supervisor or other responsible parties, who shall notify the Regional Water Board.
- c. If any monitoring data exceeds any applicable NEL in this General Permit, the discharger shall electronically submit a NEL Violation Report to the State Water Board within 24 hours after the NEL exceedance has been identified.
 - i. ATS dischargers shall certify each NEL Violation Report in accordance with the Special Provisions for Construction Activity in this General Permit.
 - ii. ATS dischargers shall retain an electronic or paper copy of each NEL Violation Report for a minimum of three years after the date the annual report is filed.
 - iii. ATS dischargers shall include in the NEL Violation Report:

¹⁰ http://www.dhs.ca.gov/ps/ls/elap/pdf/FOT_Desc.pdf.

¹¹ <http://www.epa.gov/waterscience/methods/wet/>.

- (1) The analytical method(s), method reporting unit(s), and method detection limit(s) of each analytical parameter (analytical results that are less than the method detection limit shall be reported as “less than the method detection limit”);
 - (2) The date, place, time of sampling, visual observation (inspections), and/or measurements, including precipitation; and
 - (3) A description of the current onsite BMPs, and the proposed corrective actions taken to manage the NEL exceedance.
- iv. Compliance Storm Exemption - In the event that an applicable NEL has been exceeded during a storm event equal to or larger than the Compliance Storm Event, ATS dischargers shall report the on-site rain gauge reading and nearby governmental rain gauge readings for verification.

	A	B	C
1	Sediment Risk Factor Worksheet		Entry
2	A) R Factor		
3	Analyses of data indicated that when factors other than rainfall are held constant, soil loss is directly proportional to a rainfall factor composed of total storm kinetic energy (E) times the maximum 30-min intensity (I30) (Wischmeier and Smith, 1958). The numerical value of R is the average annual sum of EI30 for storm events during a rainfall record of at least 22 years. "Isoerodent" maps were developed based on R values calculated for more than 1000 locations in the Western U.S. Refer to the link below to determine the R factor for the project site.		
4	http://cfpub.epa.gov/npdes/stormwater/LEW/lewCalculator.cfm		
5		R Factor Value	0
6	B) K Factor (weighted average, by area, for all site soils)		
7	The soil-erodibility factor K represents: (1) susceptibility of soil or surface material to erosion, (2) transportability of the sediment, and (3) the amount and rate of runoff given a particular rainfall input, as measured under a standard condition. Fine-textured soils that are high in clay have low K values (about 0.05 to 0.15) because the particles are resistant to detachment. Coarse-textured soils, such as sandy soils, also have low K values (about 0.05 to 0.2) because of high infiltration resulting in low runoff even though these particles are easily detached. Medium-textured soils, such as a silt loam, have moderate K values (about 0.25 to 0.45) because they are moderately susceptible to particle detachment and they produce runoff at moderate rates. Soils having a high silt content are especially susceptible to erosion and have high K values, which can exceed 0.45 and can be as large as 0.65. Silt-size particles are easily detached and tend to crust, producing high rates and large volumes of runoff. Use Site-specific data must be submitted.		
8	Site-specific K factor guidance		
9		K Factor Value	0
10	C) LS Factor (weighted average, by area, for all slopes)		
11	The effect of topography on erosion is accounted for by the LS factor, which combines the effects of a hillslope-length factor, L, and a hillslope-gradient factor, S. Generally speaking, as hillslope length and/or hillslope gradient increase, soil loss increases. As hillslope length increases, total soil loss and soil loss per unit area increase due to the progressive accumulation of runoff in the downslope direction. As the hillslope gradient increases, the velocity and erosivity of runoff increases. Use the LS table located in separate tab of this spreadsheet to determine LS factors. Estimate the weighted LS for the site prior to construction.		
12	LS Table		
13		LS Factor Value	0
14			
15	Watershed Erosion Estimate (=R_xK_xLS) in tons/acre		0
16	Site Sediment Risk Factor		Low
17	Low Sediment Risk: < 15 tons/acre		
18	Medium Sediment Risk: >=15 and <75 tons/acre		
19	High Sediment Risk: >= 75 tons/acre		
20			
21			
22			
23	GIS Map Method:		
24	1. The R factor for the project is calculated using the online calculator at:		
25	http://cfpub.epa.gov/npdes/stormwater/LEW/lewCalculator.cfm		
26			
27	2. The K and LS factors may be obtained by accessing the GIS maps located on the State Water Board FTP website at:		
28	ftp://swrcb2a.waterboards.ca.gov/pub/swrcb/dwq/cgp/Risk/		
29			

Receiving Water (RW) Risk Factor Worksheet	Entry	Score
A. Watershed Characteristics	yes/no	
<p>A.1. Does the disturbed area discharge (either directly or indirectly) to a 303(d)-listed waterbody impaired by sediment (For help with impaired waterbodies please visit the link below) or has a USEPA approved TMDL implementation plan for sediment?:</p> <p>http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2010.shtml</p> <p style="text-align: center;">OR</p>	no	Low
<p>A.2. Does the disturbed area discharge to a waterbody with designated beneficial uses of SPAWN & COLD & MIGRATORY? (For help please review the appropriate Regional Board Basin Plan)</p> <p>http://www.waterboards.ca.gov/waterboards_map.shtml</p>		
<p>Region 1 Basin Plan</p> <p>Region 2 Basin Plan</p> <p>Region 3 Basin Plan</p> <p>Region 4 Basin Plan</p> <p>Region 5 Basin Plan</p> <p>Region 6 Basin Plan</p> <p>Region 7 Basin Plan</p> <p>Region 8 Basin Plan</p> <p>Region 9 Basin Plan</p>		

Combined Risk Level Matrix

		<u>Sediment Risk</u>		
		Low	Medium	High
<u>Receiving Water Risk</u>	Low	Level 1	Level 2	
	High	Level 2		Level 3

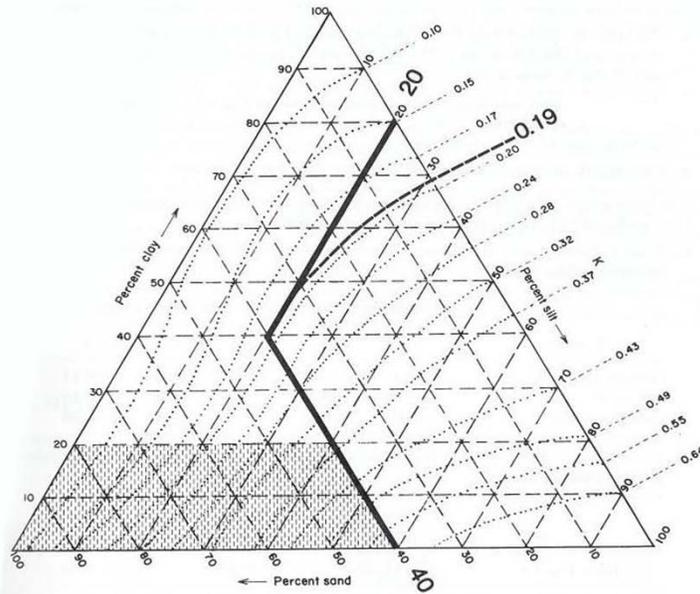
Project Sediment Risk: **Low**

Project RW Risk: **Low**

Project Combined Risk: **Level 1**

Soil Erodibility Factor (K)

The K factor can be determined by using the nomograph method, which requires that a particle size analysis (ASTM D-422) be done to determine the percentages of sand, very fine sand, silt and clay. Use the figure below to determine appropriate K value.



Erickson triangular nomograph used to estimate soil erodibility (K) factor.

The figure above is the USDA nomograph used to determine the K factor for a soil, based on its texture (% silt plus very fine sand, % sand, % organic matter, soil structure, and permeability). *Nomograph from Erickson 1977 as referenced in Goldman et. al., 1986.*

Sheet Flow Length (ft)	Average Watershed Slope (%)																		
	0.2	0.5	1.0	2.0	3.0	4.0	5.0	6.0	8.0	10.0	12.0	14.0	16.0	20.0	25.0	30.0	40.0	50.0	60.0
<3	0.05	0.07	0.09	0.13	0.17	0.20	0.23	0.26	0.32	0.35	0.36	0.38	0.39	0.41	0.45	0.48	0.53	0.58	0.63
6	0.05	0.07	0.09	0.13	0.17	0.20	0.23	0.26	0.32	0.37	0.41	0.45	0.49	0.56	0.64	0.72	0.85	0.97	1.07
9	0.05	0.07	0.09	0.13	0.17	0.20	0.23	0.26	0.32	0.38	0.45	0.51	0.56	0.67	0.80	0.91	1.13	1.31	1.47
12	0.05	0.07	0.09	0.13	0.17	0.20	0.23	0.26	0.32	0.39	0.47	0.55	0.62	0.76	0.93	1.08	1.37	1.62	1.84
15	0.05	0.07	0.09	0.13	0.17	0.20	0.23	0.26	0.32	0.40	0.49	0.58	0.67	0.84	1.04	1.24	1.59	1.91	2.19
25	0.05	0.07	0.10	0.16	0.21	0.26	0.31	0.36	0.45	0.57	0.71	0.85	0.98	1.24	1.56	1.86	2.41	2.91	3.36
50	0.05	0.08	0.13	0.21	0.30	0.38	0.46	0.54	0.70	0.91	1.15	1.40	1.64	2.10	2.67	3.22	4.24	5.16	5.97
75	0.05	0.08	0.14	0.25	0.36	0.47	0.58	0.69	0.91	1.20	1.54	1.87	2.21	2.86	3.67	4.44	5.89	7.20	8.37
100	0.05	0.09	0.15	0.28	0.41	0.55	0.68	0.82	1.10	1.46	1.88	2.31	2.73	3.57	4.59	5.58	7.44	9.13	10.63
150	0.05	0.09	0.17	0.33	0.50	0.68	0.86	1.05	1.43	1.92	2.51	3.09	3.68	4.85	6.30	7.70	10.35	12.75	14.89
200	0.06	0.10	0.18	0.37	0.57	0.79	1.02	1.25	1.72	2.34	3.07	3.81	4.56	6.04	7.88	9.67	13.07	16.16	18.92
250	0.06	0.10	0.19	0.40	0.64	0.89	1.16	1.43	1.99	2.72	3.60	4.48	5.37	7.16	9.38	11.55	15.67	19.42	22.78
300	0.06	0.10	0.20	0.43	0.69	0.98	1.28	1.60	2.24	3.09	4.09	5.11	6.15	8.23	10.81	13.35	18.17	22.57	26.51
400	0.06	0.11	0.22	0.48	0.80	1.14	1.51	1.90	2.70	3.75	5.01	6.30	7.60	10.24	13.53	16.77	22.95	28.60	33.67
600	0.06	0.12	0.24	0.56	0.96	1.42	1.91	2.43	3.52	4.95	6.67	8.45	10.26	13.94	18.57	23.14	31.89	39.95	47.18
800	0.06	0.12	0.26	0.63	1.10	1.65	2.25	2.89	4.24	6.03	8.17	10.40	12.69	17.35	23.24	29.07	40.29	50.63	59.93
1000	0.06	0.13	0.27	0.69	1.23	1.86	2.55	3.30	4.91	7.02	9.57	12.23	14.96	20.57	27.66	34.71	48.29	60.84	72.15

LS Factors for Construction Sites. *Table from Renard et. al., 1997.*

APPENDIX 2: Post-Construction Water Balance Performance Standard Spreadsheet

The discharger shall submit with their Notice of Intent (NOI) the following information to demonstrate compliance with the New and Re-Development Water Balance Performance Standard.

Map Instructions

The discharger must submit a small-scale topographic map of the site to show the existing contour elevations, pre- and post-construction drainage divides, and the total length of stream in each watershed area. Recommended scales include 1 in. = 20 ft., 1 in. = 30 ft., 1 in. = 40 ft., or 1 in. = 50 ft. The suggested contour interval is usually 1 to 5 feet, depending upon the slope of the terrain. The contour interval may be increased on steep slopes. Other contour intervals and scales may be appropriate given the magnitude of land disturbance.

Spreadsheet Instructions

The intent of the spreadsheet is to help dischargers calculate the project-related increase in runoff volume and select impervious area and runoff reduction credits to reduce the project-related increase in runoff volume to pre-project levels.

The discharger has the option of using the spreadsheet (**Appendix 2.1**) or a more sophisticated, watershed process-based model (e.g. Storm Water Management Model, Hydrological Simulation Program Fortran) to determine the project-related increase in runoff volume.

In Appendix 4.1, you must complete the worksheet for each land use/soil type combination for each project sub-watershed.

Steps 1 through 9 pertain specifically to the Runoff Volume Calculator:

Step 1: Enter the county where the project is located in cell H3.

Step 2: Enter the soil type in cell H6.

Step 3: Enter the existing pervious (dominant) land use type in cell H7.

Step 4: Enter the proposed pervious (dominant) land use type in cell H8.

Step 5: Enter the total project site area in cell H11 or J11.

Step 6: Enter the sub-watershed area in cell H12 or J12.

- Step 7: Enter the existing rooftop area in cell H17 or J17, the existing non-rooftop impervious area in cell H18 or J18, the proposed rooftop area in cell H19 or J19, and the proposed non-rooftop impervious area in cell H20 or J20
- Step 8: Work through each of the impervious area reduction credits and claim credits where applicable. Volume that cannot be addressed using non-structural practices must be captured in structural practices and approved by the Regional Water Board.
- Step 9: Work through each of the impervious volume reduction credits and claim credits where applicable. Volume that cannot be addressed using non-structural practices must be captured in structural practices and approved by the Regional Water Board.

Non-structural Practices Available for Crediting

- ***Porous Pavement***
- ***Tree Planting***
- ***Downspout Disconnection***
- ***Impervious Area Disconnection***
- ***Green Roof***
- ***Stream Buffer***
- ***Vegetated Swales***
- ***Rain Barrels and Cisterns***
- ***Landscaping Soil Quality***

Post-Construction Water Balance Calculator

1	(Step 1b) If you can not answer 1a then select the county where the project is located (click on the cell to the right for drop-down): This will determine the average 85th percentile 24 hr. storm event for your site, which will appear under precipitation to left.											
2	SACRAMENTO											
3	User may make changes from any cell that is orange or brown in color (similar to the cells to the immediate right). Cells in green are calculated for you.			(Step 1a) If you know the 85th percentile storm event for your location enter it in the box below			(Step 1c) If you would like a more precise value select the location closest to your site. If you do not recognize any of these locations, leave this drop-down menu at location. The average value for the County will be used.			SACRAMENTO FAA ARPT		
4	Project Information					Runoff Calculations						
5	Project Name:		Optional		(Step 2) Indicate the Soil Type (dropdown menu to right):			Group C Soils		Low infiltration. Sandy clay loam. Infiltration rate 0.05 to 0.15 inch/hr when wet.		
6	Waste Discharge Identification (WVID):		Optional		(Step 3) Indicate the existing dominant non-built land Use Type (dropdown menu to right):			Wood & Grass: <50% ground cover				
7	Date:		Optional		(Step 4) Indicate the proposed dominant non-built land Use Type (dropdown menu to right):			Lawn, Grass, or Pasture covering more than 75% of the open space				
8	Sub Drainage Area Name (from map):		Optional					Complete Either				
9	Runoff Curve Numbers					Existing Pervious Runoff Curve Number		82		(Step 5) Total Project Site Area:		
10						Proposed Development Pervious Runoff Curve Number		74		(Step 6) Sub-watershed Area:		
11	Design Storm							Percent of total project :		100%		
12	Based on the County you indicated above, we have included the 85 percentile average 24 hr event - P85 (in)^ for your area.		0.62		in							
13	The Amount of rainfall needed for runoff to occur (Existing runoff curve number -P from existing RCN (in)^)		0.44		In		(Step 7) Sub-watershed Conditions		Complete Either			
14	P used for calculations (in) (the greater of the above two criteria)		0.62		In		Sub-watershed Area (acres)		Calculated Acres			
15	^Available at www.cabmphandbooks.com						Existing Rooftop Impervious Coverage		0			
16							Existing Non-Rooftop Impervious Coverage		0			
17							Proposed Rooftop Impervious Coverage		0			
18							Proposed Non-Rooftop Impervious Coverage		0			
19												
20							Credits		Acres			
21							Porous Pavement		0.00			
22							Tree Planting		0.00			
23												
24							Downspout Disconnection		0.00			
25	Pre-Project Runoff Volume (cu ft)		247		Cu.Ft.				0			
26	Project-Related Runoff Volume Increase w/o credits (cu ft)		0		Cu.Ft.		Impervious Area Disconnection		0.00			
27							Green Roof		0.00			
28							Stream Buffer		0.00			
29							Vegetated Swales		0.00			
30	Project-Related Volume Increase with Credits (cu ft)		0		Cu.Ft.		Subtotal		0.00			
31							Subtotal Runoff Volume Reduction Credit		0 Cu. Ft.			
32	You have achieved your minimum requirements											
33										(Step 9) Impervious Volume Reduction Credits		
34										Volume (cubic feet)		
35										0 Cu. Ft.		
36										0 Cu. Ft.		
37										0 Cu. Ft.		
38										0 Cu. Ft.		
39										0 Cu. Ft.		

Porous Pavement Credit Worksheet

Please fill out a porous pavement credit worksheet for each project sub-watershed.

For the PROPOSED Development:

Proposed Porous Pavement	Runoff Reduction*	Fill in either Acres or SqFt		Equivalent Acres
		In SqFt.	In Acres	
Area of Brick without Grout on <u>less than 12 inches</u> of base with at least 20% void space over soil	0.45			0.00
Area of Brick without Grout on <u>more than 12 inches</u> of base with at least 20% void space over soil	0.90			0.00
Area of Cobbles <u>less than 12 inches</u> deep and over soil	0.30			0.00
Area of Cobbles <u>less than 12 inches</u> deep and over soil	0.60			0.00
Area of Reinforced Grass Pavement on <u>less than 12 inches</u> of base with at least 20% void space over soil	0.45			0.00
Area of Reinforced Grass Pavement on <u>at least 12 inches</u> of base with at least 20% void space over soil	0.90			0.00
Area of Porous Gravel Pavement on <u>less than 12 inches</u> of base with at least 20% void space over soil	0.38			0.00
Area of Porous Gravel Pavement on <u>at least 12 inches</u> of base with at least 20% void space over soil	0.75			0.00
Area of Poured Porous Concrete or Asphalt Pavement with <u>less than 4 inches</u> of gravel base (washed stone)	0.40			0.00
Area of Poured Porous Concrete or Asphalt Pavement with <u>4 to 8 inches</u> of gravel base (washed stone)	0.60			0.00
Area of Poured Porous Concrete or Asphalt Pavement with <u>8 to 12 inches</u> of gravel base (washed stone)	0.80			0.00
Area of Poured Porous Concrete or Asphalt Pavement with <u>12 or more</u> inches of gravel base (washed stone)	1.00			0.00

*=1-Rv**

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**Using Site Design Techniques to meet Development Standards for Stormwater Quality (BASMAA 2003)
 **NCDENR Stormwater BMP Manual (2007)

Tree Planting Credit Worksheet

Please fill out a tree canopy credit worksheet for each project sub-watershed.

Tree Canopy Credit Criteria	Number of Trees Planted	Credit (acres)
Number of proposed evergreen trees to be planted (credit = number of trees x 0.005)*	0	0.00
Number of proposed deciduous trees to be planted (credit = number of trees x 0.0025)*		0.00
	Square feet Under Canopy	
Square feet under an existing tree canopy, that will remain on the property, with an average diameter at 4.5 ft above grade (i.e., diameter at breast height or DBH) is LESS than 12 in diameter.		0.00
Square feet under an existing tree canopy that will remain on the property, with an average diameter at 4.5 ft above grade (i.e., diameter at breast height or DBH) is 12 in diameter or GREATER.		0.00
Please describe below how the project will ensure that these trees will be maintained.		

0

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* credit amount based on credits from Stormwater Quality Design Manual for the Sacramento and South Placer Regions

Downspout Disconnection Credit Worksheet

Please fill out a downspout disconnection credit worksheet for each project subwatershed. If you answer yes to all questions, all rooftop area draining to each downspout will be subtracted from your proposed rooftop impervious coverage.

Downspout Disconnection Credit Criteria					
Do downspouts and any extensions extend at least six feet from a basement and two feet from a crawl space or concrete slab?				<input type="radio"/> Yes	<input checked="" type="radio"/> No
Is the area of rooftop connecting to each disconnected downspout 600 square feet or less?				<input type="radio"/> Yes	<input checked="" type="radio"/> No
Is the roof runoff from the design storm event fully contained in a raised bed or planter box or does it drain as sheet flow to a landscaped area large enough to contain the roof runoff from the design storm event?				<input type="radio"/> Yes	<input checked="" type="radio"/> No
The Stream Buffer and/or Vegetated Swale credits will not be taken in this sub-watershed area?				<input type="radio"/> Yes	<input checked="" type="radio"/> No
Percentage of existing	0.00	Acres	of rooftop surface has disconnected downspouts		
Percentage of the proposed	0.00	Acres	of rooftop surface has disconnected downspouts		
				50	
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Impervious Area Disconnection Credit Worksheet

Please fill out an impervious area disconnection credit worksheet for each project sub-watershed. If you answer yes to all questions, all non-rooftop impervious surface area will be subtracted from your proposed non-rooftop impervious coverage.

Non-Rooftop Disconnection Credit Criteria	Response
Is the maximum contributing impervious flow path length less than 75 feet or, if equal or greater than 75 feet, is a storage device (e.g. French drain, bioretention area, gravel trench) implemented to achieve the required disconnection length?	<input checked="" type="radio"/> Yes <input type="radio"/> No
Is the impervious area to any one discharge location less than 5,000 square feet?	<input checked="" type="radio"/> Yes <input type="radio"/> No
The Stream Buffer credit will not be taken in this sub-watershed area?	<input checked="" type="radio"/> Yes <input type="radio"/> No

Percentage of existing	0.00	Acres non-rooftop surface area disconnected	
Percentage of the proposed	0.00	Acres non-rooftop surface area disconnected	70

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Green Roof Credit Worksheet

Please fill out a greenroof credit worksheet for each project sub-watershed. If you answer yes to all questions, 70% of the greenroof area will be subtracted from your proposed rooftop impervious coverage.

Green Roof Credit Criteria		Response
Is the roof slope less than 15% or does it have a grid to hold the substrate in place until it forms a thick vegetation mat?		<input checked="" type="radio"/> Yes <input type="radio"/> No
Has a professional engineer assessed the necessary load reserves and designed a roof structure to meet state and local codes?		<input checked="" type="radio"/> Yes <input type="radio"/> No
Is the irrigation needed for plant establishment and/or to sustain the green roof during extended dry periods, is the source from stored, recycled, reclaimed, or reused water?		<input checked="" type="radio"/> Yes <input type="radio"/> No
Percentage of existing	0.0 0 Acres rooftop surface area in greenroof	
Percentage of the proposed	0.0 0 Acres rooftop surface area in greenroof	
		Return to Calculator

Stream Buffer Credit Worksheet

Please fill out a stream buffer credit worksheet for each project sub-watershed. If you answer yes to all questions, you may subtract all impervious surface draining to each stream buffer that has not been addressed using the Downspout and/or Impervious Area Disconnection credits.

Stream Buffer Credit Criteria				Response
Does runoff enter the floodprone width* or within 500 feet (whichever is larger) of a stream channel as sheet flow**?				<input type="radio"/> Yes <input checked="" type="radio"/> No
Is the contributing overland slope 5% or less, or if greater than 5%, is a level spreader used?				<input type="radio"/> Yes <input checked="" type="radio"/> No
Is the buffer area protected from vehicle or other traffic barriers to reduce compaction?				<input type="radio"/> Yes <input checked="" type="radio"/> No
Will the stream buffer be maintained in an ungraded and uncompacted condition and will the vegetation be maintained in a natural condition?				<input type="radio"/> Yes <input checked="" type="radio"/> No
Percentage of existing	0.00	Acres	impervious surface area draining into a stream buffer:	
Percentage of the proposed	0.00	Acres	impervious surface area that will drain into a stream buffer:	
Please describe below how the project will ensure that the buffer areas will remain in ungraded and uncompacted condition and that the vegetation will be maintained in a natural condition.				

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* floodprone width is the width at twice the bankfull depth.

** the maximum contributing length shall be 75 feet for impervious area

Vegetated Swale Credit Worksheet

Please fill out a vegetated swale worksheet for each project subwatershed. If you answer yes to all questions, you may subtract all impervious surface draining to each stream buffer that has not been addressed using the Downspout Disconnection credit.

Vegetated Swale Credit Criteria

Have all vegetated swales been designed in accordance with Treatment Control BMP 30 (TC-30 - Vegetated Swale) from the California Stormwater BMP Handbook, New Development and Redevelopment (available at www.cabmphandbooks.com)?

<input type="radio"/> Yes	<input checked="" type="radio"/> No
---------------------------	-------------------------------------

Is the maximum flow velocity for runoff from the design storm event less than or equal to 1.0 foot per second?

<input type="radio"/> Yes	<input checked="" type="radio"/> No
---------------------------	-------------------------------------

Percentage of existing	0.00	Acres of impervious area draining to a vegetated swale	
Percentage of the proposed	0.00	Acres of impervious area draining to a vegetated swale	

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Rain Barrel/Cistern Credit Worksheet

Please fill out a rain barrel/cistern worksheet for each project sub-watershed.

Rain Barrel/Cistern Credit Criteria	Response
Total number of rain barrel(s)/cisterns	
Average capacity of rain barrel(s)/cistern(s) (in gallons)	
Total capacity rain barrel(s)/cistern(s) (in cu ft) ¹	0

¹ accounts for 10% loss

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Please fill out a soil quality worksheet for each project sub-watershed.

	Response
Will the landscaped area be lined with an impervious membrane?	
Will the soils used for landscaping meet the ideal bulk densities listed in Table 1 below? ¹	<input type="radio"/> Yes <input checked="" type="radio"/> No
If you answered yes to the question above, and you know the area-weighted bulk density within the top 12 inches for soils used for landscaping (in g/cm ³)*, fill in the cell to the right and skip to cell G11. If not select from the drop-down menu in G10.	1.3
If you answered yes to the question above, but you do not know the exact bulk density, which of the soil types in the drop down menu to the right best describes the top 12 inches for soils used for landscaping (in g/cm ³).	Sandy loams, loams
What is the average depth of your landscaped soil media meeting the above criteria (inches)?	12
What is the total area of the landscaped areas meeting the above criteria (in acres)?	2.97

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Table 1

Sands, loamy sands	<1.6
Sandy loams, loams	<1.4
Sandy clay loams, loams, clay loams	<1.4
Silts, silt loams	<1.3
Silt loams, silty clay loams	<1.1
Sandy clays, silty clays, some clay loams (35-45% clay)	<1.1
Clays (>45% clay)	<1.1

Porosity (%) 50.94%

Mineral grains in many soils are mainly quartz and feldspar, so 2.65 a good average for particle density. To determine percent porosity, use the formula: Porosity (%) = (1-Bulk Density/2.65) X 100

¹ USDA NRCS. "Soil Quality Urban Technical Note No.2-Urban Soil Compaction". March 2000.

http://soils.usda.gov/sqi/management/files/sq_utn_2.pdf

* To determine how to calculate density see:

<http://www.globe.gov/tctg/bulkden.pdf?sectionID=94>

APPENDIX 3

Bioassessment Monitoring Guidelines

Bioassessment monitoring is required for projects that meet all of the following criteria:

1. The project is rated Risk Level 3 or LUP Type 3
2. The project directly discharges runoff to a freshwater wadeable stream (or streams) that is either: (a) listed by the State Water Board or USEPA as impaired due to sediment, and/or (b) tributary to any downstream water body that is listed for sediment; and/or have the beneficial use SPAWN & COLD & MIGRATORY
3. Total project-related ground disturbance exceeds 30 acres.

For all such projects, the discharger shall conduct bioassessment monitoring, as described in this section, to assess the effect of the project on the biological integrity of receiving waters.

Bioassessment shall include:

1. The collection and reporting of specified instream biological data
2. The collection and reporting of specified instream physical habitat data

Bioassessment Exception

If a site qualifies for bioassessment, but construction commences out of an index period for the site location, the discharger shall:

1. Receive Regional Water Board approval for the sampling exception
2. Make a check payable to: Cal State Chico Foundation (SWAMP Bank Account) or San Jose State Foundation (SWAMP Bank Account) and include the WDID# on the check for the amount calculated for the exempted project.
3. Send a copy of the check to the Regional Water Board office for the site's region
4. Invest **7,500.00 X The number of samples required** into the SWAMP program as compensation (upon Regional Water Board approval).
5. Conduct bioassessment monitoring, as described in Appendix 4
6. Include the collection and reporting of specified instream biological data and physical habitat
7. Use the bioassessment sample collection and Quality Assurance & Quality Control (QA/QC) protocols developed by the State of California's Surface Water Ambient Monitoring Program (SWAMP)

Site Locations and Frequency

Macroinvertebrate samples shall be collected both before ground disturbance is initiated and after the project is completed. The "after" sample(s) shall be collected after at least one winter season resulting in surface runoff has transpired after project-related ground disturbance has ceased. "Before" and "after" samples shall be collected both upstream and downstream of the project's

discharge. Upstream samples should be taken immediately before the sites outfall and downstream samples should be taken immediately after the outfall (when safe to collect the samples). Samples should be collected for each freshwater wadeable stream that is listed as impaired due to sediment, or tributary to a water body that is listed for sediment. Habitat assessment data shall be collected concurrently with all required macroinvertebrate samples.

Index Period (Timing of Sample Collection)

Macroinvertebrate sampling shall be conducted during the time of year (i.e., the “index period”) most appropriate for bioassessment sampling, depending on ecoregion. This map is posted on the State Water Board’s Website: http://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.shtml

Field Methods for Macroinvertebrate Collections

In collecting macroinvertebrate samples, the discharger shall use the “Reachwide Benthos (Multi-habitat) Procedure” specified in *Standard Operating Procedures for Collecting Benthic Macroinvertebrate Samples and Associated Physical and Chemical Data for Ambient Bioassessments in California* (Ode 2007).¹

Physical - Habitat Assessment Methods

The discharger shall conduct, concurrently with all required macroinvertebrate collections, the “Full” suite of physical habitat characterization measurements as specified in *Standard Operating Procedures for Collecting Benthic Macroinvertebrate Samples and Associated Physical and Chemical Data for Ambient Bioassessments in California* (Ode 2007), and as summarized in the Surface Water Ambient Monitoring Program’s *Stream Habitat Characterization Form — Full Version*.

Laboratory Methods

Macroinvertebrates shall be identified and classified according to the Standard Taxonomic Effort (STE) Level I of the Southwestern Association of Freshwater Invertebrate Taxonomists (SAFIT),² and using a fixed-count of 600 organisms per sample.

Quality Assurance

The discharger or its consultant(s) shall have and follow a quality assurance (QA) plan that covers the required bioassessment monitoring. The QA plan shall include, or be supplemented to include, a specific requirement for external QA checks (i.e., verification of taxonomic identifications and correction of data where

¹ This document is available on the Internet at: http://www.swrcb.ca.gov/swamp/docs/phab_sopr6.pdf.
http://swamp.mpsl.mml.calstate.edu/wp-content/uploads/2009/04/swamp_sop_bioassessment_collection_020107.pdf.

² The current SAFIT STEs (28 November 2006) list requirements for both the Level I and Level II taxonomic effort, and are located at: http://www.swrcb.ca.gov/swamp/docs/safit/ste_list.pdf http://www.safit.org/Docs/ste_list.pdf. When new editions are published by SAFIT, they will supersede all previous editions. All editions will be posted at the State Water Board’s SWAMP website.

errors are identified). External QA checks shall be performed on one of the discharger's macroinvertebrate samples collected per calendar year, or ten percent of the samples per year (whichever is greater). QA samples shall be randomly selected. The external QA checks shall be paid for by the discharger, and performed by the California Department of Fish and Game's Aquatic Bioassessment Laboratory. An alternate laboratory with equivalent or better expertise and performance may be used if approved in writing by State Water Board staff.

Sample Preservation and Archiving

The original sample material shall be stored in 70 percent ethanol and retained by the discharger until: 1) all QA analyses specified herein and in the relevant QA plan are completed; and 2) any data corrections and/or re-analyses recommended by the external QA laboratory have been implemented. The remaining subsampled material shall be stored in 70 percent ethanol and retained until completeness checks have been performed according to the relevant QA plan. The identified organisms shall be stored in 70 percent ethanol, in separate glass vials for each final ID taxon. (For example, a sample with 45 identified taxa would be archived in a minimum of 45 vials, each containing all individuals of the identified taxon.) Each of the vials containing identified organisms shall be labeled with taxonomic information (i.e., taxon name, organism count) and collection information (i.e., site name/site code, waterbody name, date collected, method of collection). The identified organisms shall be archived (i.e., retained) by the discharger for a period of not less than three years from the date that all QA steps are completed, and shall be checked at least once per year and "topped off" with ethanol to prevent desiccation. The identified organisms shall be relinquished to the State Water Board upon request by any State Water Board staff.

Data Submittal

The macroinvertebrate results (i.e., taxonomic identifications consistent with the specified SAFIT STEs, and number of organisms within each taxa) shall be submitted to the State Water Board in electronic format. The State Water Board's Surface Water Ambient Monitoring Program (SWAMP) is currently developing standardized formats for reporting bioassessment data. All bioassessment data collected after those formats become available shall be submitted using the SWAMP formats. Until those formats are available, the biological data shall be submitted in MS-Excel (or equivalent) format.³

The physical/habitat data shall be reported using the standard format titled *SWAMP Stream Habitat Characterization Form — Full Version*.⁴

³ Any version of Excel, 2000 or later, may be used.

⁴ Available at:

http://www.waterboards.ca.gov/water_issues/programs/swamp/docs/reports/fieldforms_fullversion052908.pdf

Invasive Species Prevention

In conducting the required bioassessment monitoring, the discharger and its consultants shall take precautions to prevent the introduction or spread of aquatic invasive species. At minimum, the discharger and its consultants shall follow the recommendations of the California Department of Fish and Game to minimize the introduction or spread of the New Zealand mudsnail.⁵

⁵ Instructions for controlling the spread of NZ mudsnails, including decontamination methods, can be found at: <http://www.dfg.ca.gov/invasives/mudsnail/>
More information on AIS More information on AIS
http://www.waterboards.ca.gov/water_issues/programs/swamp/ais/

Appendix 4 Non Sediment TMDLs

Region 1 Lost River-DIN and CBOD

Region 1 Source: Cal Trans Construction TMDL Completion Date: 12 30 2008 TMDL Type: River, Lake Watershed Area= 2996 mi ²	Pollutant Stressors/WLA	
	Dissolved inorganic nitrogen (DIN) (metric tons/yr)	Carbonaceous biochemical oxygen demand (CBOD) (metric tons/yr)
Lost River from the Oregon border to Tule Lake	.1	.2
Tule Lake Refuge	.1	.2
Lower Klamath Refuge	.1	.2

Region 2 San Francisco Bay-Mercury

Region 2 Source:Non-Urban Stormwater Runoff TMDL Type: Bay	Name	Pollutant Stressor/WLA	TMDL Completion Date
	San Francisco Bay	Mercury 25 kg/year	08 09 2006

Region 4 Ballona Creek-Metals and Selenium

Region 4 Source: NPDES General Construction TMDL Completion Date: 12 22 2005 TMDL Type: Creek	Pollutant Stressors/WLA							
	Copper (Cu)		Lead (Pb)		Selenium (Se)		Zinc (Zn)	
	g/day	g/day/acre	g/day	g/day/acre	g/day	g/day/acre	g/day	g/day/acre
Ballona Creek	4.94E-07 x Daily storm volume (L)	2.20E-10 x Daily storm volume (L)	1.62E-06 x Daily storm volume (L)	7.20E-10 x Daily storm volume (L)	1.37E-07 x Daily storm volume (L)	6.10E-11 x Daily storm volume (L)	3.27E-06 x Daily storm volume (L)	1.45E-09 x Daily storm volume (L)

General Construction Storm Water Permits:

Waste load allocations will be incorporated into the State Board general permit upon renewal or into a watershed-specific general permit developed by the Regional Board.

- Dry-weather Implementation Non-storm water flows authorized by the General Permit for Storm Water Discharges Associated with Construction Activity (Water Quality Order No. 99-08 DWQ), or any successor order, are exempt from the dry-weather waste load allocation equal to zero as long as they comply with the provisions of sections C.3 and A.9 of the Order No. 99-08 DWQ, which state that these authorized non-storm discharges shall be:
 - (1) infeasible to eliminate
 - (2) comply with BMPs as described in the Storm Water Pollution Prevention Plan prepared by the permittee, and
 - (3) not cause or contribute to a violation of water quality standards, or comparable provisions in any successor order.
 Unauthorized non-storm water flows are already prohibited by Order No. 99-08 DWQ.
- Wet-weather Implementation Within seven years of the effective date of the TMDL, the construction industry will submit the results of BMP effectiveness studies to determine BMPs that will achieve compliance with the final waste load allocations assigned to construction storm water permittees.
- Regional Board staff will bring the recommended BMPs before the Regional Board for consideration within eight years of the effective date of the TMDL.
- General construction storm water permittees will be considered in compliance with final waste load allocations if they implement these Regional Board approved BMPs. All permittees must implement the approved BMPs within nine years of the effective date of the TMDL. If no effectiveness studies are conducted and no BMPs are approved by the Regional Board within eight years of the effective date of the TMDL, each general construction storm water permit holder will be subject to site-specific BMPs and monitoring requirements to demonstrate compliance with final waste load allocations.

Region 4 Calleaguas Creek-OC Pesticides, PCBs, and Siltation

Interim Requirements

Region 4 Calleaguas Creek	Pollutant Stressor	WLA Daily Max (µg/L)	WLA Monthly Ave (µg/L)
Source: Minor NPDES point sources/WDRs	Chlordane	1.2	0.59
TMDL Completion Date: 3 14 2006	4,4-DDD	1.7	0.84
TMDL Type:Creek	4,4-DDE	1.2	0.59
	4,4-DDT	1.2	0.59
	Dieldrin	0.28	0.14
	PCB's	0.34	0.17
	Toxaphene	0.33	0.16

Final WLA (ng/g)							
Region 4 Calleguas Creek Source: Stormwater Permittees TMDL Completion Date: 3 14 2006 TMDL Type:Creek	Chlordane	4,4-DDD	4,4-DDE	4,4-DDT	Dieldrin	PCB's	Toxaphene
Mugu Lagoon*	3.3	2.0	2.2	0.3	4.3	180.0	360.0
Callegaus Creek	3.3	2.0	1.4	0.3	0.2	120.0	0.6
Revolon Slough (SW)*	0.9	2.0	1.4	0.3	0.1	130.0	1.0
Arroyo Las posas(SW)*	3.3	2.0	1.4	0.3	0.2	120.0	0.6
Arroyo Simi	3.3	2.0	1.4	0.3	0.2	120.0	0.6
Conejo Creek	3.3	2.0	1.4	0.3	0.2	120.0	0.6
Interim Requirements (ng/g)							
Mugu Lagoon*	25.0	69.0	300.0	39.0	19.0	180.	22900.0
Callegaus Creek	17.0	66.0	470.0	110.0	3.0	3800.0	260.0
Revolon Slough (SW)*	48.0	400.0	1600.0	690.0	5.7	7600.0	790.0
Arroyo Las posas(SW)*	3.3	290.0	950.0	670.0	1.1	25700.0	230.0
Arroyo Simi	3.3	14.0	170.0	25.0	1.1	25700.0	230.0
Conejo Creek	3.4	5.3	20.0	2.0	3.0	3800.0	260.0

*(SW)=Subwatershed

*Mugu Lagoon includes Duck pond/Agricultural Drain/Mugu/Oxnard Drain #2

Compliance with sediment based WLAs is measured as an instream annual average at the base of each subwatershed where the discharges are located.

Region 4 Calleguas Creek-Salts

Final Dry Weather Pollutant WLA (mg/L)					
Region 4 Calleguas Creek Source Permitted Stormwater Dischargers TMDL Completion Date: 12 2 2008 TMDL Type:Creek	Critical Condition Flow Rate (mgd)	Chloride (lb/day)	TDS (lb/day)	Sulfate (lb/day)	Boron (lb/day)
Simi	1.39	1738.0	9849.0	2897.0	12.0
Las Posas	0.13	157.0	887.0	261.0	N/A
Conejo	1.26	1576.0	8931.0	2627.0	N/A

Camarillo	0.06	72.0	406.0	119.0	N/A
Pleasant Valley (Calleguas)	0.12	150.0	850.0	250.0	N/A
Pleasant Valley (Revolon)	0.25	314.0	1778.0	523.0	2.0
Dry Weather Interim Pollutant WLA (mg/L)					
	Chloride (mg/L)	TDS (mg/L)	Sulfate (mg/L)	Boron (mg/L)	
Simi	230.0	1720.0	1289.0	1.3	
Las Posas	230.0	1720.0	1289.0	1.3	
Conejo	230.0	1720.0	1289.0	1.3	
Camarillo	230.0	1720.0	1289.0	1.3	
Pleasant Valley (Calleguas)	230.0	1720.0	1289.0	1.3	
Pleasant Valley (Revolon)	230.0	1720.0	1289.0	1.3	

- General Construction permittees are assigned a dry weather wasteload allocation equal to the average dry weather critical condition flow rate multiplied by the numeric target for each constituent. Waste load allocations apply in the receiving water at the base of each subwatershed. Dry weather allocations apply when instream flow rates are below the 86th percentile flow and there has been no measurable precipitation in the previous 24 hours.
- Because wet weather flows transport a large mass of salts at low concentrations, these dischargers meet water quality objectives during wet weather.
- Interim limits are assigned for dry weather discharges from areas covered by NPDES stormwater permits to allow time to implement appropriate actions. The interim limits are assigned as concentration based receiving water limits set to the 95th percentile of the discharger data as a monthly average limit except for chloride. The 95th percentile for chloride was 267 mg/L which is higher than the recommended criteria set forth in the Basin Plan for protection of sensitive beneficial uses including aquatic life. Therefore, the interim limit for chloride for Permitted Stormwater Dischargers is set equal to 230 mg/L to ensure protection of sensitive beneficial uses in the Calleguas Creek watershed.

Region 4 San Gabriel River and Tributaries-Metals and Selenium

Region 4 San Gabriel River and Tributaries Source: Construction Stormwater Dischargers TMDL Completion Date: 3 2007 TMDL Type: Creek	Pollutant Stressor	Wet weather Allocations	Dry Weather Allocations	% of Watershed
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San Gabriel Reach 2	Lead (Pb)	0.7% * 166 µg/l * Daily Storm Vol	N/A	0.7%
San Gabriel Reach 2	Lead (Pb) Mass based	0.8 kg/d	N/A	0.7%
Coyote Creek	Copper (Cu)	0.285 kg/d	0	5.0%
Coyote Creek	Lead (Pb)	1.70 kg/d	N/A	5.0%
Coyote Creek	Zinc (Zn)	2.4 kg/d	N/A	5.0%
San Jose Creek Reach 1 and 2	Selenium	5 µg/L	5 µg/L	5.0%

Wet-weather allocations for lead in San Gabriel River Reach 2. Concentration-based allocations apply to non-stormwater NPDES discharges. Stormwater allocations are expressed as a percent of load duration curve. Mass-based values presented in table are based on a flow of 260 cfs (daily storm volume = 6.4×10^8 liters).

There are 1555 acres of water in the entire watershed, 37.4 acres of water in the Reach 1 subwatershed (2.4%), and 269 acres in the Coyote Creek subwatershed (17%).

General Construction Storm Water Permits

Waste load allocations for the general construction storm water permits may be incorporated into the State Board general permit upon renewal or into a watershed-specific general permit developed by the Regional Board. An estimate of direct atmospheric deposition is developed based on the percent area of surface water in the watershed. Approximately 0.4% of the watershed area draining to San Gabriel River Reach 2 is comprised of water and approximately 0.2% of the watershed area draining to Coyote Creek is comprised of water.

Region 4 The Harbor Beaches of Ventura County-Bacteria

The TMDL has a multi-part numeric target based on the bacteriological water quality objectives for marine water to protect the water contact recreation use. These targets are the most appropriate indicators of public health risk in recreational waters. Bacteriological objectives are set forth in Chapter 3 of the Basin Plan. The objectives are based on four bacteria indicators and include both geometric mean limits and single sample limits. The Basin Plan objectives that serve as the numeric targets for this TMDL are:

The General NPDES Construction permit is seen as a minor contributor and is given no allocation

General NPDES permits, individual NPDES permits, the Statewide Industrial Storm Water General Permit, the Statewide Construction Activity Storm Water General Permit, and WDR permittees in the Channel Islands Harbor subwatershed are assigned WLAs of zero (0) days of allowable exceedances for all three time periods and for the single sample limits and the rolling 30-day geometric mean. Any future enrollees under a general NPDES permit, individual NPDES permit, the Statewide Industrial Storm Water General Permit, the Statewide Construction Activity Storm Water General Permit, and WDR will also be subject to a WLA of zero (0) days of allowable exceedances.

Region 4 Resolution No. 03-009 Los Angeles River and Tributaries-Nutrients

Minor Point Sources

Waste loads are allocated to minor point sources enrolled under NPDES or WDR permits including but not limited to Tapia WRP, Whittier Narrows WRP, Los Angeles Zoo WRP, industrial and construction stormwater, and municipal storm water and urban runoff from municipal separate storm sewer systems (MS4s)

Region 4 Minor Point Sources for NPDES/WDR Permits TMDL Completion Date: 7 10 2003 TMDL Type: River	Pollutant Stressor/WLA				
	Total Ammonia (NH₃)		Nitrate-nitrogen (NO₃-N)	Nitrite-nitrogen (NO₂-N)	NO₃-N + NO₃-N
	1 Hr Ave mg/l	30 Day Ave mg/l	30 Day Ave mg/l		30 Day Ave mg/l
LA River Above Los Angeles-Glendale WRP (LAG)	4.7	1.6	8.0	1.0	8.0
LA River Below LAG	8.7	2.4	8.0	1.0	8.0
Los Angeles Tributaries	10.1	2.3	8.0	1.0	8.0

Malibu Creek Attachment A to Resolution No. 2004-019R-Bacteria

12 13 2004 The WLAs for permittees under the NPDES General Stormwater Construction Permit are zero (0) days of allowable exceedances for all three time periods and for the single sample limits and the rolling 30-day geometric mean.

Region 4 Marina del Rey Harbor, Mothers' Beach and Back Basins

Attachment A to Resolution No. 2003-012-Bacteria

8 7 2003 As discussed in “Source Analysis”, discharges from general NPDES permits, general industrial storm water permits and general construction storm water permits are not expected to be a significant source of bacteria. Therefore, the WLAs for these discharges are zero (0) days of allowable exceedances for all three time periods and for the single sample limits and the rolling 30-day geometric mean. Any future enrollees under a general NPDES permit, general industrial storm water permit or general construction storm water permit within the MdR Watershed will also be subject to a WLA of zero days of allowable exceedances.

Region 4 San Gabriel River and Tributaries-Metals and Selenium

Dry Weather Selenium WLA

A zero WLA is assigned to the industrial and construction stormwater permits during dry weather. Non-storm water discharges are already prohibited or restricted by existing general permits.

Region 4 General Construction Permittees TMDL Completion Date: 7 13 2006 TMDL Type: River	Total Recoverable Metals (kg/day)		
	Copper (Cu) Kg/day	Lead (Pb) Kg/day	Zinc (Zn) Kg/day
San Gabriel River Reach 2 and upstream reaches/tributaries	XXXX	Daily storm volume x 1.24 µg/L	XXXX
Coyote Creek and Tributaries	Daily storm volume x 0.7 µg/L	Daily storm volume x 4.3 µg/L	Daily storm volume x 6.2 µg/L

Each enrollee under the general construction stormwater permit receives a WLA on a per acre basis

Region 4 General Construction Permittees TMDL Completion Date: 7 13 2006 TMDL Type: River	Total Recoverable Metals (kg/day/acre)		
	Copper (Cu) Kg/acre/day	Lead (Pb) Kg/acre/day	Zinc (Zn) Kg/acre/day
San Gabriel River Reach 2 and upstream reaches/tributaries	XXXX	Daily storm volume x 0.56 µg/L	XXXX

Coyote Creek and Tributaries	Daily storm volume x 0.12 µg/L	Daily storm volume x 0.70 µg/L	Daily storm volume x 1.01 µg/L
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For the general industrial and construction storm water permits, the daily storm volume is measured at USGS station 11085000 for discharges to Reach 2 and above and at LACDPW flow gauge station F354-R for discharges to Coyote Creek.

General construction storm water permits

WLAs will be incorporated into the State Board general permit upon renewal or into a watershed-specific general permit developed by the Regional Board.

Dry-weather implementation

Non-storm water flows authorized by the General Permit for Storm Water Discharges Associated with Construction Activity (NPDES Permit No. CAS000002), or any successor permit, are exempt from the dry-weather WLA equal to zero as long as they comply with the provisions of sections C.3. and A.9 of the Order No. 99-08 DWQ, which state that these authorized non-storm discharges shall be (1) infeasible to eliminate (2) comply with BMPs as described in the Storm Water Pollution Prevention Plan prepared by the permittee, and (3) not cause or contribute to a violation of water quality standards, or comparable provisions in any successor order. Unauthorized non-storm water flows are already prohibited by Permit No. CAS000002.

Upon permit issuance, renewal, or re-opener

Non-storm water flows not authorized by Order No. 99-08 DWQ, or any successor order, shall achieve dry-weather WLAs. WLAs shall be expressed as NPDES water quality-based effluent limitations specified in accordance with federal regulations and state policy on water quality control. Effluent limitations may be expressed as permit conditions, such as the installation, maintenance, and monitoring of Regional Board-approved BMPs.

Six years from the effective date of the TMDL

The construction industry will submit the results of wet-weather BMP effectiveness studies to the Los Angeles Regional Board for consideration. In the event that no effectiveness studies are conducted and no BMPs are approved, permittees shall be subject to site-specific BMPs and monitoring to demonstrate BMP effectiveness.

Seven years from the effective date of the TMDL

The Los Angeles Regional Board will consider results of the wet weather BMP effectiveness studies and consider approval of BMPs.

Eight years from the effective date of the TMDL

All general construction storm water permittees shall implement Regional Board-approved BMPs.

Region 8 RESOLUTION NO. R8-2007- 0024

Total Maximum Daily Loads (TMDLs) for San Diego Creek, Upper and Lower Newport Bay, Orange County, California

Region 8 NPDES Construction Permit TMDL Completion Date: 1 24 1995 TMDL Type: River, Cr, Bay	Organochlorine Compounds							
	Total DDT		Chlordane		Total PCBs		Toxaphene	
	g/day	g/yr	g/day	g/yr	g/day	g/yr	g/day	g/yr
San Diego Creek	.27	99.8	.18*	64.3*	.09*	31.5*	.004	1.5
Upper Newport Bay	.11	40.3	.06	23.4	.06	23.2	X	X
Lower Newport Bay	.04	14.9	.02	8.6	.17	60.7	X	X

*Red= Informational WLA only, not for enforcement purposes

Organochlorine Compounds TMDLs Implementation Tasks and Schedule

Regional Board staff shall develop a SWPPP Improvement Program that identifies the Regional Board’s expectations with respect to the content of SWPPPs, including documentation regarding the selection and implementation of BMPs, and a sampling and analysis plan. The Improvement Program shall include specific guidance regarding the development and implementation of monitoring plans, including the constituents to be monitored, sampling frequency and analytical protocols. The SWPPP Improvement Program shall be completed by *(the date of OAL approval of this BPA)*. **No later than two months** from completion of the Improvement Program, Board staff shall assure that the requirements of the Program are communicated to interested parties, including dischargers with existing authorizations under the General Construction Permit. Existing, authorized dischargers shall revise their project SWPPPs as needed to address the Program requirements as soon as possible but **no later than (three months of completion of the SWPPP Improvement Program)**. Applicable SWPPPs that do not adequately address the Program requirements shall be considered inadequate and enforcement by the Regional Board shall proceed accordingly. The Caltrans and Orange County MS4 permits shall be revised as needed to assure that the permittees communicate the Regional Board’s SWPPP expectations, based on the SWPPP Improvement Program, with the Standard Conditions of Approval.

Appendix 4 Sediment TMDLs

Implemented Sediment TMDLs in California. Construction was listed as a source in all fo these TMDLs in relation to road construction. Although construction was mentioned as a source, it was not given a specific allocation amount. The closest allocation amount would be for the road activity management WLA. **Implementation Phase** – Adoption process by the Regional Board, the State Water Resources Control Board, the Office of Administrative Law, and the US Environmental Protection Agency completed and TMDL being implemented.

A. Region	Type	Name	Pollutant Stressor	Potential Sources	TMDL Completion Date	Watershed Acres	WLA tons mi² yr
1 R1.epa.albionfinaltmdl	R	Albion River	Sedimentation	Road Construction	2001	43 acres	See A (table 6)

B Region	Type	Name	Pollutant Stressor	Potential Sources	TMDL Completion Date	Watershed Acres	WLA tons mi² yr
1 R1.epa.EelR-middle.mainSed.temp	R	Middle Main Eel River and Tributaries (from Dos Rios to the South Fork)	Sedimentation	Road Construction	2005-2006	521 mi ²	100

C Region	Type	Name	Pollutant Stressor	Potential Sources	TMDL Completion Date	Watershed Acres	WLA tons mi² yr
1 R1.epa.EelRsouth.sed.temp	R	South Fork Eel River	Sedimentation	Road Construction	12 1999	See chart	473

D Region	Type	Name	Pollutant Stressor	Potential Sources	TMDL Completion Date	Watershed Acres	WLA tons mi² yr
1 R1.epa.bigfinaltmdl	R	Big River	Sedimentation	Road Construction	12 2001	181 mi ² watershed drainage	TMDL = loading capacity = nonpoint sources + background =

							393 t mi ² yr
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E Region	Type	Name	Pollutant Stressor	Potential Sources	TMDL Completion Date	Watershed Acres	WLA tons mi² yr
1 R1.epa.EelR-lower.Sed.temp-121807-signed	R	Lower Eel River	Sedimentation	Road Construction	12 2007	300 square-mile watershed	898

F Region	Type	Name	Pollutant Stressor	Potential Sources	TMDL Completion Date	Watershed Acres	WLA tons mi² yr
1 R1.epa.EelR-middle.Sed.temp-	R	Middle Fork Eel River	Sedimentation	Road Construction	12 2003	753 mi ² (approx. 482,000 acres)	82

G Region	Type	Name	Pollutant Stressor	Potential Sources	TMDL Completion Date	Watershed Acres Mi²	WLA tons mi² yr
1 R1.epa.EelRnorth-Sed.temp.final-121807-signed	R	North Fork Eel River	Sedimentation	Road Construction	12 30 2002	289 (180,020 acres)	20

H Region	Type	Name	Pollutant Stressor	Potential Sources	TMDL Completion Date	Watershed Acres Mi²	WLA tons mi² yr
1 R1.epa.EelR-upper.mainSed.temp-	R	Upper Main Eel River and Tributaries (including Tomki Creek, Outlet Creek and Lake Pillsbury)	Sedimentation	Road Construction	12 29 2004	688 (approx. 440,384 acres)	14

I Region	Type	Name	Pollutant Stressor	Potential Sources	TMDL Completion Date	Watershed Acres	WLA tons mi ² yr
1 R1.epa.gualalafina ltmdl	R	Gualala River	Sedimentation	Road Construction	Not sure	300 (191,145 acres)	7

J Region	Type	Name	Pollutant Stressor	Potential Sources	TMDL Completion Date	Watershed Acres mi ²	WLA tons mi ² yr
1 R1.epa.Mad- sed.turbidity	R	Mad River	Sedimentation	Road Construction	12 21 2007	480	174

K Region	Type	Name	Pollutant Stressor	Potential Sources	TMDL Completion Date	Watershed Acres mi ²	WLA tons mi ² yr
1 R1.epa.mattole.se diment	R	Mattole River	Sedimentation	Road Construction	12 30 2003	296	27 or 520+27 = 547

L Region	Type	Name	Pollutant Stressor	Potential Sources	TMDL Completion Date	Watershed Acres mi ²	WLA tons mi ² yr
1 R1.epa.navarro.se d.temp	R	Navarro River	Sedimentation	Road Construction	Not sure	315 (201,600 acres).	50

M Region	Type	Name	Pollutant Stressor	Potential Sources	TMDL Completion Date	Watershed Acres mi ²	WLA tons mi ² yr
1 R1.epa.noyo.sedi ment	R	Noyo River	Sedimentation	Road Construction	12 16 1999	113 (72,323 acres)	68 (three areas measured) Table 16 in the TMDL

N Region	Type	Name	Pollutant Stressor	Potential Sources	TMDL Completion Date	Watershed Acres mi²	WLA tons mi² yr
1 R1.epa.RedwoodCk.sed	Cr	Redwood Creek	Sedimentation	Road Construction	12 30 1998	278	1900 Total allocation

O Region	Type	Name	Pollutant Stressor	Potential Sources	TMDL Completion Date	Watershed Acres mi²	WLA – Roads tons mi² yr
1 R1.epa.tenmile.sed	R	Ten Mile River	Sedimentation	Road Construction	2000	120	9

P Region	Type	Name	Pollutant Stressor	Potential Sources	TMDL Completion Date	Watershed Acres mi²	WLA management tons mi² yr
1 R1.epa.trinity.sed	R	Trinity River	Sedimentation	Road Construction	12 20 2001	2000 of 3000 covered in this TMDL	See rows below
1	Cr	Horse Linto Creek	Sedimentation	Road Construction	12 20 2001	64	528
1	Cr	Mill creek and Tish Tang	Sedimentation	Road Construction	12 20 2001	39	210
1	Cr	Willow Creek	Sedimentation	Road Construction	12 20 2001	43	94
1	Cr	Campbell Creek and Supply Creek	Sedimentation	Road Construction	12 20 2001	11	1961
1	Cr	Lower Mainstem and Coon Creek	Sedimentation	Road Construction	12 20 2001	32	63
1	R	Reference	Sedimentation	Road	12 20 2001	434	24

		Subwatershed ¹		Construction			
1	Cr	Canyon Creek	Sedimentation	Road Construction	12 20 2001	64	326
1	R	Upper Tributaries ²	Sedimentation	Road Construction	12 20 2001	72	67
1	R	Middle Tributaries ³	Sedimentation	Road Construction	12 20 2001	54	53
1	R	Lower Tributaries ⁴	Sedimentation	Road Construction	12 20 2001	96	55
1	Cr	Weaver and Rush Creeks	Sedimentation	Road Construction	12 20 2001	72	169
1	Cr	Deadwood Creek Hoadley Gulch Poker Bar	Sedimentation	Road Construction	12 20 2001	47	68
1	L	Lewiston Lake	Sedimentation	Road Construction	12 20 2001	25	49
1	Cr	Grassvalley Creek	Sedimentation	Road Construction	12 20 2001	37	44
1	Cr	Indian Creek	Sedimentation	Road Construction	12 20 2001	34	81
1	Cr	Reading and Browns Creek	Sedimentation	Road Construction	12 20 2001	104	66
1	Cr	Reference Subwatersheds ⁵	Sedimentation	Road Construction	12 20 2001	235	281
1	L, Cr	Westside tributaries ⁶	Sedimentation	Road Construction	12 20 2001	93	105
1	R, Cr, G	Upper trinity ⁷	Sedimentation	Road Construction	12 20 2001	161	690
1	R, Cr, G	East Fork Tributaries ⁸	Sedimentation	Road Construction	12 20 2001	115	65

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1	R, L	Eastside Tributaries ⁹	Sedimentation	Road Construction	12 20 2001	89	60
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- 1 New River, Big French, Manzanita, North Fork, East Fork, North Fork
- 2 Dutch, Soldier, Oregon gulch, Conner Creek
- 3 Big Bar, Prairie Creek, Little French Creek
- 4 Swede, Italian, Canadian, Cedar Flat, Mill, McDonald, Hennessy, Quimby, Hawkins, Sharber
- 5 Stuarts Fork, Swift Creek, Coffee Creek
- 6 Stuart Arm, Stoney Creek, Mule Creek, East Fork, Stuart Fork, West Side Trinity Lake, Hatchet Creek, Buckeye Creek,
- 7 Upper Trinity River, Tangle Blue, Sunflower, Graves, Bear Upper Trinity Mainstream, Ramshorn Creek, Ripple Creek, Minnehaha Creek, Snowslide Gulch, Scorpion Creek
- 8 East Fork Trinity, Cedar Creek, Squirrel Gulch
- 9 East Side Tributaries, Trinity Lake

Q Region	Type	Name	Pollutant Stressor	Potential Sources	TMDL Completion Date	Watershed Acres mi ²	WLA tons mi ² yr
1 R1.epa.trinity.so.sed	R, Cr	South Fork Trinity River and Hayfork Creek	Sedimentation	Road Construction	12 1998	Not given, 19 miles long	33 (road total)

R Region	Type	Name	Pollutant Stressor	Potential Sources	TMDL Completion Date	Watershed Acres mi ²	WLA tons mi ² yr
1 R1.epa.vanduzen.sed	R, Cr	Van Duzen River and Yager Creek	Sedimentation	Various	12 16 1999	429	1353 total allocation
1		Upper Basin	Sedimentation	Road Construction			7
1		Middle Basin	Sedimentation	Road Construction			22
1		Lower Basin	Sedimentation	Road Construction			20

S Region	Type	Name	Pollutant Stressor	Potential	TMDL	Watershed	WLA tons mi ²
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				Sources	Completion Date	Acres mi²	yr
6	R6.blackwood.sed	Cr	Blackwood Creek (Placer County)	Bedded Sediment	Various	9 2007	11 17272 total

T Region	Type	Name	Pollutant Stressor	Potential Sources	TMDL Completion Date	Watershed Acres mi²	WLA tons mi² yr
6	R6.SquawCk.sed	R	Squaw Creek (Placer County)	Sedimentation /controllable sources	Various – basin plan amendment	4 13 2006	8.2 10,900

Adopted TMDLs for Construction Sediment Sources

Region	Type	Name	Pollutant Stressor	Potential Sources	TMDL Completion Date	Watershed Area mi²	Waste load Allocation tons mi² yr
8	R	Newport Bay San Diego Creek Watershed	Sedimentation	Construction Land Development	1999	2.24 (1432 acres)	125,000 tons per Year (no more than 13,000 tons per year from construction sites)

APPENDIX 5: Glossary

Active Areas of Construction

All areas subject to land surface disturbance activities related to the project including, but not limited to, project staging areas, immediate access areas and storage areas. All previously active areas are still considered active areas until final stabilization is complete. [The construction activity Phases used in this General Permit are the Preliminary Phase, Grading and Land Development Phase, Streets and Utilities Phase, and the Vertical Construction Phase.]

Active Treatment System (ATS)

A treatment system that employs chemical coagulation, chemical flocculation, or electrocoagulation to aid in the reduction of turbidity caused by fine suspended sediment.

Acute Toxicity Test

A chemical stimulus severe enough to rapidly induce a negative effect; in aquatic toxicity tests, an effect observed within 96 hours or less is considered acute.

Air Deposition

Airborne particulates from construction activities.

Approved Signatory

A person who has been authorized by the Legally Responsible Person to sign, certify, and electronically submit Permit Registration Documents, Notices of Termination, and any other documents, reports, or information required by the General Permit, the State or Regional Water Board, or U.S. EPA. The Approved Signatory must be one of the following:

1. For a corporation or limited liability company: a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (a) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation or limited liability company; or (b) the manager of the facility if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
2. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;
3. For a municipality, State, Federal, or other public agency: a principal executive officer, ranking elected official, city manager, council president, or any other authorized public employee with managerial responsibility over the

construction or land disturbance project (including, but not limited to, project manager, project superintendent, or resident engineer);

4. For the military: any military officer or Department of Defense civilian, acting in an equivalent capacity to a military officer, who has been designated;
5. For a public university: an authorized university official;
6. For an individual: the individual, because the individual acts as both the Legally Responsible Person and the Approved Signatory; or
7. For any type of entity not listed above (e.g. trusts, estates, receivers): an authorized person with managerial authority over the construction or land disturbance project.

Beneficial Uses

As defined in the California Water Code, beneficial uses of the waters of the state that may be protected against quality degradation include, but are not limited to, domestic, municipal, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves.

Best Available Technology Economically Achievable (BAT)

As defined by USEPA, BAT is a technology-based standard established by the Clean Water Act (CWA) as the most appropriate means available on a national basis for controlling the direct discharge of toxic and nonconventional pollutants to navigable waters. The BAT effluent limitations guidelines, in general, represent the best existing performance of treatment technologies that are economically achievable within an industrial point source category or subcategory.

Best Conventional Pollutant Control Technology (BCT)

As defined by USEPA, BCT is a technology-based standard for the discharge from existing industrial point sources of conventional pollutants including biochemical oxygen demand (BOD), total suspended sediment (TSS), fecal coliform, pH, oil and grease.

Best Professional Judgment (BPJ)

The method used by permit writers to develop technology-based NPDES permit conditions on a case-by-case basis using all reasonably available and relevant data.

Best Management Practices (BMPs)

BMPs are scheduling of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants. BMPs also include treatment requirements, operating procedures,

and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Chain of Custody (COC)

Form used to track sample handling as samples progress from sample collection to the analytical laboratory. The COC is then used to track the resulting analytical data from the laboratory to the client. COC forms can be obtained from an analytical laboratory upon request.

Coagulation

The clumping of particles in a discharge to settle out impurities, often induced by chemicals such as lime, alum, and iron salts.

Common Plan of Development

Generally a contiguous area where multiple, distinct construction activities may be taking place at different times under one plan. A plan is generally defined as any piece of documentation or physical demarcation that indicates that construction activities may occur on a common plot. Such documentation could consist of a tract map, parcel map, demolition plans, grading plans or contract documents. Any of these documents could delineate the boundaries of a common plan area. However, broad planning documents, such as land use master plans, conceptual master plans, or broad-based CEQA or NEPA documents that identify potential projects for an agency or facility are not considered common plans of development.

Daily Average Discharge

The discharge of a pollutant measured during any 24-hour period that reasonably represents a calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged during the day. For pollutants with limitations expressed in other units of measurement (e.g., concentration) the daily discharge is calculated as the average measurement of the pollutant throughout the day (40 CFR 122.2). In the case of pH, the pH must first be converted from a log scale.

Debris

Litter, rubble, discarded refuse, and remains of destroyed inorganic anthropogenic waste.

Direct Discharge

A discharge that is routed directly to waters of the United States by means of a pipe, channel, or ditch (including a municipal storm sewer system), or through surface runoff.

Discharger

The Legally Responsible Person (see definition) or entity subject to this General Permit.

Dose Rate (for ATS)

In exposure assessment, dose (e.g. of a chemical) per time unit (e.g. mg/day), sometimes also called dosage.

Drainage Area

The area of land that drains water, sediment, pollutants, and dissolved materials to a common outlet.

Effluent

Any discharge of water by a discharger either to the receiving water or beyond the property boundary controlled by the discharger.

Effluent Limitation

Any numeric or narrative restriction imposed on quantities, discharge rates, and concentrations of pollutants which are discharged from point sources into waters of the United States, the waters of the contiguous zone, or the ocean.

Erosion

The process, by which soil particles are detached and transported by the actions of wind, water, or gravity.

Erosion Control BMPs

Vegetation, such as grasses and wildflowers, and other materials, such as straw, fiber, stabilizing emulsion, protective blankets, etc., placed to stabilize areas of disturbed soils, reduce loss of soil due to the action of water or wind, and prevent water pollution.

Field Measurements

Testing procedures performed in the field with portable field-testing kits or meters.

Final Stabilization

All soil disturbing activities at each individual parcel within the site have been completed in a manner consistent with the requirements in this General Permit.

First Order Stream

Stream with no tributaries.

Flocculants

Substances that interact with suspended particles and bind them together to form flocs.

Good Housekeeping BMPs

BMPs designed to reduce or eliminate the addition of pollutants to construction site runoff through analysis of pollutant sources, implementation of proper handling/disposal practices, employee education, and other actions.

Grading Phase (part of the Grading and Land Development Phase)

Includes reconfiguring the topography and slope including; alluvium removals; canyon cleanouts; rock undercuts; keyway excavations; land form grading; and stockpiling of select material for capping operations.

Hydromodification

Hydromodification is the alteration of the hydrologic characteristics of coastal and non-coastal waters, which in turn could cause degradation of water resources. Hydromodification can cause excessive erosion and/or sedimentation rates, causing excessive turbidity, channel aggradation and/or degradation.

Identified Organisms

Organisms within a sub-sample that is specifically identified and counted.

Inactive Areas of Construction

Areas of construction activity that are not active and those that have been active and are not scheduled to be re-disturbed for at least 14 days.

Index Period

The period of time during which bioassessment samples must be collected to produce results suitable for assessing the biological integrity of streams and rivers. Instream communities naturally vary over the course of a year, and sampling during the index period ensures that samples are collected during a time frame when communities are stable so that year-to-year consistency is obtained. The index period approach provides a cost-effective alternative to year-round sampling. Furthermore, sampling within the appropriate index period will yield results that are comparable to the assessment thresholds or criteria for a given region, which are established for the same index period. Because index periods differ for different parts of the state, it is essential to know the index period for your area.

K Factor

The soil erodibility factor used in the Revised Universal Soil Loss Equation (RUSLE). It represents the combination of detachability of the soil, runoff potential of the soil, and the transportability of the sediment eroded from the soil.

Legally Responsible Person

The Legally Responsible Person (LRP) will typically be the project proponent. The categories of persons or entities that are eligible to serve as the LRP are set forth below. For any construction or land disturbance project where multiple persons or entities are eligible to serve as the LRP, those persons or entities

shall select a single LRP. In exceptional circumstances, a person or entity that qualifies as the LRP may provide written authorization to another person or entity to serve as the LRP. In such a circumstance, the person or entity that provides the authorization retains all responsibility for compliance with the General Permit. Except as provided in category 2(d), a contractor who does not satisfy the requirements of any of the categories below is not qualified to be an LRP.

The following persons or entities may serve as an LRP:

1. A person, company, agency, or other entity that possesses a real property interest (including, but not limited to, fee simple ownership, easement, leasehold, or other rights of way) in the land upon which the construction or land disturbance activities will occur for the regulated site.
2. In addition to the above, the following persons or entities may also serve as an LRP:
 - a. For linear underground/overhead projects, the utility company, municipality, or other public or private company or agency that owns or operates the LUP;
 - b. For land controlled by an estate or similar entity, the person who has day-to-day control over the land (including, but not limited to, a bankruptcy trustee, receiver, or conservator);
 - c. For pollution investigation and remediation projects, any potentially responsible party that has received permission to conduct the project from the holder of a real property interest in the land; or
 - d. For U.S. Army Corp of Engineers projects, the U.S. Army Corps of Engineers may provide written authorization to its bonded contractor to serve as the LRP, provided, however, that the U.S. Army Corps of Engineers is also responsible for compliance with the general permit, as authorized by the Clean Water Act or the Federal Facilities Compliance Act.

Likely Precipitation Event

Any weather pattern that is forecasted to have a 50% or greater chance of producing precipitation in the project area. The discharger shall obtain likely precipitation forecast information from the National Weather Service Forecast Office (e.g., by entering the zip code of the project's location at <http://www.srh.noaa.gov/forecast>).

Maximum Allowable Threshold Concentration (MATC)

The allowable concentration of residual, or dissolved, coagulant/flocculant in effluent. The MATC shall be coagulant/flocculant-specific, and based on toxicity

testing conducted by an independent, third-party laboratory. A typical MATC would be:

The MATC is equal to the geometric mean of the NOEC (No Observed Effect Concentration) and LOEC (Lowest Observed Effect Concentration) Acute and Chronic toxicity results for most sensitive species determined for the specific coagulant. The most sensitive species test shall be used to determine the MATC.

Natural Channel Evolution

The physical trend in channel adjustments following a disturbance that causes the river to have more energy and degrade or aggrade more sediment. Channels have been observed to pass through 5 to 9 evolution types. Once they pass through the suite of evolution stages, they will rest in a new state of equilibrium.

Non-Storm Water Discharges

Discharges are discharges that do not originate from precipitation events. They can include, but are not limited to, discharges of process water, air conditioner condensate, non-contact cooling water, vehicle wash water, sanitary wastes, concrete washout water, paint wash water, irrigation water, or pipe testing water.

Non-Visible Pollutants

Pollutants associated with a specific site or activity that can have a negative impact on water quality, but cannot be seen through observation (ex: chlorine). Such pollutants being discharged are not authorized.

Numeric Action Level (NAL)

Level is used as a warning to evaluate if best management practices are effective and take necessary corrective actions. Not an effluent limit.

Original Sample Material

The material (i.e., macroinvertebrates, organic material, gravel, etc.) remaining after the subsample has been removed for identification.

pH

Unit universally used to express the intensity of the acid or alkaline condition of a water sample. The pH of natural waters tends to range between 6 and 9, with neutral being 7. Extremes of pH can have deleterious effects on aquatic systems.

Post-Construction BMPs

Structural and non-structural controls which detain, retain, or filter the release of pollutants to receiving waters after final stabilization is attained.

Preliminary Phase (Pre-Construction Phase - Part of the Grading and Land Development Phase)

Construction stage including rough grading and/or disking, clearing and grubbing operations, or any soil disturbance prior to mass grading.

Project

Qualified SWPPP Developer

Individual who is authorized to develop and revise SWPPPs.

Qualified SWPPP Practitioner

Individual assigned responsibility for non-storm water and storm water visual observations, sampling and analysis, and responsibility to ensure full compliance with the permit and implementation of all elements of the SWPPP, including the preparation of the annual compliance evaluation and the elimination of all unauthorized discharges.

Qualifying Rain Event

Any event that produces 0.5 inches or more precipitation with a 48 hour or greater period between rain events.

R Factor

Erosivity factor used in the Revised Universal Soil Loss Equation (RUSLE). The R factor represents the erosivity of the climate at a particular location. An average annual value of R is determined from historical weather records using erosivity values determined for individual storms. The erosivity of an individual storm is computed as the product of the storm's total energy, which is closely related to storm amount, and the storm's maximum 30-minute intensity.

Rain Event Action Plan (REAP)

Written document, specific for each rain event, that when implemented is designed to protect all exposed portions of the site within 48 hours of any likely precipitation event.

Remaining Sub sampled Material

The material (e.g., organic material, gravel, etc.) that remains after the organisms to be identified have been removed from the subsample for identification. (Generally, no macroinvertebrates are present in the remaining subsampled material, but the sample needs to be checked and verified using a complete Quality Assurance (QA) plan)

Routine Maintenance

Activities intended to maintain the original line and grade, hydraulic capacity, or original purpose of a facility.

Runoff Control BMPs

Measures used to divert runoff from offsite and runoff within the site.

Run-on

Discharges that originate offsite and flow onto the property of a separate project site.

Revised Universal Soil Loss Equation (RUSLE)

Empirical model that calculates average annual soil loss as a function of rainfall and runoff erosivity, soil erodibility, topography, erosion controls, and sediment controls.

Sampling and Analysis Plan

Document that describes how the samples will be collected, under what conditions, where and when the samples will be collected, what the sample will be tested for, what test methods and detection limits will be used, and what methods/procedures will be maintained to ensure the integrity of the sample during collection, storage, shipping and testing (i.e., quality assurance/quality control protocols).

Sediment

Solid particulate matter, both mineral and organic, that is in suspension, is being transported, or has been moved from its site of origin by air, water, gravity, or ice and has come to rest on the earth's surface either above or below sea level.

Sedimentation

Process of deposition of suspended matter carried by water, wastewater, or other liquids, by gravity. It is usually accomplished by reducing the velocity of the liquid below the point at which it can transport the suspended material.

Sediment Control BMPs

Practices that trap soil particles after they have been eroded by rain, flowing water, or wind. They include those practices that intercept and slow or detain the flow of storm water to allow sediment to settle and be trapped (e.g., silt fence, sediment basin, fiber rolls, etc.).

Settleable Solids (SS)

Solid material that can be settled within a water column during a specified time frame. It is typically tested by placing a water sample into an Imhoff settling cone and then allowing the solids to settle by gravity for a given length of time. Results are reported either as a volume (mL/L) or a mass (mg/L) concentration.

Sheet Flow

Flow of water that occurs overland in areas where there are no defined channels where the water spreads out over a large area at a uniform depth.

Site**Soil Amendment**

Any material that is added to the soil to change its chemical properties, engineering properties, or erosion resistance that could become mobilized by storm water.

Streets and Utilities Phase

Construction stage including excavation and street paving, lot grading, curbs, gutters and sidewalks, public utilities, public water facilities including fire hydrants, public sanitary sewer systems, storm sewer system and/or other drainage improvements.

Structural Controls

Any structural facility designed and constructed to mitigate the adverse impacts of storm water and urban runoff pollution

Suspended Sediment Concentration (SSC)

The measure of the concentration of suspended solid material in a water sample by measuring the dry weight of all of the solid material from a known volume of a collected water sample. Results are reported in mg/L.

Total Suspended Solids (TSS)

The measure of the suspended solids in a water sample includes inorganic substances, such as soil particles and organic substances, such as algae, aquatic plant/animal waste, particles related to industrial/sewage waste, etc. The TSS test measures the concentration of suspended solids in water by measuring the dry weight of a solid material contained in a known volume of a sub-sample of a collected water sample. Results are reported in mg/L.

Toxicity

The adverse response(s) of organisms to chemicals or physical agents ranging from mortality to physiological responses such as impaired reproduction or growth anomalies.

Turbidity

The cloudiness of water quantified by the degree to which light traveling through a water column is scattered by the suspended organic and inorganic particles it contains. The turbidity test is reported in Nephelometric Turbidity Units (NTU) or Jackson Turbidity Units (JTU).

Vertical Construction Phase

The Build out of structures from foundations to roofing, including rough landscaping.

Waters of the United States

Generally refers to surface waters, as defined by the federal Environmental Protection Agency in 40 C.F.R. § 122.2.¹

Water Quality Objectives (WQO)

Water quality objectives are defined in the California Water Code as limits or levels of water quality constituents or characteristics, which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area.

¹ The application of the definition of “waters of the United States” may be difficult to determine; there are currently several judicial decisions that create some confusion. If a landowner is unsure whether the discharge must be covered by this General Permit, the landowner may wish to seek legal advice.

APPENDIX 6: Acronym List

ASBS	Areas of Special Biological Significance
ASTM	American Society of Testing and Materials; Standard Test Method for Particle-Size Analysis of Soils
ATS	Active Treatment System
BASMAA	Bay Area Storm water Management Agencies Association
BAT	Best Available Technology Economically Achievable
BCT	Best Conventional Pollutant Control Technology
BMP	Best Management Practices
BOD	Biochemical Oxygen Demand
BPJ	Best Professional Judgment
CAFO	Confined Animal Feeding Operation
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CGP	NPDES General Permit for Storm Water Discharges Associated with Construction Activities
CIWQS	California Integrated Water Quality System
CKD	Cement Kiln Dust
COC	Chain of Custody
CPESC	Certified Professional in Erosion and Sediment Control
CPSWQ	Certified Professional in Storm Water Quality
CSMP	Construction Site Monitoring Program
CTB	Cement Treated Base
CTR	California Toxics Rule
CWA	Clean Water Act
CWC	California Water Code
CWP	Center for Watershed Protection
DADMAC	Diallyldimethyl-ammonium chloride
DDNR	Delaware Department of Natural Resources
DFG	Department of Fish and Game
DHS	Department of Health Services
DWQ	Division of Water Quality
EC	Electrical Conductivity
ELAP	Environmental Laboratory Accreditation Program
EPA	Environmental Protection Agency
ESA	Environmentally Sensitive Area
ESC	Erosion and Sediment Control
HSPF	Hydrologic Simulation Program Fortran
JTU	Jackson Turbidity Units
LID	Low Impact Development
LOEC	Lowest Observed Effect Concentration
LRP	Legally Responsible Person
LUP	Linear Underground/Overhead Projects

MATC	Maximum Allowable Threshold Concentration
MDL	Method Detection Limits
MRR	Monitoring and Reporting Requirements
MS4	Municipal Separate Storm Sewer System
MUSLE	Modified Universal Soil Loss Equation
NAL	Numeric Action Level
NEL	Numeric Effluent Limitation
NICET	National Institute for Certification in Engineering Technologies
NOAA	National Oceanic and Atmospheric Administration
NOEC	No Observed Effect Concentration
NOI	Notice of Intent
NOT	Notice of Termination
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NTR	National Toxics Rule
NTU	Nephelometric Turbidity Units
O&M	Operation and Maintenance
PAC	Polyaluminum chloride
PAM	Polyacrylamide
PASS	Polyaluminum chloride Silica/sulfate
POC	Pollutants of Concern
PoP	Probability of Precipitation
POTW	Publicly Owned Treatment Works
PRDs	Permit Registration Documents
PWS	Planning Watershed
QAMP	Quality Assurance Management Plan
QA/QC	Quality Assurance/Quality Control
REAP	Rain Event Action Plan
Regional Board	Regional Water Quality Control Board
ROWD	Report of Waste Discharge
RUSLE	Revised Universal Soil Loss Equation
RW	Receiving Water
SMARTS System	Storm water Multi Application Reporting and Tracking
SS	Settleable Solids
SSC	Suspended Sediment Concentration
SUSMP	Standard Urban Storm Water Mitigation Plan
SW	Storm Water
SWARM	Storm Water Annual Report Module
SWAMP	Surface Water Ambient Monitoring Program
SWMM	Storm Water Management Model
SWMP	Storm Water Management Program
SWPPP	Storm Water Pollution Prevention Plan
TC	Treatment Control
TDS	Total Dissolved Solids

TMDL	Total Maximum Daily Load
TSS	Total Suspended Solids
USACOE	U.S. Army Corps of Engineers
USC	United States Code
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
WDID	Waste Discharge Identification Number
WDR	Waste Discharge Requirements
WLA	Waste Load Allocation
WET	Whole Effluent Toxicity
WRCC	Western Regional Climate Center
WQBEL	Water Quality Based Effluent Limitation
WQO	Water Quality Objective
WQS	Water Quality Standard

APPENDIX 7: State and Regional Water Resources Control Board Contacts

NORTH COAST REGION (1)
5550 Skylane Blvd, Ste. A
Santa Rose, CA 95403
(707) 576-2220 FAX: (707)523-0135

SAN FRANCISCO BAY REGION (2)
1515 Clay Street, Ste. 1400
Oakland, CA 94612
(510) 622-2300 FAX: (510) 622-2640

CENTRAL COAST REGION (3)
895 Aerovista Place, Ste 101
San Luis Obispo, CA 93401
(805) 549-3147 FAX: (805) 543-0397

LOS ANGELES REGION (4)
320 W. 4th Street, Ste. 200
Los Angeles, CA 90013
(213) 576-6600 FAX: (213) 576-6640

LAHONTAN REGION (6 SLT)
2501 Lake Tahoe Blvd.
South Lake Tahoe, CA 96150
(530) 542-5400 FAX: (530) 544-2271

VICTORVILLE OFFICE (6V)
14440 Civic Drive, Ste. 200
Victorville, CA 92392-2383
(760) 241-6583 FAX: (760) 241-7308

CENTRAL VALLEY REGION (5S)
11020 Sun Center Dr., #200
Rancho Cordova, CA 95670-6114
(916) 464-3291 FAX: (916) 464-4645

FRESNO BRANCH OFFICE (5F)
1685 E St.
Fresno, CA 93706
(559) 445-5116 FAX: (559) 445-5910

REDDING BRANCH OFFICE (5R)
364 Knollcrest Drive, Ste. 205
Redding, CA 96002
(530) 224-4845 FAX: (530) 224-4857

COLORADO RIVER BASIN REGION (7)
73-720 Fred Waring Dr., Ste. 100
Palm Desert, CA 92260
(760) 346-7491 FAX: (760) 341-6820

SANTA ANA REGION (8)
3737 Main Street, Ste. 500
Riverside, CA 92501-3339
Phone (951) 782-4130 FAX: (951) 781-6288

SAN DIEGO REGION (9)
9174 Sky Park Court, Ste. 100
San Diego, CA 92123-4340
(858) 467-2952 FAX: (858) 571-6972

STATE WATER BOARD
PO Box 1977
Sacramento, CA 95812-1977
stormwater@waterboards.ca.gov

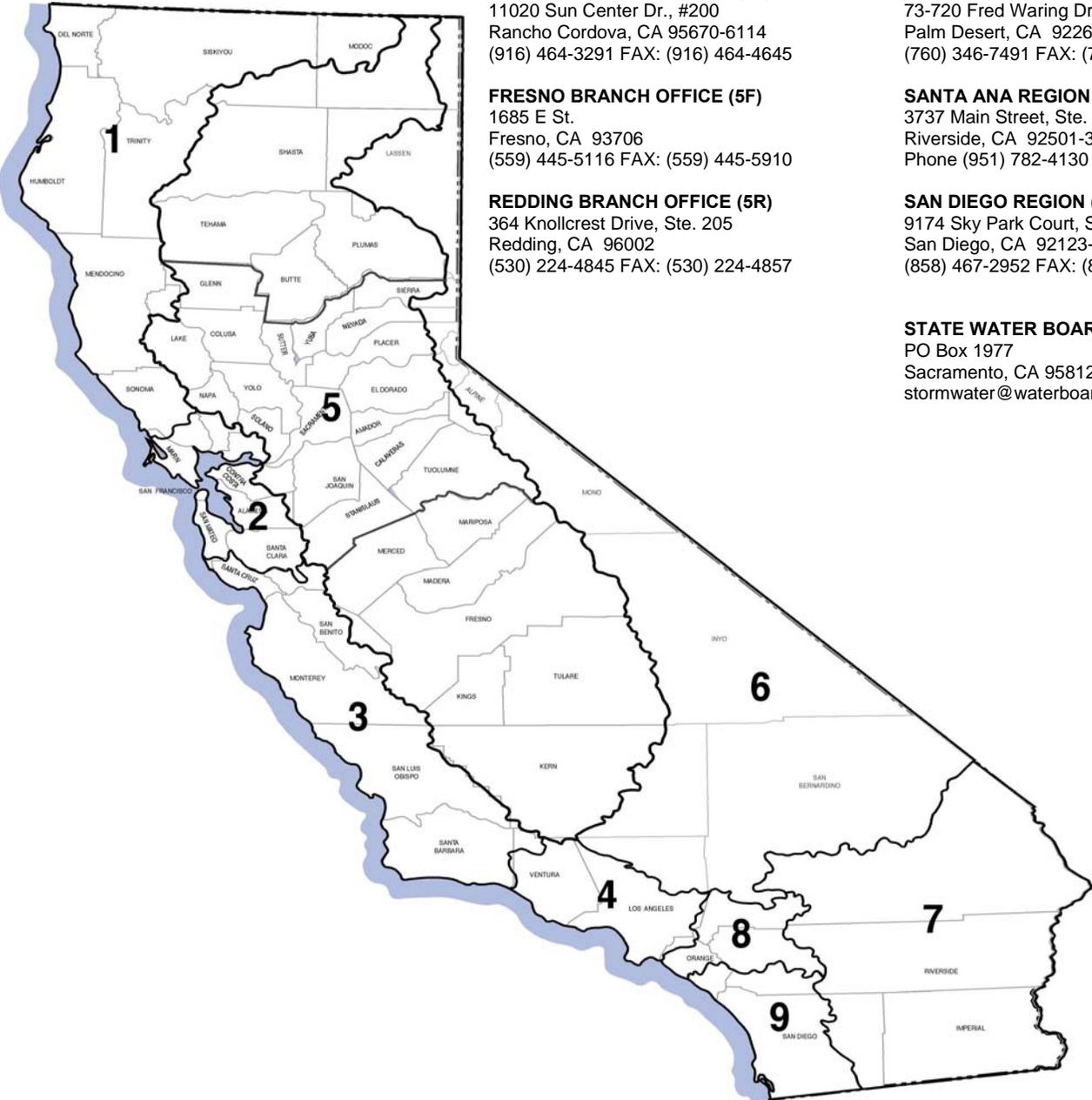


Exhibit No. 2
March 31, 2014, Sheppard Mullin letter

March 31, 2014

619.338.6524 direct
djones@sheppardmullin.com

File Number: 34RH-197915

VIA E-MAIL AND U.S. MAIL

Frank Melbourn
Water Resources Control Engineer
San Diego Regional Water Quality Control Board
2375 Northside Drive, Suite 100
San Diego, CA 92108-2700
E-Mail: frank.melbourn@waterboards.ca.gov

Re: Casa Mira View Ownership Issue

Dear Mr. Melbourn:

This letter responds to your request for information regarding Casa Mira View's phasing and ownership - an issue raised as Item 10 of NOV No. R9-2014-0018.

Property Owner's Names: The Casa Mira View 78 project, as the project is identified in the SWPPP, comprises approximately 41.31 acres and is located at 11241, 11267, and 11285 Westview Parkway in San Diego, California. The Project has been subdivided several times and the property can be described as being Parcels 1 through 4 of Parcel Map 21098 and Lots 4 and 6 of Subdivision Map 15850. Due to the sheer size of the project, construction of Casa Mira View was split up into three large phases. For financing purposes, and at the request of the lender for the project, Phase 1 was separated into a separate entity. Consequently, the ownership for the project is currently as follows:

- Phase 1: Scripps Mesa Developers II, LLC, is the legal entity that owns Phase 1 which consists of Parcel 1 of Parcel Map 21098 and Lot 4 of Map 15850.
- Phases 2 and 3: Scripps Mesa Developers, LLC, is the legal entity that owns Phases 2 and 3 which consists of Parcels 2 through 4 of Parcel Map 21098 and Lot 6 of Subdivision Map 15850.
- Both Scripps Mesa Developers II, LLC and Scripps Mesa Developers, LLC are owned by the same parent, and all phases of the Casa Mira View project are being or will be constructed by Garden Communities, a California corporation.
- In addition, the SWPPP also includes a contiguous property located to the southwest of the Casa Mira View 78 project. This property is known as Casa Mira View II and is owned by Garden

Communities RP, LLC. This property is located easterly of Westview Parkway and consists of approximately 7.09 acres. Although the property has never been subdivided, it was graded approximately 20 or more years ago and currently is configured as a flat, graded pad. It is described as being a portion of the Northeast quarter of the Northeast quarter of Section 31, Township 14 South, Range 2 West. Discretionary approvals for development of Casa Mira View II have also been obtained from the City of San Diego. However, construction documents to implement this development have not yet been prepared. On an interim basis, and as currently covered under this SWPPP, the Casa Mira View II property will be used as a staging area for the Casa Mira View 78 project.

Anticipated Dates of Work: Mass grading for all three phases commenced in July 2010.

- Phase I: Fine grading and vertical construction for Phase I commenced as soon as the mass grading within Phase I area was completed, and continues today. Vertical construction for Phase I, e.g. Final Stabilization for this phase, is currently anticipated to be complete on or around December 2014; however, actual completion depends on a variety of factors, including market demand.
- Phase II: Fine grading is currently underway in Phase II. Vertical construction has commenced with the construction of the parking structure that will support the residential units in Phase II. Vertical construction is expected to occur over about a four-year period with the first residential unit construction commencing in approximately 2015. Thus, Final Stabilization for Phase II is anticipated to occur sometime toward the end of 2018 although, as is the case with all of the phases, build-out timing depends on market and other conditions.
- Phase III: The mass grading for Phase III is not yet complete. It is currently anticipated that vertical construction for this phase would begin in approximately 2018 and would be expected to continue until approximately the end of 2020, again depending on market demands and other constraints or issues that may arise between now and then.

Phase Location: Please see Attachment A, highlighting the location of the various phases.

Staff Contact Information: The contact information is the same for all phases, which is

Stuart Posnock
Scripps Mesa Developers LLC
9110 Judicial Drive
San Diego, CA 92122

Certificate of Good Standing: Finally, Attachment B hereto confirms that Scripps Mesa Developers, LLC is active and in good standing with the California Secretary of State.

SheppardMullin

Frank Melbourn
March 31, 2014
Page 3

If you have any questions or would like to discuss this further please do not hesitate to call.

Very truly yours,

A handwritten signature in blue ink that reads "Donna Jones/set". The signature is written in a cursive style.

Donna D. Jones
for SHEPPARD, MULLIN, RICHTER & HAMPTON LLP

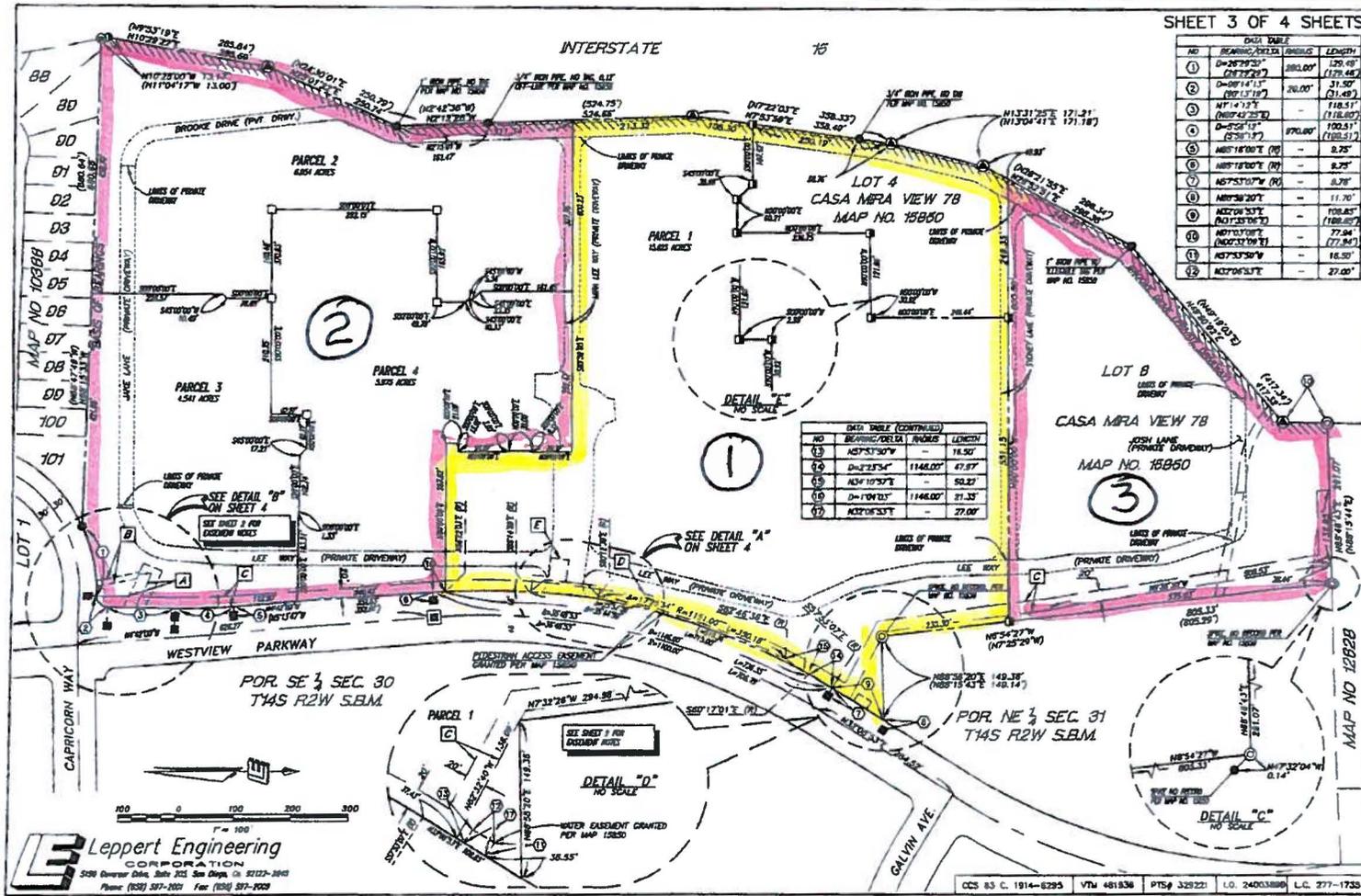
SMRH.418573832.4
Attachments

cc: Ms. Christina Arias
Stuart Posnock
Dee Snow
Keith Garner, Esq.

**Attachment A
(Map of Phases)**

PARCEL MAP NO. 21098

SHEET 3 OF 4 SHEETS



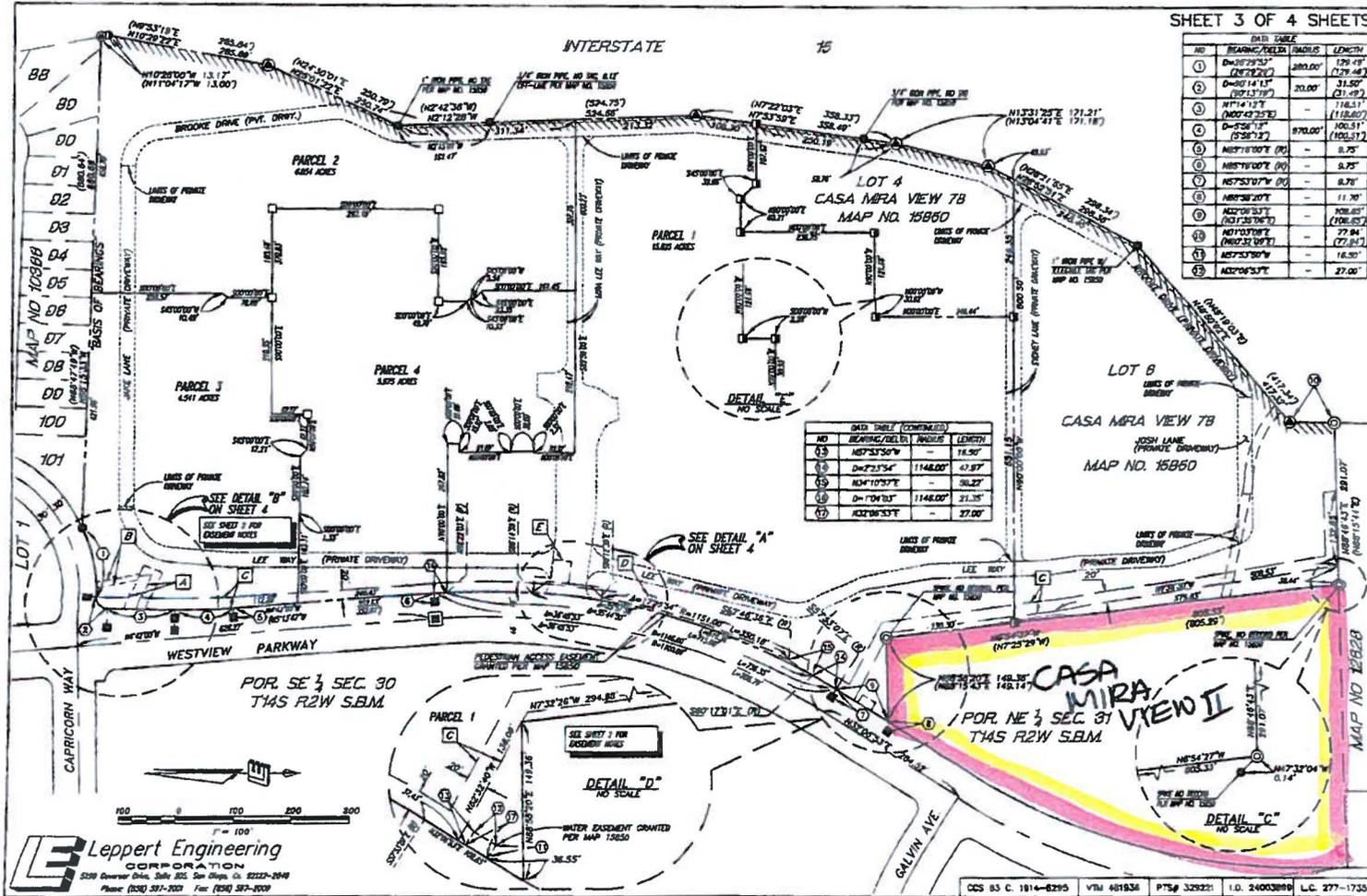
NO.	BEARING/ANGLE	LENGTH
①	D=26°29'23" (N17°22'27")	129.45' (129.45')
②	D=89°14'11" (S20°15'19")	26.00' (31.49')
③	N1°41'23" (N89°42'23")	118.51' (118.60')
④	D=25°11'11" (S28°11'17")	170.51' (162.51')
⑤	N85°18'00"E (N)	8.25'
⑥	N85°18'00"E (N)	8.25'
⑦	N57°51'00"W (N)	6.78'
⑧	N85°30'00"E	11.70'
⑨	N20°04'33"E (N)	108.65' (108.65')
⑩	N87°13'00"E (N)	77.84' (77.84')
⑪	N57°51'00"W (N)	16.50'
⑫	N37°06'33"E	27.00'

NO.	BEARING/ANGLE	LENGTH
⑬	N57°51'00"W	16.50'
⑭	D=2°23'54"	1148.00' 47.97'
⑮	N34°10'50"E	50.22'
⑯	D=1°04'03"	1148.00' 31.33'
⑰	N37°06'33"E	27.00'

Leppert Engineering CORPORATION
 5200 Governor Drive, Suite 202, San Diego, CA 92121-3943
 Phone (619) 557-2001 Fax (619) 557-1020

PARCEL MAP NO. 21098

SHEET 3 OF 4 SHEETS



NO.	BEARING/ANGLE	DISTANCE	LENGTH
1	D=0°22'25" (N77°22'25")	280.00'	129.45'
2	D=0°07'14" (N73°32'14")	30.00'	31.50'
3	N71°41'15"	-	116.51'
4	D=0°58'11" (N70°42'35")	870.00'	100.51'
5	N82°18'00" (N)	-	8.25'
6	N82°18'00" (N)	-	8.25'
7	N82°31'00" (N)	-	8.25'
8	N82°31'00" (N)	-	11.70'
9	N82°31'00" (N)	-	108.65'
10	N82°31'00" (N)	-	122.84'
11	N82°31'00" (N)	-	16.50'
12	N82°31'00" (N)	-	27.00'

NO.	BEARING/ANGLE	LENGTH
13	N82°31'00" (N)	11.50'
14	D=0°21'54"	43.87'
15	N84°10'37" (N)	38.27'
16	D=0°04'23"	31.25'
17	N82°31'00" (N)	27.00'

Leppert Engineering CORPORATION
 5209 Governor Drive, Suite 202, San Diego, CA 92122-2848
 Phone (619) 591-2001 Fax (619) 597-8009

CDS 83 C. 1814-8293 VTM 481834 P75# 32922; I.D. 24003899 LC. 277-1735

**Attachment B
(Secretary of State Confirmation)**



Secretary of State Administration Elections Business Programs Political Reform Archives Registries

Business Entities (BE)

Online Services

- E-File Statements of Information for Corporations
- Business Search
- Processing Times
- Disclosure Search

Main Page

Service Options

Name Availability

Forms, Samples & Fees

Statements of Information (annual/biennial reports)

Filing Tips

Information Requests (certificates, copies & status reports)

Service of Process

FAQs

Contact Information

Resources

- Business Resources
- Tax Information
- Starting A Business

Customer Alerts

- Business Identity Theft
- Misleading Business Solicitations

Business Entity Detail

Data is updated to the California Business Search on Wednesday and Saturday mornings. Results reflect work processed through Tuesday, March 11, 2014. Please refer to **Processing Times** for the received dates of filings currently being processed. The data provided is not a complete or certified record of an entity.

Entity Name:	SCRIPPS MESA DEVELOPERS, LLC
Entity Number:	200633510027
Date Filed:	11/30/2006
Status:	ACTIVE
Jurisdiction:	CALIFORNIA
Entity Address:	9110 JUDICIAL DR - OFC
Entity City, State, Zip:	SAN DIEGO CA 92122
Agent for Service of Process:	STUART POSNOCK
Agent Address:	9085 JUDICIAL DR - OFC
Agent City, State, Zip:	SAN DIEGO CA 92122

* Indicates the information is not contained in the California Secretary of State's database.

* **Note:** If the agent for service of process is a corporation, the address of the agent may be requested by ordering a status report.

- For information on checking or reserving a name, refer to **Name Availability**.
- For information on ordering certificates, copies of documents and/or status reports or to request a more extensive search, refer to **Information Requests**.
- For help with searching an entity name, refer to **Search Tips**.
- For descriptions of the various fields and status types, refer to **Field Descriptions and Status Definitions**.

[Modify Search](#) [New Search](#) [Printer Friendly](#) [Back to Search Results](#)

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Water Boards Storm Water Multiple Application & Report Tracking System

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Exhibit No. 3
 NOI

Navigate To:

NOTICE OF INTENT - Developer Information

The Notice of Intent (NOI) is organized into different tabs. Please complete all applicable tabs before submitting the form. If you want to complete the NOI at a later time, please click on "Save & Exit".

WDID: 9 37C353628 **Owner:** Scripps Mesa Developers LLC **Status:** Active **Processed Date:** 10/07/2008
 9110 Judicial Drive San Diego CA 92122 **Certified Date:** 06/30/2010 **NOT Effective Date:**
Permit Type: Construction **Site:** Casa Mira View
 11241 11267 11285 Westview Pkwy San Diego
 CA 92126

- [Owner Info](#) [Developer Info](#) [Site Info](#) [Risk](#) [Addtl Site Info](#) [Post Construction](#) [Billing Info](#) [Attachments](#) [Certification](#) [Requirements](#)
- [Reports](#) [Inspections](#) [Violations](#) [Enforcement Actions](#) [Admin Changes](#) [Tasks](#) [Print](#) [Notes](#) [Status History](#) [Linked Users](#) [NOTs](#) [COIs](#)

Developer Information

Developer Name:	Garden Communities *	Contact First Name:	Stuart *
Street Address:	8530 Costa Verde Blvd *	Contact Last Name:	Posnock *
Address Line 2:	<input type="text"/>	Title:	<input type="text"/>
City/State/Zip:	San Diego CA 92122 *	Phone:	858-200-2241 * Ext: (999-999-9999)
		E-mail:	stuartp@gardencommunitiesca.com * (abc@xyz.com)

Fields marked with * are mandatory fields.

Water Boards Storm Water Multiple Application & Report Tracking System

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NOTICE OF INTENT - Owner Information

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- Owner Info **Developer Info** Site Info Risk Addtl Site Info Post Construction Billing Info Attachments Certification Requirements
 Reports Inspections Violations Enforcement Actions Admin Changes Tasks Print Notes Status History Linked Users NOTs COIs

Property Owner Information		Populate Contact Info: <input type="text" value="Select"/>	
Owner Name:	<input type="text" value="Scripps Mesa Developers LLC"/> *?	Contact First Name:	<input type="text" value="Stuart"/> *
Street Address:	<input type="text" value="9110 Judicial Drive"/> *?	Contact Last Name:	<input type="text" value="Posnock"/> *
Address Line 2:	<input type="text" value=""/> ?	Title:	<input type="text"/>
City/State/Zip::	<input type="text" value="San Diego"/> <input type="text" value="CA"/> <input type="text" value="92122"/> *?	Phone:	<input type="text" value="858-200-2241"/> * Ext: <input type="text" value="(999-999-9999)"/>
Type:	<input type="text" value="Private Business"/> *? *?	E-mail:	<input type="text" value="(abc@xyz.com)"/> *
Federal Tax ID:	<input type="text" value="20-5971089"/> ?		

Fields marked with * are mandatory fields.

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NOTICE OF INTENT - Certification

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The electronic "Notice of Intent" has been successfully received by the State Water Resources Control Board's database. The confirmation information for this certification is as follows:

SWRCB Application No.	SA353250
Permit Type	Construction
Submission/Certify Date	06/30/2010
Certifier Name	Stuart Posnock
Certifier Title	

Please print out this screen as proof of certification. If you need to correct any information, please contact the Regional Board representative.

All records must be retained for 5 years from the date of the report or monitoring activity.

Please note, by default all the reporting requirements associated with the order are linked to the NOI. For inapplicable reporting requirements, go to the requirements in order level, click on the inapplicable reporting requirement and uncheck the NOI from the list and save before close of business (COB) on the day the NOI is approved.

[Download Submitted PDF](#)

The NOI is Active. The receipt letter can be downloaded by clicking on the Receipt Letter button in the Print Tab

Review Decision History

Review Decision	Incomplete Application	Application Not Signed	Payment Not Enclosed	Under Payment	Site Map not enclosed	Incorrect NOI	Status By	Action Date Srt	Review Comments	Notes To Discharger
Active							Papantzin Cid	10/07/2008		

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NOTICE OF INTENT - Site Information

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- Owner Info
- Developer Info
- Site Info
- Risk
- Addtl Site Info
- Post Construction
- Billing Info
- Attachments
- Certification
- Requirements
- Reports
- Inspections
- Violations
- Enforcement Actions
- Admin Changes
- Tasks
- Print
- Notes
- Status History
- Linked Users
- NOTs
- COIs

Site Information If different, enter below

Site Name: <input type="text" value="Casa Mira View"/> *	Contact First Name: <input type="text" value="Jim"/> *
Street Address: <input type="text" value="11241 11267 11285 Westview Pkwy"/> *	Contact Last Name: <input type="text" value="Mitchell"/> *
Address Line 2: <input type="text"/>	Title: <input type="text"/>
Latitude: <input type="text" value="32.92131"/> * Longitude: <input type="text" value="-117.11747"/> * <small>(Decimal degrees only, minimum 5 significant digits Ex: 99.99999)</small>	Phone: <input type="text" value="619-247-2193"/> * Ext: <input type="text"/> (999-999-9999)
City: <input type="text" value="San Diego"/> *	Emergency Phone: <input type="text" value="999-999-9999"/> Ext: <input type="text"/> (999-999-9999)
County: <input type="text" value="San Diego"/> *	E-mail: <input type="text" value="jimm@gardencommunities.com"/> * (abc@xyz.com)
Regional Board: <input type="text" value="Region 9 - San Diego"/> *	
State/Zip: <input type="text" value="CA 92126"/> *	Total Site Size: <input type="text" value="49.49"/> * <input checked="" type="radio"/> Acres <input type="radio"/> Sqft

Additional Information (Construction Specific)

Total Area to be Disturbed: <input type="text" value="49.49"/> Acres *	Percent of Total Disturbed: <input type="text" value="100"/> %
Imperviousness Before Construction: <input type="text" value="3"/> % *	Imperviousness After Construction: <input type="text" value="75"/> % *
Tract Number(s): <input type="text"/>	
Mile Post Marker: <input type="text"/>	
Is the construction site part of larger common plan of development? <input type="radio"/> Yes <input checked="" type="radio"/> No *	
Name of plan or development: <input type="text"/>	
Construction Commencement Date: <input type="text" value="07/01/2010"/> * <small>(mm/dd/yyyy)</small>	
Complete Grading Date: <input type="text" value="01/01/2018"/> *	Complete Project Date: <input type="text" value="12/31/2020"/> * <small>(mm/dd/yyyy)</small>

Type of Construction

Construction

Residential Commercial Industrial Reconstruction Transportation Utility:

Other: *

Linear Utility Project

Type of Construction

- Above Ground
- Below Ground
- Gas Line
- Water/Sewer Line
- Communication Line
- Cable Line
- Electrical
- Other: *

Fields marked with * are mandatory fields.

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NOTICE OF INTENT - Risk

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GIS K Value Factor	GIS LS Value Factor	GIS Receiving Water
0.2	3.67117143	Y
SEDIMENT RISK FACTOR WORKSHEET		
Instructions: Enter R,K and LS factor values. System will calculate watershed erosion estimates and site sediment risk factor		
A. Sediment Risk		
A) R Factor Value:(What's this?)		500 *Instructions to Calculate the R-factor
B) K Factor Value (weighted average, by area, for all site soils)(What's this?) ***If not using the SWRCB map(Populate K Factor) upload your analysis on the Attachment Tab prior to submitting to the SWRCB.		0.15 * <input type="button" value="Populate K Factor"/>
C) LS Factor (weighted average, by area, for all slopes)(What's this?)***If not using the SWRCB map(Populate LS Factor) upload your analysis on the Attachment Tab prior to submitting to the SWRCB.		2.33 * <input type="button" value="Populate LS Factor"/>
Watershed Erosion Estimate (=R*K*LS) in tons/acre		174.75
Site Sediment Risk Factor Low Sediment Risk: < 15 tons/acre Medium Sediment Risk: >= 15 and <75 tons/acre High Sediment Risk: >= 75 tons/acre		<input type="button" value="High"/>

RECEIVING WATER (RW) RISK FACTOR WORKSHEET

A. Watershed Characteristics

A.1.(a) Does the disturbed area discharge directly or indirectly to a 303(d) listed waterbody impaired by sediment? <p style="text-align: center;"><u>OR</u></p> A.1.(b) Is the disturbed area located within a sub-watershed draining to a 303(d) listed waterbody impaired by sediment? <p style="text-align: center;"><u>OR</u></p> A.2. Is the disturbed area located within a planning watershed draining to a waterbody with designated beneficial uses of COLD, SPAWN AND MIGRATORY?	<input type="button" value="Populate Receiving Water Risk"/> Yes <input type="button" value="Yes"/> * Yes = High, No = Low Statewide Map of High Receiving Water Risk Watersheds	<input type="button" value="High"/>
---	---	-------------------------------------

C. Combined Risk Level Matrix

		Sediment Risk		
		Low	Medium	High
Receiving Water Risk	Low	Level1	Level2	
	High	Level2		Level3
Project Sediment Risk:		<input type="button" value="High"/>		

Project Receiving Water Risk:

Project Combined Risk:

Fields marked with * are mandatory fields.

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- [Reports](#) [Inspections](#) [Violations](#) [Enforcement Actions](#) [Admin Changes](#) [Tasks](#) [Print](#) [Notes](#) [Status History](#) [Linked Users](#) [NOTs](#) [COIs](#)

Billing Information If different, enter below. **Bill Month:** October **Bill Hold:**

Billing Name: **Contact First Name:**

Street Address: **Contact Last Name:**

Address Line 2: **Title:**

City/State/Zip: San Diego **Phone:** *** Ext:** **(999-999-9999)**

Reason for Change:

E-mail:

Fields marked with * are mandatory fields.

SWRCB Tax ID: 68-0281986

The following are the Invoices and Payments associated with this NOI.

Invoices:

Invoice No	Invoice Date	Fiscal Year	Invoice Amount	Original Invoice Amount	Invoice Status	Status Date	Prepare Form-X
SW0069014	11/13/2013	2013	\$2,595.00	\$2,595.00	Done - Paid	01/07/2014	
SW0055446	10/10/2012	2012	\$1,976.00	\$1,976.00	Done - Paid	10/26/2012	
SW0041134	11/21/2011	2011	\$1,976.00	\$1,976.00	Done - Paid	12/23/2011	
SW0026525	12/08/2010	2010	\$1,479.00	\$1,479.00	Done - Paid	01/14/2011	
SW0008947	10/29/2009	2009	\$1,479.00	\$1,479.00	Done - Paid	11/19/2009	

For a copy of the original invoice please email fee_branch@waterboards.ca.gov or call (916) 341-5247

Payments:

Payment No	Payment Method	Payer Name	ROC No	Total Amount	Reference No	Allocated Amount	Unallocated Amount	Refunded Amount
42498	Check	Scripps Mesa Developers LLC	1568	\$1,232.00	1289	\$1,209.00	\$23.00	



California Regional Water Quality Control Board San Diego Region



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Governor

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<http://www.waterboards.ca.gov/sandiego>

Exhibit No. 4

NOV No. R9-2010-0146

November 3, 2010

Certified Mail – Return Receipt Requested
Article Number: 7010 1060 0000 4952 6986

Mr. Stuart Posnock
Scripps Mesa Developers, LLC
8530 Costa Verde Boulevard
San Diego, CA 92122

In reply refer to:
CIWQS Place ID: 9 37C353628: carias

Dear Mr. Posnock:

**Subject: Notice of Violation No. R9-2010-0146 and Water Code Section 13267
Technical Report, Casa Mira View**

Enclosed is Notice of Violation (NOV) No. R9-2010-0146 issued to Scripps Mesa Developers, LLC, for violations of Order No. 2009-0009-DWQ, issued by the State Water Resources Control Board and enforced by the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board). As described in the NOV, the violations are subject to further enforcement pursuant to the California Water Code. The San Diego Water Board reserves the right to take any enforcement action authorized by law.

Water Code Section 13267¹ Technical Report Is Required by November 22, 2010

Pursuant to Water Code section 13267, **you are hereby required to provide a Technical Report by November 22, 2010** that includes the following information:

1. A description of the measures taken to prevent additional illicit pumping of sediment laden water into storm drains.
2. A description of how the violations noted in NOV No. R9-2010-0146 and the Facility Inspection Report dated October 26, 2010 have been corrected, including photo-documentation of the additional BMPs implemented at the site.
3. A description of measures being taken to ensure additional violations of Order No. 2009-0009-DWQ do not occur. Please describe any changes made to the site's Storm Water Pollution Prevention Plan.

¹ Water Code section 13267, subdivision (b), allows the Water Boards to conduct investigations and to require technical or monitoring reports from any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste in accordance with the conditions in the section.

The violations documented in the attached NOV and Facility Inspection Report dated October 26, 2010 support the requirement to provide the technical report. The report is necessary for the San Diego Water Board to determine the state of compliance with Order No. 2009-0009-DWQ. The report is also necessary to determine the potential or actual harm to human health or the environment from non-compliance. The burden, including costs of the reports, bears a reasonable relationship to the need for the reports and the benefits to be obtained from them.

Failure to comply with requirements made pursuant to Water Code section 13267, subdivision (b), may result in administrative civil liability pursuant to Water Code section 13268 up to \$1,000 per day.

In making the determination of whether and how to proceed with further enforcement action, the San Diego Water Board will consider both the time it takes to correct the identified violations and the sufficiency of the corrections.

In the subject line of any response, please include the requested "In reply refer to:" information located in the heading of this letter. For questions pertaining to the subject matter, please contact Christina Arias at (858) 627-3931 or carias@waterboards.ca.gov.

Respectfully,



DAVID T. BARKER, P.E.
Supervising Water Resource Control Engineer
Surface Waters Basins Branch

Signed under the authority delegated by the Executive Officer

DTB:esb:cma

Enclosures:

1. Notice of Violation No. R9-2010-0146
2. Facility Inspection Report Dated October 26, 2010.

Cc via email: (w/encl.)

Joan Brackin, City of San Diego

SMARTS Entries:

SMARTS Entries:	Tech Staff Info & Use
Place/WDID	9 37C353628
Enf ID	403098, 403100
NPDES No.	CAS000002
Violation IDs	842769, 842770

Date of Letter

Staff Name

11/4/2010

C. Arias

SENDER: COMPLETE THIS SECTION

COMPLETE THIS SECTION ON DELIVERY

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. Stuart Posnack
 Scripps Mesa Developers
 8530 Costa Verde Blvd
 San Diego, CA 92122

A. Signature

X M. J. Alsett

Agent

Addressee

B. Received by (Printed Name)

M. J. Alsett

C. Date of Delivery

D. Is delivery address different from item 1? Yes

If YES, enter delivery address below: No

2010 NOV - 5 2:50
 SAN DIEGO
 REGIONAL
 WATERBURY

3. Service Type

Certified Mail Express Mail

Registered Return Receipt for Merchandise

Insured Mail C.O.D.

4. Restricted Delivery? (Extra Fee)

Yes

2. Article Number

(Transfer from service label)

7010 1060 0000 4952 6986



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San Diego Region



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Scripps Mesa Developers LLC

Casa Mira View

WDID No.: 9 37C353628: cma

NOTICE OF VIOLATION No. R9-2010-0146

Violations of Order No. 2009-0009-DWQ
November 3, 2010

SCRIPPS MESA DEVELOPERS LLC is hereby notified that the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) reserves the right to take any enforcement action authorized by law for the violations described herein.

SCRIPPS MESA DEVELOPERS LLC is in violation of State Water Resources Control Board Order No. 2009-0009-DWQ, NPDES No. CAS000002, *National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities*.

A. Summary of Violations

1. Failure to Comply with Discharge Prohibitions

- a. **Pursuant to Provision III A. of Order No. 2009-0009-DWQ:** Dischargers shall not violate any discharge prohibitions contained in applicable Basin Plans or statewide water quality control plans.
- b. **Pursuant to Provision III B. of Order No. 2009-0009-DWQ:** All discharges are prohibited except for the storm water and non-storm water discharge specifically authorized by this General Permit or another NPDES permit.
- c. **Observations:** On October 26, 2010, the San Diego Water Board inspected the Casa Mira View construction site (WDID No. 9 37C353628) and found sediment-laden water being pumped from the construction site into an offsite storm drain. Photo-documentation and specific findings regarding this illegal discharge are discussed in the Facility Inspection Report dated October 26, 2010.

2. Failure to Adequately Implement Erosion Control Best Management Practices (BMPs)

- a. **Pursuant to Provision D.2. of Attachment C to Order No. 2009-0009-DWQ:** Risk Level 1 dischargers shall provide effective soil cover for inactive areas and all finished slopes, open space, utility backfill, and completed lots.
- b. **Observations:** On October 26, 2010, the San Diego Water Board inspected the Casa Mira View construction site and found that several inactive areas and finished slopes had no erosion control BMPs. Photo-documentation and specific findings are discussed in the Facility Inspection Report dated October 26, 2010.

3. Failure to Adequately Implement Sediment Control BMPs

- a. **Pursuant to Provision E.1 of Attachment C to Order No. 2009-0009-DWQ:** Risk Level 1 dischargers shall establish and maintain effective perimeter controls and stabilize all construction entrances and exits to sufficiently control erosion and sediment discharges from the site.
- b. **Observations:** On October 26, 2010, the San Diego Water Board inspected the Casa Mira View construction site and found that both perimeter controls and BMPs at the construction site entrance were inadequate. This resulted in a discharge of sediment into the sidewalks and streets. Photo-documentation and specific findings are discussed in the Facility Inspection Report dated October 26, 2010.

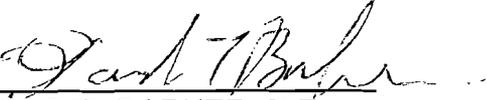
B. Summary of Potential Enforcement Options

These violations may subject you to additional enforcement by the San Diego Water Board or State Water Resources Control Board, including a potential civil liability assessment of \$10,000 per day of violation (Water Code section 13385) and/or any of the following enforcement actions:

Other Potential Enforcement Options	Applicable Water Code Section
Technical or Investigative Order	Sections 13267 or 13383
Cleanup and Abatement Order	Section 13304
Cease and Desist Order	Sections 13301-13303
Time Schedule Order	Sections 13300, 13308

In addition, the San Diego Water Board may consider revising or rescinding applicable waste discharge requirements, if any, referring the matter to other resource agencies, referring the matter to the State Attorney General for injunctive relief, and referral to the municipal or District Attorney for criminal prosecution.

Questions pertaining to this Notice of Violation should be directed to Christina Arias at 858-627-3931 or carias@waterboards.ca.gov.



DAVID T. BARKER, P.E.
Supervising Water Resource Control Engineer
Surface Waters Basins Branch

SMARTS Entries
WDID ID: 9 37C353628
Enf. ID: 403098
Violation IDs: 842770, 842769

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD - SAN DIEGO REGION
WATERSHED PROTECTION PROGRAM**

FACILITY INSPECTION REPORT

FACILITY: Casa Mira View **INSPECTION DATE/TIME:** 10/25/2010; 1330

WDID/FILE NO.: 9 37C353628

REPRESENTATIVE(S) PRESENT DURING INSPECTION:

NAME: <u> Christina Arias </u>	AFFILIATION: <u> San Diego Water Board </u>
NAME: <u> Rod Fink </u>	AFFILIATION: <u> Garden Communities </u>
NAME: _____	AFFILIATION: _____
NAME: _____	AFFILIATION: _____
NAME: _____	AFFILIATION: _____

Scripps Mesa Developers LLC
NAME OF OWNER, AGENCY OR PARTY RESPONSIBLE FOR DISCHARGE

8530 Costa Verde Blvd.
OWNER MAILING ADDRESS

(858) 320-0018
OWNER CONTACT NAME AND PHONE #

Garden Communities (Contractor)
FACILITY OR DEVELOPER NAME (if different from owner)

11241 Westview Pkwy, San Diego, 92126
FACILITY ADDRESS

FACILITY OR DEVELOPER CONTACT NAME AND PHONE #

APPLICABLE WATER QUALITY LICENSING REQUIREMENTS:

- | | |
|---|---|
| <input type="checkbox"/> MS4 URBAN RUNOFF REQUIREMENTS | <input type="checkbox"/> GENERAL OR INDIVIDUAL WASTE DISCHARGE REQUIREMENTS OR NPDES |
| <input checked="" type="checkbox"/> CONSTRUCTION GENERAL PERMIT | <input type="checkbox"/> GENERAL OR INDIVIDUAL WAIVER OF WASTE DISCHARGE REQUIREMENTS |
| <input type="checkbox"/> CALTRANS GENERAL PERMIT | <input type="checkbox"/> SECTION 401 WATER QUALITY CERTIFICATION |
| <input type="checkbox"/> INDUSTRIAL GENERAL PERMIT | <input type="checkbox"/> CWC SECTION 13264 |

INSPECTION TYPE (Check One):

- "A" TYPE COMPLIANCE--COMPREHENSIVE INSPECTION IN WHICH SAMPLES ARE TAKEN. (EPA TYPE S)
- "B" TYPE COMPLIANCE--A ROUTINE NONSAMPLING INSPECTION. (EPA TYPE C)
- NONCOMPLIANCE FOLLOW-UP--INSPECTION MADE TO VERIFY CORRECTION OF A PREVIOUSLY IDENTIFIED VIOLATION.
- ENFORCEMENT FOLLOW-UP--INSPECTION MADE TO VERIFY THAT CONDITIONS OF AN ENFORCEMENT ACTION ARE BEING MET.
- COMPLAINT--INSPECTION MADE IN RESPONSE TO A COMPLAINT.
- PRE-REQUIREMENT--INSPECTION MADE TO GATHER INFO. RELATIVE TO PREPARING, MODIFYING, OR RESCINDING REQUIREMENTS.
- NO EXPOSURE CERTIFICATION (NEC) - VERIFICATION THAT THERE IS NO EXPOSURE OF INDUSTRIAL ACTIVITIES TO STORM WATER.
- NOTICE OF TERMINATION REQUEST FOR INDUSTRIAL FACILITIES OR CONSTRUCTION SITES - VERIFICATION THAT THE FACILITY OR CONSTRUCTION SITE IS NOT SUBJECT TO PERMIT REQUIREMENTS.
- COMPLIANCE ASSISTANCE INSPECTION - OUTREACH INSPECTION DUE TO DISCHARGER'S REQUEST FOR COMPLIANCE ASSISTANCE.

INSPECTION FINDINGS:

Y WERE VIOLATIONS NOTED DURING THIS INSPECTION? (YES/NO/PENDING SAMPLE RESULTS)

Facility: Casa Mira View
Inspection Date: 10/25/2010

I. COMPLIANCE HISTORY / PURPOSE OF INSPECTION

On October 25, 2010, Christina Arias of the San Diego Water Board performed a routine inspection of the Casa Mira View construction site. This site is roughly 40 acres and is located West of I-15 in the Mira Mesa area of the City of San Diego. Photos of the site are attached and identified as Figures 1-12.

II. FINDINGS

1. The entire site lacked adequate erosion control BMPs including several slopes susceptible to discharge (Figures 3, 4, 6).
2. Inadequate entrance/exit BMPs that have not been maintained (Figure 1).
3. A shopping cart was found in the middle of the desilting basin (Figure 2).
4. Lack of adequate sediment control BMPs have resulted in the discharge of sediment onto the side walk, street, and into storm drains (Figures 1, 5, 7).
5. Temporary stockpiles, disturbed sediment, and chemical dust were found uncovered and close to the sidewalk (Figures 4, 6).
6. Sediment-laden water was being pumped from the construction site and discharged illegally into a storm drain (Figures 8-12). During the inspection, Christina Arias notified Rod Fink of Garden Communities to immediately cease the discharge.

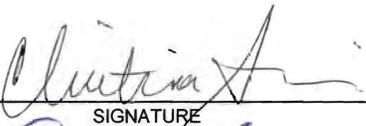
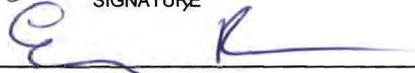
III. RECOMMENDATIONS AND ADDITIONAL COMMENTS

1. Prevent additional illegal pumping of sediment laden water into the storm drains. The illegal discharge observed during the inspection must be formally reported to the San Diego Water Board and Legally Responsible Person within 30 days (see SWPPP page 1-3).
2. Implement erosion control BMPs site-wide immediately.
3. Implement additional sediment control BMPs site-wide to prevent additional discharges of sediment. Site entrance/exit BMPs must be maintained.
4. Sediment from the construction site must be removed regularly from the public right-of-way and streets.
5. Temporary stockpiles should be covered during rain events.
6. Chemical residue should be removed and disposed of properly.

Facility: Casa Mira View
 Inspection Date: 10/25/2010

7. These findings will be used to evaluate compliance with Order No. 2009-0009-DWQ.

IV. SIGNATURE SECTION

Christina Arias STAFF INSPECTOR	 SIGNATURE	10/25/10 INSPECTION DATE
Eric Becker REVIEWED BY SUPERVISOR	 SIGNATURE	10/27/10 DATE

SMARTS:

Tech Staff Info & Use	
Application ID.	
WDID	9 37C353628
Inspection ID	2009070

Facility: Casa Mira View
Inspection Date: 10/25/2010



Note sediment on street. Gravel BMP in poor condition and in need of maintenance.

Figure 1. Construction site entrance



Shopping cart in desilting basin should be removed.

Figure 2. Desilting basin inside project boundaries

Facility: Casa Mira View
Inspection Date: 10/25/2010



Erosion control measures must be applied to slopes.

Figure 3. Uncovered slope (inside property)



Note uncovered stockpile and blue dust from pipe cutting

Figure 4. Project site at street level

Facility: Casa Mira View
Inspection Date: 10/25/2010



Project sediment is on sidewalk and street.

Figure 5. Sidewalk adjacent to project site



Slopes on West side (perimeter) of site have no erosion control BMPs. Also, disturbed sediment near sidewalk should be covered or removed.

Figure 6. Slope and project material at perimeter

Facility: Casa Mira View
Inspection Date: 10/25/2010



Area near storm drain inlet should be swept.

Figure 7. Storm drain inlet at North side of property



Riser pipe is wrapped with filter fabric. Note turbid water surrounding pipe entering via concrete swale.

Figure 8. Storm drain on Caltrans right of way (East side project boundary)

Facility: Casa Mira View
Inspection Date: 10/25/2010



Source of turbid water is illegal discharge from project site.

Figure 9. Outlet pipe of illegal discharge



Pipe from project site was placed through chain link fence to concrete swale.

Figure 10. Pipe leading off property (from pump)

Facility: Casa Mira View
Inspection Date: 10/25/2010



Pump intake line

Figure 11. Pump intake



Area of construction site being dewatered.

Figure 12. Dewatering area

Water Boards Storm Water Multiple Application & Report Tracking System

[Help](#) [Logout](#)

You are logged-in as: **Frank Melbourn - Region 9 San Diego.**

If this account does not belong to you, please log out

Navigate To:

Exhibit No. 5

NOTICE OF INTENT - Inspections Nov. 22, 2010 Inspection Entry

The Notice of Intent (NOI) is organized into different tabs. Please complete all applicable tabs before submitting the form. If you want to complete the NOI at a later time, please click on "Save & Exit".

WDID: 9 37C353628 **Owner:** Scripps Mesa Developers LLC **Status:** Active **Processed Date:** 10/07/2008
 1110 Judicial Drive San Diego CA 92122 **Certified Date:** 06/30/2010 **NOT Effective Date:**
Permit Type: Construction **Site:** Casa Mira View
 11241 11267 11285 Westview Pkwy San Diego
 CA 92126

- [Owner Info](#) [Developer Info](#) [Site Info](#) [Risk](#) [Addtl Site Info](#) [Post Construction](#) [Billing Info](#) [Attachments](#) [Certification](#) [Requirements](#)
- [Reports](#) [Inspections](#) [Violations](#) [Enforcement Actions](#) [Admin Changes](#) [Tasks](#) [Print](#) [Notes](#) [Status History](#) [Linked Users](#) [NOTs](#) [COIs](#)

[Inspection Business Rules](#)

The following are the inspections associated with this NOI. Click on "Inspection ID" to edit inspection details. Click on "Details" to view/print.

Inspection ID	Inspection Type	Inspection Date	Inspector	Follow Up Action	Linked Violations?	No of Attachments	Print
2023411	Enforcement Follow-up	09/30/2014	Christina Arias	No Further Action	N		Details
2020995	Non-compliance Follow-up	01/14/2014	Christina Arias	Additional Info Required	Y		Details
2020984	B Type compliance	01/09/2014	Christina Arias	Follow-up Inspection Needed	Y		Details
2010153	Enforcement Follow-up	11/22/2010	Christina Arias	No Further Action	N		Details
2009070	B Type compliance	10/25/2010	Christina Arias	Follow-up Inspection Needed	N		Details

[Add New Inspection](#)

Inspection ID: 2010153 **Inspector Type:** Regional Board Third Party State Board * [Audit History](#)

Inspection Type: Enforcement Follow-up ?* **Inspector Name:** Christina Arias *

Inspection Date: 11/22/2010 **Agency Name:** (Enter only if Third Party Inspector.)

Inspection Contact: **Agency Inspector Name:** (Enter only if Third Party Inspector.)

Follow Up Action: No Further Action *

General Notes: Adequate corrective measures taken. Ponded water is now pumped to desilting basin.
 (Maximum 1000 characters only. If more than 1000 characters, add attachment.)

[Save](#) [Delete](#)

[Violation Details](#)

[Attachment Details](#)

Fields marked with * are mandatory fields.



Exhibit No. 6
NOV No. R9-2014-0018



EDMUND G. BROWN JR.
GOVERNOR



MATTHEW RODRIGUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

California Regional Water Quality Control Board, San Diego Region

February 18, 2014

Certified Mail – Return Receipt Requested

Article Number: 7009 1410 0002 2347 2974

Stuart Posnock
Garden Communities
8530 Costa Verde Blvd.
San Diego, CA 92122

In reply refer to / attn:
PIN No. SM-727439:Carias

Mr. Posnock:

**Subject: Notice of Violation No. R9-2014-0018, Casa Mira View,
NPDES Order No. 2009-0009-DWQ, Statewide Construction General Storm Water
Permit**

Enclosed is Notice of Violation (NOV) No. R9-2014-0018 issued to Garden Communities for violations of Order No. 2009-0009-DWQ, enforced by the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board). As described in the attached NOV, the violations are subject to further enforcement pursuant to the California Water Code. The San Diego Water Board reserves the right to take any enforcement action authorized by law.

In making the determination of whether and how to proceed with further enforcement action, the San Diego Water Board will consider the severity and effect of the violation, the level of cooperation, the time it takes to correct the identified violations, and the sufficiency of the corrections.

In the subject line of any response, please include the information located in the heading of this letter: "in reply refer to." For questions pertaining to the subject matter, please contact Christina Arias at (619) 521-3361 or christina.arias@waterboards.ca.gov.

Respectfully,

David Barker, P.E.
Supervising Water Resource Control Engineer

DTB:esb:cma

Enclosure: NOV No. R9-2014-0018
Facility Inspection Reports dated January 9, 2014 and January 14, 2014

Cc by email: David Zoumaras, City of San Diego

Tech Staff Info & Use	
Enforcement ID	414773
WDID	9 37C353628
NPDES No.	CAS000002
Inspection ID	2020984

California Regional Water Quality Control Board, San Diego Region

February 18, 2014

NOTICE OF VIOLATION
No. R9-2014-0018

Stuart Posnock
8530 Costa Verde Blvd.
San Diego, CA 92122

Garden Communities

Casa Mira View

PIN No. SM-727439:Carias

**Violations of Order No. 2009-0009-DWQ,
Statewide Construction General Storm
Water Permit**

GARDEN COMMUNITIES is hereby notified that the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) reserves the right to take any enforcement action authorized by law for the violations described herein.

GARDEN COMMUNITIES is in violation of State Water Resources Control Board Order No. 2009-0009-DWQ, *National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities*.

A. Summary of Violations

1. Failure to Implement Chemical Storage Best Management Practices (BMPs):

- a. Pursuant to Provision B.1.c of Attachment E to Order No. 2009-0009-DWQ:** Risk Level 3 dischargers shall implement good site management (i.e. “housekeeping”) measures for construction materials that could potentially be a threat to water quality if discharged. At a minimum, Risk Level 3 dischargers shall store chemicals in watertight containers (with appropriate secondary containment to prevent any spillage or leakage) or in a storage shed (completely enclosed).

- b. **Observation:** On January 9, 2014, San Diego Water Board inspectors conducted a routine inspection of the Casa Mira View construction site and observed several chemical containers that were stored outdoors without any secondary containment to prevent spillage or leakage.

2. Failure to Implement Trash Management BMPs:

- a. **Pursuant to Provision B.2.a of Attachment E to Order No. 2009-0009-DWQ:** Risk Level 3 discharges shall implement good housekeeping measures for waste management, which, at a minimum, shall consist of the following: Prevent disposal of any rinse or wash waters or materials on impervious or pervious site surfaces or into the storm drain system.
- b. **Observation:** During the January 9, 2014 inspection, San Diego Water Board inspectors observed trash in several areas within the construction site. There was no observable management strategy for trash or construction debris.

3. Failure to Adequately Implement Concrete Washout BMPs:

- a. **Pursuant to Provision B.2.i of Attachment E to Order No. 2009-0009-DWQ:** Risk Level 3 dischargers shall implement good housekeeping measures for waste management, which, at a minimum, shall consist of the following: Ensure the containment of concrete washout areas and other washout areas that may contain additional pollutants so there is no discharge into the underlying soil and onto the surrounding areas.
- b. **Observation:** During the January 9, 2014 inspection, San Diego Water Board inspectors found concrete washouts that were leaking waste material onto the underlying soil.

4. Failure to Implement Erosion Control BMPs:

- a. **Pursuant to Provision D.2. of Attachment E to Order No. 2009-0009-DWQ:** Risk Level 3 dischargers shall provide effective soil cover for inactive areas and all finished slopes, open space, utility backfill, and completed lots.
- b. **Observation:** During the January 9, 2014 inspection, San Diego Water Board inspectors observed finished external slopes with no erosion control BMPs.

5. Failure to Adequately Implement Sediment Control BMPs

- a. **Pursuant to Provision E.1 of Attachment E to Order No. 2009-0009-DWQ:**
Risk Level 3 dischargers shall establish and maintain effective perimeter controls and stabilize all construction entrances and exits to sufficiently control erosion and sediment discharges from the site.
- b. **Observation:** During the January 9, 2014 inspection, San Diego Water Board inspectors observed broken and failing silt fences along the site perimeter. Additionally, entrance/exit BMPs were not functioning properly and in need of maintenance.

6. Failure to Protect Storm Drain Inlets

- a. **Pursuant to Provision E.6 of Attachment D to Order No. 2009-0009-DWQ:**
Risk Level 3 dischargers shall ensure that all storm drain inlets and perimeter controls, runoff control BMPs, and pollutant controls at entrances and exits are maintained and protected from activities that reduce their effectiveness.
- b. **Observation:** During the January 9, 2014 inspection, San Diego Water Board inspectors observed an unprotected storm drain inlet covered with mortar mix and other construction debris.

7. Failure to Implement BMP Repairs as Instructed by the Qualified Storm Water Pollution Prevention Plan (SWPPP) Practitioner (QSP)

- a. **Pursuant to Provision G.3 of Attachment E to Order No. 2009-0009-DWQ:**
Upon identifying failures or other shortcomings, as directed by the QSP, Risk Level 3 dischargers shall begin implementing repairs or design changes to BMPs within 72 hours of identification and complete the changes as soon as possible.
- b. **Observation:** During the January 9, 2014 inspection, San Diego Water Board inspectors reviewed the onsite SWPPP and QSP weekly inspection forms for January 2, 2014, and January 8, 2014. BMP deficiencies were repeatedly identified by the QSP as a result of weekly inspections, yet were not corrected by the site operators.

8. Failure to Submit Annual Reports

- a. **Pursuant to Provision XVI.A of Order No. 2009-0009-DWQ:**
All dischargers shall prepare and electronically submit an Annual Report no later than September 1 of each year.

- b. **Pursuant to Provision XVI.B of Order No. 2009-0009-DWQ:**
The discharger shall certify each Annual Report in accordance with the Special Provisions.
- c. **Pursuant to Provision XVI.C of Order No. 2009-0009-DWQ:**
The discharger shall retain an electronic or paper copy of each Annual Report for a minimum of three years after the date the annual report is filed.
- d. **Observation:** Following the January 9, 2014 inspections, San Diego Water Board inspectors searched the Storm Water Multiple Application and Report Tracking System (SMARTs) database for the 2010-2011 and 2012-2013 Annual Reports. Neither report had been submitted. During a follow-up inspection on January 14, 2014, San Diego Water Board inspectors searched the SWPPP and related documents provided by the site operators, but were unable to locate the missing Annual Reports.

9. Failure to Provide Training Information to Individuals Responsible For Activities Associated with Compliance with Order No. 2009-0009-DWQ

- a. **Pursuant to Provision VII.A of Order No. 2009-0009-DWQ:**
The discharger shall ensure that all persons responsible for implementing requirements of this General Permit shall be appropriately trained in accordance with this Section. Training should be both formal and informal, occur on an ongoing basis, and should include training offered by recognized governmental agencies or professional organizations.
- b. **Pursuant to Provision XVI.E of Order No. 2009-0009-DWQ:**
The discharger shall provide training information in the Annual Report consisting of 1) documentation of all training for individuals responsible for all activities associated with compliance with this General Permit; 2) documentation of all training for individuals responsible for BMP installation, inspection, and repair; and 3) documentation of all training for individuals responsible for overseeing, revising, and amending the SWPPP.
- c. **Observation:** During the January 14, 2014 inspection, San Diego Water Board inspectors searched the SWPPP and related documents for evidence of personnel training. Training had been conducted on four days: December 9, 2013, December 16, 2013, January 13, 2013, and January 13, 2014. Training had not been taking place on a regular basis, nor were training logs available in the Annual Reports.

10. Failure to Declare Change in Ownership

- a. **Pursuant to Provision II.D.1. of Order No. 2009-0009-DWQ:**
Within 90 days of when construction is complete or ownership has been transferred, the discharger shall electronically file a Notice of Termination (NOT), a final site map, and photos through the State Water Board SMARTs system.
- b. **Observation:** SMARTs lists “Scripps Mesa Developers, LLC” as the owner of the subject construction site. However, “Scripps Mesa Developers, LLC” is a suspended business entity on the California Secretary of State Business Entities website. San Diego Water Board inspectors found a deed dated March 8, 2012, transferring ownership from “Scripps Mesa Developers, LLC,” to “Scripps Mesa Developers II, LLC.” Site operators failed to submit an NOT (and subsequent Notice of Intent) to the SMARTs system, indicating a change in ownership.

11. Failure to Correctly Identify the Qualified SWPPP Practitioner (QSP)

- a. **Pursuant to Provision IV.J of Order No. 2009-0009-DWQ:**
Any person signing documents under Section IV.I above, shall make the following certification:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, *the information submitted is true, accurate, and complete.* I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”
- b. **Observation:** During the January 14, 2014 inspection, San Diego Water Board inspectors observed that the SWPPP listed Mr. Danis Bechter as the QSP. However, the site operators stated that Mr. Michael Duff was the QSP and Mr. Wes Udin was the alternate, indicating that the SWPPP was neither true, accurate, nor complete.

B. Summary of Potential Enforcement Options

These violations may subject you to additional enforcement by the San Diego Water Board or State Water Resources Control Board, including a potential civil liability assessment of \$10,000 per day of violation (Water Code section 13385) and/or any of the following enforcement actions:

Other Potential Enforcement Options	Applicable Water Code Section
Technical or Investigative Order	Sections 13267 or 13383
Cleanup and Abatement Order	Section 13304
Cease and Desist Order	Sections 13301-13303
Time Schedule Order	Sections 13300, 13308

In addition, the San Diego Water Board may consider revising or rescinding applicable waste discharge requirements, if any, referring the matter to other resource agencies, referring the matter to the State Attorney General for injunctive relief, and referral to the municipal or District Attorney for criminal prosecution.

In the subject line of any response, please include the information located in the heading of this letter: "in reply refer to." Questions pertaining to this Notice of Violation should be directed to Christina Arias at (619) 521-3361 or christina.arias@waterboards.ca.gov.



David Barker, P.E.
Supervising Water Resource Control Engineer

DB:esb:cma

Enclosure: Facility Inspection Reports dated January 9, 2014 and January 14, 2014

Tech Staff Info & Use	
Enforcement ID	414773
WDID	9 37C353628
NPDES No.	CAS000002
Inspection ID	2020984

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD - SAN DIEGO REGION
WATERSHED PROTECTION PROGRAM**

FACILITY INSPECTION REPORT

FACILITY: Casa Mira View **INSPECTION DATE/TIME:** 01/09/14; 1400

WDID/FILE NO.: 9 37C353628

REPRESENTATIVE(S) PRESENT DURING INSPECTION:

NAME: <u> Christina Arias </u>	AFFILIATION: <u> San Diego Water Board </u>
NAME: <u> Whitney Ghoram </u>	AFFILIATION: <u> San Diego Water Board </u>
NAME: <u> Bryan Smith </u>	AFFILIATION: <u> Garden Communities </u>
NAME: <u> Brian Eskow </u>	AFFILIATION: <u> Garden Communities </u>
NAME: _____	AFFILIATION: _____

Scripps Mesa Developers LLC
NAME OF OWNER, AGENCY OR PARTY RESPONSIBLE FOR DISCHARGE

8530 Costa Verde Blvd., San Diego CA 92122
OWNER MAILING ADDRESS

Stuart Posnock (858) 320-0018
OWNER CONTACT NAME AND PHONE #

Garden Communities
FACILITY OR DEVELOPER NAME (if different from owner)

11241 Westview Parkway, San Diego
FACILITY ADDRESS

same
FACILITY OR DEVELOPER CONTACT NAME AND PHONE #

APPLICABLE WATER QUALITY LICENSING REQUIREMENTS:

- | | |
|---|---|
| <input type="checkbox"/> MS4 URBAN RUNOFF REQUIREMENTS | <input type="checkbox"/> GENERAL OR INDIVIDUAL WASTE DISCHARGE REQUIREMENTS OR NPDES |
| <input checked="" type="checkbox"/> CONSTRUCTION GENERAL PERMIT | <input type="checkbox"/> GENERAL OR INDIVIDUAL WAIVER OF WASTE DISCHARGE REQUIREMENTS |
| <input type="checkbox"/> CALTRANS GENERAL PERMIT | <input type="checkbox"/> SECTION 401 WATER QUALITY CERTIFICATION |
| <input type="checkbox"/> INDUSTRIAL GENERAL PERMIT | <input type="checkbox"/> CWC SECTION 13264 |

INSPECTION TYPE (Check One):

- "A" TYPE COMPLIANCE--COMPREHENSIVE INSPECTION IN WHICH SAMPLES ARE TAKEN. (EPA TYPE S)
- "B" TYPE COMPLIANCE--A ROUTINE NONSAMPLING INSPECTION. (EPA TYPE C)
- NONCOMPLIANCE FOLLOW-UP--INSPECTION MADE TO VERIFY CORRECTION OF A PREVIOUSLY IDENTIFIED VIOLATION.
- ENFORCEMENT FOLLOW-UP--INSPECTION MADE TO VERIFY THAT CONDITIONS OF AN ENFORCEMENT ACTION ARE BEING MET.
- COMPLAINT--INSPECTION MADE IN RESPONSE TO A COMPLAINT.
- PRE-REQUIREMENT--INSPECTION MADE TO GATHER INFO. RELATIVE TO PREPARING, MODIFYING, OR RESCINDING REQUIREMENTS.
- NO EXPOSURE CERTIFICATION (NEC) - VERIFICATION THAT THERE IS NO EXPOSURE OF INDUSTRIAL ACTIVITIES TO STORM WATER.
- NOTICE OF TERMINATION REQUEST FOR INDUSTRIAL FACILITIES OR CONSTRUCTION SITES - VERIFICATION THAT THE FACILITY OR CONSTRUCTION SITE IS NOT SUBJECT TO PERMIT REQUIREMENTS.
- COMPLIANCE ASSISTANCE INSPECTION - OUTREACH INSPECTION DUE TO DISCHARGER'S REQUEST FOR COMPLIANCE ASSISTANCE.

INSPECTION FINDINGS:

Y WERE VIOLATIONS NOTED DURING THIS INSPECTION? (YES/NO/PENDING SAMPLE RESULTS)

Facility: Casa Mira View, WDID 9 37C353628
Inspection Date: 01/09/2014

I. COMPLIANCE HISTORY / PURPOSE OF INSPECTION

On January 9, 2014, Christina Arias and Whitney Ghoram of the San Diego Water Board performed a routine inspection of the Casa Mira View residential apartment construction site. The site is located in the Mira Mesa area of San Diego, west of I-15 at 111241 Westview Parkway. Further, the site is located in the Penasquitos watershed, which drains to Penasquitos Lagoon (a Clean Water Act section 303(d) listed waterbody as impaired for sediment). According to the Storm Water Multiple Application & Report Tracking System (SMARTS), the site is 41 acres in size. On November 3, 2010, this site received a Notice of Violation from the San Diego Water Board for deficient BMP implementation and an unauthorized non-storm water discharge.

We met briefly with Bryan Smith, General Superintendent for the construction site. Mr. Smith deferred to his assistant to answer storm water-related questions. Although he was in charge of the construction site, Mr. Smith was unaware of who the site Qualified SWPPP Practitioner (QSP) was, and indicated that he was not familiar with the term. He contacted Brian Eskow, assistant Superintendent, to assist us. Mr. Eskow also did not know who the QSP was, but indicated that it was his responsibility to comply with health and safety issues, as well as storm water. Mr. Eskow produced the Storm Water Pollution Prevention Plan (SWPPP) when asked, as well as the weekly inspections performed by the QSP. The weekly inspection reports listed the site QSP as Michael Duff of Ground Service Technology, Inc. We asked for copies of the two most recent weekly site inspection reports (shown as Attachment 1). We were unable to locate any training records for site personnel related to storm water compliance.

After review of the SWPPP and related documents, Mr. Eskow escorted us throughout the construction site. Findings and photos below are reported in the order that they were observed during the site walk. The weather on the day of the inspection was warm and sunny.

II. FINDINGS

1. The site was littered with cigarette butts, trash, debris, and other construction-related waste throughout. (See Figures 1-4, 14-25).
2. None of the finished curbs within the site had sediment control BMPs (such as silt fence) installed. As a result, the streets were covered in sediment (Figures 1, 3, 16-22).
3. There were no sediment control BMPs at one construction site exit/entrance located on Mira Lee Way, and sediment had been tracked into the street (Figure 5).
4. There was an uncovered stockpile, although it appeared to be active (Figure 6).
5. Two concrete wash-out bins were leaking, and waste material discharged to the surrounding the soil (Figures 7-8).

Facility: Casa Mira View, WDID 9 37C353628
Inspection Date: 01/09/2014

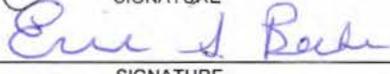
6. The site had no erosion control BMPs on exterior slopes along the north and west side of the property, 3 months into the rainy season (Figure 9-12).
7. The silt fence along the north side of the property had fallen and was in need of repair (Figure 13).
8. Sediment control BMPs throughout the site need replacement or had not been maintained. Examples include broken gravel bags (Figure 22).
9. Mortar mix and other construction wastes had entered an unprotected inlet (Figures 23-24).
10. Several chemical containers were found throughout the site without secondary containment or other proper storage practices (Figure 25).
11. Corrective actions reported by the QSP on both 1/2/2014 and 1/8/2014 had not been completed, even though such corrections are required within 72 hours. There were no signatures on the QSP's inspection reports by either Mr. Smith, Mr. Eskow, or other site personnel to indicate that the reports were received, read, and deficiencies corrected.

III. RECOMMENDATIONS AND ADDITIONAL COMMENTS

1. The entire site lacks adequate sediment, erosion control, construction waste, and housekeeping BMPs.
2. The site requires erosion control BMPs on all slopes (interior and exterior), such as hydroseed, bonded fiber matrix, or erosion control blankets.
3. All sediment control BMPs must be adequately maintained. The silt fence on the north side of the property requires replacement.
4. Sediment control BMPs such as silt fence should be installed at finished curbs to prevent sediment from reaching the streets.
5. The concrete washout BMPs must be fixed or replaced to prevent leaks. Concrete waste must not be allowed to come into contact with bare ground.
6. Site entrance/exit BMPs are required.
7. Storm drain inlets within the construction site require protection to prevent sediment, trash, and construction debris from entering.
8. Gravel bags that have been broken need replacing.
9. Construction debris and trash must be disposed of properly.
10. The construction site superintendents should read and understand the requirements contained within the State Water Resources Control Board Construction General Storm Water Permit, Order No. 2009-0009-DWQ (CGP).
11. These findings will be used to evaluate compliance with the CGP.

Facility: Casa Mira View, WDID 9 37C353628
 Inspection Date: 01/09/2014

IV. SIGNATURE SECTION

Christina Arias		1/9/14
STAFF INSPECTOR	SIGNATURE	INSPECTION DATE
Eric Becker		1/22/14
REVIEWED BY SUPERVISOR	SIGNATURE	DATE

SMARTS:

Tech Staff Info & Use	
WDID	9 37C353628
Inspection ID	2020984
Violation ID (Inadequate BMPs)	853299, 853302, 853303, 853304, 853305

Facility: Casa Mira View, WDID 9 37C353628
Inspection Date: 01/09/2014

Casa Mira View. Photos taken by Christina Arias 1/9/14



Figure 1. Near trailer; cigarette butts



Figure 2. Trailer, debris and trash

Facility: Casa Mira View, WDID 9 37C353628
Inspection Date: 01/09/2014



Figure 3. Site interior; trash



Figure 4. Site interior; construction debris

Facility: Casa Mira View, WDID 9 37C353628
Inspection Date: 01/09/2014

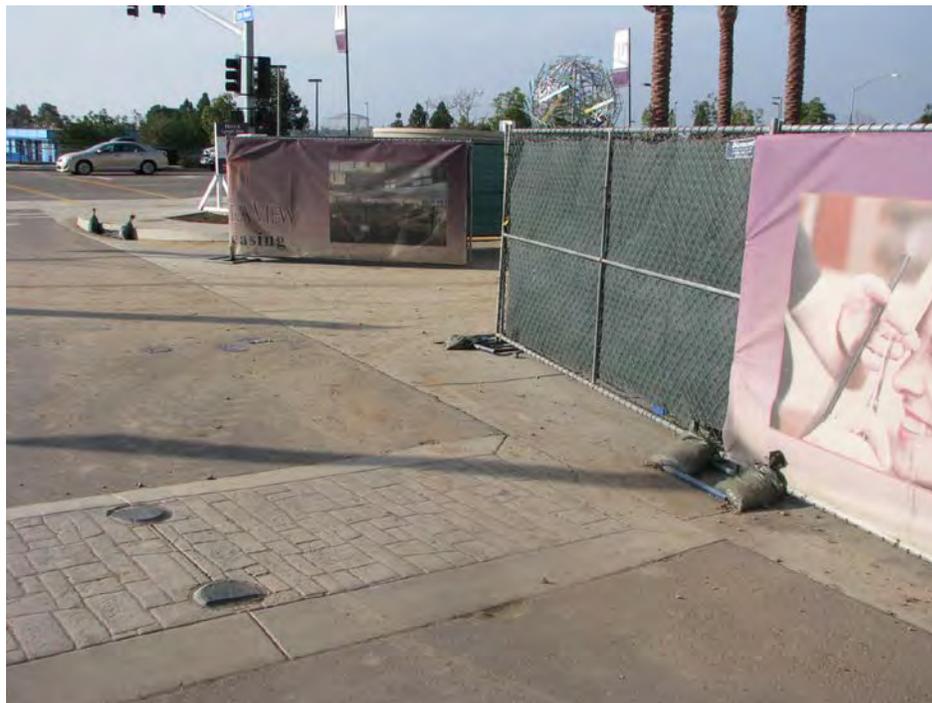


Figure 5. South-facing construction entrance; no BMPs; sediment tracking onto street



Figure 6. Sediment stockpile

Facility: Casa Mira View, WDID 9 37C353628
Inspection Date: 01/09/2014



Figure 7. Leaking concrete washouts



Figure 8. Concrete staining on soil from leaking washouts

Facility: Casa Mira View, WDID 9 37C353628
Inspection Date: 01/09/2014



Figure 9. Slope on north side with no erosion control



Figure 10. Slope is 2:1 Horizontal: Vertical according to SWPPP

Facility: Casa Mira View, WDID 9 37C353628
Inspection Date: 01/09/2014



Figure 11. North slope looking easterly



Figure 12. Slope on west side of property

Facility: Casa Mira View, WDID 9 37C353628
Inspection Date: 01/09/2014



Figure 13. Damaged silt fence



Figure 14. Construction debris

Facility: Casa Mira View, WDID 9 37C353628
Inspection Date: 01/09/2014



Figure 15. Construction debris



Figure 16. Construction debris

Facility: Casa Mira View, WDID 9 37C353628
Inspection Date: 01/09/2014



Figure 17. Construction debris



Figure 18. Construction debris

Facility: Casa Mira View, WDID 9 37C353628
Inspection Date: 01/09/2014



Figure 19. Construction debris



Figure 20. Construction debris

Facility: Casa Mira View, WDID 9 37C353628
Inspection Date: 01/09/2014



Figure 21. Construction debris



Figure 22. Broken gravel bags

Facility: Casa Mira View, WDID 9 37C353628
Inspection Date: 01/09/2014



Figure 23. Storm drain littered with construction debris



Figure 24. Storm drain littered with construction debris

Facility: Casa Mira View, WDID 9 37C353628
Inspection Date: 01/09/2014



Figure 25. Improperly stored chemicals



Ground Service Technology, Inc.

SWPPP/EROSION CONTROL DIVISION

2280 Micro Place

Phone 760-745-2010

Escondido, CA 92029

Fax 760-741-1363

www.erosioncontroller.com

CA Lic #847034 A & B

RISK LEVEL 2 SITE INSPECTION REPORT

Owner: Scripps Mesa Developers
 Contractor: Garden Communities
 Job No./Project: 20623 Casa Mira View
 Site Address: 11195 Westview Parkway
 Cross Streets/Area: Mira Mesa, California
 Performed by: Michael P. Duff, JD
 Title: CESSWI, QSP #24369

WDID#: 9 37C353628
 Project Dates:
 Site Area: 3 acres
 Exposed Area: 100%
 Site Contact: Robin Robinson
 Contact Number:
 Report Date: 1/8/2014

Inspection Date: 1/8/2014

Time: 3:00 AM

Inspector Signature: Michael Duff

Type of Inspection: Weekly Maintenance

Additional Report: NO

Phase(s) of Construction: 1 Grading/Land Devel.

2 Vertical Const.

Summary of Completed Activities

Weather & Rain Event Data Current: Clear

Rain Gauge Reading: 0.2

End date of Last Rain Event: _____

Was it a Qualifying Rain Event (QRE)? NO

Today is Day 1 of _____ predicted rain event days.

Cumulative Rain: 0.3

Is inspection during or after a QRE of .5" or more? NO

Number of QREs since July 1: _____

NOAA Forecast Chance of Precipitation

0%	Tuesday, January 07, 2014
0%	Wednesday, January 08, 2014
0%	Thursday, January 09, 2014
0%	Friday, January 10, 2014

0%	Saturday, January 11, 2014
0%	Sunday, January 12, 2014
0%	Monday, January 13, 2014
0%	Tuesday, January 14, 2014

Sampling Did first two hours of discharge occur during business hours?
 Was any storm water discharged from site?
 Were water samples taken?

Estimated start of rain: _____
 During normal business hours? _____
 If NO, please explain: _____

*If Yes, fill out and print Water Sample Report.

SWPPP Questions

- a. Is there a SWPPP on-site?
- b. Is a Wall Map updated?
- c. Are structural controls installed per the SWPPP?

YES _____
 YES _____ b2. Require updating? _____ NO _____

- d. If the SWPPP is not implemented, is there an effective combination of Erosion & Sediment control BMPs appropriate for the current stage of construction?
- e. Is there any leak, breach or malfunction to indicate non-visible pollutants?
- f. Did you observe any floating materials, oil, grease, odor, toxins, and/or sediment at any outfalls, discharge points, or downstream locations?

YES _____
 NO _____ If Yes, plan for sampling at next rain.
 NO _____ If Yes, sample and document.
 What was observed? _____

The following pages provide inspection observation results. Results are to be cross-referenced with attached photographs.

Soil Stabilization Items

- 1 Berms and Dikes
- 2 Slope protection
- 3 Vegetation
- 4 Surface erosion
- 5 Storage of Materials
- 6 Soil Stockpiles
- 7 Other Stockpiles
- 8 V-ditches & Slope Drains

	BMP Acceptable	Repairs Required	BMP	Missing	Not Applicable	CASQA BMP
1	x					EC-3, 6, 7, 8
2	x					EC-4
3	x					EC-2
4	x					WM-1, 2
5	x					WM-3
6	x					WM-3
7	x					SE-4, EC-11
8	x					

Sediment Control Items

- 9 Fiber Rolls / Straw Wattles
- 10 Check Dams
- 11 Burlap / Poly Rock Bags
- 12 Silt Fence
- 13 Drain Inlet Protection
- 14 Basins

	BMP Acceptable	Repairs Required	BMP	Missing	Not Applicable	CASQA BMP
9	x					SE-5
10	x					SE-4
11	x					SE-6
12	x					SE-1
13		x				SE-10
14	x					SE-2, 3

Wind Control Items

- 15 Dust Control

	BMP Acceptable	Repairs Required	BMP	Missing	Not Applicable	CASQA BMP
15	x					WE-1

Tracking Control Items

- 16 Construction Entrance
- 17 Tracking on Street

	BMP Acceptable	Repairs Required	BMP	Missing	Not Applicable	CASQA BMP
16	x					TC-1, 2, 3
17		x				SE-7

Good House Keeping & Waste Management Items

- 18 Debris Clean-up
- 19 Disposal Areas (Export Sites)
- 20 Spills or Leaks on Vehicles, Equipment or Materials
- 21 Portable Toilets and Septic
- 22 Dumpsters, Roll-Offs, Trash Receptacles
- 23 Concrete, Paint, Stucco Wash Outs

	BMP Acceptable	Repairs Required	BMP	Missing	Not Applicable	CASQA BMP
18		x				WM-5, 6
19	x					
20	x					WM-4,6,7,10
21	x					WM-9
22	x					WM-5
23	x					WM-8

Non-Stormwater Management BMP Items

- 24 Dewatering Operations
- 25 Paving or Grinding Operations
- 26 Concrete Curing/Finishing
- 27 Temporary Stream Crossing
- 28 Illicit Connection/Illegal Discharge Reporting
- 29 Vehicle and Equipment Cleaning
- 30 Vehicle and Equipment Fueling Area
- 31 Vehicle and Equipment Maintenance
- 32 Vehicle and Equipment Drip Pans
- 33 Spill Kits

	BMP Acceptable	Repairs Required	BMP	Missing	Not Applicable	CASQA BMP
24					x	NS-2
25					x	NS-3
26	x					NS-12, 14
27					x	NS-4
28	x					NS-6
29					x	NS-8
30	x					NS-9
31					x	NS-10
32	x					NS-10
33	x					WM-4

Non-Storm Water Management BMP Items

- g. Are materials and supplies in compliance with the SWPPP? _____
- h. Were damaged or dissipated materials removed from the site? _____
- i. Are appropriate spill response personnel trained? _____

Other

	BMP Acceptable	Repairs Required	BMP	Missing	Not Applicable	CASQA BMP

Items Noted "Repairs Required" or "BMP Missing"

13	17	18							

CONTRACTOR: CORRECTIVE ACTIONS REQUIRED WITHIN 72 HOURS.

ITEM	Inspection Observation and Corrective Actions Summary	Assigned to	Date Completed
13	13. Maintain existing inlet protection.		
Response:			
17	17. Sweep tracking as needed. Visually inspect daily.		
Response:			
18	18. Properly dispose of construction debris/trash.		
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			
Response:			

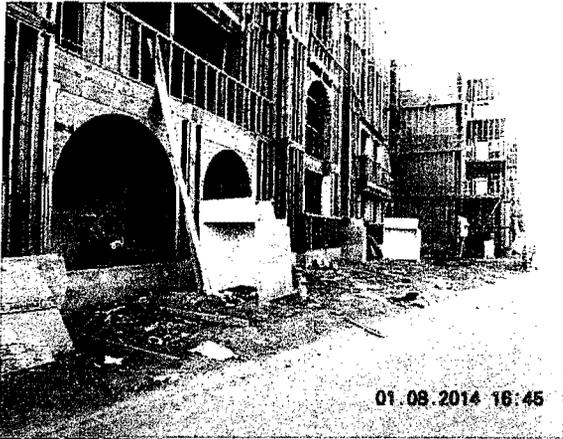
NOTE: Not all instances are necessarily photographed. All items apply throughout site.

Refer to the California Stormwater Quality Association (CASQA) Best Management Practices (BMP) Details and Cut Sheets in your SWPPP for installation, maintenance and usage standards.

Inspection Report Received by: _____

Date: _____

#18



01.08.2014 16:45



01.08.2014 16:46

#18

#18



01.08.2014 16:45



01.08.2014 16:45

#18

#18



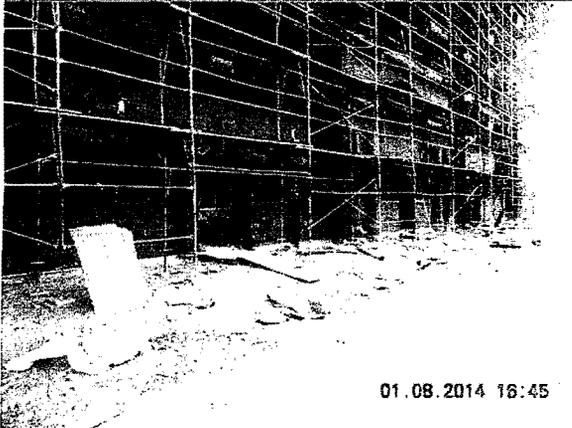
01.08.2014 16:45



01

#18
Debris

#18



01.08.2014 16:45



01.08.2014 16:45

#13
DRAIN
INLET
#17
TRACKING

No Warnings or Advisories In Effect for this Point.
 For warnings and/or advisories in effect for adjacent areas to this point,
 see <http://www.wrh.noaa.gov/sgx>

Forecast For Lat/Lon: 32.9270/-117.1390 (Elev. 462 ft)
San Diego-Mira Mesa CA

Forecast Created at: 7am PST Jan 8, 2014

Custom Weather Forecast Table

	Wed Jan 08				Thu Jan 09				Fri Jan 10				Sat Jan 11				Sun Jan 12				Mon Jan 13				Tue Jan 14							
Weather	Patchy Fog																															
Daily-Temp	High 66 Low 51				High 63 Low 54				High 70 Low 49				High 71 Low 52				High 72 Low 54				High 76 Low 53				High 77 Low 52							
Chance of Precip	0%	5%	5%	10%	10%	10%	0%	0%	0%	0%	0%	0%	0%	0%	5%	5%	5%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Precip 12-hr	0.00" 0.00"																															
Snow Total	0" 0" 0" 0" 0" 0" 0" 0" 0" 0" 0" 0"																															
FRET	0.08" 0.07" 0.10" 0.12" 0.13" 0.23" 0.21"																															
6-Hour Temp	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm
Cloudiness	52	62	62	56	55	61	59	51	50	64	64	55	53	66	66	56	55	67	66	56	54	70	68	55	53	70	70	57	49	51	85	91
Dewpoint	45	43	49	50	47	45	49	46	41	37	40	37	33	34	44	44	39	40	39	31	25	20	30	29	23	19	24	21	45	43	49	50
Relative Humidity	76%	49%	63%	82%	75%	56%	69%	83%	71%	37%	41%	52%	46%	31%	46%	63%	56%	38%	38%	40%	33%	15%	24%	37%	31%	14%	18%	25%	76%	49%	63%	82%
Wind	E	S	SW	S	SE	NE	W	E	E	W	NW	E	E	N	W	E	E	E	E	E	E	E	E	E	E	E	E	E	E	S	SW	S
Snow Level (ft)	6	6	7	6	7	1	5	5	6	6	5	6	7	8	6	3	6	13	10	9	14	14	12	12	10	10	9	9	7144	7144	7587	7587



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CA Lic #847034 A & B

RISK LEVEL 2 SITE INSPECTION REPORT

Owner: Scripps Mesa Developers
 Contractor: Garden Communities
 Job No./Project: 20623 Casa Mira View
 Site Address: 11195 Westview Parkway
 Cross Streets/Area: Mira Mesa, California
 Performed by: Michael P. Duff, JD
 Title: CESSWI, OSP #24369

WDID#: 9 37C353628
 Project Dates:
 Site Area: 3 acres
 Exposed Area: 100%
 Site Contact: Robin Robinson
 Contact Number:
 Report Date: 1/2/2014

Inspector Signature: Michael P. Duff

Inspection Date: 1/2/2014

Time: 12:00 PM

Type of Inspection: Weekly Maintenance

Additional Report: NO

Phase(s) of Construction: 1 Grading/Land Level.

2 Vertical Const.

Summary of Completed Activities

Weather & Rain Event Data Current: Clear

Rain Gauge Reading:

End date of Last Rain Event:

Was it a Qualifying Rain Event (QRE)? NO

Today is Day of predicted rain event days.

Cumulative Rain:

Is inspection during or after a QRE of .5" or more? NO

Number of QREs since July 1:

NOAA Forecast Chance of Precipitation

0%	Wednesday, January 01, 2014
0%	Thursday, January 02, 2014
0%	Friday, January 03, 2014
0%	Saturday, January 04, 2014

0%	Sunday, January 05, 2014
0%	Monday, January 06, 2014
0%	Tuesday, January 07, 2014
0%	Wednesday, January 08, 2014

Sampling Did first two hours of discharge occur during business hours?

Estimated start of rain:

Was any storm water discharged from site?

During normal business hours?

Were water samples taken?

If NO, please explain:

*If Yes, fill out and print Water Sample Report.

SWPPP Questions

- a. Is there a SWPPP on-site?
- b. Is a Wall Map updated?
- c. Are structural controls installed per the SWPPP?

YES
YES b2. Require updating? NO

d. If the SWPPP is not implemented, is there an effective combination of Erosion & Sediment control BMPs appropriate for the current stage of construction?

YES

e. Is there any leak, breach or malfunction to indicate non-visible pollutants?

NO

If Yes, plan for sampling at next rain.

f. Did you observe any floating materials, oil, grease, odor, toxins, and/or sediment at any outfalls, discharge points, or downstream locations?

NO

If Yes, sample and document.

What was observed?

The following pages provide inspection observation results. Results are to be cross-referenced with attached photographs.

Soil Stabilization Items

- 1 Berms and Dikes
- 2 Slope protection
- 3 Vegetation
- 4 Surface erosion
- 5 Storage of Materials
- 6 Soil Stockpiles
- 7 Other Stockpiles
- 8 V-ditches & Slope Drains

	BMP Acceptable	Repairs Required	BMP	Missing	Not Applicable	CASQA BMP
1	X					EC-3, 6, 7, 8
2		X				EC-4
3	X					EC-2
4	X					WM-1, 2
5	X					WM-3
6	X					WM-3
7	X					SE-4, EC-11
8	X					

Sediment Control Items

- 9 Fiber Rolls / Straw Wattles
- 10 Check Dams
- 11 Burlap / Poly Rock Bags
- 12 Silt Fence
- 13 Drain Inlet Protection
- 14 Basins

	BMP Acceptable	Repairs Required	BMP	Missing	Not Applicable	CASQA BMP
9	X					SE-5
10	X					SE-4
11	X					SE-6
12		X				SE-1
13	X					SE-10
14	X					SE-2, 3

Wind Control Items

- 15 Dust Control

	BMP Acceptable	Repairs Required	BMP	Missing	Not Applicable	CASQA BMP
15	X					WE-1

Tracking Control Items

- 16 Construction Entrance
- 17 Tracking on Street

	BMP Acceptable	Repairs Required	BMP	Missing	Not Applicable	CASQA BMP
16	X					TC-1, 2, 3
17		X				SE-7

Good House Keeping & Waste Management Items

- 18 Debris Clean-up
- 19 Disposal Areas (Export Sites)
- 20 Spills or Leaks on Vehicles, Equipment or Materials
- 21 Portable Toilets and Septic
- 22 Dumpsters, Roll-Offs, Trash Receptacles
- 23 Concrete, Paint, Stucco Wash Outs

	BMP Acceptable	Repairs Required	BMP	Missing	Not Applicable	CASQA BMP
18		X				WM-5, 6
19	X					
20	X					WM-4, 6, 7, 10
21	X					WM-9
22	X					WM-5
23	X					WM-8

Non-Stormwater Management BMP Items

- 24 Dewatering Operations
- 25 Paving or Grinding Operations
- 26 Concrete Curing/Finishing
- 27 Temporary Stream Crossing
- 28 Illicit Connection/Illegal Discharge Reporting
- 29 Vehicle and Equipment Cleaning
- 30 Vehicle and Equipment Fueling Area
- 31 Vehicle and Equipment Maintenance
- 32 Vehicle and Equipment Drip Pans
- 33 Spill Kits

	BMP Acceptable	Repairs Required	BMP	Missing	Not Applicable	CASQA BMP
24					X	NS-2
25					X	NS-3
26	X					NS-12, 14
27					X	NS-4
28	X					NS-6
29					X	NS-8
30	X					NS-9
31					X	NS-10
32	X					NS-10
33	X					WM-4

Non-Storm Water Management BMP Items

- g. Are materials and supplies in compliance with the SWPPP? _____
- h. Were damaged or dissipated materials removed from the site? _____
- i. Are appropriate spill response personnel trained? _____

Other

	BMP Acceptable	Repairs Required	BMP	Missing	Not Applicable	CASQA BMP

Items Noted "Repairs Required" or "BMP Missing"

2	12	17	18	22					

CONTRACTOR: CORRECTIVE ACTIONS REQUIRED WITHIN 72 HOURS.

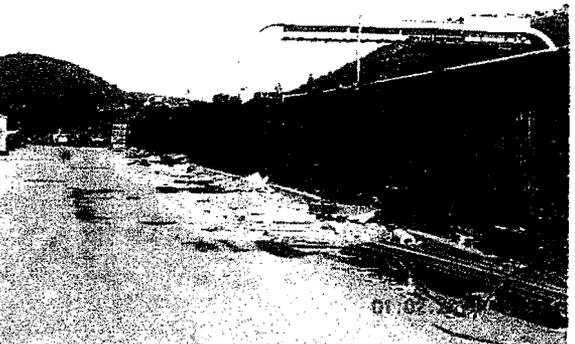
ITEM	Inspection Observation and Corrective Actions Summary	Assigned to	Date Completed
2	2. Inactive slopes require erosion and sediment control BMPs.		
Response:			
12	12. Replace missing or damaged silt fence as needed.		
Response:			
17	17. Sweep tracking as needed. Visually inspect daily.		
Response:			
18	18. Properly dispose of construction debris/trash.		
Response:			
22	22. Dumpsters need to be covered and the end of each workday and prior/during a rain event.		
Response:			
0			
Response:			
0			
Response:			
0			
Response:			

NOTE: Not all instances are necessarily photographed. All items apply throughout site.

Refer to the California Stormwater Quality Association (CASQA) Best Management Practices (BMP) Details and Cut Sheets in your SWPPP for installation, maintenance and usage standards.

Inspection Report Received by: _____

Date: _____





01.02.2014 13:39



No Warnings or Advisories In Effect for this Point.
 For warnings and/or advisories in effect for adjacent areas to this point,
 see <http://www.wrh.noaa.gov/sgx>

Forecast For Lat/Lon: 32.9270/-117.1390 (Elev. 462 ft)
San Diego-Mira Mesa CA

Forecast Created at: 8am PST Jan 2, 2014

Custom Weather Forecast Table

	Thu Jan 02				Fri Jan 03				Sat Jan 04				Sun Jan 05				Mon Jan 06				Tue Jan 07				Wed Jan 08								
Weather																					Patchy Fog												
Daily-Temp	High 73 Low 50				High 71 Low 52				High 70 Low 53				High 74 Low 53				High 71 Low 50				High 68 Low 49				High 66 Low 49								
Chance of Precip	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	10%	10%	10%	10%	5%
Precip	0.00" 0.00"																																
12-hr Snow Total	0" 0"																																
FRET	0.09"				0.09"				0.08"				0.12"				0.11"				0.08"				0.08"								
6-Hour Temp	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	
Cloudiness	51	66	67	56	53	65	66	56	54	65	65	56	54	67	67	54	51	64	65	53	50	62	63	52	50	61	61	52	50	61	61	52	
Dewpoint	36	37	41	37	32	33	47	46	41	42	45	39	33	33	42	39	34	35	43	40	35	37	47	45	40	41	48	41	40	41	48	41	
Relative Humidity	57%	34%	39%	49%	45%	30%	51%	69%	62%	43%	48%	54%	46%	28%	40%	56%	51%	33%	46%	60%	56%	40%	58%	76%	69%	49%	61%	66%	69%	49%	61%	66%	
Wind	E	SW	W	N	E	W	W	E	E	W	NW	E	E	E	NW	E	E	E	W	E	E	S	W	E	E	S	W	E	E	S	W	E	
	3	2	3	1	5	1	2	3	3	3	2	5	7	7	5	6	8	1	6	3	3	2	6	5	5	3	5	2	5	3	5	2	



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 2280 Micro Place Phone 760-745-2010
 Escondido, CA 92029 Fax 760-741-1363
 www.erosioncontroller.com CA Lic #847034 A & B

Non-Storm Water Discharge Visual Inspection

QUARTERLY REPORT

Owner: Scripps Mesa Developers
 Contractor: Garden Communities
 Job No./Project: **20623 Casa Mira View**
 Performed by: Michael P. Duff, JD
 Site Address: 11195 Westview Parkway
 Cross Streets/Area: Mira Mesa, California

WDID#: 9 37C353628
 Project Dates: 0
 Site Area: 3 acres
 Exposed Area: 100%
 Site Contact: Robin Robinson
 Contact Number: 0

Signature: Michael Duff

Date: 12/26/2013
 Time: 11:30 AM

Quarter: Report Period: Risk:

Current Stage(s) of Construction

<input checked="" type="checkbox"/>	Grading and Land Development	<input type="checkbox"/>	Final Landscaping & Site Stabilization
<input checked="" type="checkbox"/>	Streets & Utilities Phase	<input type="checkbox"/>	Inactive Construction
<input checked="" type="checkbox"/>	Vertical Construction Phase	<input type="checkbox"/>	Complete

Visual Inspection

Inspect each drainage area on site and off. Were any of the following observed:

If Yes, Location(s) and Source

a Odors	<input type="text" value="No"/>	
b Floating Materials	<input type="text" value="No"/>	
c Suspended Materials	<input type="text" value="No"/>	
d Sheen	<input type="text" value="No"/>	
e Discolorations	<input type="text" value="No"/>	
f Turbidity	<input type="text" value="No"/>	

If Yes, Location(s) and Source

Is any evidence of NSWD observed?

If evidence is observed, was it authorized?

Were photos taken?

Contractor: Note date the Corrective Action/Change is complete. Required.

ITEM	Corrective Actions Identified	Is SWPPP Amendment or change needed?	No	Date

Photo References/Comments

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD - SAN DIEGO REGION
WATERSHED PROTECTION PROGRAM**

FACILITY INSPECTION REPORT

FACILITY: Casa Mira View **INSPECTION DATE/TIME:** 01/14/14; 1100

WDID/FILE NO.: 9 37C353628

REPRESENTATIVE(S) PRESENT DURING INSPECTION:

NAME: <u>Christina Arias</u>	AFFILIATION: <u>San Diego Water Board</u>
NAME: <u>Frank Melbourn</u>	AFFILIATION: <u>San Diego Water Board</u>
NAME: <u>Bryan Smith, Brian Eskow</u>	AFFILIATION: <u>Garden Communities</u>
NAME: <u>Akram Bassyouni, Eliseo Guerrero</u>	AFFILIATION: <u>City of San Diego</u>
NAME: <u>Wes Udin</u>	AFFILIATION: <u>GST, Inc.</u>

Scripps Mesa Developers LLC
NAME OF OWNER, AGENCY OR PARTY RESPONSIBLE FOR DISCHARGE

Garden Communities
FACILITY OR DEVELOPER NAME (if different from owner)

8530 Costa Verde Blvd., San Diego CA 92122
OWNER MAILING ADDRESS

11241 Westview Parkway, San Diego
FACILITY ADDRESS

Stuart Posnock (858) 320-0018
OWNER CONTACT NAME AND PHONE #

same
FACILITY OR DEVELOPER CONTACT NAME AND PHONE #

APPLICABLE WATER QUALITY LICENSING REQUIREMENTS:

- | | |
|---|---|
| <input type="checkbox"/> MS4 URBAN RUNOFF REQUIREMENTS | <input type="checkbox"/> GENERAL OR INDIVIDUAL WASTE DISCHARGE REQUIREMENTS OR NPDES |
| <input checked="" type="checkbox"/> CONSTRUCTION GENERAL PERMIT | <input type="checkbox"/> GENERAL OR INDIVIDUAL WAIVER OF WASTE DISCHARGE REQUIREMENTS |
| <input type="checkbox"/> CALTRANS GENERAL PERMIT | <input type="checkbox"/> SECTION 401 WATER QUALITY CERTIFICATION |
| <input type="checkbox"/> INDUSTRIAL GENERAL PERMIT | <input type="checkbox"/> CWC SECTION 13264 |

INSPECTION TYPE (Check One):

- "A" TYPE COMPLIANCE--COMPREHENSIVE INSPECTION IN WHICH SAMPLES ARE TAKEN. (EPA TYPE S)
- "B" TYPE COMPLIANCE--A ROUTINE NONSAMPLING INSPECTION. (EPA TYPE C)
- NONCOMPLIANCE FOLLOW-UP--INSPECTION MADE TO VERIFY CORRECTION OF A PREVIOUSLY IDENTIFIED VIOLATION.
- ENFORCEMENT FOLLOW-UP--INSPECTION MADE TO VERIFY THAT CONDITIONS OF AN ENFORCEMENT ACTION ARE BEING MET.
- COMPLAINT--INSPECTION MADE IN RESPONSE TO A COMPLAINT.
- PRE-REQUIREMENT--INSPECTION MADE TO GATHER INFO. RELATIVE TO PREPARING, MODIFYING, OR RESCINDING REQUIREMENTS.
- NO EXPOSURE CERTIFICATION (NEC) - VERIFICATION THAT THERE IS NO EXPOSURE OF INDUSTRIAL ACTIVITIES TO STORM WATER.
- NOTICE OF TERMINATION REQUEST FOR INDUSTRIAL FACILITIES OR CONSTRUCTION SITES - VERIFICATION THAT THE FACILITY OR CONSTRUCTION SITE IS NOT SUBJECT TO PERMIT REQUIREMENTS.
- COMPLIANCE ASSISTANCE INSPECTION - OUTREACH INSPECTION DUE TO DISCHARGER'S REQUEST FOR COMPLIANCE ASSISTANCE.

INSPECTION FINDINGS:

Y WERE VIOLATIONS NOTED DURING THIS INSPECTION? (YES/NO/PENDING SAMPLE RESULTS)

Facility: Casa Mira View, WDID 9 37C353628
Inspection Date: 01/14/2014

I. COMPLIANCE HISTORY / PURPOSE OF INSPECTION

On January 14, 2014, Christina Arias and Frank Melbourn of the San Diego Water Board performed a follow up inspection of the Casa Mira View residential apartment construction site. I (Christina Arias) previously visited the site on January 9, 2014, and found a number of violations of the California State Water Resources Control Board Construction General Storm Water Permit, Order No. 2009-0009-DWQ (CGP). The inspection taking place on January 14, 2014, was coordinated with two inspectors from the City of San Diego, as well as a co-worker of the site's Qualified Storm Water Pollution Prevention Plan (SWPPP) Practitioner (QSP). The QSP, Michael Duff of Ground Service Technology (GST), Inc. was not available at the time of the inspection, so Wes Udin of GST filled in to answer questions related to the SWPPP and the onsite Best Management Practices (BMPs). Before the inspection began, I checked the Storm Water Multiple Tracking System (SMARTS) database, and found that the only Annual Report submitted for this site was for the 2011-2012 reporting period. The 2010-2011 and 2012-2013 Annual Reports had not been submitted. Construction at this site began in July, 2010.

The inspection began with a review of the SWPPP and related documents. The SWPPP was dated September 1, 2011, and was not signed by the Legally Responsible Person (LRP). The Risk Level assignment for the site was unclear because there was a handwritten note indicating Risk Level 2 on the onsite SWPPP, however, the SWPPP uploaded onto SMARTS indicated Risk Level 3. Mr. Smith, Mr. Eskow, and Mr. Udin assured us that all subcontractors are trained in storm water compliance, almost on a weekly basis. However, documentation in the SWPPP does not support this. There were only four training logs available for review, dated January 13, 2013, December 9, 2013, December 16, 2013, and January 13, 2014.

After review of the SWPPP and related documents, we walked the site and found that additional BMPs have been implemented over the previous site visit on January 9, 2014. Photographs and inspection findings are presented below in the order that they were observed during the site walk.

II. FINDINGS

1. The finished roads within the site have been swept and are much cleaner than the previous site visit (Figures 1-2, 4).
2. One storm drain on the east side requires improved protection (Figure 3).
3. Sandbags had been replaced; however, additional BMPs are needed to prevent sediment from reaching the street (Figure 5).
4. A trash bin was overflowing (Figure 7).
5. Cigarettes in front of the trailers had been swept (Figure 8).
6. The leaking concrete wash-out bins were replaced or fixed (Figure 9).
7. The exterior slopes had adequate erosion control BMPs (Figures 10-11).

Facility: Casa Mira View, WDID 9 37C353628
Inspection Date: 01/14/2014

8. Chemical containers had secondary containment and the site was much tidier than the previous inspection (Figure 12).
9. There were no sediment control BMPs at one construction site exit/entrance located on Mira Lee Way, and sediment had been tracked into the street (Figures 13-14). Site operators indicated that this area is swept; however, a structural BMP such as gravel or shaker plates should be considered since street sweeping does not occur daily.
10. We found some fiber rolls that could be used in the event of rain; however, overall the site contains inadequate stockpiled BMPs. Mr. Melbourn asked that the site operators produce a list of stockpiled BMPs within two weeks.

III. RECOMMENDATIONS AND ADDITIONAL COMMENTS

1. The SWPPP and related documents must be signed by the LRP. Mr. Melbourn asked for a copy of the signed SWPPP within two weeks of the site visit.
2. Site operators should keep logs of all training given to subcontractors and locate any evidence of training given to date.
3. Sediment control BMPs such as silt fence should be installed at finished curbs to prevent sediment from reaching the streets.
4. Site operators should consider increasing the frequency of trash removal to prevent the overflow of trash BMPs.
5. Storm drain inlets within the construction site require protection to prevent sediment, trash, and construction debris from entering.
6. Additional site entrance/exit BMPs should be implemented since tracking in the street was still observed.
7. Upon review of SMARTS following the inspection, the owner of the site is listed as Scripps Mesa Developers, LLC. However, research shows that this is a suspended business entity.
8. These findings will be used to evaluate compliance with the CGP.

Facility: Casa Mira View, WDID 9 37C353628
 Inspection Date: 01/14/2014

IV. SIGNATURE SECTION

Christina Arias
 STAFF INSPECTOR

Christina Arias
 SIGNATURE

1/14/14

INSPECTION DATE

Eric Becker
 REVIEWED BY SUPERVISOR

Eric D. Becker
 SIGNATURE

1/22/14
 DATE

SMARTS:

Tech Staff Info & Use	
WDID	9 37C353628
Inspection ID	2020995
Violation ID (Deficient Annual Rpt)	853312
Violation ID (Incomplete SWPPP)	853313

Facility: Casa Mira View, WDID 9 37C353628
Inspection Date: 01/14/2014

Casa Mira View. Photos taken by Christina Arias 1/14/14



Figure 1. South side of active construction site



Figure 2. East side of active constructive site

Facility: Casa Mira View, WDID 9 37C353628
Inspection Date: 01/14/2014



Figure 3. Site interior; inlet requires better protection



Figure 4. Street sweeper on east side

Facility: Casa Mira View, WDID 9 37C353628
Inspection Date: 01/14/2014



Figure 5. Site interior; linear sediment control BMPs not effective



Figure 6. Site interior; trash and debris has been removed

Facility: Casa Mira View, WDID 9 37C353628
Inspection Date: 01/14/2014



Figure 7. Site interior with overflowing waste bin



Figure 8. Curb in front of trailer; cigarettes have been swept up

Facility: Casa Mira View, WDID 9 37C353628
Inspection Date: 01/14/2014



Figure 9. Leaking concrete waste bin has been replaced



Figure 10. North slope has erosion control BMPs

Facility: Casa Mira View, WDID 9 37C353628
Inspection Date: 01/14/2014

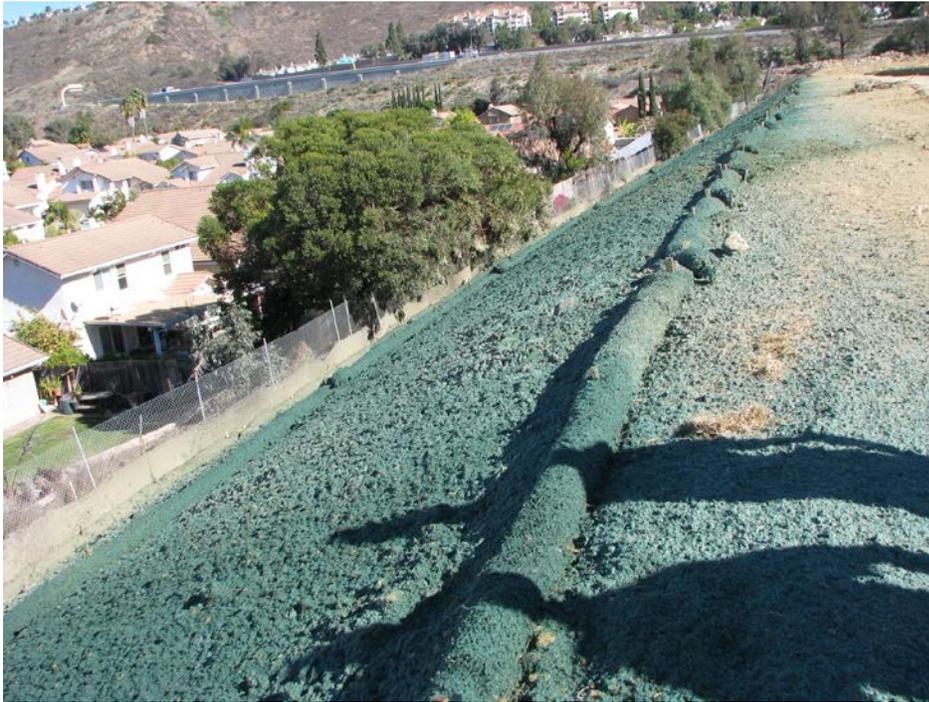


Figure 11. North slope has erosion control BMPs



Figure 12. Chemicals with secondary containment

Facility: Casa Mira View, WDID 9 37C353628
Inspection Date: 01/14/2014



Figure 13. Construction entrance shows tracking



Figure 14. Looking north into construction site from entrance in Fig. 13

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY	
<ul style="list-style-type: none"> Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 	A. Signature <input checked="" type="checkbox"/> <i>BM</i> <input type="checkbox"/> Agent <input type="checkbox"/> Addressee	
1. Article Addressed to: <i>Stuart Posnock Garden Communities 8530 Costa Verde Blvd. San Diego, CA 92122</i>	B. Received by (Printed Name) <i>Benzi Lasan</i>	C. Date of Delivery
2. Article Number (Transfer from service label)	D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No 3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D. 4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes	
7009 1410 0002 2347 2974		

PS Form 3811, February 2004

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102595-02-M-1540

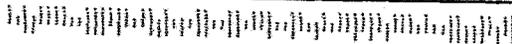
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USPS
Permit No. G-10

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*Attn: C. Arias
RWACB
2375 Northside Dr., Ste 100
San Diego CA 92108*





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February 19, 2014 , 3:13 am	Processed through USPS Sort Facility	SAN DIEGO, CA 92199
February 19, 2014	Depart USPS Sort Facility	SAN DIEGO, CA 92199
February 18, 2014 , 6:19 pm	Processed through USPS Sort Facility	SAN DIEGO, CA 92199

Available Actions

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Track Another Package

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[Track It](#)

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Exhibit No. 7

March 7, 2014, Sheppard Mullin letter

SheppardMullin

SAN DIEGO REGIONAL
WATER QUALITY
CONTROL BOARD

2014 MAR 7 PM 4 43

Sheppard, Mullin, Richter & Hampton LLP
501 West Broadway, 19th Floor
San Diego, California 92101-3598
619.338.6500 main
619.234.3815 fax
www.sheppardmullin.com

619.338.6524 direct
djones@sheppardmullin.com

File Number: 0100-092378

March 7, 2014

VIA E-MAIL AND U.S. MAIL

Ms. Christina Arias
Water Resources Control Engineer
San Diego Regional Water Quality Control Board
2375 Northside Drive, Suite 100
San Diego, CA 92108-2700
E-Mail: Christina.Arias@waterboards.ca.gov

Re: Casa Mira View and Torrey Hills Weekly Inspection Reports

Dear Ms. Arias:

This letter is to follow up on your request earlier this week for the Casa Mira View and the Torrey Hills construction sites' weekly inspection reports from our Qualified Storm Water Pollution Prevention Plan (SWPPP) Practitioner (QSP). Enclosed herein are the reports for the past rainy season, from the first week of October 2013 through January 2014, as requested.

You will see from a review of the reports that, once our new personnel took over in late December, we better documented the actions taken to correct any issues found during the QSP's weekly inspections. Nonetheless, we are not relying on the fact we have new personnel at the job site to ensure that our sites comply with the California State Water Resources Control Board Construction General Storm Water Permit, Order No. 2009-0009-DWQ (CGP) requirements. We take compliance with the CGP very seriously and, as a result, are implementing new corporate policies that will focus on making clear the training, processes, procedures and tools required to ensure all job sites fully comply with the CGP.

For example, our QSP, Ground Service Technology (GST), will conduct weekly SWPPP training at each job site, and that training will be logged and documented with the SWPPP documentation each week, until such time as it is clear based on the weekly inspection reports that weekly training is no longer necessary to ensure compliance with the CGP and SWPPP.

In addition, we are contracting with GST to not only inspect all of our sites each week but also to follow up within 48 hours of the inspection to confirm that any corrections needed as a result of that inspection have been made. If the subcontractors have not fully addressed any issue noted in the inspection then GST itself will immediately make the correction during its visit. As a result, any and all issues will be corrected within 48 hours, and we will ensure that documentation of that compliance is kept with the SWPPP on the job site.

SheppardMullin

Christina Arias
March 7, 2014
Page 2

Similarly, we are amending our contracts with our subcontractors where needed to emphasize the importance of the SWPPP compliance, so that we are confident that each subcontractor fully understands its responsibilities.

We are working hard to get these strengthened SWPPP-related policies and procedures in place and should be able to provide them to you by March 21st, if not before. Garden Communities is committed to complying with the CGP and appreciates your cooperation as we work through the process to ensure that we are fully compliant at each of our job sites both now and in the future.

If you have any questions or would like to discuss this further please do not hesitate to call.

Very truly yours,


for

Donna D. Jones
for SHEPPARD, MULLIN, RICHTER & HAMPTON LLP

SMRH:418407296.1

Enclosures: Weekly Inspection Reports for October 2013-January 2014

cc: Frank Melbourn (w/o enclosures)
Stuart Posnock
Dee Snow
Keith Garner, Esq.



Ground Service Technology, Inc.

SWPPP/EROSION CONTROL DIVISION

2280 Micro Place

Phone 760-745-2010

Escondido, CA 92029

Fax 760-741-1363

www.erosioncontroller.com

CA Lic #847034 A & B

RAIN EVENT ACTION PLAN (REAP)

Owner: Scripps Mesa Developers
 Contractor: Garden Communities
 Job No./Project: 20623 Casa Mira View
 Performed by: Michael P. Duff, JD
 Site Address: 11195 Westview Parkway
 Cross Streets/Area: Mira Mesa, California

WDID#: 9 37C353628
 Project Dates: 0
 Site Area: 3 acres
 Exposed Area: 1
 Site Contact: Robin Robinson
 Contact Number: 0
 Date: 10/7/2013
 Time: 2:00 PM

Signature: Michael Duff

Site Stormwater Manager

Name: Michael Duff
 Company: GST
 24/7 Phone Number: 760.802.7900

Stormwater Sampling Agent

Name: Michael Duff
 Company: GST
 24/7 Phone Number: 760.802.7900

Erosion & Sediment Control Labor Force

Contact Name: Wes Udwin
 Company: GST
 24/7 Phone Number: 760.815.2909

CRITICAL: THIS REAP IS PREPARED WITH YOUR SWPPP INSPECTOR. ALL ITEMS ARE TO BE ADDRESSED PRIOR TO START OF PREDICTED RAIN. Document this.

Current Phase(s) of Construction

- Grading and Land Development
- Streets & Utilities Phase
- Vertical Construction Phase

- Final Landscaping & Site Stabilization
- Inactive Construction
- Complete

Weather Conditions

- Clear
- Cloudy
- Raining
- Temperature

NOAA Forecast Chance of Precipitation:

0%	Sunday, October 06, 2013
5%	Monday, October 07, 2013
10%	Tuesday, October 08, 2013
60%	Wednesday, October 09, 2013

20%	Thursday, October 10, 2013
0%	Friday, October 11, 2013
0%	Saturday, October 12, 2013
0%	Sunday, October 13, 2013

Information Provided to Subcontractors

- Contractual Language
- Trainings
- Fines & Penalties
- Signage
- Tailgate Meetings
- Educational Handouts

Current Activities

Grading and Land Development

<input type="checkbox"/> Development	<input type="checkbox"/> Vertical Removal	<input checked="" type="checkbox"/> Equipment Maintenance/Fueling
<input type="checkbox"/> Rough Grade	<input checked="" type="checkbox"/> Finish Grade	<input checked="" type="checkbox"/> Erosion/Sediment Control
<input type="checkbox"/> Soil Amendments	<input checked="" type="checkbox"/> Excavation	<input checked="" type="checkbox"/> Material Delivery & Storage
<input type="checkbox"/> Rock Crushing	<input type="checkbox"/> Blasting	<input checked="" type="checkbox"/> Vegetation Salvage/Harvest
<input checked="" type="checkbox"/> Surveying	<input type="checkbox"/> Soils Testing	<input type="checkbox"/>

Streets and Utilities

<input checked="" type="checkbox"/> Rough Grade	<input type="checkbox"/> Paving	<input checked="" type="checkbox"/> Material Delivery & Storage
<input type="checkbox"/> Finish Grade	<input type="checkbox"/> Striping	<input checked="" type="checkbox"/> Erosion/Sediment Control
<input type="checkbox"/> Masonry	<input type="checkbox"/> Utility Install	<input checked="" type="checkbox"/> Storm Drain Installation
<input type="checkbox"/> Curb & Gutter/Culvert	<input type="checkbox"/> Landscaping	<input type="checkbox"/>

Vertical Construction

<input checked="" type="checkbox"/> Framing	<input checked="" type="checkbox"/> Stucco	<input checked="" type="checkbox"/> Equipment Maintenance/Fueling
<input checked="" type="checkbox"/> Masonry	<input checked="" type="checkbox"/> Plumbing	<input checked="" type="checkbox"/> Concrete/Forms/Foundation
<input checked="" type="checkbox"/> Exterior Siding	<input checked="" type="checkbox"/> Insulation	<input checked="" type="checkbox"/> Landscaping & Irrigation
<input checked="" type="checkbox"/> Flooring	<input checked="" type="checkbox"/> HVAC	<input checked="" type="checkbox"/> Drywall/Interior Walls
<input checked="" type="checkbox"/> Carpentry	<input checked="" type="checkbox"/> Roofing	<input checked="" type="checkbox"/> Tile
<input checked="" type="checkbox"/> Electrical	<input checked="" type="checkbox"/> Painting	<input type="checkbox"/>

Final Landscaping & Site Stabilization

<input checked="" type="checkbox"/> Stabilization	<input type="checkbox"/> Vegetation	<input checked="" type="checkbox"/> E & S Control BMP Removal
<input checked="" type="checkbox"/> Finish Grade	<input type="checkbox"/> Landscape Installation	<input checked="" type="checkbox"/> Storage Yard / Material Removal
<input checked="" type="checkbox"/> Painting & Touch-up	<input type="checkbox"/> Inlet Filtration	<input type="checkbox"/> Perm. Water Quality Ponds
<input type="checkbox"/> Drainage Inlet Stencils	<input type="checkbox"/> Irrigation System Testing	<input type="checkbox"/>

Inactive Construction

<input type="checkbox"/> Trash Removal	<input checked="" type="checkbox"/> E & S Controls Maint.	<input checked="" type="checkbox"/> E & S Controls Installation
<input checked="" type="checkbox"/> Street Sweeping	<input checked="" type="checkbox"/> Routine Inspection	<input type="checkbox"/>

Trade Crews Active On-Site

<input checked="" type="checkbox"/> Material Delivery	<input type="checkbox"/> Street Improvements	<input checked="" type="checkbox"/> Utility - Water	<input checked="" type="checkbox"/> Electrical
<input checked="" type="checkbox"/> Trenching	<input checked="" type="checkbox"/> Grading Contractor	<input checked="" type="checkbox"/> Utility - Sewer	<input checked="" type="checkbox"/> Carpentry
<input checked="" type="checkbox"/> Concrete Pouring	<input checked="" type="checkbox"/> Water Pipe Install	<input checked="" type="checkbox"/> Utility - Gas	<input checked="" type="checkbox"/> Plumbing
<input checked="" type="checkbox"/> Foundation	<input checked="" type="checkbox"/> Sewer Pipe Install	<input checked="" type="checkbox"/> Landscapers	<input checked="" type="checkbox"/> Masonry
<input type="checkbox"/> Demolition	<input checked="" type="checkbox"/> Gas Pipe Install	<input type="checkbox"/> Line Testers	<input checked="" type="checkbox"/> Painters
<input checked="" type="checkbox"/> Insulation	<input checked="" type="checkbox"/> Electrical Install	<input checked="" type="checkbox"/> Equipment Fueling	<input checked="" type="checkbox"/> Roofers
<input checked="" type="checkbox"/> Exterior Siding	<input checked="" type="checkbox"/> Communications	<input checked="" type="checkbox"/> Equipment Maintenance	<input checked="" type="checkbox"/> Stucco
<input checked="" type="checkbox"/> Fireproofing	<input checked="" type="checkbox"/> E & S Control	<input checked="" type="checkbox"/> Tile	<input checked="" type="checkbox"/> Riggers
<input type="checkbox"/> Steel Systems	<input checked="" type="checkbox"/> Sanitary Station Tech	<input checked="" type="checkbox"/> HVAC Install	<input checked="" type="checkbox"/> Drywall
<input checked="" type="checkbox"/> Carpenters	<input type="checkbox"/> Rock Products	<input checked="" type="checkbox"/> Survey/Soil Tech	<input checked="" type="checkbox"/> Irrigation
<input type="checkbox"/> Pest Control	<input type="checkbox"/> Water Feature Install	<input type="checkbox"/> Traffic Striping	<input checked="" type="checkbox"/> Storm Drain

Predicted Rain Event = 50% or greater chance of precipitation per NOAA forecast.

Qualifying Rain Event (ORE) = If rain gauge is not on site, nearest NOAA reporting site data will be used.

Extended Rain Event = Rain occurs in successive 24-hour periods. There must be 72 hours without rain for the event to be considered complete.

Checklist of Items to Address Prior to Predicted Rain Event

CONTRACTOR: Ensure each 'TO DO' item listed below is completed prior to start of rain event.

Information & Scheduling

Done	Finding		Date/Time:
<input type="checkbox"/>	<input type="checkbox"/>	Superintendent informed of predicted rain	10.7.13 3am
<input type="checkbox"/>	<input type="checkbox"/>	Foremen and Subcontractors informed of predicted rain	
<input type="checkbox"/>	<input type="checkbox"/>	Alert Erosion & Sediment Control Provider. Request needed crews/materials/maintenance.	
<input type="checkbox"/>	<input type="checkbox"/>	Alert Sample Collection Contractor if applicable	
<input type="checkbox"/>	<input type="checkbox"/>	Schedule staff for extended rain event inspections (once each 24 hours)	
<input type="checkbox"/>	<input type="checkbox"/>	Pre-Storm Stormwater Site Inspection completed	
<input type="checkbox"/>	<input type="checkbox"/>	Adequate erosion and sediment control measures are on hand for pre-storm preparation & extended maintenance	
<input type="checkbox"/>	<input type="checkbox"/>	Review that the BMP site map is updated. Provide a copy for Sediment & Erosion Control Provider/Subcontractor.	
<input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/>	<input type="checkbox"/>		

Material Storage Areas

<input type="checkbox"/>	<input type="checkbox"/>	Materials covered or indoors
<input type="checkbox"/>	<input type="checkbox"/>	Perimeter controls around stockpiles
<input type="checkbox"/>	<input type="checkbox"/>	Stockpiles covered
<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	

Waste Management Areas

<input type="checkbox"/>	<input type="checkbox"/>	All trash receptacles and recycling bins closed or covered
<input type="checkbox"/>	<input type="checkbox"/>	Drain holes plugged
<input type="checkbox"/>	<input type="checkbox"/>	Sanitary stations (portable toilets) bermed or in secondary containment and protected from tipping
<input type="checkbox"/>	<input type="checkbox"/>	

Concrete Washout Areas

<input type="checkbox"/>	<input type="checkbox"/>	Washout receptacles covered
<input type="checkbox"/>	<input type="checkbox"/>	Adequate capacity for rain
<input type="checkbox"/>	<input type="checkbox"/>	

Trade Operations & Securing of Site

- Exterior operations shut down for rain event
- Soil treatments not applied within 24 hours of predicted rain event
- Materials, equipment and tools properly stored and covered
- Waste and debris disposed of in covered receptacles or removed from site in accordance with approved manner
- Trenches and excavations protected
- Perimeter controls around disturbed areas
- Cover and berm fueling and repair areas
-

Site Erosion & Sediment Control BMPs

- Adequate capacity in sediment basins and traps
- Site perimeter controls in place
- Catch basin and storm drain inlet protection in place
- If previously-approved practice due to safety concerns, remove some or all storm drain inlet protection
- Deploy temporary erosion control on inactive areas
- Deploy temporary perimeter control around disturbed areas
- Sweep roads
- Stabilize site ingress and egress points
-
-

Spills & Drips

- Clean up all spills and drips, including paint, fuel, oil, hydraulic fluid, etc.
- Empty drip pans
- Place drip pans under all idle equipment
-

Corrective Actions - CRITICAL

CONTRACTOR: Address 'Deficient' items listed here AND items listed on the Pre-Rain Inspection Report.
 Check off each gray box here as completed and sign in gray box below when all REAP items are addressed. **PRE-RAIN INSPECTION REPORT: Note the date and time each item is addressed for proof of your compliance.**

Once complete, place this REAP in the SWPPP binder with completed Rain Event Inspection Reports.

Received by On-Site Representative: _____ Date _____

All 'Deficient' items addressed by: _____	Date _____	Time _____
---	------------	------------



Ground Service Technology, Inc.

SWPPP/EROSION CONTROL DIVISION

2280 Micro Place

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Escondido, CA 92029

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CA Lic #847034 A & B

RISK LEVEL 2 SITE INSPECTION REPORT

Owner: Scripps Mesa Developers
 Contractor: Garden Communities
 Job No./Project: 20623 Casa Mira View
 Site Address: 11195 Westview Parkway
 Cross Streets/Area: Mira Mesa, California
 Performed by: Michael P. Duff, JD
 Title: CESSWI, QSP #24369

WDID#: 9 37C353628
 Project Dates:
 Site Area: 3 acres
 Exposed Area: 100%
 Site Contact: Robin Robinson
 Contact Number:
 Report Date: 10/7/2013

Inspector Signature: Michael P. Duff

Inspection Date: 10/7/2013 x
 Time: 2:00 PM

Type of Inspection: Prior to Anticipated Storm Event

Additional Report: NO

Phase(s) of Construction: 1 Grading/Land Devel.

2 Vertical Const.

Summary of Completed Activities

Weather & Rain Event Data Current: Cloudy

Rain Gauge Reading:

End date of Last Rain Event:

Was it a Qualifying Rain Event (QRE)?

Today is Day of predicted rain event days.

Cumulative Rain:

Is inspection during or after a QRE of .5" or more?

Number of QREs since July 1:

NOAA Forecast Chance of Precipitation

0%	Sunday, October 06, 2013
5%	Monday, October 07, 2013
10%	Tuesday, October 08, 2013
60%	Wednesday, October 09, 2013

20%	Thursday, October 10, 2013
0%	Friday, October 11, 2013
0%	Saturday, October 12, 2013
0%	Sunday, October 13, 2013

Sampling Did first two hours of discharge occur during business hours?
 Was any storm water discharged from site?
 Were water samples taken?
 *If Yes, fill out and print Water Sample Report.

Estimated start of rain:
 During normal business hours?
 If NO, please explain:

SWPPP Questions

- a. Is there a SWPPP on-site?
- b. Is a Wall Map updated?
- c. Are structural controls installed per the SWPPP?
- d. If the SWPPP is not implemented, is there an effective combination of Erosion & Sediment control BMPs appropriate for the current stage of construction?
- e. Is there any leak, breach or malfunction to indicate non-visible pollutants?
- f. Did you observe any floating materials, oil, grease, odor, toxins, and/or sediment at any outfalls, discharge points, or downstream locations?

YES
YES b2. Require updating? NO
YES
NO If Yes, plan for sampling at next rain.
NO If Yes, sample and document.
 What was observed?

The following pages provide inspection observation results. Results are to be cross-referenced with attached photographs.

Soil Stabilization Items

- 1 Berms and Dikes
- 2 Slope protection
- 3 Vegetation
- 4 Surface erosion
- 5 Storage of Materials
- 6 Soil Stockpiles
- 7 Other Stockpiles
- 8 V-ditches & Slope Drains

	BMP Acceptable	Repairs Required	BMP	Missing	Not Applicable	CASQA BMP
1	X					EC-3, 6, 7, 8
2	X					EC-4
3	X					EC-2
4	X					WM-1, 2
5	X					WM-3
6	X					WM-3
7	X					SE-4, EC-11
8	X					

Sediment Control Items

- 9 Fiber Rolls / Straw Wattles
- 10 Check Dams
- 11 Burlap / Poly Rock Bags
- 12 Silt Fence
- 13 Drain Inlet Protection
- 14 Basins

	BMP Acceptable	Repairs Required	BMP	Missing	Not Applicable	CASQA BMP
9	X					SE-5
10	X					SE-4
11	X					SE-6
12		X				SE-1
13	X					SE-10
14	X					SE-2, 3

Wind Control Items

- 15 Dust Control

	BMP Acceptable	Repairs Required	BMP	Missing	Not Applicable	CASQA BMP
15	X					WE-1

Tracking Control Items

- 16 Construction Entrance
- 17 Tracking on Street

	BMP Acceptable	Repairs Required	BMP	Missing	Not Applicable	CASQA BMP
16	X					TC-1, 2, 3
17		X				SE-7

Good House Keeping & Waste Management Items

- 18 Debris Clean-up
- 19 Disposal Areas (Export Sites)
- 20 Spills or Leaks on Vehicles, Equipment or Materials
- 21 Portable Toilets and Septic
- 22 Dumpsters, Roll-Offs, Trash Receptacles
- 23 Concrete, Paint, Stucco Wash Outs

	BMP Acceptable	Repairs Required	BMP	Missing	Not Applicable	CASQA BMP
18		X				WM-5, 6
19	X					
20	X					WM-4,6,7,10
21	X					WM-9
22		X				WM-5
23	X					WM-8

Non-Stormwater Management BMP Items

- 24 Dewatering Operations
- 25 Paving or Grinding Operations
- 26 Concrete Curing/Finishing
- 27 Temporary Stream Crossing
- 28 Illicit Connection/Illegal Discharge Reporting
- 29 Vehicle and Equipment Cleaning
- 30 Vehicle and Equipment Fueling Area
- 31 Vehicle and Equipment Maintenance
- 32 Vehicle and Equipment Drip Pans
- 33 Spill Kits

	BMP Acceptable	Repairs Required	BMP	Missing	Not Applicable	CASQA BMP
24					X	NS-2
25					X	NS-3
26	X					NS-12, 14
27					X	NS-4
28	X					NS-6
29					X	NS-8
30	X					NS-9
31					X	NS-10
32	X					NS-10
33	X					WM-4

Non-Storm Water Management BMP Items

- g. Are materials and supplies in compliance with the SWPPP? _____
- h. Were damaged or dissipated materials removed from the site? _____
- i. Are appropriate spill response personnel trained? _____

Other

	BMP Acceptable	Repairs Required	BMP	Missing	Not Applicable	CASQA BMP

Items Noted 'Repairs Required' or 'BMP Missing'

12	17	18	22						

CONTRACTOR: CORRECTIVE ACTIONS REQUIRED WITHIN 72 HOURS.

ITEM	Inspection Observation and Corrective Actions Summary	Assigned to	Date Completed
12	12. Replace missing or damaged silt fence as needed.		
Response:			
17	17. Sweep tracking as needed. Visually inspect daily.		
Response:			
18	18. Properly dispose of construction debris/trash.		
Response:			
22	22. Dumpsters need to be covered and the end of each workday and prior/during a rain event.		
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			
Response:			

NOTE: Not all instances are necessarily photographed. All items apply throughout site.

Refer to the California Stormwater Quality Association (CASQA) Best Management Practices (BMP) Details and Cut Sheets in your SWPPP for installation, maintenance and usage standards.

Inspection Report Received by: _____

Date: _____

#12

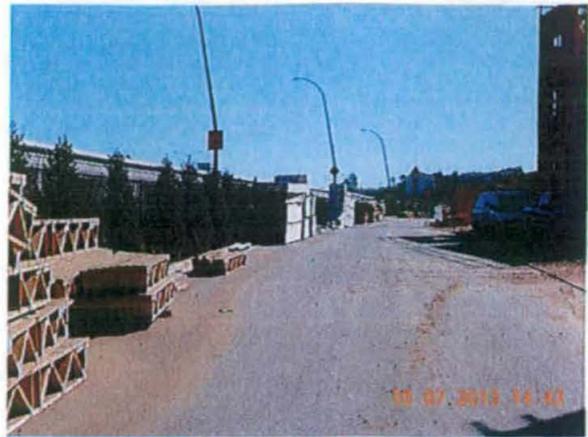
Fix
Silt
Fence



10.07.2013 14:18

#17

Dirt
Track
out



10.07.2013 14:17

#22

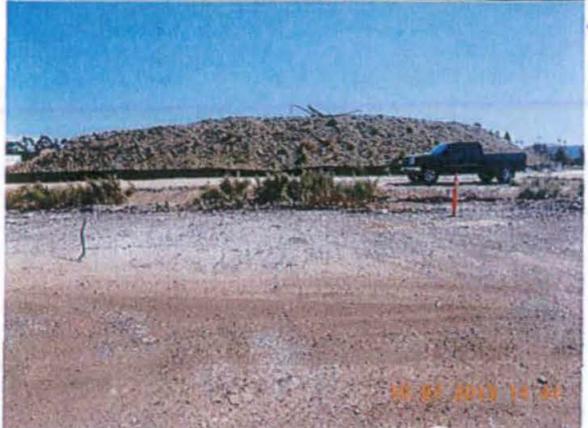
Cover
Dumpster



10.07.2013 14:19

#18

TRASH



10.07.2013 14:17

. 18



10.07.2013 14:19

CLEAN UP
TRASH

Warnings and/or Advisories In Effect for this Point:
Special Weather Statement
 For warnings and/or advisories in effect for adjacent areas to this point,
 see <http://www.wrh.noaa.gov/sbx>

Forecast For Lat/Lon: 32.9270/-117.1390 (Elev. 462 ft)
 San Diego-Mira Mesa CA

Forecast Created at: 7am PDT Oct 7, 2013

Custom Weather Forecast Table

	Mon Oct 07				Tue Oct 08				Wed Oct 09				Thu Oct 10				Fri Oct 11				Sat Oct 12				Sun Oct 13																							
Weather	Patchy Fog								Slight Chance Rain	Chance Rain Showers	Likely Rain Showers	Chance Rain Showers	Slight Chance Rain Showers																																			
Daily-Temp	High 70 Low 62				High 71 Low 58				High 63 Low 56				High 65 Low 54				High 69 Low 54				High 74 Low 57				High 75 Low 58																							
Chance of Precip	0%	0%	0%	5%	5%	5%	5%	10%	25%	45%	60%	35%	20%	5%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%																
Precip 12-hr	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.03"	0.07"	0.03"	0.01"	0.00"	0.00"	0.00"	0.00"																															
Snow Total	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"																															
FRET	0.16"				0.11"				0.08"				0.10"				0.11"				0.12"				0.12"																							
6-Hour Temp	5am	11am	5pm	11pm	5am	11am	5pm	11pm	5am	11am	5pm	11pm	5am	11am	5pm	11pm	5am	11am	5pm	11pm	5am	11am	5pm	11pm	5am	11am	5pm	11pm	5am	11am	5pm	11pm																
Cloudiness	29%	30%	15%	100%	100%	30%	71%	100%	100%	86%	88%	96%	75%	44%	44%	14%	14%	5%	5%	5%	5%	12%	12%	12%	12%	8%	8%	7%	12%	8%	8%	7%																
Dewpoint	39	40	47	52	51	51	53	54	54	52	51	52	52	49	49	51	51	50	53	56	53	54	54	56	53	54	54	56	53	53	54	55																
Relative Humidity	43%	27%	40%	69%	77%	52%	62%	84%	94%	68%	71%	88%	94%	59%	62%	85%	89%	55%	64%	88%	87%	52%	58%	83%	84%	50%	57%	82%	84%	50%	57%	82%																
Wind	SE	SW	W	SE	E	SW	W	S	S	SW	W	W	W	W	W	NE	E	W	W	NE	E	W	W	S	E	W	W	NE	E	W	W	NE																
Snow Level (ft)	2	5	7	3	3	7	9	5	5	10	14	14	10	7	8	2	5	6	8	2	5	7	8	2	2	8	7	2	2	8	7	2																
					10226				7733				8639				5992				5810				6454				0				0				0				0				0			



Ground Service Technology, Inc.

SWPPP/EROSION CONTROL DIVISION

2280 Micro Place

Phone 760-745-2010

Escondido, CA 92029

Fax 760-741-1363

www.erosioncontroller.com

CA Lic #847034 A & B

RISK LEVEL 2 SITE INSPECTION REPORT

Owner: Scripps Mesa Developers
 Contractor: Garden Communities
 Job No./Project: 20623 Casa Mira View
 Site Address: 11195 Westview Parkway
 Cross Streets/Area: Mira Mesa, California
 Performed by: Michael P. Duff, JD
 Title: CESSWI, QSP #24369

WDID#: 9 37C353628
 Project Dates:
 Site Area: 3 acres
 Exposed Area: 100%
 Site Contact: Robin Robinson
 Contact Number:
 Report Date: 10/15/2013

Inspection Date: 10/15/2013

Time: 12:30 PM

Inspector Signature: Michael P. Duff

Type of Inspection: Weekly Maintenance

Additional Report: NO

Phase(s) of Construction: 1 Grading/Land Devel.

2 Vertical Const.

Summary of Completed Activities

Weather & Rain Event Data Current: Clear

Rain Gauge Reading:

End date of Last Rain Event:

Was it a Qualifying Rain Event (QRE)?

Today is Day of predicted rain event days.

Cumulative Rain:

Is inspection during or after a QRE of .5" or more?

Number of QREs since July 1:

NOAA Forecast Chance of Precipitation

0%	Monday, October 14, 2013
0%	Tuesday, October 15, 2013
0%	Wednesday, October 16, 2013
0%	Thursday, October 17, 2013

0%	Friday, October 18, 2013
0%	Saturday, October 19, 2013
0%	Sunday, October 20, 2013
0%	Monday, October 21, 2013

Sampling Did first two hours of discharge occur during business hours?
 Was any storm water discharged from site?
 Were water samples taken?
 *If Yes, fill out and print Water Sample Report.

Estimated start of rain:
 During normal business hours?
 If NO, please explain:

SWPPP Questions

- a. Is there a SWPPP on-site?
- b. Is a Wall Map updated?
- c. Are structural controls installed per the SWPPP?

YES
 YES b2. Require updating? NO

- d. If the SWPPP is not implemented, is there an effective combination of Erosion & Sediment control BMPs appropriate for the current stage of construction?
- e. Is there any leak, breach or malfunction to indicate non-visible pollutants?
- f. Did you observe any floating materials, oil, grease, odor, toxins, and/or sediment at any outfalls, discharge points, or downstream locations?

YES
 NO If Yes, plan for sampling at next rain.
 NO If Yes, sample and document.
 What was observed?

The following pages provide inspection observation results. Results are to be cross-referenced with attached photographs.

#32



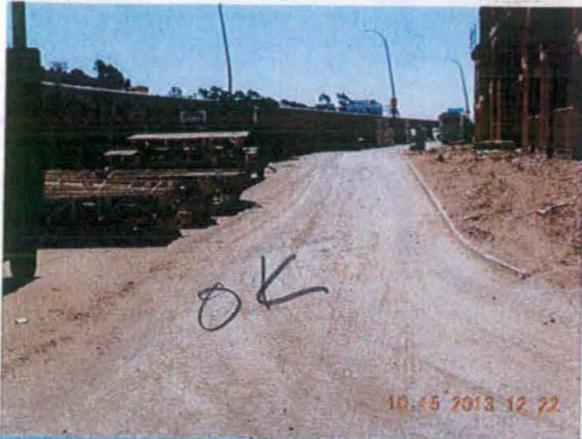
DRIP PAN

#18



CLEAN

#17



OK



#18

#22



#18

#18



WEP J.P.

CARLOS CLEAN

No Warnings or Advisories In Effect for this Point.
 For warnings and/or advisories in effect for adjacent areas to this point,
 see <http://www.wrh.noaa.gov/sgx>

**Forecast For Lat/Lon: 32.9270/-117.1390 (Elev. 462 ft)
 San Diego-Mira Mesa CA**

Forecast Created at: 9am PDT Oct 15, 2013

Custom Weather Forecast Table

	Tue Oct 15				Wed Oct 16				Thu Oct 17				Fri Oct 18				Sat Oct 19				Sun Oct 20				Mon Oct 21							
Weather																					Patchy Fog											
Daily-Temp	High 79 Low 66				High 84 Low 66				High 79 Low 66				High 77 Low 67				High 80 Low 66				High 78 Low 66				High 76 Low 66							
Chance of Precip	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%				
Precip	0.00" 0.00"																															
12-hr Snow Total	0" 0"																															
FRET	0.14"				0.18"				0.19"				0.17"				0.18"				0.15"				0.15"							
6-Hour Temp	5am	11am	5pm	11pm	5am	11am	5pm	11pm	5am	11am	5pm	11pm	5am	11am	5pm	11pm	5am	11am	5pm	11pm	5am	11am	5pm	11pm	5am	11am	5pm	11pm	5am	11am	5pm	11pm
Temp	55	77	73	58	55	82	77	60	58	77	74	61	57	75	72	59	55	78	74	59	55	78	72	59	55	74	70	57	55	74	70	57
Cloudiness	0%	4%	3%	15%	6%	3%	5%	5%	7%	9%	20%	53%	53%	3%	3%	3%	3%	7%	7%	6%	6%	5%	5%	5%	5%	4%	4%	5%	5%	4%	4%	5%
Dewpoint	47	42	46	49	40	36	37	40	39	37	38	39	39	38	39	42	39	38	40	43	42	42	43	46	45	44	45	45	45	44	45	45
Relative Humidity	73%	28%	39%	70%	67%	19%	24%	48%	53%	23%	28%	45%	49%	25%	31%	54%	53%	23%	29%	55%	61%	30%	35%	62%	67%	34%	40%	65%	67%	34%	40%	65%
Wind	E	W	W	E	E	W	W	E	E	W	W	E	E	W	W	E	E	W	W	E	E	W	W	E	E	W	W	E	E	W	W	E
	7	3	6	3	8	5	7	7	8	9	8	5	7	7	8	7	8	5	7	5	8	5	7	5	5	6	8	5	5	6	8	5



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CA Lic #847034 A & B

RISK LEVEL 2 SITE INSPECTION REPORT

Owner: Scripps Mesa Developers
 Contractor: Garden Communities
 Job No./Project: 20623 Casa Mira View
 Site Address: 11195 Westview Parkway
 Cross Streets/Area: Mira Mesa, California
 Performed by: Michael P. Duff, JD
 Title: CESSWI, QSP #24369

WDID#: 9 37C353628
 Project Dates:
 Site Area: 3 acres
 Exposed Area: 100%
 Site Contact: Robin Robinson
 Contact Number:
 Report Date: 10/24/2013

Inspection Date: 10/24/2013

Time: 1:30 PM

Inspector Signature: Michael Duff

Type of Inspection: Weekly Maintenance

Additional Report: NO

Phase(s) of Construction: 1 Grading/Land Devel.

2 Vertical Const.

Summary of Completed Activities

Weather & Rain Event Data

Current: Cloudy

Rain Gauge Reading:

End date of Last Rain Event:

Was it a Qualifying Rain Event (QRE)?

Today is Day of predicted rain event days.

Cumulative Rain:

Is inspection during or after a QRE of .5" or more?

Number of QREs since July 1:

NOAA Forecast Chance of Precipitation

0%	Wednesday, October 23, 2013
0%	Thursday, October 24, 2013
0%	Friday, October 25, 2013
0%	Saturday, October 26, 2013

5%	Sunday, October 27, 2013
30%	Monday, October 28, 2013
30%	Tuesday, October 29, 2013
15%	Wednesday, October 30, 2013

Did first two hours of discharge occur during business hours?
 Was any storm water discharged from site?
 Were water samples taken?
 *If Yes, fill out and print Water Sample Report.

Estimated start of rain:
 During normal business hours?
 If NO, please explain:

SWPPP Questions

- a. Is there a SWPPP on-site?
- b. Is a Wall Map updated?
- c. Are structural controls installed per the SWPPP?

YES
YES b2. Require updating? NO

- d. If the SWPPP is not implemented, is there an effective combination of Erosion & Sediment control BMPs appropriate for the current stage of construction?
- e. Is there any leak, breach or malfunction to indicate non-visible pollutants?
- f. Did you observe any floating materials, oil, grease, odor, toxins, and/or sediment at any outfalls, discharge points, or downstream locations?

YES
NO If Yes, plan for sampling at next rain.
NO If Yes, sample and document.
 What was observed?

The following pages provide inspection observation results. Results are to be cross-referenced with attached photographs.

Soil Stabilization Items

- 1 Berms and Dikes
- 2 Slope protection
- 3 Vegetation
- 4 Surface erosion
- 5 Storage of Materials
- 6 Soil Stockpiles
- 7 Other Stockpiles
- 8 V-ditches & Slope Drains

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
1	X				EC-3, 6, 7, 8
2	X				EC-4
3	X				EC-2
4	X				WM-1, 2
5	X				WM-3
6		X			WM-3
7		X			SE-4, EC-11
8	X				

Sediment Control Items

- 9 Fiber Rolls / Straw Wattles
- 10 Check Dams
- 11 Burlap / Poly Rock Bags
- 12 Silt Fence
- 13 Drain Inlet Protection
- 14 Basins

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
9	X				SE-5
10	X				SE-4
11	X				SE-6
12		X			SE-1
13	X				SE-10
14	X				SE-2, 3

Wind Control Items

- 15 Dust Control

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
15	X				WE-1

Tracking Control Items

- 16 Construction Entrance
- 17 Tracking on Street

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
16	X				TC-1, 2, 3
17		X			SE-7

Good House Keeping & Waste Management Items

- 18 Debris Clean-up
- 19 Disposal Areas (Export Sites)
- 20 Spills or Leaks on Vehicles, Equipment or Materials
- 21 Portable Toilets and Septic
- 22 Dumpsters, Roll-Offs, Trash Receptacles
- 23 Concrete, Paint, Stucco Wash Outs

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
18		X			WM-5, 6
19	X				
20	X				WM-4,6,7,10
21	X				WM-9
22		X			WM-5
23	X				WM-8

Non-Stormwater Management BMP Items

- 24 Dewatering Operations
- 25 Paving or Grinding Operations
- 26 Concrete Curing/Finishing
- 27 Temporary Stream Crossing
- 28 Illicit Connection/Illegal Discharge Reporting
- 29 Vehicle and Equipment Cleaning
- 30 Vehicle and Equipment Fueling Area
- 31 Vehicle and Equipment Maintenance
- 32 Vehicle and Equipment Drip Pans
- 33 Spill Kits

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
24				X	NS-2
25				X	NS-3
26	X				NS-12, 14
27				X	NS-4
28	X				NS-6
29				X	NS-8
30	X				NS-9
31				X	NS-10
32		X			NS-10
33	X				WM-4

Non-Storm Water Management BMP Items

- g. Are materials and supplies in compliance with the SWPPP? _____
- h. Were damaged or dissipated materials removed from the site? _____
- i. Are appropriate spill response personnel trained? _____

Other

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP

Items Noted 'Repairs Required' or 'BMP Missing'

6	7	12	17	18	22	32				
---	---	----	----	----	----	----	--	--	--	--

CONTRACTOR: CORRECTIVE ACTIONS REQUIRED WITHIN 72 HOURS.

ITEM	Inspection Observation and Corrective Actions Summary	Assigned to	Date Completed
6	6. Cover and berm inactive soil stockpiles.		
Response:			
7	7. Remove or cover any concrete or misc. debris type stockpiles		
Response:			
12	12. Replace missing or damaged silt fence as needed.		
Response:			
17	17. Sweep tracking as needed. Visually inspect daily.		
Response:			
18	18. Properly dispose of construction debris/trash.		
Response:			
22	22. Trash receptacles need to have lids or covers.		
Response:			
32	32. Place drip pans underneath stored and/or idle equipment.		
Response:			
0			
Response:			

NOTE: Not all instances are necessarily photographed. All items apply throughout site.

Refer to the California Stormwater Quality Association (CASQA) Best Management Practices (BMP) Details and Cut Sheets in your SWPPP for installation, maintenance and usage standards.

Inspection Report Received by: _____

Date: _____

#18



#22



#32



#18



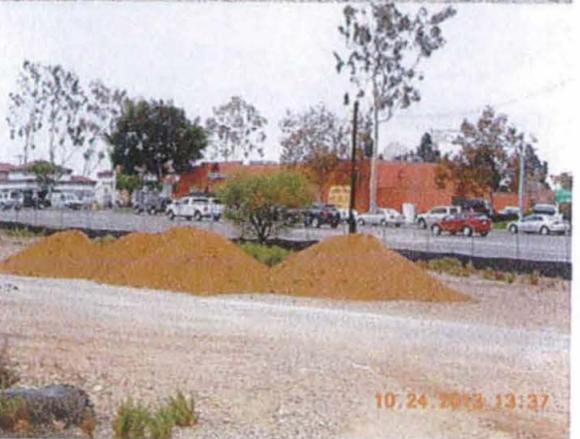
#7



#12



#6



#17



No Warnings or Advisories In Effect for this Point.
 For warnings and/or advisories in effect for adjacent areas to this point,
 see <http://www.wrh.noaa.gov/sgx>

Forecast For Lat/Lon: 32.9270/-117.1390 (Elev. 462 ft)
San Diego-Mira Mesa CA

Forecast Created at: 8am PDT Oct 24, 2013

Custom Weather Forecast Table

	Thu Oct 24				Fri Oct 25				Sat Oct 26				Sun Oct 27				Mon Oct 28			Tue Oct 29			Wed Oct 30						
Weather	Patchy Fog								Patchy Fog								Slight Chance Rain Showers			Chance Rain Showers			Slight Chance Rain Showers						
Daily-Temp	High 68 Low 58				High 70 Low 57				High 78 Low 58				High 78 Low 60				High 72 Low 57			High 68 Low 55			High 72 Low 53						
Chance of Precip	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	5%	5%	15%	30%	30%	20%	20%	15%	15%	5%	5%	0%
Precip 12-hr	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	
Snow Total	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"
FRET	0.07"				0.08"				0.09"				0.11"				0.10"			0.10"			0.13"						
6-Hour Temp	5am	11am	5pm	11pm	5am	11am	5pm	11pm	5am	11am	5pm	11pm	5am	11am	5pm	11pm													
Cloudiness	100%	54%	85%	88%	71%	8%	50%	94%	94%	19%	19%	77%	77%	7%	7%	100%	100%	55%	83%	100%	100%	66%	66%	75%	75%	15%	15%	18%	
Dewpoint	54	58	58	54	52	56	58	56	52	57	58	55	51	52	55	53	50	54	55	52	49	50	50	47	44	46	46	43	
Relative Humidity	84%	78%	80%	84%	81%	69%	77%	92%	86%	60%	60%	75%	70%	48%	55%	79%	76%	61%	66%	81%	78%	64%	65%	74%	69%	47%	48%	61%	
Wind	NE	NW	W	NW	N	NW	NW	N	N	W	W	NE	E	W	W	E	E	SW	W	SW	SW	SW	SW	W	E	E	W	W	
Snow Level (ft)	3	6	9	5	3	6	7	2	2	7	5	1	3	5	7	2	3	8	14	9	9	12	8	3	7	8	10	5	
																	9151	9151	8528	8528	8091	8091	8690	8690	8690	8690	0	0	



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RISK LEVEL 2 SITE INSPECTION REPORT

Owner: Scripps Mesa Developers
 Contractor: Garden Communities
 Job No./Project: 20623 Casa Mira View
 Site Address: 11195 Westview Parkway
 Cross Streets/Area: Mira Mesa, California
 Performed by: Michael P. Duff, JD
 Title: CESSWI, QSP #24369

WDID#: 9 37C353628
 Project Dates:
 Site Area: 3 acres
 Exposed Area: 100%
 Site Contact: Robin Robinson
 Contact Number:
 Report Date: 10/28/2013

Inspector Signature: Michael Duff

Inspection Date: 10/28/2013

Time: 3:30 PM

Type of Inspection: During Extended Storm Event

Additional Report: NO

Phase(s) of Construction: 1 Grading/Land Devel.

2 Vertical Const.

Summary of Completed Activities

Weather & Rain Event Data Current: Cloudy

Rain Gauge Reading: 0.1

End date of Last Rain Event: _____

Was it a Qualifying Rain Event (QRE)? _____

Today is Day 1 of _____ predicted rain event days.

Cumulative Rain: 0.1

Is inspection during or after a QRE of .5" or more? _____

Number of QREs since July 1: _____

NOAA Forecast Chance of Precipitation

8%	Sunday, October 27, 2013
45%	Monday, October 28, 2013
5%	Tuesday, October 29, 2013
0%	Wednesday, October 30, 2013

0%	Thursday, October 31, 2013
0%	Friday, November 01, 2013
0%	Saturday, November 02, 2013
0%	Sunday, November 03, 2013

Sampling Did first two hours of discharge occur during business hours? _____

Estimated start of rain: 12:00 AM

Was any storm water discharged from site? _____

During normal business hours? No

Were water samples taken? _____

If NO, please explain: _____

*If Yes, fill out and print Water Sample Report.

SWPPP Questions

a. Is there a SWPPP on-site? YES

YES

b. Is a Wall Map updated? YES

YES

b2. Require updating? NO

c. Are structural controls installed per the SWPPP? _____

d. If the SWPPP is not implemented, is there an effective combination of Erosion & Sediment control BMPs appropriate for the current stage of construction? YES

YES

e. Is there any leak, breach or malfunction to indicate non-visible pollutants? NO

NO

If Yes, plan for sampling at next rain.

f. Did you observe any floating materials, oil, grease, odor, toxins, and/or sediment at any outfalls, discharge points, or downstream locations? NO

NO

If Yes, sample and document.

What was observed? _____

The following pages provide inspection observation results. Results are to be cross-referenced with attached photographs.

Soil Stabilization Items

- 1 Berms and Dikes
- 2 Slope protection
- 3 Vegetation
- 4 Surface erosion
- 5 Storage of Materials
- 6 Soil Stockpiles
- 7 Other Stockpiles
- 8 V-ditches & Slope Drains

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
1	X				EC-3, 6, 7, 8
2	X				EC-4
3	X				EC-2
4	X				WM-1, 2
5	X				WM-3
6	X				WM-3
7	X				SE-4, EC-11
8	X				

Sediment Control Items

- 9 Fiber Rolls / Straw Wattles
- 10 Check Dams
- 11 Burlap / Poly Rock Bags
- 12 Silt Fence
- 13 Drain Inlet Protection
- 14 Basins

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
9	X				SE-5
10	X				SE-4
11	X				SE-6
12	X				SE-1
13	X				SE-10
14	X				SE-2, 3

Wind Control Items

- 15 Dust Control

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
15	X				WE-1

Tracking Control Items

- 16 Construction Entrance
- 17 Tracking on Street

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
16	X				TC-1, 2, 3
17	X				SE-7

Good House Keeping & Waste Management Items

- 18 Debris Clean-up
- 19 Disposal Areas (Export Sites)
- 20 Spills or Leaks on Vehicles, Equipment or Materials
- 21 Portable Toilets and Septic
- 22 Dumpsters, Roll-Offs, Trash Receptacles
- 23 Concrete, Paint, Stucco Wash Outs

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
18	X				WM-5, 6
19	X				
20	X				WM-4,6,7,10
21	X				WM-9
22	X				WM-5
23	X				WM-8

Non-Stormwater Management BMP Items

- 24 Dewatering Operations
- 25 Paving or Grinding Operations
- 26 Concrete Curing/Finishing
- 27 Temporary Stream Crossing
- 28 Illicit Connection/Illegal Discharge Reporting
- 29 Vehicle and Equipment Cleaning
- 30 Vehicle and Equipment Fueling Area
- 31 Vehicle and Equipment Maintenance
- 32 Vehicle and Equipment Drip Pans
- 33 Spill Kits

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
24				X	NS-2
25				X	NS-3
26	X				NS-12, 14
27				X	NS-4
28	X				NS-6
29				X	NS-8
30		X			NS-9
31				X	NS-10
32	X				NS-10
33	X				WM-4

Non-Storm Water Management BMP Items

- g. Are materials and supplies in compliance with the SWPPP? _____
- h. Were damaged or dissipated materials removed from the site? _____
- i. Are appropriate spill response personnel trained? _____

Other

No discharge observed or reported

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP

Items Noted "Repairs Required" or "BMP Missing"

30									
----	--	--	--	--	--	--	--	--	--

CONTRACTOR: CORRECTIVE ACTIONS REQUIRED WITHIN 72 HOURS.

ITEM	Inspection Observation and Corrective Actions Summary	Assigned to	Date Completed
30	30. Replace damaged drip pans as needed.		
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			
Response:			

NOTE: Not all instances are necessarily photographed. All items apply throughout site.

Refer to the California Stormwater Quality Association (CASQA) Best Management Practices (BMP) Details and Cut Sheets in your SWPPP for installation, maintenance and usage standards.

Inspection Report Received by: _____

Date: _____



No Warnings or Advisories In Effect for this Point.
 For warnings and/or advisories in effect for adjacent areas to this point,
 see <http://www.wrh.noaa.gov/sga>

Forecast For Lat/Lon: 32.9270/-117.1390 (Elev. 462 ft)
San Diego-Mira Mesa CA

Forecast Created at: 9am PDT Oct 28, 2013

Custom Weather Forecast Table

	Mon Oct 28				Tue Oct 29				Wed Oct 30				Thu Oct 31				Fri Nov 01				Sat Nov 02				Sun Nov 03							
Weather	Likely Rain		Rain Showers		Chance Rain Showers		Slight Chance Rain Showers		Chance Rain Showers		Patchy Fog						Patchy Fog				Patchy Fog				Slight Chance Rain							
Daily-Temp	High 62 Low 58				High 61 Low 54				High 66 Low 52				High 73 Low 54				High 77 Low 55				High 75 Low 56				High 64 Low 54							
Chance of Precip	70%	75%	80%	80%	45%	25%	20%	20%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	5%	5%	5%	10%	10%	20%	20%	20%	20%
Precip	0.06"	0.07"	0.04"	0.04"	0.09"	0.06"	0.00"	0.01"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.05"	0.05"	0.05"	0.05"	0.10"	0.10"	0.20"	0.20"	0.20"	0.20"
12-hr Snow Total	0"				0"				0"				0"				0"				0"				0"							
FRET	0.06"				0.07"				0.09"				0.13"				0.16"				0.14"				0.08"							
6-Hour Temp	5am	11am	5pm	11pm	5am	11am	5pm	11pm	5am	11am	5pm	11pm	5am	11am	5pm	11pm	5am	11am	5pm	11pm	5am	11am	5pm	11pm	5am	11am	5pm	11pm	5am	11am	5pm	11pm
Cloudiness	100%	90%	90%	67%	90%	73%	80%	64%	39%	36%	21%	60%	42%	6%	6%	6%	6%	5%	5%	98%	98%	7%	7%	98%	98%	88%	53%	53%	100%	100%	100%	100%
Dewpoint	57	56	53	50	49	50	49	49	49	48	50	50	48	43	42	42	40	37	38	39	40	41	46	48	47	46	49	50	49	49	49	50
Relative Humidity	98%	84%	77%	83%	84%	73%	71%	88%	87%	62%	62%	83%	78%	43%	39%	57%	56%	30%	29%	49%	54%	37%	43%	73%	76%	58%	66%	91%	91%	91%	91%	91%
Wind	SW	W	W	W	SW	W	W	E	E	W	W	NE	E	E	NW	E	E	E	NE	E	E	E	SW	W	SE	E	SW	W	SE	SE	SE	SE
Wind Speed	8	14	10	9	8	8	9	5	6	8	9	6	8	6	6	7	9	8	3	7	7	6	9	3	6	7	10	5	5	5	5	5
Snow Level (ft)	7203 6768 6330 5521 5356 5948 6748 6928																								7588							



Ground Service Technology, Inc.

SWPPP/EROSION CONTROL DIVISION

2280 Micro Place

Phone 760-745-2010

Escondido, CA 92029

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www.erosioncontroller.com

CA Lic #847034 A & B

RISK LEVEL 2 SITE INSPECTION REPORT

Owner: Scripps Mesa Developers
 Contractor: Garden Communities
 Job No./Project: 20623 Casa Mira View
 Site Address: 11195 Westview Parkway
 Cross Streets/Area: Mira Mesa, California
 Performed by: Michael P. Duff, JD
 Title: CESSWI, QSP #24369

WDID#: 9 37C353628
 Project Dates:
 Site Area: 3 acres
 Exposed Area: 100%
 Site Contact: Robin Robinson
 Contact Number:
 Report Date: 10/29/2013

Inspection Date: 10/29/2013

Time: 4:00 PM

Inspector Signature: Michael P. Duff

Type of Inspection: After Actual Storm Event

Additional Report: NO

Phase(s) of Construction: 1 Grading/Land Level.

2 Vertical Const.

Summary of Completed Activities

Weather & Rain Event Data Current: Cloudy

Rain Gauge Reading: 3

End date of Last Rain Event: _____

Was it a Qualifying Rain Event (QRE)? NO

Today is Day 1 of 1 predicted rain event days.

Cumulative Rain: 0.4

Is inspection during or after a QRE of .5" or more? NO

Number of QREs since July 1: _____

NOAA Forecast Chance of Precipitation

%	Monday, October 28, 2013
25%	Tuesday, October 29, 2013
10%	Wednesday, October 30, 2013
0%	Thursday, October 31, 2013

0%	Friday, November 01, 2013
5%	Saturday, November 02, 2013
20%	Sunday, November 03, 2013
20%	Monday, November 04, 2013

Did first two hours of discharge occur during business hours? _____

Estimated start of rain: 12:00 AM

Was any storm water discharged from site? _____

During normal business hours? No

Were water samples taken? _____

If NO, please explain: _____

*If Yes, fill out and print Water Sample Report.

SWPPP Questions

a. Is there a SWPPP on-site? _____

YES _____

b. Is a Wall Map updated? _____

YES _____

c. Are structural controls installed per the SWPPP? _____

b2. Require updating? NO

d. If the SWPPP is not implemented, is there an effective combination of Erosion & Sediment control BMPs appropriate for the current stage of construction? _____

YES _____

e. Is there any leak, breach or malfunction to indicate non-visible pollutants? _____

NO _____

If Yes, plan for sampling at next rain.

f. Did you observe any floating materials, oil, grease, odor, toxins, and/or sediment at any outfalls, discharge points, or downstream locations? _____

NO _____

If Yes, sample and document.

What was observed? _____

The following pages provide inspection observation results. Results are to be cross-referenced with attached photographs.

Soil Stabilization Items

- 1 Berms and Dikes
- 2 Slope protection
- 3 Vegetation
- 4 Surface erosion
- 5 Storage of Materials
- 6 Soil Stockpiles
- 7 Other Stockpiles
- 8 V-ditches & Slope Drains

	BMP Acceptable	Repairs Required	BMP	Missing	Not Applicable	CASQA BMP
1	X					EC-3, 6, 7, 8
2	X					EC-4
3	X					EC-2
4	X					WM-1, 2
5	X					WM-3
6	X					WM-3
7	X					SE-4, EC-11
8	X					

Sediment Control Items

- 9 Fiber Rolls / Straw Wattles
- 10 Check Dams
- 11 Burlap / Poly Rock Bags
- 12 Silt Fence
- 13 Drain Inlet Protection
- 14 Basins

	BMP Acceptable	Repairs Required	BMP	Missing	Not Applicable	CASQA BMP
9	X					SE-5
10	X					SE-4
11	X					SE-6
12	X					SE-1
13	X					SE-10
14	X					SE-2, 3

Wind Control Items

- 15 Dust Control

	BMP Acceptable	Repairs Required	BMP	Missing	Not Applicable	CASQA BMP
15	X					WE-1

Tracking Control Items

- 16 Construction Entrance
- 17 Tracking on Street

	BMP Acceptable	Repairs Required	BMP	Missing	Not Applicable	CASQA BMP
16	X					TC-1, 2, 3
17		X				SE-7

Good House Keeping & Waste Management Items

- 18 Debris Clean-up
- 19 Disposal Areas (Export Sites)
- 20 Spills or Leaks on Vehicles, Equipment or Materials
- 21 Portable Toilets and Septic
- 22 Dumpsters, Roll-Offs, Trash Receptacles
- 23 Concrete, Paint, Stucco Wash Outs

	BMP Acceptable	Repairs Required	BMP	Missing	Not Applicable	CASQA BMP
18		X				WM-5, 6
19	X					
20	X					WM-4, 6, 7, 10
21	X					WM-9
22	X					WM-5
23	X					WM-8

Non-Stormwater Management BMP Items

- 24 Dewatering Operations
- 25 Paving or Grinding Operations
- 26 Concrete Curing/Finishing
- 27 Temporary Stream Crossing
- 28 Illicit Connection/Illegal Discharge Reporting
- 29 Vehicle and Equipment Cleaning
- 30 Vehicle and Equipment Fueling Area
- 31 Vehicle and Equipment Maintenance
- 32 Vehicle and Equipment Drip Pans
- 33 Spill Kits

	BMP Acceptable	Repairs Required	BMP	Missing	Not Applicable	CASQA BMP
24					X	NS-2
25					X	NS-3
26	X					NS-12, 14
27					X	NS-4
28	X					NS-6
29					X	NS-8
30	X					NS-9
31					X	NS-10
32	X					NS-10
33	X					WM-4

Non-Storm Water Management BMP Items

- g. Are materials and supplies in compliance with the SWPPP? _____
- h. Were damaged or dissipated materials removed from the site? _____
- i. Are appropriate spill response personnel trained? _____

Other

No discharge observed or reported

	BMP Acceptable	Repairs Required	BMP	Missing	Not Applicable	CASQA BMP

Items Noted "Repairs Required" or "BMP Missing"

17	18								

No Warnings or Advisories In Effect for this Point.
 For warnings and/or advisories in effect for adjacent areas to this point,
 see <http://www.wrh.noaa.gov/spx>

Forecast For Lat/Lon: 32.9270/-117.1390 (Elev. 462 ft)
 San Diego-Mira Mesa CA
 Forecast Created at: 8am PDT Oct 29, 2013

Custom Weather Forecast Table

Weather	Tue Oct 29				Wed Oct 30				Thu Oct 31				Fri Nov 01				Sat Nov 02				Sun Nov 03				Mon Nov 04																							
	Numerous Rain Showers		Chance Rain Showers		Patchy Fog		Patchy Fog		Slight Chance Rain		Slight Chance Rain		Slight Chance Rain																																			
Daily-Temp	High 82 Low 54				High 86 Low 49				High 74 Low 54				High 77 Low 66				High 75 Low 57				High 86 Low 54				High 65 Low 52																							
Chance of Precip	60%				25% 25% 30%				10%				0% 0% 0% 0%				0% 0% 0% 0%				0% 0% 0% 0%				0% 0% 0% 0%				0% 0% 0% 0%				0% 0% 0% 0%				0% 0% 0% 0%				0% 0% 0% 0%				0% 0% 0% 0%			
Precip	0.14"				0.00" 0.04" 0.01"				0.00"				0.00" 0.00" 0.00"				0.00" 0.00" 0.00"				0.00" 0.00" 0.00"				0.00" 0.00" 0.00"				0.00" 0.00" 0.00"				0.00" 0.00" 0.00"				0.00" 0.00" 0.00"											
12-hr Snow Total	0"				0"				0"				0"				0"				0"				0"				0"				0"				0"											
FRET	0.07"				0.10"				0.13"				0.15"				0.14"				0.09"				0.08"				0.08"																			
6-Hour Temp	5am	11am	5pm	11pm	5am	11am	5pm	11pm	5am	11am	5pm	11pm	5am	11am	5pm	11pm	5am	11am	5pm	11pm	5am	11am	5pm	11pm	5am	11am	5pm	11pm	5am	11am	5pm	11pm	5am	11am	5pm	11pm												
Cloudiness	74%	53%	47%	41%	41%	17%	5%	7%	7%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%												
Dewpoint	50	49	48	49	48	47	48	49	47	44	44	46	44	41	42	44	43	43	46	48	49	50	51	51	49	50	51	51	49	49	50	50	49	49	50	50												
Relative Humidity	86%	67%	65%	83%	84%	62%	60%	78%	75%	45%	42%	65%	64%	37%	35%	58%	60%	41%	43%	73%	81%	66%	67%	80%	90%	66%	64%	84%	90%	66%	64%	84%	90%	66%	64%	84%												
Wind	W	SW	W	NE	E	N	W	E	E	W	NW	NE	E	E	E	E	E	SW	W	E	E	SW	W	SE	SE	SW	W	E	SE	SW	W	E																
Wind Speed	2	5	8	5	7	5	9	5	9	2	7	3	9	8	5	8	8	5	8	5	7	7	10	3	8	5	9	3	8	5	9	3	8	5	9	3												
Snow Level (ft)	5598				5865 6802 6608																								6410 6410 0 0 0																			



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SWPPP/EROSION CONTROL DIVISION

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CA Lic #847034 A & B

RISK LEVEL 2 SITE INSPECTION REPORT

Owner: Scripps Mesa Developers
 Contractor: Garden Communities
 Job No./Project: 20623 Casa Mira View
 Site Address: 11195 Westview Parkway
 Cross Streets/Area: Mira Mesa, California
 Performed by: Michael P. Duff, JD
 Title: CESSWI, QSP #24369

WDID#: 9 37C353628
 Project Dates:
 Site Area: 3 acres
 Exposed Area: 100%
 Site Contact: Robin Robinson
 Contact Number:
 Report Date: 11/5/2013

Inspection Date: 11/5/2013

Time: 11:30 AM

Inspector Signature: M. Duff

Type of Inspection: Weekly Maintenance

Additional Report: NO

Phase(s) of Construction: 1 Grading/Land Level.

2 Vertical Const.

Summary of Completed Activities

Weather & Rain Event Data Current: Clear Rain Gauge Reading:

End date of Last Rain Event: Was it a Qualifying Rain Event (QRE)?

Today is Day of predicted rain event days. Cumulative Rain:

Is inspection during or after a QRE of .5" or more? Number of QREs since July 1:

NOAA Forecast Chance of Precipitation

0%	Monday, November 04, 2013
0%	Tuesday, November 05, 2013
0%	Wednesday, November 06, 2013
0%	Thursday, November 07, 2013

0%	Friday, November 08, 2013
0%	Saturday, November 09, 2013
5%	Sunday, November 10, 2013
5%	Monday, November 11, 2013

Sampling Did first two hours of discharge occur during business hours?
 Was any storm water discharged from site?
 Were water samples taken?

Estimated start of rain:
 During normal business hours?
 If NO, please explain:

*If Yes, fill out and print Water Sample Report.

SWPPP Questions

- a. Is there a SWPPP on-site? YES
 - b. Is a Wall Map updated? YES
 - c. Are structural controls installed per the SWPPP?
 - d. If the SWPPP is not implemented, is there an effective combination of Erosion & Sediment control BMPs appropriate for the current stage of construction? YES
 - e. Is there any leak, breach or malfunction to indicate non-visible pollutants? NO
 - f. Did you observe any floating materials, oil, grease, odor, toxins, and/or sediment at any outfalls, discharge points, or downstream locations? NO
- b2. Require updating? NO
- If Yes, plan for sampling at next rain.
 If Yes, sample and document.
 What was observed?

The following pages provide inspection observation results. Results are to be cross-referenced with attached photographs.

Soil Stabilization Items

- 1 Berms and Dikes
- 2 Slope protection
- 3 Vegetation
- 4 Surface erosion
- 5 Storage of Materials
- 6 Soil Stockpiles
- 7 Other Stockpiles
- 8 V-ditches & Slope Drains

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
1	X				EC-3, 6, 7, 8
2	X				EC-4
3	X				EC-2
4	X				WM-1, 2
5		X			WM-3
6	X				WM-3
7		X			SE-4, EC-11
8	X				

Sediment Control Items

- 9 Fiber Rolls / Straw Wattles
- 10 Check Dams
- 11 Burlap / Poly Rock Bags
- 12 Silt Fence
- 13 Drain Inlet Protection
- 14 Basins

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
9	X				SE-5
10	X				SE-4
11	X				SE-6
12		X			SE-1
13	X				SE-10
14	X				SE-2, 3

Wind Control Items

- 15 Dust Control

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
15	X				WE-1

Tracking Control Items

- 16 Construction Entrance
- 17 Tracking on Street

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
16	X				TC-1, 2, 3
17		X			SE-7

Good House Keeping & Waste Management Items

- 18 Debris Clean-up
- 19 Disposal Areas (Export Sites)
- 20 Spills or Leaks on Vehicles, Equipment or Materials
- 21 Portable Toilets and Septic
- 22 Dumpsters, Roll-Offs, Trash Receptacles
- 23 Concrete, Paint, Stucco Wash Outs

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
18		X			WM-5, 6
19	X				
20	X				WM-4,6,7,10
21	X				WM-9
22		X			WM-5
23	X				WM-8

Non-Stormwater Management BMP Items

- 24 Dewatering Operations
- 25 Paving or Grinding Operations
- 26 Concrete Curing/Finishing
- 27 Temporary Stream Crossing
- 28 Illicit Connection/Illegal Discharge Reporting
- 29 Vehicle and Equipment Cleaning
- 30 Vehicle and Equipment Fueling Area
- 31 Vehicle and Equipment Maintenance
- 32 Vehicle and Equipment Drip Pans
- 33 Spill Kits

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
24				X	NS-2
25				X	NS-3
26	X				NS-12, 14
27				X	NS-4
28	X				NS-6
29				X	NS-8
30	X				NS-9
31				X	NS-10
32	X				NS-10
33	X				WM-4

Non-Storm Water Management BMP Items

- g. Are materials and supplies in compliance with the SWPPP? _____
- h. Were damaged or dissipated materials removed from the site? _____
- i. Are appropriate spill response personnel trained? _____

Other

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP

Items Noted "Repairs Required" or "BMP Missing"

5	7	12	17	18	22				

CONTRACTOR: CORRECTIVE ACTIONS REQUIRED WITHIN 72 HOURS.

ITEM	Inspection Observation and Corrective Actions Summary	Assigned to	Date Completed
5	5. Liquid or powder type construction material needs to have secondary containment and should be c		
Response:			
7	7. Remove or cover any concrete or misc. debris type stockpiles		
Response:			
12	12. Replace missing or damaged silt fence as needed.		
Response:			
17	17. Sweep tracking as needed. Visually inspect daily.		
Response:			
18	18. Properly dispose of construction debris/trash.		
Response:			
22	22. Trash receptacles need to have lids or covers.		
Response:			
0			
Response:			
0			
Response:			

NOTE: Not all instances are necessarily photographed. All items apply throughout site.

Refer to the California Stormwater Quality Association (CASQA) Best Management Practices (BMP) Details and Cut Sheets in your SWPPP for installation, maintenance and usage standards.

Inspection Report Received by: _____

Date: _____

TRACKING
ash
soil
off
Curb



Debris



Debris



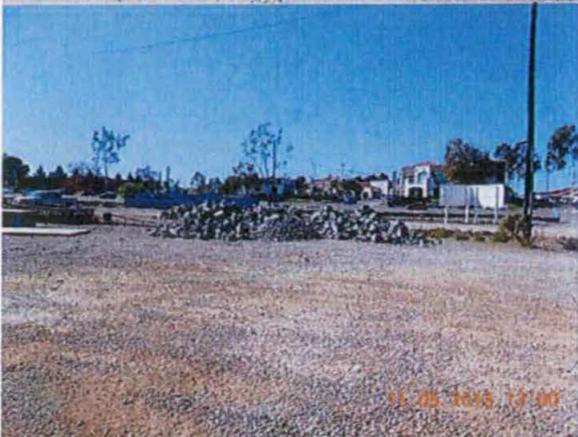
Silt
Fence



Silt
Fence



Concrete
Stackpile.



Debris



Warnings and/or Advisories In Effect for this Point:

[Beach Hazards Statement](#)

[Hazardous Weather Outlook](#)

For warnings and/or advisories in effect for adjacent areas to this point, see <http://www.wrh.noaa.gov/sgx>

Forecast For Lat/Lon: 32.9270/-117.1390 (Elev. 462 ft)
San Diego-Mira Mesa CA

Forecast Created at: 8am PST Nov 5, 2013

Custom Weather Forecast Table

	Tue Nov 05				Wed Nov 06				Thu Nov 07				Fri Nov 08				Sat Nov 09				Sun Nov 10				Mon Nov 11																							
Weather									Patchy Fog																																							
Daily-Temp	High 75 Low 50				High 80 Low 51				High 80 Low 55				High 72 Low 58				High 68 Low 58				High 70 Low 54				High 70 Low 55																							
Chance of Precip	0% 0% 0% 0%				0% 0% 0% 0%				0% 0% 0% 0%				0% 0% 0% 0%				0% 0% 0% 0%				0% 0% 0% 0%				0% 0% 5% 5%				5% 5% 5% 5%																			
Precip 12-hr	0.00" 0.00" 0.00" 0.00"				0.00" 0.00" 0.00" 0.00"				0.00" 0.00" 0.00" 0.00"				0.00" 0.00" 0.00" 0.00"				0.00" 0.00" 0.00" 0.00"				0.00" 0.00" 0.00" 0.00"				0.00" 0.00" 0.00" 0.00"																							
Snow Total FRET	0" 0"				0" 0"				0" 0"				0" 0"				0" 0"				0.13"				0.17"				0.17"				0.11"				0.08"				0.09"				0.10"			
6-Hour Temp	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm																																				
Cloudiness	50	68	68	56	51	72	73	60	55	73	73	81	56	67	67	59	56	65	64	57	54	65	66	58	55	66	66	58	55	66	66	58	55	66	66	58												
Dewpoint	44	27	39	28	19	23	39	28	21	30	46	45	42	43	51	51	49	49	52	52	50	49	51	51	47	44	50	50	47	44	50	50																
Relative Humidity	79%	21%	34%	35%	28%	16%	29%	30%	25%	20%	38%	57%	58%	40%	56%	76%	76%	57%	66%	83%	85%	55%	59%	78%	74%	46%	56%	74%																				
Wind	E	NW	W	E	E	W	NW	E	E	W	W	E	E	W	W	E	E	SW	SW	S	E	SW	SW	S	E	SW	SW	S	E	SW	SW	S																
Snow Level (ft)	6	5	7	9	7	2	7	8	9	5	6	3	8	5	7	3	6	6	8	2	6	6	8	2	6	6	8	2	6	6	8	2	6	6	8	2												



Ground Service Technology, Inc.

SWPPP/EROSION CONTROL DIVISION

2280 Micro Place

Phone 760-745-2010

Escondido, CA 92029

Fax 760-741-1363

www.erosioncontroller.com

CA Lic #847034 A & B

RISK LEVEL 2 SITE INSPECTION REPORT

Owner: Scripps Mesa Developers
 Contractor: Garden Communities
 Job No./Project: 20623 Casa Mira View
 Site Address: 11195 Westview Parkway
 Cross Streets/Area: Mira Mesa, California
 Performed by: Michael P. Duff, JD
 Title: CESSWI, QSP #24369

WDID#: 9 37C353628
 Project Dates:
 Site Area: 3 acres
 Exposed Area: 100%
 Site Contact: Robin Robinson
 Contact Number:
 Report Date: 11/12/2013

Inspector Signature: Michael Duff

Inspection Date: 11/12/2013
 Time: 1:30 PM

Type of Inspection: Weekly Maintenance

Additional Report: NO

Phase(s) of Construction: 1 Grading/Land Devel.

2 Vertical Const.

Summary of Completed Activities

Weather & Rain Event Data Current: Cloudy Rain Gauge Reading:

End date of Last Rain Event: Was it a Qualifying Rain Event (QRE)?

Today is Day of predicted rain event days. Cumulative Rain:

Is inspection during or after a QRE of .5" or more? Number of QREs since July 1:

NOAA Forecast Chance of Precipitation

0%	Monday, November 11, 2013
0%	Tuesday, November 12, 2013
0%	Wednesday, November 13, 2013
5%	Thursday, November 14, 2013

5%	Friday, November 15, 2013
15%	Saturday, November 16, 2013
15%	Sunday, November 17, 2013
5%	Monday, November 18, 2013

Sampling Did first two hours of discharge occur during business hours?
 Was any storm water discharged from site?
 Were water samples taken?

Estimated start of rain:
 During normal business hours?
 If NO, please explain:

*If Yes, fill out and print Water Sample Report.

SWPPP Questions

- a. Is there a SWPPP on-site? YES
 - b. Is a Wall Map updated? YES
 - c. Are structural controls installed per the SWPPP?
 - d. If the SWPPP is not implemented, is there an effective combination of Erosion & Sediment control BMPs appropriate for the current stage of construction? YES
 - e. Is there any leak, breach or malfunction to indicate non-visible pollutants? NO
 - f. Did you observe any floating materials, oil, grease, odor, toxins, and/or sediment at any outfalls, discharge points, or downstream locations? NO
- b2. Require updating? NO
- If Yes, plan for sampling at next rain.
 If Yes, sample and document.
 What was observed?

The following pages provide inspection observation results. Results are to be cross-referenced with attached photographs.

Soil Stabilization Items

- 1 Berms and Dikes
- 2 Slope protection
- 3 Vegetation
- 4 Surface erosion
- 5 Storage of Materials
- 6 Soil Stockpiles
- 7 Other Stockpiles
- 8 V-ditches & Slope Drains

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
1	X				EC-3, 6, 7, 8
2	X				EC-4
3	X				EC-2
4	X				WM-1, 2
5	X				WM-3
6	X				WM-3
7	X				SE-4, EC-11
8	X				

Sediment Control Items

- 9 Fiber Rolls / Straw Wattles
- 10 Check Dams
- 11 Burlap / Poly Rock Bags
- 12 Silt Fence
- 13 Drain Inlet Protection
- 14 Basins

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
9	X				SE-5
10	X				SE-4
11	X				SE-6
12		X			SE-1
13	X				SE-10
14	X				SE-2, 3

Wind Control Items

- 15 Dust Control

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
15	X				WE-1

Tracking Control Items

- 16 Construction Entrance
- 17 Tracking on Street

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
16	X				TC-1, 2, 3
17		X			SE-7

Good House Keeping & Waste Management Items

- 18 Debris Clean-up
- 19 Disposal Areas (Export Sites)
- 20 Spills or Leaks on Vehicles, Equipment or Materials
- 21 Portable Toilets and Septic
- 22 Dumpsters, Roll-Offs, Trash Receptacles
- 23 Concrete, Paint, Stucco Wash Outs

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
18		X			WM-5, 6
19	X				
20	X				WM-4,6,7,10
21	X				WM-9
22		X			WM-5
23		X			WM-8

Non-Stormwater Management BMP Items

- 24 Dewatering Operations
- 25 Paving or Grinding Operations
- 26 Concrete Curing/Finishing
- 27 Temporary Stream Crossing
- 28 Illicit Connection/Illegal Discharge Reporting
- 29 Vehicle and Equipment Cleaning
- 30 Vehicle and Equipment Fueling Area
- 31 Vehicle and Equipment Maintenance
- 32 Vehicle and Equipment Drip Pans
- 33 Spill Kits

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
24				X	NS-2
25				X	NS-3
26	X				NS-12, 14
27				X	NS-4
28	X				NS-6
29				X	NS-8
30	X				NS-9
31				X	NS-10
32	X				NS-10
33	X				WM-4

Non-Storm Water Management BMP Items

- g. Are materials and supplies in compliance with the SWPPP? _____
- h. Were damaged or dissipated materials removed from the site? _____
- i. Are appropriate spill response personnel trained? _____

Other

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP

Items Noted "Repairs Required" or "BMP Missing"

12	17	18	22	23	23					

CONTRACTOR: CORRECTIVE ACTIONS REQUIRED WITHIN 72 HOURS.

ITEM	Inspection Observation and Corrective Actions Summary	Assigned to	Date Completed
12	12. Replace missing or damaged silt fence as needed.		
Response:			
17	17. Sweep tracking as needed. Visually Inspect daily.		
Response:			
18	18. Properly dispose of construction debris/trash.		
Response:			
22	22. Dumpsters need to be covered and the end of each workday and prior/during a rain event.		
Response:			
23	23. Maintain full concrete cleanout devices.		
Response:			
23	23. Ensure appropriate washout facilities are provided per plan and CASQA BMP standards. Clean up trace washout per standards.		
Response:			
0			
Response:			
0			
Response:			

NOTE: Not all instances are necessarily photographed. All items apply throughout site.

Refer to the California Stormwater Quality Association (CASQA) Best Management Practices (BMP) Details and Cut Sheets in your SWPPP for installation, maintenance and usage standards.

Inspection Report Received by: 
 Date: 11/12/2013

WIT
ENCE



DEBRIS



RACKING



DEBRIS



WASH
OUT
FULL



USE
WASHOUT



DEBRIS



DEBRIS



No Warnings or Advisories In Effect for this Point.
 For warnings and/or advisories in effect for adjacent areas to this point,
 see <http://www.wrhi.noaa.gov/sgx>

Forecast For Lat/Lon: 32.9270/-117.1390 (Elev. 462 ft)
 San Diego-Mira Mesa CA

Forecast Created at: 10am PST Nov 12, 2013

Custom Weather Forecast Table

	Tue Nov 12				Wed Nov 13				Thu Nov 14				Fri Nov 15				Sat Nov 16				Sun Nov 17				Mon Nov 18			
Weather																	Slight Chance Rain Showers				Patchy Fog							
Daily-Temp	High 81 Low 66				High 87 Low 60				High 80 Low 60				High 75 Low 56				High 70 Low 54				High 68 Low 53				High 73 Low 54			
Chance of Precip	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	5%	5%	5%	5%	5%	5%	15%	15%	10%	10%	5%	5%	5%	5%	5%	5%
Precip 12-hr	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"
Snow Total FRET	0.10"				0.14"				0.14"				0.10"				0.08"				0.07"				0.09"			
6-Hour Temp	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm												
Cloudiness	57	75	74	63	61	81	78	64	61	75	72	60	57	71	68	57	55	66	65	56	54	65	64	56	55	69	67	57
Dewpoint	49	44	47	52	48	44	48	52	49	42	49	51	45	46	51	53	48	47	51	53	48	47	50	52	47	47	51	48
Relative Humidity	75%	33%	38%	65%	62%	27%	34%	64%	63%	31%	43%	73%	63%	41%	54%	86%	76%	49%	61%	91%	82%	53%	61%	85%	74%	45%	56%	71%
Wind	NE	NW	NW	E	E	SE	N	E	E	S	S	SE	S	W	NW	E	SE	SW	S	NE	NE	N	NW	E	E	SW	W	NE
Snow Level (ft)	5	6	10	6	7	2	5	9	9	9	7	9	9	5	6	7	5	8	8	2	5	2	3	7	7	3	7	7
																	7933	7933	0	0	0	0	0	0	0	0	0	0



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CA Lic #847034 A & B

RAIN EVENT ACTION PLAN (REAP)

Owner: Scripps Mesa Developers
 Contractor: Garden Communities
 Job No./Project: 20623 Casa Mira View
 Performed by: Michael P. Duff, JD
 Site Address: 11195 Westview Parkway
 Cross Streets/Area: Mira Mesa, California

WDID#: 9 37C353628
 Project Dates: 0
 Site Area: 3 acres
 Exposed Area: 1
 Site Contact: Robin Robinson
 Contact Number: 0
 Date: 11/19/2013
 Time: 9:30 AM

Signature: Michael Duff

Site Stormwater Manager

Name: Michael Duff

Company: GST

24/7 Phone Number: 760.802.7900

Stormwater Sampling Agent

Name: Michael Duff

Company: GST

24/7 Phone Number: 760.802.7900

Erosion & Sediment Control Labor Force

Contact Name: Wes Udwin

Company: GST

24/7 Phone Number: 760.815.2909

CRITICAL: THIS REAP IS PREPARED WITH YOUR SWPPP INSPECTOR. ALL ITEMS ARE TO BE ADDRESSED PRIOR TO START OF PREDICTED RAIN. Document this.

Current Phase(s) of Construction

Grading and Land Development

Final Landscaping & Site Stabilization

Streets & Utilities Phase

Inactive Construction

Vertical Construction Phase

Complete

Weather Conditions

Clear Cloudy Raining Temperature

NOAA Forecast Chance of Precipitation:

0%	Monday, November 18, 2013
15%	Tuesday, November 19, 2013
55%	Wednesday, November 20, 2013
60%	Thursday, November 21, 2013

35%	Friday, November 22, 2013
20%	Saturday, November 23, 2013
15%	Sunday, November 24, 2013
10%	Monday, November 25, 2013

Information Provided to Subcontractors

Contractual Language

Trainings

Fines & Penalties

Signage

Tailgate Meetings

Educational Handouts

Current Activities

Grading and Land Development

<input type="checkbox"/> Development	<input checked="" type="checkbox"/> Vertical Removal	<input checked="" type="checkbox"/> Equipment Maintenance/Fueling
<input type="checkbox"/> Rough Grade	<input checked="" type="checkbox"/> Finish Grade	<input checked="" type="checkbox"/> Erosion/Sediment Control
<input type="checkbox"/> Soil Amendments	<input checked="" type="checkbox"/> Excavation	<input checked="" type="checkbox"/> Material Delivery & Storage
<input type="checkbox"/> Rock Crushing	<input type="checkbox"/> Blasting	<input checked="" type="checkbox"/> Vegetation Salvage/Harvest
<input checked="" type="checkbox"/> Surveying	<input checked="" type="checkbox"/> Soils Testing	<input type="checkbox"/>

Streets and Utilities

<input type="checkbox"/> Rough Grade	<input type="checkbox"/> Paving	<input checked="" type="checkbox"/> Material Delivery & Storage
<input checked="" type="checkbox"/> Finish Grade	<input type="checkbox"/> Striping	<input checked="" type="checkbox"/> Erosion/Sediment Control
<input checked="" type="checkbox"/> Masonry	<input type="checkbox"/> Utility Install	<input checked="" type="checkbox"/> Storm Drain Installation
<input type="checkbox"/> Curb & Gutter/Culvert	<input type="checkbox"/> Landscaping	<input type="checkbox"/>

Vertical Construction

<input checked="" type="checkbox"/> Framing	<input checked="" type="checkbox"/> Stucco	<input checked="" type="checkbox"/> Equipment Maintenance/Fueling
<input checked="" type="checkbox"/> Masonry	<input checked="" type="checkbox"/> Plumbing	<input checked="" type="checkbox"/> Concrete/Forms/Foundation
<input checked="" type="checkbox"/> Exterior Siding	<input checked="" type="checkbox"/> Insulation	<input checked="" type="checkbox"/> Landscaping & Irrigation
<input checked="" type="checkbox"/> Flooring	<input checked="" type="checkbox"/> HVAC	<input checked="" type="checkbox"/> Drywall/Interior Walls
<input checked="" type="checkbox"/> Carpentry	<input checked="" type="checkbox"/> Roofing	<input checked="" type="checkbox"/> Tile
<input checked="" type="checkbox"/> Electrical	<input checked="" type="checkbox"/> Painting	<input type="checkbox"/>

Final Landscaping & Site Stabilization

<input checked="" type="checkbox"/> Stabilization	<input type="checkbox"/> Vegetation	<input checked="" type="checkbox"/> E & S Control BMP Removal
<input type="checkbox"/> Finish Grade	<input type="checkbox"/> Landscape Installation	<input checked="" type="checkbox"/> Storage Yard / Material Removal
<input type="checkbox"/> Painting & Touch-up	<input type="checkbox"/> Inlet Filtration	<input type="checkbox"/> Perm. Water Quality Ponds
<input type="checkbox"/> Drainage Inlet Stencils	<input type="checkbox"/> Irrigation System Testing	<input type="checkbox"/>

Inactive Construction

<input type="checkbox"/> Trash Removal	<input type="checkbox"/> E & S Controls Maint.	<input type="checkbox"/> E & S Controls Installation
<input type="checkbox"/> Street Sweeping	<input type="checkbox"/> Routine Inspection	<input type="checkbox"/>

Trade Crews Active On-Site

<input checked="" type="checkbox"/> Material Delivery	<input checked="" type="checkbox"/> Street Improvements	<input checked="" type="checkbox"/> Utility - Water	<input checked="" type="checkbox"/> Electrical
<input checked="" type="checkbox"/> Trenching	<input checked="" type="checkbox"/> Grading Contractor	<input checked="" type="checkbox"/> Utility - Sewer	<input checked="" type="checkbox"/> Carpentry
<input checked="" type="checkbox"/> Concrete Pouring	<input checked="" type="checkbox"/> Water Pipe Install	<input type="checkbox"/> Utility - Gas	<input checked="" type="checkbox"/> Plumbing
<input checked="" type="checkbox"/> Foundation	<input checked="" type="checkbox"/> Sewer Pipe Install	<input checked="" type="checkbox"/> Landscapers	<input checked="" type="checkbox"/> Masonry
<input type="checkbox"/> Demolition	<input checked="" type="checkbox"/> Gas Pipe Install	<input checked="" type="checkbox"/> Line Testers	<input type="checkbox"/> Painters
<input checked="" type="checkbox"/> Insulation	<input checked="" type="checkbox"/> Electrical Install	<input checked="" type="checkbox"/> Equipment Fueling	<input checked="" type="checkbox"/> Roofers
<input checked="" type="checkbox"/> Exterior Siding	<input checked="" type="checkbox"/> Communications	<input checked="" type="checkbox"/> Equipment Maintenance	<input type="checkbox"/> Stucco
<input checked="" type="checkbox"/> Fireproofing	<input checked="" type="checkbox"/> E & S Control	<input checked="" type="checkbox"/> Tile	<input checked="" type="checkbox"/> Riggers
<input checked="" type="checkbox"/> Steel Systems	<input checked="" type="checkbox"/> Sanitary Station Tech	<input checked="" type="checkbox"/> HVAC Install	<input checked="" type="checkbox"/> Drywall
<input checked="" type="checkbox"/> Carpenters	<input type="checkbox"/> Rock Products	<input type="checkbox"/> Survey/Soil Tech	<input checked="" type="checkbox"/> Irrigation
<input type="checkbox"/> Pest Control	<input type="checkbox"/> Water Feature Install	<input type="checkbox"/> Traffic Striping	<input checked="" type="checkbox"/> Storm Drain

Predicted Rain Event = 50% or greater chance of precipitation per NOAA forecast.

Qualifying Rain Event (QRE) = If rain gauge is not on site, nearest NOAA reporting site data will be used.

Extended Rain Event = Rain occurs in successive 24-hour periods. There must be 72 hours without rain for the event to be considered complete.

Checklist of Items to Address Prior to Predicted Rain Event

CONTRACTOR: Ensure each 'TO DO' item listed below is completed prior to start of rain event.

Information & Scheduling

Done	Finding		Date/Time:
<input type="checkbox"/>	<input type="checkbox"/>	Superintendent informed of predicted rain	11.19.13 @10:45 am
<input type="checkbox"/>	<input type="checkbox"/>	Foremen and Subcontractors informed of predicted rain	
<input type="checkbox"/>	<input type="checkbox"/>	Alert Erosion & Sediment Control Provider. Request needed crews/materials/maintenance.	
<input type="checkbox"/>	<input type="checkbox"/>	Alert Sample Collection Contractor if applicable	
<input type="checkbox"/>	<input type="checkbox"/>	Schedule staff for extended rain event inspections (once each 24 hours)	
<input type="checkbox"/>	<input type="checkbox"/>	Pre-Storm Stormwater Site Inspection completed	
<input type="checkbox"/>	<input type="checkbox"/>	Adequate erosion and sediment control measures are on hand for pre-storm preparation & extended maintenance	
<input type="checkbox"/>	<input type="checkbox"/>	Review that the BMP site map is updated. Provide a copy for Sediment & Erosion Control Provider/Subcontractor.	
<input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/>	<input type="checkbox"/>		

Material Storage Areas

<input type="checkbox"/>	<input type="checkbox"/>	Materials covered or indoors
<input type="checkbox"/>	<input type="checkbox"/>	Perimeter controls around stockpiles
<input type="checkbox"/>	<input type="checkbox"/>	Stockpiles covered
<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	

Waste Management Areas

<input type="checkbox"/>	<input type="checkbox"/>	All trash receptacles and recycling bins closed or covered
<input type="checkbox"/>	<input type="checkbox"/>	Drain holes plugged
<input type="checkbox"/>	<input type="checkbox"/>	Sanitary stations (portable toilets) bermed or in secondary containment and protected from tipping
<input type="checkbox"/>	<input type="checkbox"/>	

Concrete Washout Areas

<input type="checkbox"/>	<input type="checkbox"/>	Washout receptacles covered
<input type="checkbox"/>	<input type="checkbox"/>	Adequate capacity for rain
<input type="checkbox"/>	<input type="checkbox"/>	

Trade Operations & Securing of Site

- Exterior operations shut down for rain event
- Soil treatments not applied within 24 hours of predicted rain event
- Materials, equipment and tools properly stored and covered
- Waste and debris disposed of in covered receptacles or removed from site in accordance with approved manner
- Trenches and excavations protected
- Perimeter controls around disturbed areas
- Cover and berm fueling and repair areas
-

Site Erosion & Sediment Control BMPs

- Adequate capacity in sediment basins and traps
- Site perimeter controls in place
- Catch basin and storm drain inlet protection in place
- If previously-approved practice due to safety concerns, remove some or all storm drain inlet protection
- Deploy temporary erosion control on inactive areas
- Deploy temporary perimeter control around disturbed areas
- Sweep roads
- Stabilize site ingress and egress points
-
-

Spills & Drips

- Clean up all spills and drips, including paint, fuel, oil, hydraulic fluid, etc.
- Empty drip pans
- Place drip pans under all idle equipment
-

Corrective Actions - CRITICAL

CONTRACTOR: Address 'Deficient' items listed here AND items listed on the Pre-Rain Inspection Report.
 Check off each gray box here as completed and sign in gray box below when all REAP items are addressed. **PRE-RAIN INSPECTION REPORT: Note the date and time each item is addressed for proof of your compliance.**

Once complete, place this REAP in the SWPPP binder with completed Rain Event Inspection Reports.

Received by On-Site Representative: _____ Date _____

All 'Deficient' items addressed by: _____	Date _____	Time _____
---	------------	------------



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RISK LEVEL 2 SITE INSPECTION REPORT

Owner: Scripps Mesa Developers
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 Job No./Project: 20623 Casa Mira View
 Site Address: 11195 Westview Parkway
 Cross Streets/Area: Mira Mesa, California
 Performed by: Michael P. Duff, JD
 Title: CESSWI, QSP #24369

WDID#: 9 37C353628
 Project Dates:
 Site Area: 3 acres
 Exposed Area: 100%
 Site Contact: Robin Robinson
 Contact Number:
 Report Date: 11/19/2013

Inspection Date: 11/19/2013

Time: 9:30 AM

Inspector Signature: Michael Duff

Type of Inspection: Weekly Maintenance

Additional Report: NO

Phase(s) of Construction: 1 Grading/Land Level.

2 Vertical Const.

Summary of Completed Activities

Weather & Rain Event Data

Current: Cloudy

Rain Gauge Reading:

End date of Last Rain Event:

Was it a Qualifying Rain Event (QRE)?

Today is Day of predicted rain event days.

Cumulative Rain:

Is inspection during or after a QRE of .5" or more?

Number of QREs since July 1:

NOAA Forecast Chance of Precipitation

0%	Monday, November 18, 2013
15%	Tuesday, November 19, 2013
55%	Wednesday, November 20, 2013
60%	Thursday, November 21, 2013

35%	Friday, November 22, 2013
20%	Saturday, November 23, 2013
15%	Sunday, November 24, 2013
10%	Monday, November 25, 2013

Sampling
 Did first two hours of discharge occur during business hours?
 Was any storm water discharged from site?
 Were water samples taken?
 *If Yes, fill out and print Water Sample Report.

Estimated start of rain:
 During normal business hours?
 If NO, please explain:

SWPPP Questions

- a. Is there a SWPPP on-site?
- b. Is a Wall Map updated?
- c. Are structural controls installed per the SWPPP?
- d. If the SWPPP is not implemented, is there an effective combination of Erosion & Sediment control BMPs appropriate for the current stage of construction?
- e. Is there any leak, breach or malfunction to indicate non-visible pollutants?
- f. Did you observe any floating materials, oil, grease, odor, toxins, and/or sediment at any outfalls, discharge points, or downstream locations?

YES
YES b2. Require updating? NO
YES
NO If Yes, plan for sampling at next rain.
NO If Yes, sample and document.
 What was observed?

The following pages provide inspection observation results. Results are to be cross-referenced with attached photographs.

Soil Stabilization Items

- 1 Berms and Dikes
- 2 Slope protection
- 3 Vegetation
- 4 Surface erosion
- 5 Storage of Materials
- 6 Soil Stockpiles
- 7 Other Stockpiles
- 8 V-ditches & Slope Drains

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
1	X				EC-3, 6, 7, 8
2	X				EC-4
3	X				EC-2
4	X				WM-1, 2
5	X				WM-3
6	X				WM-3
7		X			SE-4, EC-11
8	X				

Sediment Control Items

- 9 Fiber Rolls / Straw Wattles
- 10 Check Dams
- 11 Burlap / Poly Rock Bags
- 12 Silt Fence
- 13 Drain Inlet Protection
- 14 Basins

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
9	X				SE-5
10	X				SE-4
11	X				SE-6
12		X			SE-1
13	X				SE-10
14	X				SE-2, 3

Wind Control Items

- 15 Dust Control

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
15	X				WE-1

Tracking Control Items

- 16 Construction Entrance
- 17 Tracking on Street

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
16	X				TC-1, 2, 3
17		X			SE-7

Good House Keeping & Waste Management Items

- 18 Debris Clean-up
- 19 Disposal Areas (Export Sites)
- 20 Spills or Leaks on Vehicles, Equipment or Materials
- 21 Portable Toilets and Septic
- 22 Dumpsters, Roll-Offs, Trash Receptacles
- 23 Concrete, Paint, Stucco Wash Outs

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
18		X			WM-5, 6
19	X				
20	X				WM-4,6,7,10
21	X				WM-9
22		X			WM-5
23		X			WM-8

Non-Stormwater Management BMP Items

- 24 Dewatering Operations
- 25 Paving or Grinding Operations
- 26 Concrete Curing/Finishing
- 27 Temporary Stream Crossing
- 28 Illicit Connection/Illegal Discharge Reporting
- 29 Vehicle and Equipment Cleaning
- 30 Vehicle and Equipment Fueling Area
- 31 Vehicle and Equipment Maintenance
- 32 Vehicle and Equipment Drip Pans
- 33 Spill Kits

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
24				X	NS-2
25				X	NS-3
26	X				NS-12, 14
27				X	NS-4
28	X				NS-6
29				X	NS-8
30	X				NS-9
31				X	NS-10
32	X				NS-10
33	X				WM-4

Non-Storm Water Management BMP Items

- g. Are materials and supplies in compliance with the SWPPP? _____
- h. Were damaged or dissipated materials removed from the site? _____
- i. Are appropriate spill response personnel trained? _____

Other

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP

Items Noted "Repairs Required" or "BMP Missing"

7	12	17	18	22	23				

CONTRACTOR: CORRECTIVE ACTIONS REQUIRED WITHIN 72 HOURS.

ITEM	Inspection Observation and Corrective Actions Summary	Assigned to	Date Completed
7	7. Remove or cover any concrete or misc. debris type stockpiles		
Response:			
12	12. Replace missing or damaged silt fence as needed.		
Response:			
17	17. Sweep tracking as needed. Visually inspect daily.		
Response:			
18	18. Property dispose of construction debris/trash.		
Response:			
22	22. Dumpsters need to be covered and the end of each workday and prior/during a rain event.		
Response:			
23	23. Ensure appropriate washout facilities are provided per plan and CASQA BMP standards. Clean up trace washout per standards.		
Response:			
0			
Response:			
0			
Response:			

NOTE: Not all instances are necessarily photographed. All items apply throughout site.

Refer to the California Stormwater Quality Association (CASQA) Best Management Practices (BMP) Details and Cut Sheets in your SWPPP for installation, maintenance and usage standards.

Inspection Report Received by: _____

Date: _____

MIT
K E

Asphalt/
concrete
stockpile

compster

Cover/
REMOVE
FROM
NEAR
DRAIN



DEBRIS

DEBRIS

tracking

DEBRIS/
Dumpster

No Warnings or Advisories In Effect for this Point.
 For warnings and/or advisories in effect for adjacent areas to this point,
 see <http://www.wrh.noaa.gov/sgx>

Forecast For Lat/Lon: 32.9270/-117.1390 (Elev. 462 ft)
 San Diego-Mira Mesa CA

Forecast Created at: 8am PST Nov 19, 2013

Custom Weather Forecast Table

	Tue Nov 19				Wed Nov 20				Thu Nov 21				Fri Nov 22				Sat Nov 23				Sun Nov 24				Mon Nov 25							
Weather	Slight Chance Rain								Chance Rain Showers				Likely Rain Showers and TStorms				Chance Rain Showers and TStorms				Slight Chance Rain Showers											
Daily-Temp	High 63 Low 54				High 64 Low 53				High 60 Low 57				High 67 Low 56				High 68 Low 52				High 67 Low 53				High 68 Low 54							
Chance of Precip	15%	5%	5%	0%	0%	15%	15%	55%	55%	60%	60%	35%	35%	25%	25%	15%	15%	20%	20%	15%	15%	15%	15%	10%	10%	10%	10%	10%				
Precip	0.01"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.05"	0.06"	0.04"	0.03"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"				
12-hr Snow Total	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"				
FRET	0.05"				0.05"				0.04"				0.10"				0.16"				0.15"				0.10"							
6-Hour Temp	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm
Cloudiness	55	61	60	55	54	61	62	58	57	59	59	57	56	64	63	55	53	64	64	56	54	63	64	57	55	64	64	56	55	64	64	56
Dewpoint	88%	75%	81%	73%	84%	86%	89%	89%	98%	83%	84%	78%	78%	48%	48%	47%	47%	29%	29%	34%	34%	24%	24%	14%	14%	14%	14%	11%	14%	14%	14%	11%
Relative Humidity	55	53	53	54	54	53	54	56	56	54	53	53	49	46	43	40	37	38	38	37	36	39	42	41	40	42	44	42	40	42	44	42
Wind	100%	75%	77%	95%	100%	74%	74%	92%	97%	84%	80%	88%	78%	52%	48%	57%	55%	38%	38%	49%	51%	41%	46%	56%	58%	44%	48%	59%	58%	44%	48%	59%
Snow Level (ft)	E	W	W	E	E	S	W	S	SW	W	W	E	E	NE	W	E	E	E	E	E	E	E	NW	E	E	S	SW	E	E	S	SW	E
	1	2	7	2	8	5	6	2	1	7	7	3	8	13	12	13	12	12	13	14	13	12	12	2	6	5	8	5	6	5	8	5
	9461				8289	8195	7429	7216	6905	6653	6146	5824	5906	5906	5786	5786	6371	6371	5941	5941	5941	0	0	0	0	0	0	0	0	0	0	0

Soil Stabilization Items

- 1 Berms and Dikes
- 2 Slope protection
- 3 Vegetation
- 4 Surface erosion
- 5 Storage of Materials
- 6 Soil Stockpiles
- 7 Other Stockpiles
- 8 V-ditches & Slope Drains

	BMP Acceptable	Repairs Required	BMP	Missing	Not Applicable	CASQA BMP
1	X					EC-3, 6, 7, 8
2	X					EC-4
3	X					EC-2
4	X					WM-1, 2
5	X					WM-3
6	X					WM-3
7	X					SE-4, EC-11
8	X					

Sediment Control Items

- 9 Fiber Rolls / Straw Wattles
- 10 Check Dams
- 11 Burlap / Poly Rock Bags
- 12 Silt Fence
- 13 Drain Inlet Protection
- 14 Basins

	BMP Acceptable	Repairs Required	BMP	Missing	Not Applicable	CASQA BMP
9	X					SE-5
10	X					SE-4
11	X					SE-6
12	X					SE-1
13	X					SE-10
14	X					SE-2, 3

Wind Control Items

- 15 Dust Control

	BMP Acceptable	Repairs Required	BMP	Missing	Not Applicable	CASQA BMP
15	X					WE-1

Tracking Control Items

- 16 Construction Entrance
- 17 Tracking on Street

	BMP Acceptable	Repairs Required	BMP	Missing	Not Applicable	CASQA BMP
16	X					TC-1, 2, 3
17	X					SE-7

Good House Keeping & Waste Management Items

- 18 Debris Clean-up
- 19 Disposal Areas (Export Sites)
- 20 Spills or Leaks on Vehicles, Equipment or Materials
- 21 Portable Toilets and Septic
- 22 Dumpsters, Roll-Offs, Trash Receptacles
- 23 Concrete, Paint, Stucco Wash Outs

	BMP Acceptable	Repairs Required	BMP	Missing	Not Applicable	CASQA BMP
18	X					WM-5, 6
19	X					
20	X					WM-4,6,7,10
21	X					WM-9
22	X					WM-5
23	X					WM-8

Non-Stormwater Management BMP Items

- 24 Dewatering Operations
- 25 Paving or Grinding Operations
- 26 Concrete Curing/Finishing
- 27 Temporary Stream Crossing
- 28 Illicit Connection/Illegal Discharge Reporting
- 29 Vehicle and Equipment Cleaning
- 30 Vehicle and Equipment Fueling Area
- 31 Vehicle and Equipment Maintenance
- 32 Vehicle and Equipment Drip Pans
- 33 Spill Kits

	BMP Acceptable	Repairs Required	BMP	Missing	Not Applicable	CASQA BMP
24					X	NS-2
25					X	NS-3
26	X					NS-12, 14
27					X	NS-4
28	X					NS-6
29					X	NS-8
30	X	X				NS-9
31					X	NS-10
32	X					NS-10
33	X					WM-4

Non-Storm Water Management BMP Items

- g. Are materials and supplies in compliance with the SWPPP? _____
- h. Were damaged or dissipated materials removed from the site? _____
- i. Are appropriate spill response personnel trained? _____

Other

No discharge observed or reported

	BMP Acceptable	Repairs Required	BMP	Missing	Not Applicable	CASQA BMP

Items Noted "Repairs Required" or "BMP Missing"

30									

CONTRACTOR: CORRECTIVE ACTIONS REQUIRED WITHIN 72 HOURS.

ITEM	Inspection Observation and Corrective Actions Summary	Assigned to	Date Completed
20	30- Replace damaged drip pans as needed. <i>OK</i>		
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			

NOTE: Not all instances are necessarily photographed. All items apply throughout site.

Refer to the California Stormwater Quality Association (CASQA) Best Management Practices (BMP) Details and Cut Sheets in your SWPPP for installation, maintenance and usage standards.

Inspection Report Received by: _____

Date: _____



Warnings and/or Advisories In Effect for this Point:
 Hazardous Weather Outlook
 For warnings and/or advisories in effect for adjacent areas to this point,
 see <http://www.wrh.noaa.gov/sus>

Forecast For Lat/Lon: 32.9270/-117.1390 (Elev. 482 ft)
 San Diego-Mira Mesa CA

Forecast Created at: 7am PST Nov 21, 2013

Custom Weather Forecast Table

Weather	Thu Nov 21			Fri Nov 22				Sat Nov 23			Sun Nov 24		Mon Nov 25			Tue Nov 26			Wed Nov 27										
	Widespread Rain Showers	Likely Rain Showers	Likely Rain Showers and TStorms	Chance Rain Showers and TStorms	Chance Rain Showers and TStorms	Chance Rain Showers and TStorms	Slight Chance TStorms and Rain Showers	Slight Chance TStorms and Rain Showers	Slight Chance Rain Showers																				
Daily-Temp		High 64 Low 57					High 64 Low 53			High 65 Low 52		High 68 Low 52		High 67 Low 50		High 70 Low 53		High 70 Low 53		High 70 Low 54									
Chance of Precip	75%	70%	70%	35%	35%	25%	25%	15%	15%	20%	20%	15%	15%	5%	10%	10%	5%	5%	0%	0%	0%	0%	10%	10%	10%	10%	10%		
Precip	0.09"	0.14"	0.07"	0.06"	0.02"	0.05"	0.04"	0.02"	0.02"	0.02"	0.01"	0.02"	0.02"	0.00"															
12-hr Snow Total	0"		0"		0"		0"		0"		0"		0"																
FRET		0.06"					0.07"			0.08"		0.08"				0.08"					0.10"						0.09"		
6-Hour Temp	4am 57	10am 62	4pm 61	10pm 55	4am 54	10am 61	4pm 60	10pm 54	4am 53	10am 61	4pm 61	10pm 54	4am 53	10am 62	4pm 61	10pm 53	4am 51	10am 62	4pm 63	10pm 55	4am 54	10am 65	4pm 65	10pm 57	4am 55	10am 65	4pm 65	10pm 58	
Cloudiness	96%	87%	70%	85%	64%	56%	57%	57%	54%	53%	53%	44%	44%	35%	35%	21%	21%	16%	16%	21%	21%	17%	17%	34%	34%	43%	43%	89%	
Dewpoint	55	55	53	50	47	46	46	47	46	45	46	48	47	46	47	49	47	46	48	50	47	48	47	50	48	46	47	49	
Relative Humidity	91%	77%	76%	84%	80%	58%	59%	77%	77%	54%	57%	79%	80%	55%	60%	87%	87%	56%	58%	82%	79%	50%	53%	79%	77%	50%	52%	79%	
Wind	SE 9	W 9	W 8	NE 2	E 5	SE 5	SW 3	E 8	E 7	W 1	NW 5	NE 7	NE 7	E 8	NE 5	NE 7	E 8	NE 5	NW 6	E 7	E 7	E 7	E 7	E 7	E 6	E 7	E 6	SW 5	E 3
Snow Level (ft)	7611	7203	6829	6118	5938	6028	6028	5904	5904	5851	5851	6004	6004	6138	6138	6138													



Ground Service Technology, Inc.

SWPPP/EROSION CONTROL DIVISION

2280 Micro Place

Phone 760-745-2010

Escondido, CA 92029

Fax 760-741-1363

www.erosioncontroller.com

CA Lic #847034 A & B

RISK LEVEL 2 SITE INSPECTION REPORT

Owner: Scripps Mesa Developers
 Contractor: Garden Communities
 Job No./Project: 20623 Casa Mira View
 Site Address: 11195 Westview Parkway
 Cross Streets/Area: Mira Mesa, California
 Performed by: Michael P. Duff, JD
 Title: CESSWI, QSP #24369

WDID#: 9 37C353628
 Project Dates:
 Site Area: 3 acres
 Exposed Area: 100%
 Site Contact: Robin Robinson
 Contact Number:
 Report Date: 11/22/2013

Inspector Signature: M. Duff

Inspection Date: 11/22/2013

Time: 10:30 AM

Type of Inspection: During Extended Storm Event

Additional Report: NO

Phase(s) of Construction: 1 Grading/Land Devel.

2 Vertical Const.

Summary of Completed Activities

Weather & Rain Event Data Current: Cloudy

Rain Gauge Reading: 0.3

End date of Last Rain Event: 10.28.13

Was it a Qualifying Rain Event (QRE)?

Today is Day 2 of predicted rain event days.

Cumulative Rain: 0.3

Is inspection during or after a QRE of .5" or more?

Number of QREs since July 1: 1

NOAA Forecast Chance of Precipitation

80%	Thursday, November 21, 2013
25%	Friday, November 22, 2013
10%	Saturday, November 23, 2013
0%	Sunday, November 24, 2013

0%	Monday, November 25, 2013
0%	Tuesday, November 26, 2013
30%	Wednesday, November 27, 2013
35%	Thursday, November 28, 2013

Sampling
 Did first two hours of discharge occur during business hours?
 Was any storm water discharged from site?
 Were water samples taken?
 *If Yes, fill out and print Water Sample Report.

Estimated start of rain: 12:00 AM
 During normal business hours? No
 If NO, please explain:

SWPPP Questions

- a. Is there a SWPPP on-site?
- b. Is a Wall Map updated?
- c. Are structural controls installed per the SWPPP?

YES
YES b2. Require updating? NO

- d. If the SWPPP is not implemented, is there an effective combination of Erosion & Sediment control BMPs appropriate for the current stage of construction?
- e. Is there any leak, breach or malfunction to indicate non-visible pollutants?
- f. Did you observe any floating materials, oil, grease, odor, toxins, and/or sediment at any outfalls, discharge points, or downstream locations?

YES
NO If Yes, plan for sampling at next rain.
NO If Yes, sample and document.
 What was observed?

The following pages provide inspection observation results. Results are to be cross-referenced with attached photographs.

CONTRACTOR: CORRECTIVE ACTIONS REQUIRED WITHIN 72 HOURS.

ITEM	Inspection Observation and Corrective Actions Summary	Assigned to	Date Completed
17	17. Sweep tracking as needed. Visually Inspect daily.		
Response:			
18	18. Properly dispose of construction debris/trash.		
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			
Response:			

NOTE: Not all instances are necessarily photographed. All items apply throughout site.

Refer to the California Stormwater Quality Association (CASQA) Best Management Practices (BMP) Details and Cut Sheets in your SWPPP for installation, maintenance and usage standards.

Inspection Report Received by: _____

Date: _____



No Warnings or Advisories In Effect for this Point
 For warnings and/or advisories in effect for adjacent areas to this point,
 see <http://www.wrh.noaa.gov/sgs>

Forecast For Lat/Lon: 32.9270/-117.1390 (Elev. 462 ft)
 San Diego-Mira Mesa CA

Forecast Created at: 6am PST Nov 22, 2013

Custom Weather Forecast Table

	Fri Nov 22				Sat Nov 23				Sun Nov 24				Mon Nov 25				Tue Nov 26				Wed Nov 27				Thu Nov 28							
Weather	Scattered Rain Showers and TStorms	Scattered Rain Showers and TStorms	Slight Chance TStorms and Rain																													
Daily-Temp	High 62 Low 56				High 63 Low 52				High 65 Low 51				High 68 Low 51				High 70 Low 52				High 68 Low 62				High 65 Low 51							
Chance of Precip 12-hr	50%	40%	25%	25%	20%	20%	10%	10%	5%	5%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	5%	30%	30%	35%	35%	35%	
Snow Total FRET	0"				0"				0"				0"				0"				0"				0"							
6-Hour Temp	4am 56	10am 60	4pm 59	10pm 54	4am 52	10am 60	4pm 60	10pm 53	4am 51	10am 61	4pm 61	10pm 53	4am 51	10am 63	4pm 63	10pm 54	4am 52	10am 65	4pm 65	10pm 55	4am 53	10am 63	4pm 63	10pm 54	4am 52	10am 61	4pm 62	10pm 57				
Cloudiness	82%	77%	86%	76%	85%	84%	71%	53%	42%	34%	33%	26%	19%	7%	7%	20%	20%	28%	28%	32%	32%	40%	40%	72%	72%	80%	80%	55%				
Dewpoint	51	50	47	49	49	47	46	47	46	44	45	48	47	45	46	47	45	43	46	47	46	46	48	50	48	48	48	50				
Relative Humidity	84%	68%	65%	84%	88%	62%	60%	61%	83%	54%	55%	62%	85%	53%	52%	75%	76%	45%	50%	75%	78%	54%	58%	69%	88%	62%	60%	80%				
Wind	E	S	W	E	E	E	NW	E	E	W	NW	NE	E	E	N	E	E	E	NE	E	E	SE	W	E	E	S	SW	S				
Snow Level (ft)	5586	5734	5585	5533	5167	5581	5703	6215																	7030	7030	6324	6324	8168			



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Phone 760-745-2010

Fax 760-741-1363

CA Lic #847034 A & B

RAIN EVENT ACTION PLAN (REAP)

Owner: Scripps Mesa Developers
 Contractor: Garden Communities
 Job No./Project: 20623 Casa Mira View
 Performed by: Michael P. Duff, JD
 Site Address: 11195 Westview Parkway
 Cross Streets/Area: Mira Mesa, California

WDID#: 9 37C353628
 Project Dates: 0
 Site Area: 3 acres
 Exposed Area: 1
 Site Contact: Robin Robinson
 Contact Number: 0

Signature: Michael Duff

Date: 11/25/2013
 Time: 9:30 AM

Site Stormwater Manager

Name: Michael Duff

Company: GST

24/7 Phone Number: 760.802.7900

Stormwater Sampling Agent

Name: Michael Duff

Company: GST

24/7 Phone Number: 760.802.7900

Erosion & Sediment Control Labor Force

Contact Name: Wes Udwin

Company: GST

24/7 Phone Number: 760.815.2909

CRITICAL: THIS REAP IS PREPARED WITH YOUR SWPPP INSPECTOR. ALL ITEMS ARE TO BE ADDRESSED PRIOR TO START OF PREDICTED RAIN. Document this.

Current Phase(s) of Construction

Grading and Land Development

Streets & Utilities Phase

Vertical Construction Phase

Final Landscaping & Site Stabilization

Inactive Construction

Complete

Weather Conditions

Clear

Cloudy

Raining

Temperature

NOAA Forecast Chance of Precipitation:

0%	Sunday, November 24, 2013
0%	Monday, November 25, 2013
0%	Tuesday, November 26, 2013
10%	Wednesday, November 27, 2013

50%	Thursday, November 28, 2013
50%	Friday, November 29, 2013
10%	Saturday, November 30, 2013
10%	Sunday, December 01, 2013

Information Provided to Subcontractors

Contractual Language

Trainings

Fines & Penalties

Signage

Tailgate Meetings

Educational Handouts

Current Activities

Grading and Land Development

<input type="checkbox"/> Development	<input checked="" type="checkbox"/> Vertical Removal	<input checked="" type="checkbox"/> Equipment Maintenance/Fueling
<input type="checkbox"/> Rough Grade	<input checked="" type="checkbox"/> Finish Grade	<input checked="" type="checkbox"/> Erosion/Sediment Control
<input type="checkbox"/> Soil Amendments	<input checked="" type="checkbox"/> Excavation	<input checked="" type="checkbox"/> Material Delivery & Storage
<input type="checkbox"/> Rock Crushing	<input type="checkbox"/> Blasting	<input checked="" type="checkbox"/> Vegetation Salvage/Harvest
<input checked="" type="checkbox"/> Surveying	<input checked="" type="checkbox"/> Soils Testing	<input type="checkbox"/>

Streets and Utilities

<input type="checkbox"/> Rough Grade	<input type="checkbox"/> Paving	<input checked="" type="checkbox"/> Material Delivery & Storage
<input checked="" type="checkbox"/> Finish Grade	<input type="checkbox"/> Striping	<input checked="" type="checkbox"/> Erosion/Sediment Control
<input checked="" type="checkbox"/> Masonry	<input type="checkbox"/> Utility Install	<input checked="" type="checkbox"/> Storm Drain Installation
<input type="checkbox"/> Curb & Gutter/Culvert	<input type="checkbox"/> Landscaping	<input type="checkbox"/>

Vertical Construction

<input checked="" type="checkbox"/> Framing	<input checked="" type="checkbox"/> Stucco	<input checked="" type="checkbox"/> Equipment Maintenance/Fueling
<input checked="" type="checkbox"/> Masonry	<input checked="" type="checkbox"/> Plumbing	<input checked="" type="checkbox"/> Concrete/Forms/Foundation
<input checked="" type="checkbox"/> Exterior Siding	<input checked="" type="checkbox"/> Insulation	<input checked="" type="checkbox"/> Landscaping & Irrigation
<input checked="" type="checkbox"/> Flooring	<input checked="" type="checkbox"/> HVAC	<input checked="" type="checkbox"/> Drywall/Interior Walls
<input checked="" type="checkbox"/> Carpentry	<input checked="" type="checkbox"/> Roofing	<input checked="" type="checkbox"/> Tile
<input checked="" type="checkbox"/> Electrical	<input checked="" type="checkbox"/> Painting	<input type="checkbox"/>

Final Landscaping & Site Stabilization

<input checked="" type="checkbox"/> Stabilization	<input type="checkbox"/> Vegetation	<input checked="" type="checkbox"/> E & S Control BMP Removal
<input type="checkbox"/> Finish Grade	<input type="checkbox"/> Landscape Installation	<input checked="" type="checkbox"/> Storage Yard / Material Removal
<input type="checkbox"/> Painting & Touch-up	<input type="checkbox"/> Inlet Filtration	<input type="checkbox"/> Perm. Water Quality Ponds
<input type="checkbox"/> Drainage Inlet Stencils	<input type="checkbox"/> Irrigation System Testing	<input type="checkbox"/>

Inactive Construction

<input type="checkbox"/> Trash Removal	<input type="checkbox"/> E & S Controls Maint.	<input type="checkbox"/> E & S Controls Installation
<input type="checkbox"/> Street Sweeping	<input type="checkbox"/> Routine Inspection	<input type="checkbox"/>

Trade Crews Active On-Site

<input checked="" type="checkbox"/> Material Delivery	<input checked="" type="checkbox"/> Street Improvements	<input checked="" type="checkbox"/> Utility - Water	<input checked="" type="checkbox"/> Electrical
<input checked="" type="checkbox"/> Trenching	<input checked="" type="checkbox"/> Grading Contractor	<input checked="" type="checkbox"/> Utility - Sewer	<input checked="" type="checkbox"/> Carpentry
<input checked="" type="checkbox"/> Concrete Pouring	<input checked="" type="checkbox"/> Water Pipe Install	<input type="checkbox"/> Utility - Gas	<input checked="" type="checkbox"/> Plumbing
<input checked="" type="checkbox"/> Foundation	<input checked="" type="checkbox"/> Sewer Pipe Install	<input checked="" type="checkbox"/> Landscapers	<input checked="" type="checkbox"/> Masonry
<input type="checkbox"/> Demolition	<input checked="" type="checkbox"/> Gas Pipe Install	<input checked="" type="checkbox"/> Line Testers	<input type="checkbox"/> Painters
<input checked="" type="checkbox"/> Insulation	<input checked="" type="checkbox"/> Electrical Install	<input checked="" type="checkbox"/> Equipment Fueling	<input checked="" type="checkbox"/> Roofers
<input checked="" type="checkbox"/> Exterior Siding	<input checked="" type="checkbox"/> Communications	<input checked="" type="checkbox"/> Equipment Maintenance	<input type="checkbox"/> Stucco
<input checked="" type="checkbox"/> Fireproofing	<input checked="" type="checkbox"/> E & S Control	<input checked="" type="checkbox"/> Tile	<input checked="" type="checkbox"/> Riggers
<input checked="" type="checkbox"/> Steel Systems	<input checked="" type="checkbox"/> Sanitary Station Tech	<input checked="" type="checkbox"/> HVAC Install	<input checked="" type="checkbox"/> Drywall
<input checked="" type="checkbox"/> Carpenters	<input type="checkbox"/> Rock Products	<input type="checkbox"/> Survey/Soil Tech	<input checked="" type="checkbox"/> Irrigation
<input type="checkbox"/> Pest Control	<input type="checkbox"/> Water Feature Install	<input type="checkbox"/> Traffic Striping	<input checked="" type="checkbox"/> Storm Drain

Predicted Rain Event = 50% or greater chance of precipitation per NOAA forecast.

Qualifying Rain Event (QRE) = If rain gauge is not on site, nearest NOAA reporting site data will be used.

Extended Rain Event = Rain occurs in successive 24-hour periods. There must be 72 hours without rain for the event to be considered complete.

Checklist of Items to Address Prior to Predicted Rain Event

CONTRACTOR: Ensure each TO DO' item listed below is completed prior to start of rain event.

Information & Scheduling

Done	Finding		Date/Time:
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Superintendent informed of predicted rain	11.25.13 @ 11:40 AM
<input type="checkbox"/>	<input type="checkbox"/>	Foremen and Subcontractors informed of predicted rain	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Alert Erosion & Sediment Control Provider. Request needed crews/materials/maintenance.	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Alert Sample Collection Contractor if applicable	
<input type="checkbox"/>	<input type="checkbox"/>	Schedule staff for extended rain event inspections (once each 24 hours)	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Pre-Storm Stormwater Site Inspection completed	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Adequate erosion and sediment control measures are on hand for pre-storm preparation & extended maintenance	
<input type="checkbox"/>	<input type="checkbox"/>	Review that the BMP site map is updated. Provide a copy for Sediment & Erosion Control Provider/Subcontractor.	
<input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/>	<input type="checkbox"/>		

Material Storage Areas

<input type="checkbox"/>	<input type="checkbox"/>	Materials covered or indoors
<input type="checkbox"/>	<input type="checkbox"/>	Perimeter controls around stockpiles
<input type="checkbox"/>	<input type="checkbox"/>	Stockpiles covered
<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	

Waste Management Areas

<input type="checkbox"/>	<input type="checkbox"/>	All trash receptacles and recycling bins closed or covered
<input type="checkbox"/>	<input type="checkbox"/>	Drain holes plugged
<input type="checkbox"/>	<input type="checkbox"/>	Sanitary stations (portable toilets) bermed or in secondary containment and protected from tipping
<input type="checkbox"/>	<input type="checkbox"/>	

Concrete Washout Areas

<input type="checkbox"/>	<input type="checkbox"/>	Washout receptacles covered
<input type="checkbox"/>	<input type="checkbox"/>	Adequate capacity for rain
<input type="checkbox"/>	<input type="checkbox"/>	

Trade Operations & Securing of Site

- Exterior operations shut down for rain event
- Soil treatments not applied within 24 hours of predicted rain event
- Materials, equipment and tools properly stored and covered
- Waste and debris disposed of in covered receptacles or removed from site in accordance with approved manner
- Trenches and excavations protected
- Perimeter controls around disturbed areas
- Cover and berm fueling and repair areas
-

Site Erosion & Sediment Control BMPs

- Adequate capacity in sediment basins and traps
- Site perimeter controls in place
- Catch basin and storm drain inlet protection in place
- If previously-approved practice due to safety concerns, remove some or all storm drain inlet protection
- Deploy temporary erosion control on inactive areas
- Deploy temporary perimeter control around disturbed areas
- Sweep roads
- Stabilize site ingress and egress points
-
-

Spills & Drips

- Clean up all spills and drips, including paint, fuel, oil, hydraulic fluid, etc.
- Empty drip pans
- Place drip pans under all idle equipment
-

Corrective Actions - CRITICAL

CONTRACTOR: Address 'Deficient' items listed here AND items listed on the Pre-Rain Inspection Report.
 Check off each gray box here as completed and sign in gray box below when all REAP items are addressed. **PRE-RAIN INSPECTION REPORT: Note the date and time each item is addressed for proof of your compliance.**

Once complete, place this REAP in the SWPPP binder with completed Rain Event Inspection Reports.

Received by On-Site Representative: _____ Date _____

All 'Deficient' items addressed by: _____ Date _____ Time _____



Ground Service Technology, Inc.

SWPPP/EROSION CONTROL DIVISION

2280 Micro Place

Phone 760-745-2010

Escondido, CA 92029

Fax 760-741-1363

www.erosioncontroller.com

CA Lic #847034 A & B

RISK LEVEL 2 SITE INSPECTION REPORT

Owner: Scripps Mesa Developers
 Contractor: Garden Communities
 Job No./Project: 20623 Casa Mira View
 Site Address: 11195 Westview Parkway
 Cross Streets/Area: Mira Mesa, California
 Performed by: Michael P. Duff, JD
 Title: CESSWI, QSP #24369

WDID#: 9 37C353628
 Project Dates:
 Site Area: 3 acres
 Exposed Area: 100%
 Site Contact: Robin Robinson
 Contact Number:
 Report Date: 11/25/2013

Inspection Date: 11/25/2013

Time: 11:00 AM

Inspector Signature: M. P. Duff

Type of Inspection: Weekly Maintenance

Additional Report: NO

Phase(s) of Construction: 1 Grading/Land Devel.

2 Vertical Const.

Summary of Completed Activities

Weather & Rain Event Data Current: Clear Cloudy Rain Gauge Reading: 0

End date of Last Rain Event: 10.28.13 Was it a Qualifying Rain Event (QRE)? NO

Today is Day _____ of _____ predicted rain event days. Cumulative Rain: 0.2

Is inspection during or after a QRE of .5" or more? NO Number of QREs since July 1: 1

NOAA Forecast Chance of Precipitation

0%	Sunday, November 24, 2013
0%	Monday, November 25, 2013
0%	Tuesday, November 26, 2013
10%	Wednesday, November 27, 2013

50%	Thursday, November 28, 2013
50%	Friday, November 29, 2013
10%	Saturday, November 30, 2013
10%	Sunday, December 01, 2013

Sampling Did first two hours of discharge occur during business hours? _____
 Was any storm water discharged from site? _____
 Were water samples taken? _____
 *If Yes, fill out and print Water Sample Report.

Estimated start of rain: 12:00 AM
 During normal business hours? No
 If NO, please explain: _____

SWPPP Questions

- a. Is there a SWPPP on-site? YES
 - b. Is a Wall Map updated? YES b2. Require updating? NO
 - c. Are structural controls installed per the SWPPP? _____
 - d. If the SWPPP is not implemented, is there an effective combination of Erosion & Sediment control BMPs appropriate for the current stage of construction? YES
 - e. Is there any leak, breach or malfunction to indicate non-visible pollutants? NO If Yes, plan for sampling at next rain.
 - f. Did you observe any floating materials, oil, grease, odor, toxins, and/or sediment at any outfalls, discharge points, or downstream locations? NO If Yes, sample and document.
- What was observed? _____

The following pages provide inspection observation results. Results are to be cross-referenced with attached photographs.

Soil Stabilization Items

- 1 Berms and Dikes
- 2 Slope protection
- 3 Vegetation
- 4 Surface erosion
- 5 Storage of Materials
- 6 Soil Stockpiles
- 7 Other Stockpiles
- 8 V-ditches & Slope Drains

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
1	X				EC-3, 6, 7, 8
2	X				EC-4
3	X				EC-2
4	X				WM-1, 2
5	X				WM-3
6	X				WM-3
7	X				SE-4, EC-11
8	X				

Sediment Control Items

- 9 Fiber Rolls / Straw Wattles
- 10 Check Dams
- 11 Burlap / Poly Rock Bags
- 12 Silt Fence
- 13 Drain Inlet Protection
- 14 Basins

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
9	X				SE-5
10	X				SE-4
11	X				SE-6
12		X			SE-1
13	X				SE-10
14	X				SE-2, 3

Wind Control Items

- 15 Dust Control

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
15	X				WE-1

Tracking Control Items

- 16 Construction Entrance
- 17 Tracking on Street

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
16	X				TC-1, 2, 3
17		X			SE-7

Good House Keeping & Waste Management Items

- 18 Debris Clean-up
- 19 Disposal Areas (Export Sites)
- 20 Spills or Leaks on Vehicles, Equipment or Materials
- 21 Portable Toilets and Septic
- 22 Dumpsters, Roll-Offs, Trash Receptacles
- 23 Concrete, Paint, Stucco Wash Outs

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
18	X	X			WM-5, 6
19	X				
20	X				WM-4,6,7,10
21	X				WM-9
22	X				WM-5
23	X				WM-8

Non-Stormwater Management BMP Items

- 24 Dewatering Operations
- 25 Paving or Grinding Operations
- 26 Concrete Curing/Finishing
- 27 Temporary Stream Crossing
- 28 Illicit Connection/Illegal Discharge Reporting
- 29 Vehicle and Equipment Cleaning
- 30 Vehicle and Equipment Fueling Area
- 31 Vehicle and Equipment Maintenance
- 32 Vehicle and Equipment Drip Pans
- 33 Spill Kits

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
24				X	NS-2
25				X	NS-3
26	X				NS-12, 14
27				X	NS-4
28	X				NS-6
29				X	NS-8
30	X				NS-9
31				X	NS-10
32	X				NS-10
33	X				WM-4

Non-Storm Water Management BMP Items

- g. Are materials and supplies in compliance with the SWPPP? _____
- h. Were damaged or dissipated materials removed from the site? _____
- i. Are appropriate spill response personnel trained? _____

Other

No discharge observed or reported

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP

Items Noted "Repairs Required" or "BMP Missing"

12	17	18							

CONTRACTOR: CORRECTIVE ACTIONS REQUIRED WITHIN 72 HOURS.

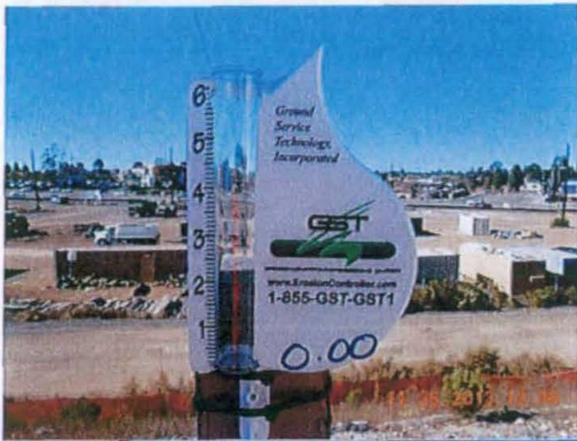
ITEM	Inspection Observation and Corrective Actions Summary	Assigned to	Date Completed
12	12. Replace missing or damaged silt fence as needed.		
Response:			
17	17. Sweep tracking as needed. Visually inspect daily.		
Response:			
18	18. Properly dispose of construction debris/trash.		
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			
Response:			

NOTE: Not all instances are necessarily photographed. All items apply throughout site.

Refer to the California Stormwater Quality Association (CASQA) Best Management Practices (BMP) Details and Cut Sheets in your SWPPP for installation, maintenance and usage standards.

Inspection Report Received by: _____

Date: _____



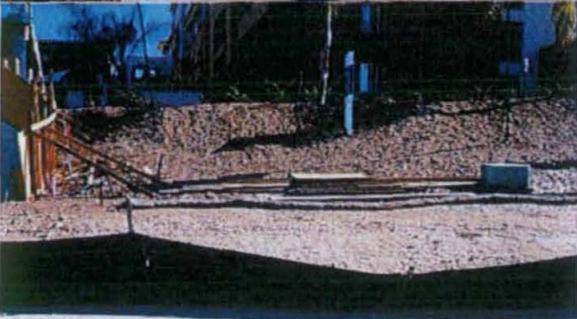
#18

#17



#18

#12



#12



No Warnings or Advisories In Effect for this Point.
 For warnings and/or advisories in effect for adjacent areas to this point,
 see <http://www.wrh.noaa.gov/sgr>

**Forecast For Lat/Lon: 32.9270/-117.1390 (Elev. 462 ft)
 San Diego-Mira Mesa CA**

Forecast Created at: 6am PST Nov 25, 2013

Custom Weather Forecast Table

	Mon Nov 25				Tue Nov 26				Wed Nov 27				Thu Nov 28				Fri Nov 29				Sat Nov 30				Sun Dec 01																																							
Weather									Patchy Fog				Chance Rain				Chance Rain Showers																																															
Daily-Temp	High 68 Low 45				High 70 Low 48				High 72 Low 54				High 63 Low 53				High 64 Low 62				High 68 Low 53				High 69 Low 53																																							
Chance of Precip	0%				0%				0%				10%				40%				50%				10%				10%				5%																															
Precip 12-hr	0.00"				0.00"				0.00"				0.00"				0.02"																																															
Snow Total	0"				0"				0"				0"				0"				0"																																											
FRET	0.09"				0.10"				0.11"				0.08"				0.09"				0.10"																																											
6-Hour Temp	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm																																												
Temp	46	62	62	52	49	64	65	57	55	67	67	57	54	60	60	54	53	61	61	55	54	64	64	58	54	65	64	54	54	65	64	54																																
Cloudiness	0%	1%	1%	8%	21%	23%	26%	33%	29%	33%	36%	88%	98%	52%	52%	56%	56%	51%	51%	46%	46%	34%	34%	20%	20%	22%	22%	20%	20%	22%	22%	20%																																
Dewpoint	40	39	50	48	34	37	42	39	36	39	44	49	48	48	46	49	48	43	47	51	50	48	49	52	46	45	44	42	46	45	44	42																																
Relative Humidity	79%	43%	65%	87%	56%	37%	43%	51%	50%	36%	44%	75%	82%	64%	60%	82%	83%	52%	60%	87%	87%	56%	60%	87%	75%	49%	49%	64%	75%	49%	49%	64%																																
Wind	E	W	NW	E	E	SW	NW	E	E	W	W	E	E	S	SW	E	E	S	W	E	E	NW	NW	E	E	W	W	E	E	W	W	E																																
Wind Speed	7	2	8	3	8	3	5	6	8	5	6	5	8	6	9	7	7	3	7	6	5	6	6	8	8	6	8	7	8	6	8	7																																
Snow Level (ft)													8048				8048				7031				7031				6766				6766				7148				7148				6594				0				0				0				0			



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 www.erosioncontroller.com CA Lic #847034 A & B

RISK LEVEL 2 SITE INSPECTION REPORT

Owner: Scripps Mesa Developers
 Contractor: Garden Communities
 Job No./Project: 20623 Casa Mira View
 Site Address: 11195 Westview Parkway
 Cross Streets/Area: Mira Mesa, California
 Performed by: Michael P. Duff, JD
 Title: CESSWI, QSP #24369

WDID#: 9 37C353628
 Project Dates:
 Site Area: 3 acres
 Exposed Area: 100%
 Site Contact: Robin Robinson
 Contact Number:
 Report Date: 12/3/2013

Inspector Signature: Michael Duff

Inspection Date: 12/3/2013
 Time: 10:00 AM

Type of Inspection: Prior to Anticipated Storm Event

Additional Report: NO

Phase(s) of Construction: 1 Grading/Land Devel.

2 Vertical Const.

Summary of Completed Activities

Weather & Rain Event Data Current: Cloudy Rain Gauge Reading: 0

End date of Last Rain Event: 10.28.13 Was it a Qualifying Rain Event (QRE)? NO

Today is Day _____ of _____ predicted rain event days. Cumulative Rain: _____

Is inspection during or after a QRE of .5" or more? NO Number of QREs since July 1: 1

NOAA Forecast Chance of Precipitation

0%	Monday, December 02, 2013
50%	Tuesday, December 03, 2013
20%	Wednesday, December 04, 2013
20%	Thursday, December 05, 2013

10%	Friday, December 06, 2013
50%	Saturday, December 07, 2013
5%	Sunday, December 08, 2013
5%	Monday, December 09, 2013

Sampling
 Did first two hours of discharge occur during business hours? _____
 Was any storm water discharged from site? _____
 Were water samples taken? _____
 *If Yes, fill out and print Water Sample Report.

Estimated start of rain: 12:00 AM
 During normal business hours? No
 If NO, please explain: _____

SWPPP Questions

- a. Is there a SWPPP on-site? YES
 - b. Is a Wall Map updated? YES b2. Require updating? NO
 - c. Are structural controls installed per the SWPPP? _____
 - d. If the SWPPP is not implemented, is there an effective combination of Erosion & Sediment control BMPs appropriate for the current stage of construction? YES
 - e. Is there any leak, breach or malfunction to indicate non-visible pollutants? NO If Yes, plan for sampling at next rain.
 - f. Did you observe any floating materials, oil, grease, odor, toxins, and/or sediment at any outfalls, discharge points, or downstream locations? NO If Yes, sample and document.
- What was observed? _____

The following pages provide inspection observation results. Results are to be cross-referenced with attached photographs.

Soil Stabilization Items

- 1 Berms and Dikes
- 2 Slope protection
- 3 Vegetation
- 4 Surface erosion
- 5 Storage of Materials
- 6 Soil Stockpiles
- 7 Other Stockpiles
- 8 V-ditches & Slope Drains

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
1	X				EC-3, 6, 7, 8
2	X				EC-4
3	X				EC-2
4	X				WM-1, 2
5	X				WM-3
6	X				WM-3
7	X				SE-4, EC-11
8	X				

Sediment Control Items

- 9 Fiber Rolls / Straw Wattles
- 10 Check Dams
- 11 Burlap / Poly Rock Bags
- 12 Silt Fence
- 13 Drain Inlet Protection
- 14 Basins

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
9	X				SE-5
10	X				SE-4
11	X				SE-6
12		X			SE-1
13	X				SE-10
14	X				SE-2, 3

Wind Control Items

- 15 Dust Control

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
15	X				WE-1

Tracking Control Items

- 16 Construction Entrance
- 17 Tracking on Street

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
16	X				TC-1, 2, 3
17		X			SE-7

Good House Keeping & Waste Management Items

- 18 Debris Clean-up
- 19 Disposal Areas (Export Sites)
- 20 Spills or Leaks on Vehicles, Equipment or Materials
- 21 Portable Toilets and Septic
- 22 Dumpsters, Roll-Offs, Trash Receptacles
- 23 Concrete, Paint, Stucco Wash Outs

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
18		X			WM-5, 6
19	X				
20	X				WM-4,6,7,10
21	X				WM-9
22	X				WM-5
23	X				WM-8

Non-Stormwater Management BMP Items

- 24 Dewatering Operations
- 25 Paving or Grinding Operations
- 26 Concrete Curing/Finishing
- 27 Temporary Stream Crossing
- 28 Illicit Connection/Illegal Discharge Reporting
- 29 Vehicle and Equipment Cleaning
- 30 Vehicle and Equipment Fueling Area
- 31 Vehicle and Equipment Maintenance
- 32 Vehicle and Equipment Drip Pans
- 33 Spill Kits

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
24				X	NS-2
25				X	NS-3
26	X				NS-12, 14
27				X	NS-4
28	X				NS-6
29				X	NS-8
30	X				NS-9
31				X	NS-10
32	X				NS-10
33	X				WM-4

Non-Storm Water Management BMP Items

- g. Are materials and supplies in compliance with the SWPPP? _____
- h. Were damaged or dissipated materials removed from the site? _____
- i. Are appropriate spill response personnel trained? _____

Other

No discharge observed or reported

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP

Items Noted "Repairs Required" or "BMP Missing"

12	17	18							

CONTRACTOR: CORRECTIVE ACTIONS REQUIRED WITHIN 72 HOURS.

ITEM	Inspection Observation and Corrective Actions Summary	Assigned to	Date Completed
12	12. Replace missing or damaged silt fence as needed.		
Response:			
17	17. Sweep tracking as needed. Visually inspect daily.		
Response:			
18	18. Properly dispose of construction debris/trash.		
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			
Response:			

NOTE: Not all instances are necessarily photographed. All items apply throughout site.

Refer to the California Stormwater Quality Association (CASQA) Best Management Practices (BMP) Details and Cut Sheets in your SWPPP for installation, maintenance and usage standards.

Inspection Report Received by: _____

Date: _____

#12



#18



#12



#18



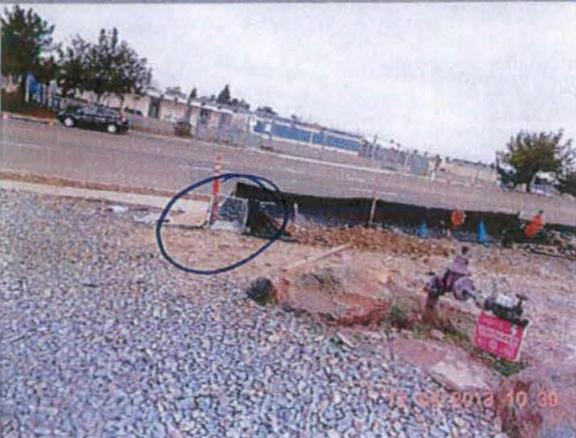
#17



#18



#18



#18



#18



#18



#18



#18



#18



Warnings and/or Advisories In Effect for this Point:

[Beach Hazards Statement](#)

For warnings and/or advisories in effect for adjacent areas to this point,

see <http://www.wrh.noaa.gov/sgx>

Forecast For Lat/Lon: 32.9270/-117.1390 (Elev. 462 ft)
San Diego-Mira Mesa CA

Forecast Created at: 7am PST Dec 3, 2013

Custom Weather Forecast Table

	Tue Dec 03				Wed Dec 04				Thu Dec 05				Fri Dec 06				Sat Dec 07				Sun Dec 08				Mon Dec 09			
Weather	Patchy Fog	Chance Rain	Chance Rain Showers	Chance Rain Showers	Slight Chance Rain Showers																							
Daily-Temp	High 63 Low 52				High 59 Low 52				High 56 Low 47				High 58 Low 44				High 57 Low 45				High 60 Low 43				High 63 Low 47			
Chance of Precip	5%	20%	50%	45%	25%	25%	20%	20%	20%	20%	10%	5%	5%	5%	5%	10%	10%	50%	50%	30%	30%	5%	5%	5%	5%	5%	5%	5%
Precip 12-hr	0.00"	0.00"	0.02"	0.00"	0.01"	0.00"	0.00"	0.03"	0.02"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"
Snow Total	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"
FRET	0.10"				0.09"				0.10"				0.08"				0.05"				0.08"				0.08"			
6-Hour Temp	4am 52	10am 61	4pm 60	10pm 55	4am 52	10am 58	4pm 55	10pm 50	4am 47	10am 54	4pm 52	10pm 47	4am 44	10am 55	4pm 54	10pm 48	4am 45	10am 55	4pm 53	10pm 46	4am 43	10am 57	4pm 56	10pm 50	4am 47	10am 60	4pm 59	10pm 52
Cloudiness	80%	79%	90%	77%	80%	55%	44%	56%	56%	26%	26%	13%	13%	8%	8%	40%	40%	60%	60%	56%	56%	32%	32%	27%	27%	23%	23%	16%
Dewpoint	33	50	52	51	48	40	40	39	40	36	36	36	35	36	38	43	42	44	42	42	39	37	38	41	41	39	42	46
Relative Humidity	48%	67%	75%	88%	80%	51%	55%	68%	76%	49%	53%	67%	69%	48%	55%	81%	89%	67%	67%	86%	84%	48%	51%	72%	80%	46%	53%	79%
Wind	SE	S	S	W	W	SW	SW	W	W	W	W	W	W	S	SW	E	SE	W	E	NE	E	E	W	E	E	N	W	SE
Snow Level (ft)	8944	9463	8598	6367	4677	4079	4079	3972	3972	3643	3643	3603	3603	5008	5008	4947	4947	4949	4949	5148	5148	5317	5317	0	0	0	0	0



Ground Service Technology, Inc.

SWPPP/EROSION CONTROL DIVISION

2280 Micro Place

Escondido, CA 92029

www.erosioncontroller.com

Phone 760-745-2010

Fax 760-741-1363

CA Lic #847034 A & B

RAIN EVENT ACTION PLAN (REAP)

Owner: Scripps Mesa Developers
 Contractor: Garden Communities
 Job No./Project: 20623 Casa Mira View
 Performed by: Michael P. Duff, JD
 Site Address: 11195 Westview Parkway
 Cross Streets/Area: Mira Mesa, California

WDID#: 9 37C353628
 Project Dates: 0
 Site Area: 3 acres
 Exposed Area: 1
 Site Contact: Robin Robinson
 Contact Number: 0
 Date: 12/3/2013
 Time: 10:00 AM

Signature: Michael Duff

Site Stormwater Manager

Name: Michael Duff, CESSWI, OSP

Company: GST

24/7 Phone Number: 760.802.7900

Stormwater Sampling Agent

Name: Michael Duff, CESSWI, OSP

Company: GST

24/7 Phone Number: 760.802.7900

Erosion & Sediment Control Labor Force

Contact Name: Wes Udwin

Company: GST

24/7 Phone Number: 760.815.2909

CRITICAL: THIS REAP IS PREPARED WITH YOUR SWPPP INSPECTOR. ALL ITEMS ARE TO BE ADDRESSED PRIOR TO START OF PREDICTED RAIN. Document this.

Current Phase(s) of Construction

Grading and Land Development

Streets & Utilities Phase

Vertical Construction Phase

Final Landscaping & Site Stabilization

Inactive Construction

Complete

Weather Conditions

Clear

Cloudy

Raining

62° Temperature

NOAA Forecast Chance of Precipitation:

0%	Monday, December 02, 2013
50%	Tuesday, December 03, 2013
20%	Wednesday, December 04, 2013
20%	Thursday, December 05, 2013

10%	Friday, December 06, 2013
50%	Saturday, December 07, 2013
5%	Sunday, December 08, 2013
5%	Monday, December 09, 2013

Information Provided to Subcontractors

Contractual Language

Trainings

Fines & Penalties

Signage

Tailgate Meetings

Educational Handouts

Current Activities

Grading and Land Development

<input checked="" type="checkbox"/> Development	<input checked="" type="checkbox"/> Vertical Removal	<input checked="" type="checkbox"/> Equipment Maintenance/Fueling
<input checked="" type="checkbox"/> Rough Grade	<input checked="" type="checkbox"/> Finish Grade	<input checked="" type="checkbox"/> Erosion/Sediment Control
<input type="checkbox"/> Soil Amendments	<input type="checkbox"/> Excavation	<input checked="" type="checkbox"/> Material Delivery & Storage
<input type="checkbox"/> Rock Crushing	<input type="checkbox"/> Blasting	<input checked="" type="checkbox"/> Vegetation Salvage/Harvest
<input checked="" type="checkbox"/> Surveying	<input type="checkbox"/> Soils Testing	<input type="checkbox"/>

Streets and Utilities

<input type="checkbox"/> Rough Grade	<input type="checkbox"/> Paving	<input checked="" type="checkbox"/> Material Delivery & Storage
<input type="checkbox"/> Finish Grade	<input type="checkbox"/> Striping	<input checked="" type="checkbox"/> Erosion/Sediment Control
<input type="checkbox"/> Masonry	<input type="checkbox"/> Utility Install	<input checked="" type="checkbox"/> Storm Drain Installation
<input type="checkbox"/> Curb & Gutter/Culvert	<input type="checkbox"/> Landscaping	<input type="checkbox"/>

Vertical Construction

<input checked="" type="checkbox"/> Framing	<input checked="" type="checkbox"/> Stucco	<input checked="" type="checkbox"/> Equipment Maintenance/Fueling
<input checked="" type="checkbox"/> Masonry	<input checked="" type="checkbox"/> Plumbing	<input checked="" type="checkbox"/> Concrete/Forms/Foundation
<input checked="" type="checkbox"/> Exterior Siding	<input checked="" type="checkbox"/> Insulation	<input checked="" type="checkbox"/> Landscaping & Irrigation
<input checked="" type="checkbox"/> Flooring	<input checked="" type="checkbox"/> HVAC	<input checked="" type="checkbox"/> Drywall/Interior Walls
<input checked="" type="checkbox"/> Carpentry	<input checked="" type="checkbox"/> Roofing	<input checked="" type="checkbox"/> Tile
<input checked="" type="checkbox"/> Electrical	<input checked="" type="checkbox"/> Painting	<input type="checkbox"/>

Final Landscaping & Site Stabilization

<input type="checkbox"/> Stabilization	<input checked="" type="checkbox"/> Vegetation	<input checked="" type="checkbox"/> E & S Control BMP Removal
<input type="checkbox"/> Finish Grade	<input checked="" type="checkbox"/> Landscape Installation	<input type="checkbox"/> Storage Yard / Material Removal
<input type="checkbox"/> Painting & Touch-up	<input type="checkbox"/> Inlet Filtration	<input type="checkbox"/> Perm. Water Quality Ponds
<input type="checkbox"/> Drainage Inlet Stencils	<input type="checkbox"/> Irrigation System Testing	<input type="checkbox"/>

Inactive Construction

<input checked="" type="checkbox"/> Trash Removal	<input checked="" type="checkbox"/> E & S Controls Maint.	<input checked="" type="checkbox"/> E & S Controls Installation
<input checked="" type="checkbox"/> Street Sweeping	<input checked="" type="checkbox"/> Routine Inspection	<input type="checkbox"/>

Trade Crews Active On-Site

<input checked="" type="checkbox"/> Material Delivery	<input type="checkbox"/> Street Improvements	<input checked="" type="checkbox"/> Utility - Water	<input checked="" type="checkbox"/> Electrical
<input type="checkbox"/> Trenching	<input checked="" type="checkbox"/> Grading Contractor	<input checked="" type="checkbox"/> Utility - Sewer	<input checked="" type="checkbox"/> Carpentry
<input checked="" type="checkbox"/> Concrete Pouring	<input checked="" type="checkbox"/> Water Pipe Install	<input checked="" type="checkbox"/> Utility - Gas	<input checked="" type="checkbox"/> Plumbing
<input checked="" type="checkbox"/> Foundation	<input checked="" type="checkbox"/> Sewer Pipe Install	<input checked="" type="checkbox"/> Landscapers	<input checked="" type="checkbox"/> Masonry
<input type="checkbox"/> Demolition	<input checked="" type="checkbox"/> Gas Pipe Install	<input type="checkbox"/> Line Testers	<input checked="" type="checkbox"/> Painters
<input checked="" type="checkbox"/> Insulation	<input checked="" type="checkbox"/> Electrical Install	<input checked="" type="checkbox"/> Equipment Fueling	<input checked="" type="checkbox"/> Roofers
<input checked="" type="checkbox"/> Exterior Siding	<input checked="" type="checkbox"/> Communications	<input checked="" type="checkbox"/> Equipment Maintenance	<input checked="" type="checkbox"/> Stucco
<input checked="" type="checkbox"/> Fireproofing	<input checked="" type="checkbox"/> E & S Control	<input checked="" type="checkbox"/> Tile	<input checked="" type="checkbox"/> Riggers
<input checked="" type="checkbox"/> Steel Systems	<input checked="" type="checkbox"/> Sanitary Station Tech	<input checked="" type="checkbox"/> HVAC Install	<input checked="" type="checkbox"/> Drywall
<input checked="" type="checkbox"/> Carpenters	<input type="checkbox"/> Rock Products	<input checked="" type="checkbox"/> Survey/Soil Tech	<input checked="" type="checkbox"/> Irrigation
<input type="checkbox"/> Pest Control	<input type="checkbox"/> Water Feature Install	<input type="checkbox"/> Traffic Striping	<input checked="" type="checkbox"/> Storm Drain

Predicted Rain Event = 50% or greater chance of precipitation per NOAA forecast.

Qualifying Rain Event (QRE) = If rain gauge is not on site, nearest NOAA reporting site data will be used.

Extended Rain Event = Rain occurs in successive 24-hour periods. There must be 72 hours without rain for the event to be considered complete.

Checklist of Items to Address Prior to Predicted Rain Event

CONTRACTOR: Ensure each 'TO DO' item listed below is completed prior to start of rain event.

Information & Scheduling

12-3-13 @

Done Finding Superintendent informed of predicted rain Date/Time: 9:45 AM

Foremen and Subcontractors informed of predicted rain

Alert Erosion & Sediment Control Provider. Request needed crews/materials/maintenance.

Alert Sample Collection Contractor if applicable

Schedule staff for extended rain event inspections (once each 24 hours)

Pre-Storm Stormwater Site Inspection completed

Adequate erosion and sediment control measures are on hand for pre-storm preparation & extended maintenance

Review that the BMP site map is updated. Provide a copy for Sediment & Erosion Control Provider/Subcontractor.

Material Storage Areas

Materials covered or indoors

Perimeter controls around stockpiles

Stockpiles covered

Waste Management Areas

All trash receptacles and recycling bins closed or covered

Drain holes plugged

Sanitary stations (portable toilets) bermed or in secondary containment and protected from tipping

Concrete Washout Areas

Washout receptacles covered

Adequate capacity for rain

Trade Operations & Securing of Site

- Exterior operations shut down for rain event
- Soil treatments not applied within 24 hours of predicted rain event
- Materials, equipment and tools properly stored and covered
- Waste and debris disposed of in covered receptacles or removed from site in accordance with approved manner
- Trenches and excavations protected
- Perimeter controls around disturbed areas
- Cover and berm fueling and repair areas
-

Site Erosion & Sediment Control BMPs

- Adequate capacity in sediment basins and traps
- Site perimeter controls in place
- Catch basin and storm drain inlet protection in place
- If previously-approved practice due to safety concerns, remove some or all storm drain inlet protection
- Deploy temporary erosion control on inactive areas
- Deploy temporary perimeter control around disturbed areas
- Sweep roads
- Stabilize site ingress and egress points
-
-

Spills & Drips

- Clean up all spills and drips, including paint, fuel, oil, hydraulic fluid, etc.
- Empty drip pans
- Place drip pans under all idle equipment
-

Corrective Actions - CRITICAL

CONTRACTOR: Address 'Deficient' items listed here AND items listed on the Pre-Rain Inspection Report.
 Check off each gray box here as completed and sign in gray box below when all REAP items are addressed. **PRE-RAIN INSPECTION REPORT: Note the date and time each item is addressed for proof of your compliance.**

Once complete, place this REAP in the SWPPP binder with completed Rain Event Inspection Reports.

Received by On-Site Representative: _____ Date _____

All 'Deficient' items addressed by: _____	Date _____	Time _____
---	------------	------------



Ground Service Technology, Inc.

SWPPP/EROSION CONTROL DIVISION

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CA Lic #847034 A & B

RISK LEVEL 2 SITE INSPECTION REPORT

Owner: Scripps Mesa Developers
 Contractor: Garden Communities
 Job No./Project: 20623 Casa Mira View
 Site Address: 11195 Westview Parkway
 Cross Streets/Area: Mira Mesa, California
 Performed by: Michael P. Duff, JD
 Title: CESSWI, QSP #24369

WDID#: 9 37C353628
 Project Dates:
 Site Area: 3 acres
 Exposed Area: 100%
 Site Contact: Robin Robinson
 Contact Number:
 Report Date: 12/18/2013

Inspection Date: 12/18/2013

Time: 10:30 AM

Inspector Signature: Michael Duff

Type of Inspection: Weekly Maintenance

Additional Report: NO

Phase(s) of Construction: 1 Grading/Land Devel.

2 Vertical Const.

Summary of Completed Activities

Weather & Rain Event Data Current: Cloudy

Rain Gauge Reading:

End date of Last Rain Event:

Was it a Qualifying Rain Event (QRE)?

Today is Day of predicted rain event days.

Cumulative Rain:

Is inspection during or after a QRE of .5" or more?

Number of QREs since July 1:

NOAA Forecast Chance of Precipitation

0%	Tuesday, December 17, 2013
20%	Wednesday, December 18, 2013
75%	Thursday, December 19, 2013
10%	Friday, December 20, 2013

0%	Saturday, December 21, 2013
0%	Sunday, December 22, 2013
0%	Monday, December 23, 2013
0%	Tuesday, December 24, 2013

Sampling Did first two hours of discharge occur during business hours?
 Was any storm water discharged from site?
 Were water samples taken?

Estimated start of rain:

During normal business hours?

If NO, please explain:

*If Yes, fill out and print Water Sample Report.

SWPPP Questions

- a. Is there a SWPPP on-site?
- b. Is a Wall Map updated?
- c. Are structural controls installed per the SWPPP?

YES
 YES b2. Require updating? NO

d. If the SWPPP is not implemented, is there an effective combination of Erosion & Sediment control BMPs appropriate for the current stage of construction?

YES

e. Is there any leak, breach or malfunction to indicate non-visible pollutants?

NO If Yes, plan for sampling at next rain.

f. Did you observe any floating materials, oil, grease, odor, toxins, and/or sediment at any outfalls, discharge points, or downstream locations?

NO If Yes, sample and document.
 What was observed?

The following pages provide inspection observation results. Results are to be cross-referenced with attached photographs.

CONTRACTOR: CORRECTIVE ACTIONS REQUIRED WITHIN 72 HOURS.

ITEM	Inspection Observation and Corrective Actions Summary	Assigned to	Date Completed
12	12. Replace missing or damaged silt fence as needed.		
Response:			
17	17. Sweep tracking as needed. Visually inspect daily.		
Response:			
18	18. Properly dispose of construction debris/trash.		
Response:			
22	22. Dumpsters need to be covered and the end of each workday and prior/during a rain event.		
Response:			
23	23. Concrete cleanouts need to be covered prior to a rain event.		
Response:			
0			
Response:			
0			
Response:			
0			
Response:			

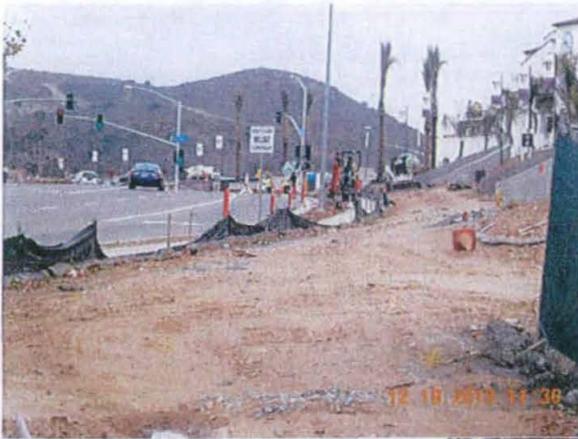
NOTE: Not all instances are necessarily photographed. All items apply throughout site.

Refer to the California Stormwater Quality Association (CASQA) Best Management Practices (BMP) Details and Cut Sheets in your SWPPP for installation, maintenance and usage standards.

Inspection Report Received by: _____

Date: _____

#12
silt
ce



#22
Dumper



#18
bris



#18
Debris



#18



#18



#18



#18





#17
Tracking



#23
Cover
WASHOUT
PRIOR TO RAIN.



#19
Debris



#18
Debris



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CA Lic #847034 A & B

RISK LEVEL 2 SITE INSPECTION REPORT

Owner: Scripps Mesa Developers
 Contractor: Garden Communities
 Job No./Project: 20623 Casa Mira View
 Site Address: 11195 Westview Parkway
 Cross Streets/Area: Mira Mesa, California
 Performed by: Michael P. Duff, JD
 Title: CESSWI, OSP #24369

WDID#: 9 37C353628
 Project Dates:
 Site Area: 3 acres
 Exposed Area: 100%
 Site Contact: Robin Robinson
 Contact Number:
 Report Date: 12/19/2013

Inspection Date: 12/19/2013

Time: 12:30 PM

Inspector Signature: Michael Duff

Type of Inspection: During Extended Storm Event

Additional Report: NO

Phase(s) of Construction: 1 Grading/Land Level.

2 Vertical Const.

Summary of Completed Activities

Weather & Rain Event Data Current: Raining

Rain Gauge Reading: 0.1

End date of Last Rain Event: _____

Was it a Qualifying Rain Event (QRE)? NO

Today is Day 1 of _____ predicted rain event days.

Cumulative Rain: 0.1

Is inspection during or after a QRE of .5" or more? NO

Number of QREs since July 1: _____

NOAA Forecast Chance of Precipitation

0%	Wednesday, December 18, 2013
90%	Thursday, December 19, 2013
20%	Friday, December 20, 2013
0%	Saturday, December 21, 2013

0%	Sunday, December 22, 2013
0%	Monday, December 23, 2013
0%	Tuesday, December 24, 2013
0%	Wednesday, December 25, 2013

Sampling
 Did first two hours of discharge occur during business hours?
 Was any storm water discharged from site?
 Were water samples taken?
 *If Yes, fill out and print Water Sample Report.

Estimated start of rain: _____
 During normal business hours? _____
 If NO, please explain: _____

SWPPP Questions

- a. Is there a SWPPP on-site?
- b. Is a Wall Map updated?
- c. Are structural controls installed per the SWPPP?
- d. If the SWPPP is not implemented, is there an effective combination of Erosion & Sediment control BMPs appropriate for the current stage of construction?
- e. Is there any leak, breach or malfunction to indicate non-visible pollutants?
- f. Did you observe any floating materials, oil, grease, odor, toxins, and/or sediment at any outfalls, discharge points, or downstream locations?

YES _____
 YES _____ b2. Require updating? NO
 YES _____
 NO _____ If Yes, plan for sampling at next rain.
 NO _____ If Yes, sample and document.
 What was observed? _____

The following pages provide inspection observation results. Results are to be cross-referenced with attached photographs.

CONTRACTOR: CORRECTIVE ACTIONS REQUIRED WITHIN 72 HOURS.

ITEM	Inspection Observation and Corrective Actions Summary	Assigned to	Date Completed
17	17. Sweep tracking as needed. Visually Inspect daily.		
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			
Response:			

NOTE: Not all instances are necessarily photographed. All items apply throughout site.

Refer to the California Stormwater Quality Association (CASQA) Best Management Practices (BMP) Details and Cut Sheets in your SWPPP for installation, maintenance and usage standards.

Inspection Report Received by: _____

Date: _____



Keep Watch
ON tracking.



NO Discharge.





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CA Lic #847034 A & B

RISK LEVEL 2 SITE INSPECTION REPORT

Owner: Scripps Mesa Developers
 Contractor: Garden Communities
 Job No./Project: 20623 Casa Mira View
 Site Address: 11195 Westview Parkway
 Cross Streets/Area: Mira Mesa, California
 Performed by: Michael P. Duff, JD
 Title: CESSWI, QSP #24369

WDID#: 9 37C353628
 Project Dates:
 Site Area: 3 acres
 Exposed Area: 100%
 Site Contact: Robin Robinson
 Contact Number:
 Report Date: 12/9/2013

Inspector Signature: Michael Duff

Inspection Date: 12/9/2013

Time: 11:00 AM

Type of Inspection: Weekly Maintenance

Additional Report: NO

Phase(s) of Construction: 1 Grading/Land Devel.

2 Vertical Const.

Summary of Completed Activities

Weather & Rain Event Data Current: Clear

Rain Gauge Reading: 0.3

End date of Last Rain Event: 10.28.13

Was it a Qualifying Rain Event (ORE)? NO

Today is Day of predicted rain event days.

Cumulative Rain: 0.3

Is inspection during or after a ORE of .5" or more? NO

Number of OREs since July 1: 1

NOAA Forecast Chance of Precipitation

0%	Sunday, December 08, 2013
5%	Monday, December 09, 2013
0%	Tuesday, December 10, 2013
0%	Wednesday, December 11, 2013

5%	Thursday, December 12, 2013
5%	Friday, December 13, 2013
10%	Saturday, December 14, 2013
10%	Sunday, December 15, 2013

Sampling
 Did first two hours of discharge occur during business hours?
 Was any storm water discharged from site?
 Were water samples taken?
 *If Yes, fill out and print Water Sample Report.

Estimated start of rain: 12:00 AM
 During normal business hours? No
 If NO, please explain:

SWPPP Questions

- a. Is there a SWPPP on-site?
- b. Is a Wall Map updated?
- c. Are structural controls installed per the SWPPP?
- d. If the SWPPP is not implemented, is there an effective combination of Erosion & Sediment control BMPs appropriate for the current stage of construction?
- e. Is there any leak, breach or malfunction to indicate non-visible pollutants?
- f. Did you observe any floating materials, oil, grease, odor, toxins, and/or sediment at any outfalls, discharge points, or downstream locations?

YES
YES b2. Require updating? NO
YES
NO If Yes, plan for sampling at next rain.
NO If Yes, sample and document.
 What was observed?

The following pages provide inspection observation results. Results are to be cross-referenced with attached photographs.

CONTRACTOR: CORRECTIVE ACTIONS REQUIRED WITHIN 72 HOURS.

ITEM	Inspection Observation and Corrective Actions Summary	Assigned to	Date Completed
9	9. Maintain existing Fiber rolls/ Straw waddles per the CASQA standards.		
Response:			
12	12. Replace missing or damaged silt fence as needed.		
Response:			
13	13. Maintain existing inlet protection.		
Response:			
17	17. Sweep tracking as needed. Visually inspect daily.		
Response:			
18	18. Property dispose of construction debris/trash.		
Response:			
0			
Response:			
0			
Response:			
0			
Response:			

NOTE: Not all instances are necessarily photographed. All items apply throughout site.

Refer to the California Stormwater Quality Association (CASQA) Best Management Practices (BMP) Details and Cut Sheets in your SWPPP for installation, maintenance and usage standards.

Inspection Report Received by: _____
 Date: _____



#9
Fiber
Roll

#12
S.I.T
FENCE

#12
S.I.T
FENCE

#18

DEBRIS

#18
DEBRIS

#18



12.09.2013 12:19



12.09.2013 12:18

#13
DRAIN
INLET
PROTECTION

#18



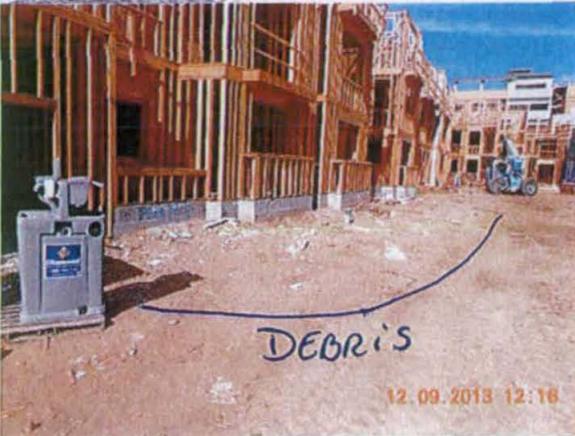
12.09.2013 12:19



12.09.2013 12:19

#18
DEBRIS
#17
TRACKING

#18



12.09.2013 12:18

DEBRIS

No Warnings or Advisories In Effect for this Point.
 For warnings and/or advisories in effect for adjacent areas to this point,
 see <http://www.wrh.noaa.gov/sgx>

Forecast For Lat/Lon: 32.9270/-117.1390 (Elev. 462 ft)
 San Diego-Mira Mesa CA

Forecast Created at: 9am PST Dec 9, 2013

Custom Weather Forecast Table

	Mon Dec 09				Tue Dec 10				Wed Dec 11				Thu Dec 12				Fri Dec 13				Sat Dec 14				Sun Dec 15																											
Weather																																																				
Daily-Temp	High 60 Low 41				High 62 Low 39				High 65 Low 40				High 66 Low 44				High 63 Low 46				High 68 Low 48				High 69 Low 50																											
Chance of Precip	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	5%	5%	5%	5%	5%	5%	5%	10%	10%	10%	10%	10%	10%	10%																								
Precip	0.00" 0.00" 0.00" 0.00" 0.00" 0.00" 0.00" 0.00" 0.00" 0.00" 0.00" 0.00" 0.00" 0.00" 0.00" 0.00"																																																			
12-hr Snow Total	0" 0"																																																			
FRET	0.13"				0.11"				0.12"				0.10"				0.08"				0.07"				0.07"																											
8-Hour Temp	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm																				
Cloudiness	33%	6%	0%	0%	2%	6%	7%	9%	7%	13%	13%	14%	14%	13%	13%	17%	17%	31%	31%	24%	24%	19%	19%	29%	29%	29%	29%	29%	29%	29%	29%	29%																				
Dewpoint	36	26	5	9	7	12	23	22	14	18	32	32	31	30	33	36	37	38	40	43	43	44	45	47	46	48	48	47	46	48	48	47																				
Relative Humidity	79%	31%	14%	24%	24%	16%	28%	39%	31%	20%	36%	53%	56%	30%	35%	56%	65%	44%	50%	71%	79%	49%	52%	76%	82%	53%	56%	71%	82%	53%	56%	71%																				
Wind	E	E	E	E	E	S	N	E	E	W	N	SE	E	E	N	E	E	SW	W	E	E	E	NE	E	E	E	E	W	E	E	E	W																				
Snow Level (ft)																	7	9	9	12	6	2	5	10	9	2	3	7	7	5	7	6	7	1	6	5	9	3	3	7	7	7	6	5	7	7	6	5	7	7	6	5



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RISK LEVEL 2 SITE INSPECTION REPORT

Owner: Scripps Mesa Developers
 Contractor: Garden Communities
 Job No./Project: 20623 Casa Mira View
 Site Address: 11195 Westview Parkway
 Cross Streets/Area: Mira Mesa, California
 Performed by: Michael P. Duff, JD
 Title: CESSWI, QSP #24369

WDID#: 9 37C353628
 Project Dates:
 Site Area: 3 acres
 Exposed Area: 100%
 Site Contact: Robin Robinson
 Contact Number:
 Report Date: 12/26/2013

Inspector Signature: Michael Duff

Inspection Date: 12/26/2013

Time: 11:30 AM

Type of Inspection: Weekly Maintenance

Additional Report: NO

Phase(s) of Construction: 1 Grading/Land Devel.

2 Vertical Const.

Summary of Completed Activities

Weather & Rain Event Data Current: Clear

Rain Gauge Reading: 0.2

End date of Last Rain Event: _____

Was it a Qualifying Rain Event (QRE)? NO

Today is Day 1 of _____ predicted rain event days.

Cumulative Rain: 0.3

Is inspection during or after a QRE of .5" or more? NO

Number of QREs since July 1: _____

NOAA Forecast Chance of Precipitation

0%	Wednesday, December 25, 2013
0%	Thursday, December 26, 2013
0%	Friday, December 27, 2013
0%	Saturday, December 28, 2013

0%	Sunday, December 29, 2013
0%	Monday, December 30, 2013
0%	Tuesday, December 31, 2013
0%	Wednesday, January 01, 2014

Sampling Did first two hours of discharge occur during business hours? _____
 Was any storm water discharged from site? _____
 Were water samples taken? _____

Estimated start of rain: _____

During normal business hours? _____

If NO, please explain: _____

*If Yes, fill out and print Water Sample Report.

SWPPP Questions

- a. Is there a SWPPP on-site? _____
- b. Is a Wall Map updated? _____
- c. Are structural controls installed per the SWPPP? _____

YES

YES

b2. Require updating? NO

d. If the SWPPP is not implemented, is there an effective combination of Erosion & Sediment control BMPs appropriate for the current stage of construction? _____

YES

e. Is there any leak, breach or malfunction to indicate non-visible pollutants? _____

NO

If Yes, plan for sampling at next rain.

f. Did you observe any floating materials, oil, grease, odor, toxins, and/or sediment at any outfalls, discharge points, or downstream locations? _____

NO

If Yes, sample and document.

What was observed? _____

The following pages provide inspection observation results. Results are to be cross-referenced with attached photographs.

CONTRACTOR: CORRECTIVE ACTIONS REQUIRED WITHIN 72 HOURS.

ITEM	Inspection Observation and Corrective Actions Summary	Assigned to	Date Completed
12	12. Replace missing or damaged silt fence as needed.		
Response:			
17	17. Sweep tracking as needed. Visually Inspect daily.		
Response:			
18	18. Properly dispose of construction debris/trash.		
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			
Response:			

NOTE: Not all instances are necessarily photographed. All items apply throughout site.

Refer to the California Stormwater Quality Association (CASQA) Best Management Practices (BMP) Details and Cut Sheets in your SWPPP for installation, maintenance and usage standards.

Inspection Report Received by: _____

Date: _____

#18



12-26-2013 12:33

#18



12.26.2013 12:34

#18



12-26-2013 12:35

#12



12-26-2013 12:37

#18



12-26-2013 12:29

#12



12-26-2013 12:31

#18



12-26-2013 12:31

#17



12-26-2013 12:31

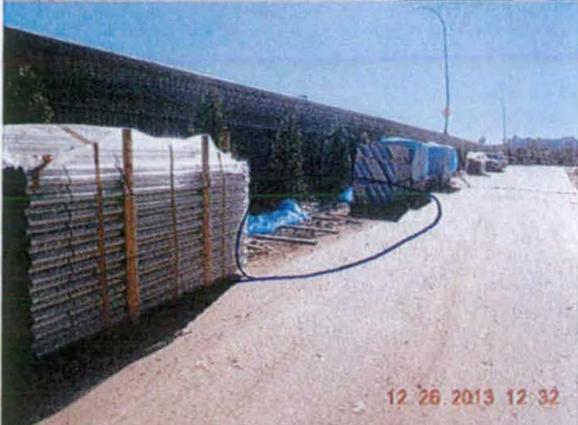
#18



#18



#18



#18



#18



No Warnings or Advisories In Effect for this Point.
 For warnings and/or advisories in effect for adjacent areas to this point,
 see <http://www.wrh.noaa.gov/sgx>

**Forecast For Lat/Lon: 32.9270/-117.1390 (Elev. 462 ft)
 San Diego-Mira Mesa CA**

Forecast Created at: 8am PST Dec 26, 2013

Custom Weather Forecast Table

	Thu Dec 26				Fri Dec 27				Sat Dec 28				Sun Dec 29				Mon Dec 30				Tue Dec 31				Wed Jan 01							
Weather																																
Daily-Temp	High 81 Low 58				High 77 Low 57				High 73 Low 58				High 78 Low 57				High 76 Low 60				High 74 Low 60				High 71 Low 59							
Chance of Precip	0%	0%	0%	0%	0%	0%	0%	5%	5%	5%	5%	5%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Precip	0.00" 0.00" 0.00" 0.00" 0.00" 0.00" 0.00" 0.00" 0.00" 0.00" 0.00" 0.00" 0.00" 0.00" 0.00" 0.00"																															
12-hr	0" 0" 0" 0" 0" 0" 0" 0" 0" 0" 0" 0"																															
Snow Total	0" 0" 0" 0" 0" 0" 0" 0" 0" 0" 0" 0"																															
FRET	0.20"				0.14"				0.11"				0.16"				0.17"				0.16"				0.13"							
6-Hour Temp	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm
Temp	59	75	73	61	58	72	71	61	59	69	68	60	58	73	72	63	61	72	71	63	61	71	69	62	60	68	66	58	60	68	66	58
Cloudiness	4%	5%	4%	2%	4%	20%	29%	38%	44%	32%	25%	19%	17%	8%	8%	12%	12%	8%	8%	16%	16%	14%	14%	17%	17%	12%	12%	11%	17%	12%	12%	11%
Dewpoint	19	23	22	19	17	21	32	25	22	30	39	36	27	25	28	22	21	20	29	29	24	26	35	38	30	30	38	36	30	30	38	36
Relative Humidity	21%	14%	15%	20%	20%	14%	24%	25%	24%	23%	34%	41%	30%	17%	19%	20%	22%	14%	21%	28%	24%	19%	29%	42%	33%	24%	36%	45%	33%	24%	36%	45%
Wind	E	W	NE	E	SE	S	E	E	E	W	NW	E	E	E	NE	E	E	E	N	E	E	SE	W	E	E	W	W	E	E	W	W	E
	7	6	10	5	8	1	1	7	8	3	1	6	7	8	6	7	7	8	6	8	8	7	8	7	7	5	6	8	7	5	6	8



Ground Service Technology, Inc.
 SWPPP/EROSION CONTROL DIVISION
 2280 Micro Place Phone 760-745-2010
 Escondido, CA 92029 Fax 760-741-1363
 www.erosioncontroller.com CA Lic #847034 A & B

Non-Storm Water Discharge Visual Inspection

QUARTERLY REPORT

Owner: Scripps Mesa Developers
 Contractor: Garden Communities
 Job No./Project: **20623 Casa Mira View**
 Performed by: Michael P. Duff, JD
 Site Address: 11195 Westview Parkway
 Cross Streets/Area: Mira Mesa, California

WDID#: 9 37C353628
 Project Dates: 0
 Site Area: 3 acres
 Exposed Area: 100%
 Site Contact: Robin Robinson
 Contact Number: 0

Signature: Michael Duff

Date: 12/26/2013
 Time: 11:30 AM

Quarter: Report Period: Risk:

Current Stage(s) of Construction

<input checked="" type="checkbox"/>	Grading and Land Development	<input type="checkbox"/>	Final Landscaping & Site Stabilization
<input checked="" type="checkbox"/>	Streets & Utilities Phase	<input type="checkbox"/>	Inactive Construction
<input checked="" type="checkbox"/>	Vertical Construction Phase	<input type="checkbox"/>	Complete

Visual Inspection

Inspect each drainage area on site and off. Were any of the following observed:

- a Odors
- b Floating Materials
- c Suspended Materials
- d Sheen
- e Discolorations
- f Turbidity

If Yes, Location(s) and Source	
No	

If Yes, Location(s) and Source

Is any evidence of NSWD observed?

If evidence is observed, was it authorized?

Were photos taken?

Contractor: Note date the Corrective Action/Change is complete. Required.

ITEM	Corrective Actions Identified	Is SWPPP Amendment or change needed?	No	Date
			<input type="text"/>	<input type="text"/>

Photo References/Comments



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CA Lic #847034 A & B

RISK LEVEL 2 SITE INSPECTION REPORT

Owner: Scripps Mesa Developers
 Contractor: Garden Communities
 Job No./Project: 20623 Casa Mira View
 Site Address: 11195 Westview Parkway
 Cross Streets/Area: Mira Mesa, California
 Performed by: Michael P. Duff, JD
 Title: CESSWI, OSP #24369

WDID#: 9 37C353628
 Project Dates:
 Site Area: 3 acres
 Exposed Area: 100%
 Site Contact: Robin Robinson
 Contact Number:
 Report Date: 1/2/2014

Inspection Date: 1/2/2014

Time: 12:00 PM

Inspector Signature: Michael Duff

Type of Inspection: Weekly Maintenance

Additional Report: NO

Phase(s) of Construction: 1 Grading/Land Devel.

2 Vertical Const.

Summary of Completed Activities

Weather & Rain Event Data Current: Clear

Rain Gauge Reading:

End date of Last Rain Event: Was it a Qualifying Rain Event (QRE)? NO

Today is Day of predicted rain event days. Cumulative Rain:

Is inspection during or after a QRE of .5" or more? NO Number of QREs since July 1:

NOAA Forecast Chance of Precipitation

0%	Wednesday, January 01, 2014
0%	Thursday, January 02, 2014
0%	Friday, January 03, 2014
0%	Saturday, January 04, 2014

0%	Sunday, January 05, 2014
0%	Monday, January 06, 2014
0%	Tuesday, January 07, 2014
0%	Wednesday, January 08, 2014

Sampling Did first two hours of discharge occur during business hours?
 Was any storm water discharged from site?
 Were water samples taken?
 *If Yes, fill out and print Water Sample Report.

Estimated start of rain:
 During normal business hours?
 If NO, please explain:

SWPPP Questions

- a. Is there a SWPPP on-site?
- b. Is a Wall Map updated?
- c. Are structural controls installed per the SWPPP?
- d. If the SWPPP is not implemented, is there an effective combination of Erosion & Sediment control BMPs appropriate for the current stage of construction?
- e. Is there any leak, breach or malfunction to indicate non-visible pollutants?
- f. Did you observe any floating materials, oil, grease, odor, toxins, and/or sediment at any outfalls, discharge points, or downstream locations?

YES
YES b2. Require updating? NO
YES
NO If Yes, plan for sampling at next rain.
NO If Yes, sample and document.
 What was observed?

The following pages provide inspection observation results. Results are to be cross-referenced with attached photographs.

CONTRACTOR: CORRECTIVE ACTIONS REQUIRED WITHIN 72 HOURS.

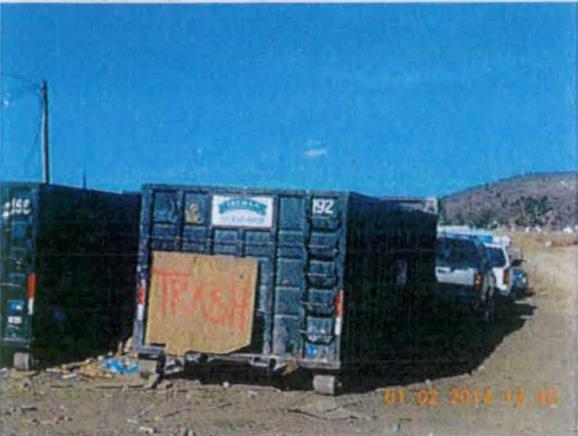
ITEM	Inspection Observation and Corrective Actions Summary	Assigned to	Date Completed
2	2. Inactive slopes require erosion and sediment control BMPs.		
Response:			
12	12. Replace missing or damaged silt fence as needed.	GST	1/10/14
Response:			
17	17. Sweep tracking as needed. Visually inspect daily. <i>GC laborer</i>		1/10/14
Response:			
18	18. Properly dispose of construction debris/trash.		
Response:			
22	22. Dumpsters need to be covered and the end of each workday and prior/during a rain event.		
Response:			
0			
Response:			
0			
Response:			
0			
Response:			

NOTE: Not all instances are necessarily photographed. All items apply throughout site.

Refer to the California Stormwater Quality Association (CASQA) Best Management Practices (BMP) Details and Cut Sheets in your SWPPP for installation, maintenance and usage standards.

Inspection Report Received by: _____
 Date: _____





No Warnings or Advisories In Effect for this Point.
 For warnings and/or advisories in effect for adjacent areas to this point.
 see <http://www.wrh.noaa.gov/sgx>

Forecast For Lat/Lon: 32.9270/-117.1390 (Elev. 462 ft)
 San Diego-Mira Mesa CA

Forecast Created at: 8am PST Jan 2, 2014

Custom Weather Forecast Table

	Thu Jan 02				Fri Jan 03				Sat Jan 04				Sun Jan 05				Mon Jan 06				Tue Jan 07				Wed Jan 08			
Weather																					Patchy Fog							
Daily-Temp	High 73 Low 50				High 71 Low 62				High 70 Low 53				High 74 Low 63				High 71 Low 50				High 68 Low 49				High 66 Low 49			
Chance of Precip	0% 10% 10% 10% 10% 5%																											
Precip	0.00" 0.00"																											
12-hr Snow Total	0" 0"																											
FRET	0.09"				0.09"				0.08"				0.12"				0.11"				0.08"				0.08"			
6-Hour Temp	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm
Temp	51	68	67	58	53	65	66	56	54	65	65	56	54	67	67	54	51	64	65	53	50	62	63	52	50	61	61	52
Cloudiness	20%	18%	17%	17%	27%	29%	23%	35%	35%	24%	24%	22%	22%	14%	14%	11%	11%	13%	13%	14%	14%	16%	16%	76%	76%	17%	17%	27%
Dewpoint	38	37	41	37	32	33	47	46	41	42	45	39	33	33	42	39	34	35	43	40	35	37	47	45	40	41	48	41
Relative Humidity	57%	34%	39%	49%	45%	30%	51%	69%	62%	43%	48%	54%	46%	28%	40%	56%	51%	33%	46%	60%	56%	40%	58%	76%	69%	49%	61%	66%
Wind	E	SW	W	N	E	W	W	E	E	W	NW	E	E	E	NW	E	E	E	W	E	E	S	W	E	E	S	W	E
	3	2	3	1	5	1	2	3	3	3	2	5	7	7	5	6	8	1	6	3	3	2	6	5	5	3	5	2



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CA Lic #847034 A & B

RISK LEVEL 2 SITE INSPECTION REPORT

Owner: Scripps Mesa Developers
 Contractor: Garden Communities
 Job No./Project: 20623 Casa Mira View
 Site Address: 11195 Westview Parkway
 Cross Streets/Area: Mira Mesa, California
 Performed by: Michael P. Duff, JD
 Title: CESSWI, QSP #24369

WDID#: 9 37C353628
 Project Dates:
 Site Area: 3 acres
 Exposed Area: 100%
 Site Contact: Robin Robinson
 Contact Number:
 Report Date: 1/8/2014

Inspector Signature: _____

Michael Duff

Inspection Date: 1/8/2014

Time: 3:00 AM

Type of Inspection:

Additional Report:

Phase(s) of Construction: 1

2

Summary of Completed Activities

Weather & Rain Event Data Current:

Rain Gauge Reading:

End date of Last Rain Event: _____

Was it a Qualifying Rain Event (QRE)?

Today is Day of _____ predicted rain event days.

Cumulative Rain:

Is inspection during or after a QRE of .5" or more?

Number of QREs since July 1: _____

NOAA Forecast Chance of Precipitation

0%	Tuesday, January 07, 2014
0%	Wednesday, January 08, 2014
0%	Thursday, January 09, 2014
0%	Friday, January 10, 2014

0%	Saturday, January 11, 2014
0%	Sunday, January 12, 2014
0%	Monday, January 13, 2014
0%	Tuesday, January 14, 2014

Sampling
 Did first two hours of discharge occur during business hours?
 Was any storm water discharged from site?
 Were water samples taken?
 *If Yes, fill out and print Water Sample Report.

Estimated start of rain: _____
 During normal business hours? _____
 If NO, please explain: _____

SWPPP Questions

- a. Is there a SWPPP on-site?
- b. Is a Wall Map updated?
- c. Are structural controls installed per the SWPPP?
- d. If the SWPPP is not implemented, is there an effective combination of Erosion & Sediment control BMPs appropriate for the current stage of construction?
- e. Is there any leak, breach or malfunction to indicate non-visible pollutants?
- f. Did you observe any floating materials, oil, grease, odor, toxins, and/or sediment at any outfalls, discharge points, or downstream locations?

b2. Require updating?
 If Yes, plan for sampling at next rain.
 If Yes, sample and document.
 What was observed? _____

The following pages provide inspection observation results. Results are to be cross-referenced with attached photographs.

Soil Stabilization Items

- 1 Berms and Dikes
- 2 Slope protection
- 3 Vegetation
- 4 Surface erosion
- 5 Storage of Materials
- 6 Soil Stockpiles
- 7 Other Stockpiles
- 8 V-ditches & Slope Drains

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
1	X				EC-3, 6, 7, 8
2	X				EC-4
3	X				EC-2
4	X				WM-1, 2
5	X				WM-3
6	X				WM-3
7	X				SE-4, EC-11
8	X				

Sediment Control Items

- 9 Fiber Rolls / Straw Wattles
- 10 Check Dams
- 11 Burlap / Poly Rock Bags
- 12 Silt Fence
- 13 Drain Inlet Protection
- 14 Basins

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
9	X				SE-5
10	X				SE-4
11	X				SE-6
12	X				SE-1
13		X			SE-10
14	X				SE-2, 3

Wind Control Items

- 15 Dust Control

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
15	X				WE-1

Tracking Control Items

- 16 Construction Entrance
- 17 Tracking on Street

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
16	X				TC-1, 2, 3
17		X			SE-7

Good House Keeping & Waste Management Items

- 18 Debris Clean-up
- 19 Disposal Areas (Export Sites)
- 20 Spills or Leaks on Vehicles, Equipment or Materials
- 21 Portable Toilets and Septic
- 22 Dumpsters, Roll-Offs, Trash Receptacles
- 23 Concrete, Paint, Stucco Wash Outs

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
18		X			WM-5, 6
19	X				
20	X				WM-4,6,7,10
21	X				WM-9
22	X				WM-5
23	X				WM-8

Non-Stormwater Management BMP Items

- 24 Dewatering Operations
- 25 Paving or Grinding Operations
- 26 Concrete Curing/Finishing
- 27 Temporary Stream Crossing
- 28 Illicit Connection/Illegal Discharge Reporting
- 29 Vehicle and Equipment Cleaning
- 30 Vehicle and Equipment Fueling Area
- 31 Vehicle and Equipment Maintenance
- 32 Vehicle and Equipment Drip Pans
- 33 Spill Kits

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
24				X	NS-2
25				X	NS-3
26	X				NS-12, 14
27				X	NS-4
28	X				NS-6
29				X	NS-8
30	X				NS-9
31				X	NS-10
32	X				NS-10
33	X				WM-4

Non-Storm Water Management BMP Items

- g. Are materials and supplies in compliance with the SWPPP? _____
- h. Were damaged or dissipated materials removed from the site? _____
- i. Are appropriate spill response personnel trained? _____

Other

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP

Items Noted "Repairs Required" or "BMP Missing"

13	17	18							

CONTRACTOR: CORRECTIVE ACTIONS REQUIRED WITHIN 72 HOURS.

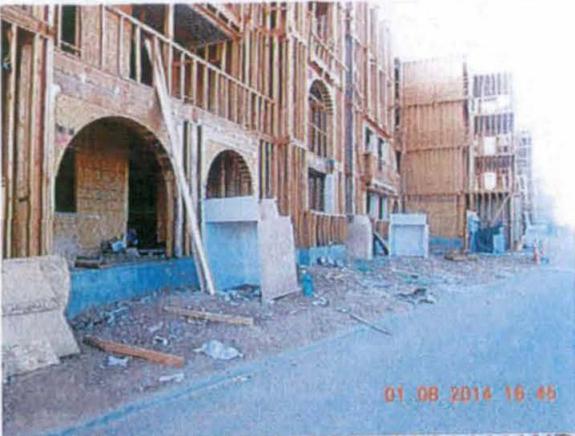
ITEM	Inspection Observation and Corrective Actions Summary	Assigned to	Date Completed
13	13. Maintain existing inlet protection. <i>BMP cleaned</i>	<i>a</i>	<i>1/9/2014</i>
Response:			
17	17. Sweep tracking as needed. Visually inspect daily. <i>Addressed daily by laborer</i>		
Response:			
18	18. Properly dispose of construction debris/trash. <i>Cleaning company cleaned all</i>		<i>1/10/14</i>
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			
Response:			

NOTE: Not all instances are necessarily photographed. All items apply throughout site.

Refer to the California Stormwater Quality Association (CASQA) Best Management Practices (BMP) Details and Cut Sheets in your SWPPP for installation, maintenance and usage standards.

Inspection Report Received by: *Brian Estow*
 Date: *1/9/14*

#18



#18



#18



#18



#18



#18



#18

Debris



#13

DRAIN INLET

#17 TRACKING



DAILY TIME SHEET

Date: 11/4/2014

#	Job Number	Job Name	Start Time	End Time	Less half hour lunch	Employees on site X = All marked below	See attached work order	Scope of Work Description	Quantity Loaded	Quantity Installed	Note number
	000	Shop	6:00	7:20		174 384					2
	200	DRT	7:20	7:45		174 384					
	20023	CeSA MIRA U. CV	7:45		X	174 384					

- TRUCKS**
- 3500
 - 150 4x4
 - F 150
 - F 4500
 - F 550
 - 5500
 - Tundra
 - D Truck
 - L 8000
 -

- GST EMPLOYEES LIST**
- | | | |
|---|--|--|
| <ul style="list-style-type: none"> <input type="checkbox"/> 105 Rogelio Abundis <input type="checkbox"/> 109 Javier Guzman <input type="checkbox"/> 126 Juan G. Luna <input type="checkbox"/> 141 Rodrigo Villanueva <input type="checkbox"/> 143 Roman Hernandez <input type="checkbox"/> 152 Shawn Asbell <input type="checkbox"/> 155 Carlos Rodriguez <input checked="" type="checkbox"/> 174 Eric Avila <input type="checkbox"/> 175 Luis Linares <input type="checkbox"/> 176 Luis Luna | <ul style="list-style-type: none"> <input type="checkbox"/> 236 Victor Abundis <input type="checkbox"/> 238 Pedro Hernandez <input type="checkbox"/> 249 Josiah Gorgas <input type="checkbox"/> 356 Victor Garcia <input type="checkbox"/> 378 Tony Hernandez <input type="checkbox"/> 381 Alejandro Hernandez <input type="checkbox"/> 382 Avery Foote <input type="checkbox"/> 383 Sean Ames <input checked="" type="checkbox"/> 384 Richard O'Reilly <input type="checkbox"/> | <ul style="list-style-type: none"> <input type="checkbox"/> |
|---|--|--|

- Scope of Work / Description**
- | | |
|--|--|
| <ul style="list-style-type: none"> DRT- Drive Time <input checked="" type="checkbox"/> TLD- Truck loading <input checked="" type="checkbox"/> TUL- Truck unloading SFM- Safety meeting TCU- Truck clean up TSF-Temporary silt fencing RSF-Reinforced silt fencing ESA- ESA fencing BGB- Burlap gravel bags PGB- Poly gravel bags | <ul style="list-style-type: none"> SBG- Sand bags FBR- Fiber rolls BLK- Blankets CEN- Construction entrance FFC- Filter fabric SDP- Storm drain inlet protection <input checked="" type="checkbox"/> SHW- Shop Work <input checked="" type="checkbox"/> HYD- Hydro seeding STS- Street Sweeping |
|--|--|

NOTES

went to put gas Isuzu

Crew Leader

name

Rental Equipment Used : (Job #)

Page: of

DAILY VEHICLE INSPECTION SHEET

Driver Richard
Vehicle ISUSA

Date 1-14-11 Time 6:20
Mileage 613573

The items on this inspection sheet should be checked daily. A separate sheet should be filled out for each vehicle driven. Example: If you drive vehicle #5500 and swap to #4500 during the day, 2 inspection sheets should be filled out for that day. These forms are due daily. Place an X by any item that needs attention. Place a check mark by the rest. Any discrepancies should be detailed on the bottom of this sheet.

- Ignition Key
- Fuel Key
- Check Radio
- Visual Inspection for Exterior Damage/Leaks under vehicle
- Check inside Engine compartment for Leaks/loose items
- Oil Level
- Washer Fluid Level
- Coolant Level
- Power Steering Fluid Level
- Start Engine and check Transmission Fluid Level (Fluid should be hot)
- Check for Air Gauge
- Check Tires for wear and pressure (70 PSI COLD) LF good LR good RF good RR good
- Check Horn
- Check Heater/Defroster
- Check Windshield Wipers/Washers
- Check Highlight/Signal lights/4way flashes/Tail lights/Backup lights/Horn
- Check Lift, run one Complete Cycle
- Check Interior lights
- Check Mirrors for damage and adjustments
- Check fuel level (Should Not be Less Than 1/4 Tank)
- Check Adequate tie-downs/Tie-down Tracks (must be clean)
- As you drive, continually check for any strange smells, sounds, vibrations, or Anything that does not feel right.

*Form to be completed and turned in to Operations Manager DAILY.

The following discrepancies were noted: low oil, ~~low oil~~, the gas not good need a new one, Low coolant, check engine light,

Driver's Signature: _____

Corrective action taken: _____



MISSION, EFFICIENCY, INTEGRATING DIVISION
 2280 Micro Place
 Escondido, CA 92029
 CA Lic. # 847034

WORK ORDER

DATE	JOB #	TRUCK:
1/14/2014	20623	18826

FILE

CONTRACTOR: Garden Communities

PROJECT NAME: Casa Mira View

ADDRESS: 11195 Westview Pkwy San Diego, CA

CONTACT NAME AND PHONE #: Rod 619-572-1114

CREW LEADER: Eric JOB START TIME: 7:45 LUNCH START: 12:00 LUNCH END: 12:30 JOB END TIME: 2:40

QTY LOADED	SCOPE OF WORK	QTY INSTALLED	QTY STOCKPILED ON SITE	QTY RETURNED TO SHOP
	Hydroseed	3 loads		

GST EMPLOYEES ONSITE:
Eric Avila
Paul Haslinger
Richard O'Reilly

NEED TO RETURN THE FOLLOWING DAY:
 YES NO
 OVERTIME APPROVED:
 OFFICE CONTACT: _____
 FIELD CONTACT: _____

RENTAL EQUIPMENT USED: T.330 Hydro seeder

NOTES:

RECEIVED BY [Signature] CREW LEADER: Eric Avila
 SIGNATURE: [Signature]

ROBIN G. ROBERTSON - CASA MIRA VIEW
 FOR BRIAN ESCOBAR



Ground Service Technology, Inc.

SWPPP/EROSION CONTROL DIVISION

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Phone 760-745-2010

Escondido, CA 92029

Fax 760-741-1363

www.erosioncontroller.com

CA Lic #847034 A & B

RISK LEVEL 2 SITE INSPECTION REPORT

Owner: Scripps Mesa Developers
 Contractor: Garden Communities
 Job No./Project: 20623 Casa Mira View
 Site Address: 11195 Westview Parkway
 Cross Streets/Area: Mira Mesa, California
 Performed by: Michael P. Duff, JD
 Title: CESSWI, QSP #24369

WDID#: 9 37C353628
 Project Dates:
 Site Area: 3 acres
 Exposed Area: 100%
 Site Contact: Robin Robinson
 Contact Number:
 Report Date: 1/15/2014

Inspector Signature: Michael Duff

Inspection Date: 1/15/2014

Time: 10:00 AM

Type of Inspection: Weekly Maintenance

Additional Report: NO

Phase(s) of Construction: 1 Grading/Land Devel.

2 Vertical Const.

Summary of Completed Activities

Weather & Rain Event Data Current: Clear

Rain Gauge Reading:

End date of Last Rain Event:

Was it a Qualifying Rain Event (QRE)? NO

Today is Day of predicted rain event days.

Cumulative Rain:

Is inspection during or after a QRE of .5" or more? NO

Number of QREs since July 1:

NOAA Forecast Chance of Precipitation

0%	Tuesday, January 14, 2014
0%	Wednesday, January 15, 2014
0%	Thursday, January 16, 2014
0%	Friday, January 17, 2014

0%	Saturday, January 18, 2014
0%	Sunday, January 19, 2014
0%	Monday, January 20, 2014
0%	Tuesday, January 21, 2014

Sampling
 Did first two hours of discharge occur during business hours?
 Was any storm water discharged from site?
 Were water samples taken?
 *If Yes, fill out and print Water Sample Report.

Estimated start of rain:
 During normal business hours?
 If NO, please explain:

SWPPP Questions

- a. Is there a SWPPP on-site?
- b. Is a Wall Map updated?
- c. Are structural controls installed per the SWPPP?
- d. If the SWPPP is not implemented, is there an effective combination of Erosion & Sediment control BMPs appropriate for the current stage of construction?
- e. Is there any leak, breach or malfunction to indicate non-visible pollutants?
- f. Did you observe any floating materials, oil, grease, odor, toxins, and/or sediment at any outfalls, discharge points, or downstream locations?

YES
YES b2. Require updating? NO

NO
NO If Yes, plan for sampling at next rain.
 If Yes, sample and document.
 What was observed?

The following pages provide inspection observation results. Results are to be cross-referenced with attached photographs.

Soil Stabilization Items

- 1 Berms and Dikes
- 2 Slope protection
- 3 Vegetation
- 4 Surface erosion
- 5 Storage of Materials
- 6 Soil Stockpiles
- 7 Other Stockpiles
- 8 V-ditches & Slope Drains

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
1	X				EC-3, 6, 7, 8
2	X				EC-4
3	X				EC-2
4	X				WM-1, 2
5	X				WM-3
6		X			WM-3
7	X				SE-4, EC-11
8	X				

Sediment Control Items

- 9 Fiber Rolls / Straw Wattles
- 10 Check Dams
- 11 Burlap / Poly Rock Bags
- 12 Silt Fence
- 13 Drain Inlet Protection
- 14 Basins

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
9	X				SE-5
10	X				SE-4
11	X				SE-6
12	X				SE-1
13	X				SE-10
14	X				SE-2, 3

Wind Control Items

- 15 Dust Control

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
15	X				WE-1

Tracking Control Items

- 16 Construction Entrance
- 17 Tracking on Street

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
16	X				TC-1, 2, 3
17	X				SE-7

Good House Keeping & Waste Management Items

- 18 Debris Clean-up
- 19 Disposal Areas (Export Sites)
- 20 Spills or Leaks on Vehicles, Equipment or Materials
- 21 Portable Toilets and Septic
- 22 Dumpsters, Roll-Offs, Trash Receptacles
- 23 Concrete, Paint, Stucco Wash Outs

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
18		X			WM-5, 6
19	X				
20	X				WM-4,6,7,10
21	X				WM-9
22		X			WM-5
23	X				WM-8

Non-Stormwater Management BMP Items

- 24 Dewatering Operations
- 25 Paving or Grinding Operations
- 26 Concrete Curing/Finishing
- 27 Temporary Stream Crossing
- 28 Illicit Connection/Illegal Discharge Reporting
- 29 Vehicle and Equipment Cleaning
- 30 Vehicle and Equipment Fueling Area
- 31 Vehicle and Equipment Maintenance
- 32 Vehicle and Equipment Drip Pans
- 33 Spill Kits

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
24				X	NS-2
25				X	NS-3
26	X				NS-12, 14
27				X	NS-4
28	X				NS-6
29				X	NS-8
30	X				NS-9
31				X	NS-10
32	X				NS-10
33	X				WM-4

Non-Storm Water Management BMP Items

- g. Are materials and supplies in compliance with the SWPPP? _____
- h. Were damaged or dissipated materials removed from the site? _____
- i. Are appropriate spill response personnel trained? _____

Other

Need LRP's original signature in SWPPP Book

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
		X			

Items Noted "Repairs Required" or "BMP Missing"

6	18	22							

CONTRACTOR: CORRECTIVE ACTIONS REQUIRED WITHIN 72 HOURS.

ITEM	Inspection Observation and Corrective Actions Summary	Assigned to	Date Completed
6	6. Cover and berm inactive soil stockpiles. - soil stockpile is active		
Response:			
18	18. Properly dispose of construction debris/trash. - on going site clean up occurring	1/15	
Response:			
22	22. Dumpsters need to be covered and the end of each workday and prior/during a rain event.	Daily	
Response:		↓	
0		end of	
Response:		day	
0			
Response:			
0			
Response:			
0			
Response:			
0			
Response:			

NOTE: Not all instances are necessarily photographed. All items apply throughout site.

Refer to the California Stormwater Quality Association (CASQA) Best Management Practices (BMP) Details and Cut Sheets in your SWPPP for installation, maintenance and usage standards.

Inspection Report Received by: Brian Eskow

Date: 1/15/14



#22
Domdster
Foll



#6
Stackpile



#18
Debris



#19
Debris

No Warnings or Advisories In Effect for this Point.
 For warnings and/or advisories in effect for adjacent areas to this point,
 see <http://www.wrh.noaa.gov/sgx>

Forecast For Lat/Lon: 32.9270/-117.1390 (Elev. 462 ft)
 San Diego-Mira Mesa CA

Forecast Created at: 8am PST Jan 15, 2014

Custom Weather Forecast Table

	Wed Jan 15				Thu Jan 16				Fri Jan 17				Sat Jan 18				Sun Jan 19				Mon Jan 20				Tue Jan 21			
Weather																												
Daily-Temp	High 82 Low 54				High 80 Low 58				High 78 Low 56				High 76 Low 52				High 75 Low 52				High 76 Low 51				High 77 Low 53			
Chance of Precip	0% 0%																											
Precip	0.00" 0.00"																											
12-hr Snow Total	0" 0"																											
FRET	0.20"				0.17"				0.16"				0.14"				0.13"				0.14"				0.16"			
6-Hour Temp	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm
Cloudiness	56	75	74	61	58	74	73	60	58	72	70	57	54	70	69	58	54	69	68	55	53	70	69	57	55	71	71	59
Dewpoint	20	24	29	23	26	28	27	24	18	19	31	24	20	22	31	31	23	23	30	32	25	23	30	30	24	24	31	31
Relative Humidity	24%	15%	18%	23%	29%	18%	18%	25%	21%	13%	23%	28%	27%	16%	25%	38%	30%	17%	24%	40%	34%	17%	23%	35%	30%	17%	23%	35%
Wind	E	S	E	E	E	W	N	E	E	SW	NW	E	E	SE	W	E	E	W	NW	E	E	E	NW	E	E	E	W	E
	9	2	7	6	10	6	5	9	7	6	2	7	8	3	5	7	6	3	3	8	6	3	5	8	9	5	3	5



Ground Service Technology, Inc.

SWPPP/EROSION CONTROL DIVISION

2280 Micro Place

Phone 760-745-2010

Escondido, CA 92029

Fax 760-741-1363

www.erosioncontroller.com

CA Lic #847034 A & B

RISK LEVEL 2 SITE INSPECTION REPORT

Owner: Scripps Mesa Developers
 Contractor: Garden Communities
 Job No./Project: 20623 Casa Mira View
 Site Address: 11195 Westview Parkway
 Cross Streets/Area: Mira Mesa, California
 Performed by: Michael P. Duff, JD
 Title: CESSWI, QSP #24369

WDID#: 9 37C353628
 Project Dates:
 Site Area: 3 acres
 Exposed Area: 100%
 Site Contact: Robin Robinson
 Contact Number:
 Report Date: 1/20/2014

Inspection Date: 1/20/2014

Time: 10:30 AM

Inspector Signature: Michael Duff

Type of Inspection: Weekly Maintenance

Additional Report: NO

Phase(s) of Construction: 1 Grading/Land Devel.

2 Vertical Const.

Summary of Completed Activities

Weather & Rain Event Data Current: Clear

Rain Gauge Reading:

End date of Last Rain Event:

Was it a Qualifying Rain Event (QRE)? NO

Today is Day of predicted rain event days.

Cumulative Rain:

Is inspection during or after a QRE of .5" or more? NO

Number of QREs since July 1:

NOAA Forecast Chance of Precipitation

0%	Sunday, January 19, 2014
0%	Monday, January 20, 2014
0%	Tuesday, January 21, 2014
0%	Wednesday, January 22, 2014

0%	Thursday, January 23, 2014
0%	Friday, January 24, 2014
0%	Saturday, January 25, 2014
0%	Sunday, January 26, 2014

Sampling
 Did first two hours of discharge occur during business hours?
 Was any storm water discharged from site?
 Were water samples taken?
 *If Yes, fill out and print Water Sample Report.

Estimated start of rain:
 During normal business hours?
 If NO, please explain:

SWPPP Questions

- a. Is there a SWPPP on-site?
- b. Is a Wall Map updated?
- c. Are structural controls installed per the SWPPP?
- d. If the SWPPP is not implemented, is there an effective combination of Erosion & Sediment control BMPs appropriate for the current stage of construction?
- e. Is there any leak, breach or malfunction to indicate non-visible pollutants?
- f. Did you observe any floating materials, oil, grease, odor, toxins, and/or sediment at any outfalls, discharge points, or downstream locations?

YES
YES b2. Require updating? NO
YES
NO If Yes, plan for sampling at next rain.
NO If Yes, sample and document.
 What was observed?

The following pages provide inspection observation results. Results are to be cross-referenced with attached photographs.

Soil Stabilization Items

- 1 Berms and Dikes
- 2 Slope protection
- 3 Vegetation
- 4 Surface erosion
- 5 Storage of Materials
- 6 Soil Stockpiles
- 7 Other Stockpiles
- 8 V-ditches & Slope Drains

	BMP Acceptable	Repairs Required	BMP	Missing	Not Applicable	CASQA BMP
1	X					EC-3, 6, 7, 8
2	X					EC-4
3	X					EC-2
4	X					WM-1, 2
5	X					WM-3
6	X					WM-3
7	X					SE-4, EC-11
8	X					

Sediment Control Items

- 9 Fiber Rolls / Straw Wattles
- 10 Check Dams
- 11 Burlap / Poly Rock Bags
- 12 Silt Fence
- 13 Drain Inlet Protection
- 14 Basins

	BMP Acceptable	Repairs Required	BMP	Missing	Not Applicable	CASQA BMP
9	X					SE-5
10	X					SE-4
11	X					SE-6
12	X					SE-1
13	X					SE-10
14	X					SE-2, 3

Wind Control Items

- 15 Dust Control

	BMP Acceptable	Repairs Required	BMP	Missing	Not Applicable	CASQA BMP
15	X					WE-1

Tracking Control Items

- 16 Construction Entrance
- 17 Tracking on Street

	BMP Acceptable	Repairs Required	BMP	Missing	Not Applicable	CASQA BMP
16	X					TC-1, 2, 3
17	X					SE-7

Good House Keeping & Waste Management Items

- 18 Debris Clean-up
- 19 Disposal Areas (Export Sites)
- 20 Spills or Leaks on Vehicles, Equipment or Materials
- 21 Portable Toilets and Septic
- 22 Dumpsters, Roll-Offs, Trash Receptacles
- 23 Concrete, Paint, Stucco Wash Outs

	BMP Acceptable	Repairs Required	BMP	Missing	Not Applicable	CASQA BMP
18		X				WM-5, 6
19	X					
20	X					WM-4,6,7,10
21	X					WM-9
22		X				WM-5
23	X					WM-8

Non-Stormwater Management BMP Items

- 24 Dewatering Operations
- 25 Paving or Grinding Operations
- 26 Concrete Curing/Finishing
- 27 Temporary Stream Crossing
- 28 Illicit Connection/Illegal Discharge Reporting
- 29 Vehicle and Equipment Cleaning
- 30 Vehicle and Equipment Fueling Area
- 31 Vehicle and Equipment Maintenance
- 32 Vehicle and Equipment Drip Pans
- 33 Spill Kits

	BMP Acceptable	Repairs Required	BMP	Missing	Not Applicable	CASQA BMP
24					X	NS-2
25					X	NS-3
26	X					NS-12, 14
27					X	NS-4
28	X					NS-6
29					X	NS-8
30	X					NS-9
31					X	NS-10
32	X					NS-10
33	X					WM-4

Non-Storm Water Management BMP Items

- g. Are materials and supplies in compliance with the SWPPP? _____
- h. Were damaged or dissipated materials removed from the site? _____
- i. Are appropriate spill response personnel trained? _____

Other

	BMP Acceptable	Repairs Required	BMP	Missing	Not Applicable	CASQA BMP

Items Noted "Repairs Required" or "BMP Missing"

18	22								
----	----	--	--	--	--	--	--	--	--

CONTRACTOR: CORRECTIVE ACTIONS REQUIRED WITHIN 72 HOURS.

ITEM	Inspection Observation and Corrective Actions Summary	Assigned to	Date Completed
18	18. Properly dispose of construction debris/trash.	Pacific Coast	1/20/2014
Response:			
22	22. Trash receptacles need to have lids or covers.	labored	1/31/14
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			
Response:			

NOTE: Not all instances are necessarily photographed. All items apply throughout site.

Refer to the California Stormwater Quality Association (CASQA) Best Management Practices (BMP) Details and Cut Sheets in your SWPPP for installation, maintenance and usage standards.

Inspection Report Received by: _____

Date: _____

B.C.H.
1/20/14

#18
Debris



#18
Debris



#18
Debris



#18
Debris



#22
TRASH
CANS
MUST
HAVE
LIDS



Debris
Clean up
in progress

Warnings and/or Advisories In Effect for this Point:

High Surf Advisory

For warnings and/or advisories in effect for adjacent areas to this point,

see <http://www.wrh.noaa.gov/sgx>

Forecast For Lat/Lon: 32.9270/-117.1390 (Elev. 462 ft)

San Diego-Mira Mesa CA

Forecast Created at: 6am PST Jan 20, 2014

Custom Weather Forecast Table

	Mon Jan 20				Tue Jan 21				Wed Jan 22				Thu Jan 23				Fri Jan 24				Sat Jan 25				Sun Jan 26							
Weather									Patchy Fog				Patchy Fog				Patchy Fog															
Daily-Temp	High 73 Low 52				High 78 Low 52				High 78 Low 55				High 69 Low 53				High 69 Low 51				High 69 Low 51				High 69 Low 52							
Chance of Precip	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Precip	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"
12-hr Snow Total	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"
FRET	0.12"				0.12"				0.11"				0.12"				0.10"				0.12"				0.11"							
6-Hour Temp	4am	10am	4pm	10pm	4am	10am	4pm	10pm																								
Cloudiness	31%	30%	31%	33%	37%	38%	41%	45%	44%	40%	25%	41%	41%	15%	15%	77%	77%	34%	34%	53%	53%	20%	20%	17%	17%	27%	27%	25%	27%	27%	25%	25%
Dewpoint	25	24	39	32	18	21	40	36	22	25	35	40	33	38	46	45	39	35	39	43	35	34	41	43	37	34	42	43	37	34	42	43
Relative Humidity	33%	20%	35%	40%	25%	15%	31%	41%	27%	17%	26%	50%	45%	38%	51%	70%	60%	33%	40%	63%	53%	33%	42%	62%	54%	33%	44%	63%	54%	33%	44%	63%
Wind	E	W	NW	E	E	W	NW	E	E	W	NW	SE	E	S	SW	E	E	W	W	E	E	E	E	E	E	E	E	E	E	SW	W	S
	6	3	6	3	7	1	3	5	6	2	2	7	7	6	7	5	6	2	6	6	8	7	6	7	6	2	6	3	6	2	6	3



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RISK LEVEL 2 SITE INSPECTION REPORT

Owner: Scripps Mesa Developers
 Contractor: Garden Communities
 Job No./Project: 20623 Casa Mira View
 Site Address: 11195 Westview Parkway
 Cross Streets/Area: Mira Mesa, California
 Performed by: Michael P. Duff, JD
 Title: CESSWI, QSP #24369

WDID#: 9 37C353628
 Project Dates:
 Site Area: 3 acres
 Exposed Area: 100%
 Site Contact: Robin Robinson
 Contact Number:
 Report Date: 1/29/2014

Inspection Date: 1/29/2014

Time: 8:30 AM

Inspector Signature: Michael Duff

Type of Inspection: Weekly Maintenance

Additional Report: NO

Phase(s) of Construction: 1 Grading/Land Devel.

2 Vertical Const.

Summary of Completed Activities

Weather & Rain Event Data Current: Clear

Rain Gauge Reading:

End date of Last Rain Event:

Was it a Qualifying Rain Event (QRE)? NO

Today is Day of predicted rain event days.

Cumulative Rain:

Is inspection during or after a QRE of .5" or more? NO

Number of QREs since July 1:

NOAA Forecast Chance of Precipitation

0%	Tuesday, January 28, 2014
0%	Wednesday, January 29, 2014
35%	Thursday, January 30, 2014
25%	Friday, January 31, 2014

10%	Saturday, February 01, 2014
10%	Sunday, February 02, 2014
10%	Monday, February 03, 2014
10%	Tuesday, February 04, 2014

Sampling Did first two hours of discharge occur during business hours?
 Was any storm water discharged from site?
 Were water samples taken?

Estimated start of rain:
 During normal business hours?
 If NO, please explain:

*If Yes, fill out and print Water Sample Report.

SWPPP Questions

- a. Is there a SWPPP on-site?
- b. Is a Wall Map updated?
- c. Are structural controls installed per the SWPPP?

YES
YES b2. Require updating? NO

- d. If the SWPPP is not implemented, is there an effective combination of Erosion & Sediment control BMPs appropriate for the current stage of construction?
- e. Is there any leak, breach or malfunction to indicate non-visible pollutants?
- f. Did you observe any floating materials, oil, grease, odor, toxins, and/or sediment at any outfalls, discharge points, or downstream locations?

YES
NO If Yes, plan for sampling at next rain.
NO If Yes, sample and document.
 What was observed?

The following pages provide inspection observation results. Results are to be cross-referenced with attached photographs.

Soil Stabilization Items

- 1 Berms and Dikes
- 2 Slope protection
- 3 Vegetation
- 4 Surface erosion
- 5 Storage of Materials
- 6 Soil Stockpiles
- 7 Other Stockpiles
- 8 V-ditches & Slope Drains

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
1	X				EC-3, 6, 7, 8
2	X				EC-4
3	X				EC-2
4	X				WM-1, 2
5	X				WM-3
6	X				WM-3
7		X			SE-4, EC-11
8	X				

Sediment Control Items

- 9 Fiber Rolls / Straw Wattles
- 10 Check Dams
- 11 Burlap / Poly Rock Bags
- 12 Silt Fence
- 13 Drain Inlet Protection
- 14 Basins

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
9		X			SE-5
10	X				SE-4
11		X			SE-6
12		X			SE-1
13	X				SE-10
14	X				SE-2, 3

Wind Control Items

- 15 Dust Control

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
15	X				WE-1

Tracking Control Items

- 16 Construction Entrance
- 17 Tracking on Street

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
16	X				TC-1, 2, 3
17		X			SE-7

Good House Keeping & Waste Management Items

- 18 Debris Clean-up
- 19 Disposal Areas (Export Sites)
- 20 Spills or Leaks on Vehicles, Equipment or Materials
- 21 Portable Toilets and Septic
- 22 Dumpsters, Roll-Offs, Trash Receptacles
- 23 Concrete, Paint, Stucco Wash Outs

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
18		X			WM-5, 6
19	X				
20	X				WM-4,6,7,10
21	X				WM-9
22		X			WM-5
23	X				WM-8

Non-Stormwater Management BMP Items

- 24 Dewatering Operations
- 25 Paving or Grinding Operations
- 26 Concrete Curing/Finishing
- 27 Temporary Stream Crossing
- 28 Illicit Connection/Illegal Discharge Reporting
- 29 Vehicle and Equipment Cleaning
- 30 Vehicle and Equipment Fueling Area
- 31 Vehicle and Equipment Maintenance
- 32 Vehicle and Equipment Drip Pans
- 33 Spill Kits

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
24				X	NS-2
25				X	NS-3
26	X				NS-12, 14
27				X	NS-4
28	X				NS-6
29				X	NS-8
30	X				NS-9
31				X	NS-10
32	X				NS-10
33	X				WM-4

Non-Storm Water Management BMP Items

- g. Are materials and supplies in compliance with the SWPPP? _____
- h. Were damaged or dissipated materials removed from the site? _____
- i. Are appropriate spill response personnel trained? _____

Other

22. empty full dumpsters

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
		X			

Items Noted "Repairs Required" or "BMP Missing"

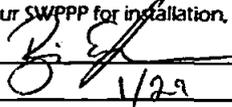
7	9	11	12	17	18	22			

CONTRACTOR: CORRECTIVE ACTIONS REQUIRED WITHIN 72 HOURS.

ITEM	Inspection Observation and Corrective Actions Summary	Assigned to	Date Completed
7	7. Remove or cover any concrete or misc. debris type stockpiles	JES	1/31
	Response:		
9	9. Maintain existing Fiber rolls/ Straw waddles per the CASQA standards.	labore	1/31
	Response:		
11	11. Replace damaged or broken Burlap/poly rock bags as needed.	labore	1/30/2014
	Response:		
12	12. Replace missing or damaged silt fence as needed.	labore	
	Response:		
17	17. Sweep tracking as needed. Visually Inspect daily.	labore	1/31
	Response:		
18	18. Properly dispose of construction debris/trash.	Reid/Cast	1/31
	Response:		
	Response:		
0			
	Response:		

NOTE: Not all instances are necessarily photographed. All items apply throughout site.

Refer to the California Stormwater Quality Association (CASQA) Best Management Practices (BMP) Details and Cut Sheets in your SWPPP for installation, maintenance and usage standards.

Inspection Report Received by: 
 Date: 1/29

#12
#14
fence



01.29.2014 09:58

#17
TRACKING



01.29.2014 09:57

#18
Debris



01.29.2014 09:50

#11
Replace
broken
bags



01.29.2014 09:58

#22
#14
umpster



01.29.2014 09:55

#18
Debris



01.29.2014 09:58

#7
concrete
stockpile



01.29.2014 09:57

#9
Replace
straw
waddle



01.29.2014 09:59

Warnings and/or Advisories In Effect for this Point:

[Dense Fog Advisory](#)

For warnings and/or advisories in effect for adjacent areas to this point, see <http://www.wrh.noaa.gov/sgx>

Forecast For Lat/Lon: 32.9270/-117.1390 (Elev. 462 ft)
San Diego-Mira Mesa CA

Forecast Created at: 7am PST Jan 29, 2014

Custom Weather Forecast Table

	Wed Jan 29				Thu Jan 30				Fri Jan 31				Sat Feb 01				Sun Feb 02				Mon Feb 03				Tue Feb 04							
Weather	Fog				Patchy Fog		Patchy Fog		Slight Chance Rain Showers		Chance Rain Showers						Slight Chance Rain Showers															
Daily-Temp	High 72 Low 51				High 64 Low 53				High 61 Low 51				High 64 Low 46				High 62 Low 43				High 59 Low 50				High 64 Low 46							
Chance of Precip	0%	0%	0%	0%	0%	0%	20%	35%	35%	25%	15%	10%	10%	10%	10%	5%	5%	10%	10%	10%	10%	20%	20%	10%	10%	10%	10%	10%	10%	5%		
Precip 12-hr	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.01"	0.02"	0.01"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"		
Snow Total	0"				0"				0"				0"				0"				0"											
FRET	0.08"				0.06"				0.08"				0.11"				0.08"				0.07"				0.09"							
6-Hour Temp	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm
Temp	52	65	67	56	54	60	61	53	51	58	57	49	46	58	59	47	44	56	59	52	50	56	56	48	46	58	61	52	46	58	61	52
Cloudiness	91%	14%	17%	100%	100%	84%	98%	100%	55%	42%	35%	39%	37%	37%	37%	50%	50%	43%	43%	50%	50%	44%	44%	57%	57%	42%	42%	53%	57%	42%	42%	53%
Dewpoint	42	45	47	49	47	50	55	53	51	46	43	45	42	36	39	44	40	38	45	47	45	40	45	46	38	34	43	46	38	34	43	46
Relative Humidity	69%	49%	48%	78%	80%	70%	81%	100%	98%	64%	60%	88%	84%	44%	48%	91%	86%	52%	60%	84%	80%	56%	67%	93%	73%	41%	52%	78%	73%	41%	52%	78%
Wind	NE	W	W	SE	SE	SE	W	W	W	W	W	E	E	SW	W	E	E	W	W	SE	E	W	W	E	E	W	W	E	E	W	W	E
Wind Speed	3	5	6	3	3	7	8	9	7	10	10	9	8	8	9	6	5	6	10	2	6	3	8	3	6	5	7	3	6	5	7	3
Snow Level (ft)					8860				8256 6941 6437 6214								4952 4952				0 0 0 0 0 0 0 0											



Ground Service Technology, Inc.

SWPPP/EROSION CONTROL DIVISION

2280 Micro Place

Phone 760-745-2010

Escondido, CA 92029

Fax 760-741-1363

www.erosioncontroller.com

CA Lic #847034 A & B

RISK LEVEL 2 SITE INSPECTION REPORT

Owner: Torrey Garden Hills
 Contractor: Garden Communities
 Job No./Project: 24243 Torrey Garden Hills
 Site Address: Calle Mar de Mariposa/ W. Ocean Dr.
 Cross Streets/Area: Del mar
 Performed by: Michael P. Duff, JD, CESSWI, QSP
 Title: QSP # 24369

WDID#: 9 37C362854
 Project Dates:
 Site Area: 8.4 Acres
 Exposed Area: 50%
 Site Contact: Rod Fink
 Contact Number: (619) 572-1114
 Report Date: 10/7/2013

Inspection Date: 10/7/2013

Time: 12:30 PM

Inspector Signature: _____

Type of Inspection:

Additional Report:

Phase(s) of Construction: 1 2

Summary of Completed Activities

Weather & Rain Event Data Current:

Rain Gauge Reading:

End date of Last Rain Event: _____

Was it a Qualifying Rain Event (QRE)? _____

Today is Day _____ of _____ predicted rain event days.

Cumulative Rain:

Is inspection during or after a QRE of .5" or more? _____

Number of QREs since July 1: _____

NOAA Forecast Chance of Precipitation

0%	Sunday, October 06, 2013
5%	Monday, October 07, 2013
10%	Tuesday, October 08, 2013
60%	Wednesday, October 09, 2013

20%	Thursday, October 10, 2013
0%	Friday, October 11, 2013
0%	Saturday, October 12, 2013
0%	Sunday, October 13, 2013

Sampling Did first two hours of discharge occur during business hours?
 Was any storm water discharged from site?
 Were water samples taken?

NO Estimated start of rain: _____
 NO During normal business hours? _____
 NO If NO, please explain: _____

*If Yes, fill out and print Water Sample Report.

SWPPP Questions

- a. Is there a SWPPP on-site?
- b. Is a Wall Map updated?
- c. Are structural controls installed per the SWPPP?
- d. If the SWPPP is not implemented, is there an effective combination of Erosion & Sediment control BMPs appropriate for the current stage of construction?
- e. Is there any leak, breach or malfunction to indicate non-visible pollutants?
- f. Did you observe any floating materials, oil, grease, odor, toxins, and/or sediment at any outfalls, discharge points, or downstream locations?

YES
 YES b2. Require updating?

YES
 NO If Yes, plan for sampling at next rain.
 NO If Yes, sample and document.
 What was observed? _____

The following pages provide inspection observation results. Results are to be cross-referenced with attached photographs.

Soil Stabilization Items

- 1 Berms and Dikes
- 2 Slope protection
- 3 Vegetation
- 4 Surface erosion
- 5 Storage of Materials
- 6 Soil Stockpiles
- 7 Other Stockpiles
- 8 V-ditches & Slope Drains

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
1				X	EC-3, 6, 7, 8
2	X				EC-4
3	X				EC-2
4	X				WM-1, 2
5	X				WM-3
6	X				WM-3
7	X				SE-4, EC-11
8	X				

Sediment Control Items

- 9 Fiber Rolls / Straw Wattles
- 10 Check Dams
- 11 Burlap / Poly Rock Bags
- 12 Silt Fence
- 13 Drain Inlet Protection
- 14 Basins

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
9	X				SE-5
10	X				SE-4
11	X				SE-6
12	X				SE-1
13	X				SE-10
14				X	SE-2, 3

Wind Control Items

- 15 Dust Control

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
15	X	X			WE-1

Tracking Control Items

- 16 Construction Entrance
- 17 Tracking on Street

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
16	X				TC-1, 2, 3
17		X			SE-7

Good House Keeping & Waste Management Items

- 18 Debris Clean-up
- 19 Disposal Areas (Export Sites)
- 20 Spills or Leaks on Vehicles, Equipment or Materials
- 21 Portable Toilets and Septic
- 22 Dumpsters, Roll-Offs, Trash Receptacles
- 23 Concrete, Paint, Stucco Wash Outs

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
18	X				WM-5, 6
19	X				
20	X				WM-4,6,7,10
21	X				WM-9
22		X			WM-5
23	X				WM-8

Non-Stormwater Management BMP Items

- 24 Dewatering Operations
- 25 Paving or Grinding Operations
- 26 Concrete Curing/Finishing
- 27 Temporary Stream Crossing
- 28 Illicit Connection/Illegal Discharge Reporting
- 29 Vehicle and Equipment Cleaning
- 30 Vehicle and Equipment Fueling Area
- 31 Vehicle and Equipment Maintenance
- 32 Vehicle and Equipment Drip Pans
- 33 Spill Kits

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
24				X	NS-2
25				X	NS-3
26	X				NS-12, 14
27				X	NS-4
28	X				NS-6
29				X	NS-8
30	X				NS-9
31	X				NS-10
32	X				NS-10
33	X				WM-4

Non-Storm Water Management BMP Items

- g. Are materials and supplies in compliance with the SWPPP? YES _____
- h. Were damaged or dissipated materials removed from the site? _____
- i. Are appropriate spill response personnel trained? YES _____

Other

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP

Items Noted 'Repairs Required' or 'BMP Missing'

15	17	22							

CONTRACTOR: CORRECTIVE ACTIONS REQUIRED WITHIN 72 HOURS.

ITEM	Inspection Observation and Corrective Actions Summary	Assigned to	Date Completed
15	15. Control dust by using an approved method.		
Response:			
17	17. Sweep tracking as needed. Visually inspect daily.		
Response:			
22	22. Dumpsters need to be covered and the end of each workday and prior/during a rain event.		
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			
Response:			

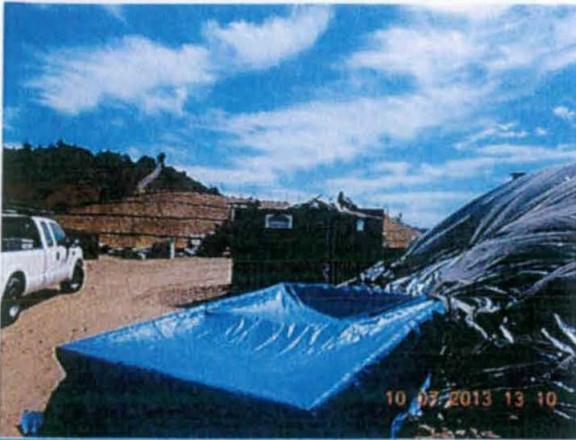
NOTE: Not all instances are necessarily photographed. All items apply throughout site.

Refer to the California Stormwater Quality Association (CASQA) Best Management Practices (BMP) Details and Cut Sheets in your SWPPP for installation, maintenance and usage standards.

Inspection Report Received by: _____

Date: _____

#22



Cover Dumpster
at end of Day
Prior to Rain

#15



Control
DUST.

#17



Sweep Tracking
when needed.

Warnings and/or Advisories in Effect for this Point:
Special Weather Statement
 For warnings and/or advisories in effect for adjacent areas to this point,
 see <http://www.wrh.noaa.gov/sgx>

Forecast For Lat/Lon: 32.9570/-117.2540 (Elev. 335 ft)
 Del Mar CA

Forecast Created at: 7am PDT Oct 7, 2013

Custom Weather Forecast Table

	Mon Oct 07				Tue Oct 08				Wed Oct 09				Thu Oct 10				Fri Oct 11				Sat Oct 12				Sun Oct 13											
Weather	Patchy Fog								Chance Rain	Chance Rain Showers	Likely Rain Showers	Chance Rain Showers	Slight Chance Rain Showers																							
Daily-Temp	High 74 Low 59				High 68 Low 59				High 63 Low 57				High 63 Low 55				High 67 Low 55				High 71 Low 67				High 70 Low 57											
Chance of Precip	0%	0%	0%	5%	5%	5%	5%	10%	25%	50%	60%	35%	20%	5%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
Precip	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.03"	0.07"	0.02"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"				
12-hr Snow Total	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"				
FRET	0.12"				0.09"				0.10"				0.11"				0.11"				0.11"															
6-Hour Temp	5am	11am	5pm	11pm	5am	11am	5pm	11pm	5am	11am	5pm	11pm	5am	11am	5pm	11pm	5am	11am	5pm	11pm	5am	11am	5pm	11pm	5am	11am	5pm	11pm	5am	11am	5pm	11pm	5am	11am	5pm	11pm
Cloudiness	29%	30%	27%	100%	100%	33%	76%	95%	98%	85%	92%	86%	67%	43%	43%	14%	14%	5%	5%	5%	5%	12%	12%	12%	12%	12%	8%	8%	8%	7%	7%	7%	7%			
Dewpoint	49	50	58	54	52	55	55	50	49	51	50	48	47	50	50	49	47	53	55	52	50	58	57	53	50	58	58	58	53	53	50	58	58	53		
Relative Humidity	67%	47%	63%	74%	75%	67%	70%	71%	74%	67%	69%	72%	74%	66%	68%	75%	73%	66%	72%	76%	76%	64%	70%	76%	76%	64%	70%	76%	76%	64%	70%	75%	75%			
Wind	SE	SW	W	S	SE	SW	SW	S	SW	SW	W	W	W	W	W	N	NE	W	W	N	NE	W	W	S	SE	W	W	W	W	W	W	N				
Snow Level (ft)	2	5	7	2	2	7	9	7	6	16	16	18	12	7	9	2	5	7	9	2	3	7	8	2	2	7	7	2	2	7	7	2				
									10160	7875	6619	5981	5802	6449	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			

CONTRACTOR: CORRECTIVE ACTIONS REQUIRED WITHIN 72 HOURS.

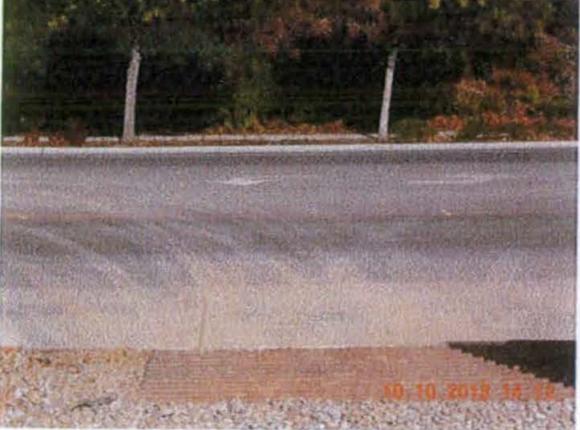
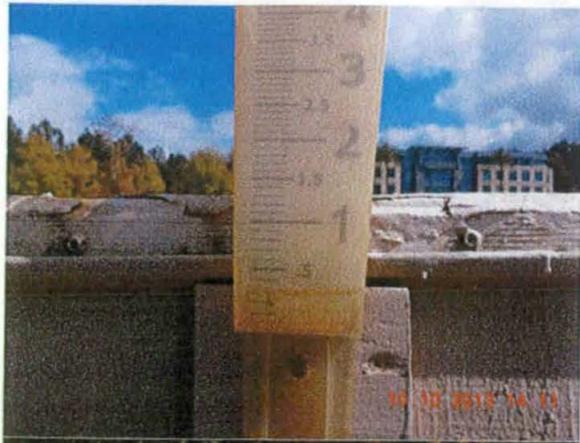
ITEM	Inspection Observation and Corrective Actions Summary	Assigned to	Date Completed
17	17. Sweep tracking as needed. Visually Inspect daily.		
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			

NOTE: Not all instances are necessarily photographed. All items apply throughout site.

Refer to the California Stormwater Quality Association (CASQA) Best Management Practices (BMP) Details and Cut Sheets in your SWPPP for installation, maintenance and usage standards.

Inspection Report Received by: _____

Date: _____



Soil Stabilization Items

- 1 Berms and Dikes
- 2 Slope protection
- 3 Vegetation
- 4 Surface erosion
- 5 Storage of Materials
- 6 Soil Stockpiles
- 7 Other Stockpiles
- 8 V-ditches & Slope Drains

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
1				X	EC-3, 6, 7, 8
2	X				EC-4
3	X				EC-2
4	X				WM-1, 2
5		X			WM-3
6	X				WM-3
7	X				SE-4, EC-11
8	X				

Sediment Control Items

- 9 Fiber Rolls / Straw Wattles
- 10 Check Dams
- 11 Burlap / Poly Rock Bags
- 12 Silt Fence
- 13 Drain Inlet Protection
- 14 Basins

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
9	X				SE-5
10	X				SE-4
11	X				SE-6
12	X				SE-1
13	X				SE-10
14				X	SE-2, 3

Wind Control Items

- 15 Dust Control

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
15	X				WE-1

Tracking Control Items

- 16 Construction Entrance
- 17 Tracking on Street

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
16	X				TC-1, 2, 3
17		X			SE-7

Good House Keeping & Waste Management Items

- 18 Debris Clean-up
- 19 Disposal Areas (Export Sites)
- 20 Spills or Leaks on Vehicles, Equipment or Materials
- 21 Portable Toilets and Septic
- 22 Dumpsters, Roll-Offs, Trash Receptacles
- 23 Concrete, Paint, Stucco Wash Outs

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
18		X			WM-5, 6
19	X				
20	X				WM-4,6,7,10
21	X				WM-9
22	X				WM-5
23	X				WM-8

Non-Stormwater Management BMP Items

- 24 Dewatering Operations
- 25 Paving or Grinding Operations
- 26 Concrete Curing/Finishing
- 27 Temporary Stream Crossing
- 28 Illicit Connection/Illegal Discharge Reporting
- 29 Vehicle and Equipment Cleaning
- 30 Vehicle and Equipment Fueling Area
- 31 Vehicle and Equipment Maintenance
- 32 Vehicle and Equipment Drip Pans
- 33 Spill Kits

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
24				X	NS-2
25				X	NS-3
26	X				NS-12, 14
27				X	NS-4
28	X				NS-6
29				X	NS-8
30	X				NS-9
31	X				NS-10
32	X				NS-10
33	X				WM-4

Non-Storm Water Management BMP Items

- g. Are materials and supplies in compliance with the SWPPP? _____
- h. Were damaged or dissipated materials removed from the site? _____
- i. Are appropriate spill response personnel trained? _____

Other

Hand held gas powered equipment needs to be stored upright.
 exposed trench outside property needs to be secured

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
		X			
		X			

Items Noted "Repairs Required" or "BMP Missing"

5	17	18							
---	----	----	--	--	--	--	--	--	--

CONTRACTOR: CORRECTIVE ACTIONS REQUIRED WITHIN 72 HOURS.

ITEM	Inspection Observation and Corrective Actions Summary	Assigned to	Date Completed
5	5. Liquid or powder type construction material needs to have secondary containment and should be covered.		
Response:			
17	17. Sweep tracking as needed. Visually inspect daily.		
Response:			
18	18. Properly dispose of construction debris/trash.		
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			
Response:			

NOTE: Not all instances are necessarily photographed. All items apply throughout site.

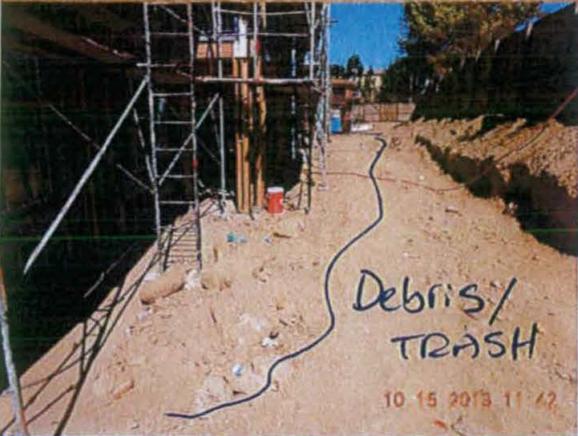
Refer to the California Stormwater Quality Association (CASQA) Best Management Practices (BMP) Details and Cut Sheets in your SWPPP for installation, maintenance and usage standards.

Inspection Report Received by: _____

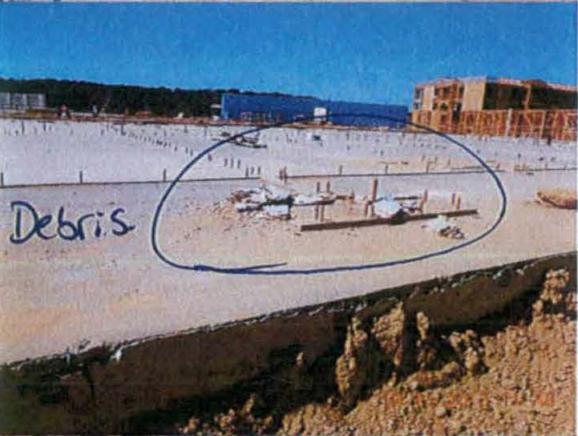
Date: _____



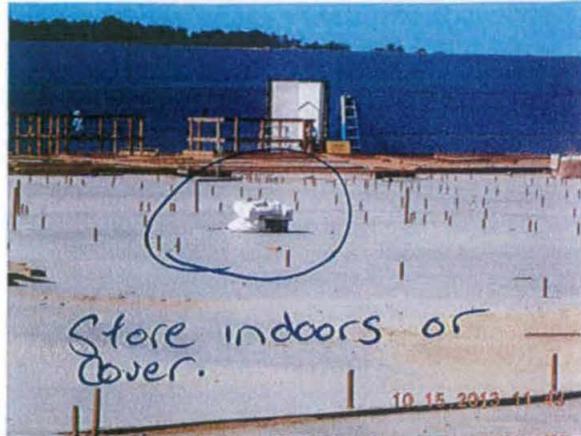
#18



#18



#17



#5



#18



Consider BMP's if exposed for a duration of time.

Soil Stabilization Items

- 1 Berms and Dikes
- 2 Slope protection
- 3 Vegetation
- 4 Surface erosion
- 5 Storage of Materials
- 6 Soil Stockpiles
- 7 Other Stockpiles
- 8 V-ditches & Slope Drains

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
1				X	EC-3, 6, 7, 8
2	X				EC-4
3	X				EC-2
4	X				WM-1, 2
5		X			WM-3
6	X				WM-3
7	X				SE-4, EC-11
8	X				

Sediment Control Items

- 9 Fiber Rolls / Straw Wattles
- 10 Check Dams
- 11 Burlap / Poly Rock Bags
- 12 Silt Fence
- 13 Drain Inlet Protection
- 14 Basins

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
9	X				SE-5
10	X				SE-4
11	X				SE-6
12	X				SE-1
13	X				SE-10
14				X	SE-2, 3

Wind Control Items

- 15 Dust Control

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
15	X				WE-1

Tracking Control Items

- 16 Construction Entrance
- 17 Tracking on Street

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
16	X				TC-1, 2, 3
17		X			SE-7

Good House Keeping & Waste Management Items

- 18 Debris Clean-up
- 19 Disposal Areas (Export Sites)
- 20 Spills or Leaks on Vehicles, Equipment or Materials
- 21 Portable Toilets and Septic
- 22 Dumpsters, Roll-Offs, Trash Receptacles
- 23 Concrete, Paint, Stucco Wash Outs

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
18		X			WM-5, 6
19	X				
20	X				WM-4,6,7,10
21	X				WM-9
22		X			WM-5
23	X				WM-8

Non-Stormwater Management BMP Items

- 24 Dewatering Operations
- 25 Paving or Grinding Operations
- 26 Concrete Curing/Finishing
- 27 Temporary Stream Crossing
- 28 Illicit Connection/Illegal Discharge Reporting
- 29 Vehicle and Equipment Cleaning
- 30 Vehicle and Equipment Fueling Area
- 31 Vehicle and Equipment Maintenance
- 32 Vehicle and Equipment Drip Pans
- 33 Spill Kits

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
24				X	NS-2
25				X	NS-3
26	X				NS-12, 14
27				X	NS-4
28	X				NS-6
29				X	NS-8
30	X				NS-9
31	X				NS-10
32	X				NS-10
33	X				WM-4

Non-Storm Water Management BMP Items

- g. Are materials and supplies in compliance with the SWPPP? _____
- h. Were damaged or dissipated materials removed from the site? _____
- i. Are appropriate spill response personnel trained? _____

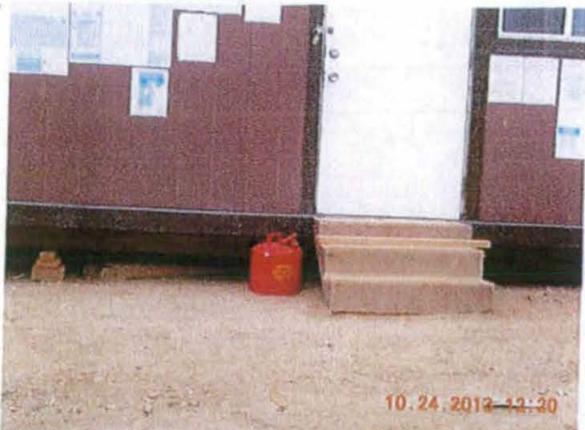
Other

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
		X			
		X			

Items Noted "Repairs Required" or "BMP Missing"

5	17	18	22						

#5



10.24.2013 12:20

#22



10.24.2013 12:28

#18



10.24.2013 12:23

#18



10.24.2013 12:26

#18



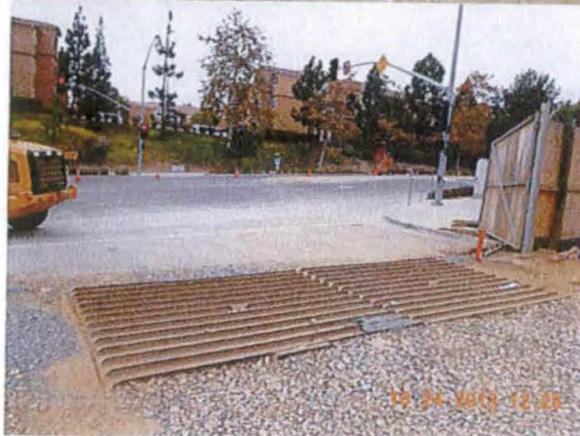
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#18



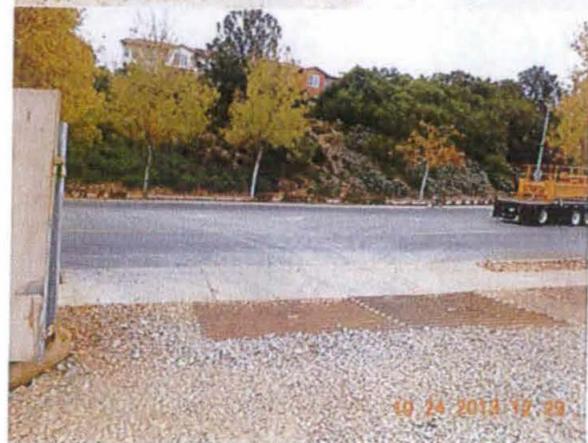
10.24.2013 12:27

#17



10.24.2013 12:25

#17



10.24.2013 12:29

No Warnings or Advisories In Effect for this Point.
 For warnings and/or advisories in effect for adjacent areas to this point,
 see <http://www.wrh.noaa.gov/sgx>

Forecast For Lat/Lon: 32.8410/-117.2590 (Elev. 348 ft)
 San Diego-La Jolla CA

Forecast Created at: 8am PDT Oct 24, 2013

Custom Weather Forecast Table

	Thu Oct 24				Fri Oct 25				Sat Oct 26				Sun Oct 27				Mon Oct 28			Tue Oct 29			Wed Oct 30									
Weather					Patchy Fog				Patchy Fog							Slight Chance Rain Showers			Chance Rain Showers			Slight Chance Rain Showers			Patchy Fog							
Daily-Temp	High 64 Low 58				High 65 Low 58				High 71 Low 58				High 72 Low 58				High 67 Low 57						High 64 Low 58			High 68 Low 55						
Chance of Precip	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	5%	10%	15%	30%	30%	20%	20%	15%	15%	5%	5%	0%	0%	0%	0%	
Precip	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"																
12-hr Snow Total	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"																
FRET	0.05"				0.07"				0.08"				0.09"				0.07"			0.08"			0.09"									
6-Hour Temp	5am	11am	5pm	11pm	5am	11am	5pm	11pm	5am	11am	5pm	11pm	5am	11am	5pm	11pm	5am	11am	5pm	11pm												
Cloudiness	58	63	62	59	58	64	63	58	56	69	67	60	58	70	68	60	57	66	64	58	58	63	62	57	55	66	65	58	58	65	64	52
Dewpoint	89%	73%	86%	97%	86%	48%	60%	86%	96%	31%	31%	86%	96%	19%	19%	100%	100%	55%	88%	100%	100%	67%	67%	75%	75%	28%	28%	52%	75%	28%	28%	52%
Relative Humidity	55	59	58	58	55	57	57	55	53	59	58	54	51	57	57	54	52	57	57	54	52	55	54	52	50	54	52	50	50	54	52	50
Wind	NW	N	NW	NW	N	NW	NW	N	N	NW	NW	N	N	W	W	W	SE	SW	W	W	W	SW	SW	W	N	E	W	W	N	W	W	N
Snow Level (ft)	3	5	8	8	5	6	7	3	3	7	5	2	3	5	8	2	1	8	13	10	10	10	8	3	7	8	10	5	0	0	0	0

Soil Stabilization Items

- 1 Berms and Dikes
- 2 Slope protection
- 3 Vegetation
- 4 Surface erosion
- 5 Storage of Materials
- 6 Soil Stockpiles
- 7 Other Stockpiles
- 8 V-ditches & Slope Drains

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
1				X	EC-3, 6, 7, 8
2	X				EC-4
3	X				EC-2
4	X				WM-1, 2
5	X				WM-3
6	X				WM-3
7	X				SE-4, EC-11
8	X				

Sediment Control Items

- 9 Fiber Rolls / Straw Wattles
- 10 Check Dams
- 11 Burlap / Poly Rock Bags
- 12 Silt Fence
- 13 Drain Inlet Protection
- 14 Basins

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
9	X				SE-5
10	X				SE-4
11	X				SE-6
12	X				SE-1
13	X				SE-10
14				X	SE-2, 3

Wind Control Items

- 15 Dust Control

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
15	X				WE-1

Tracking Control Items

- 16 Construction Entrance
- 17 Tracking on Street

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
16	X				TC-1, 2, 3
17		X			SE-7

Good House Keeping & Waste Management Items

- 18 Debris Clean-up
- 19 Disposal Areas (Export Sites)
- 20 Spills or Leaks on Vehicles, Equipment or Materials
- 21 Portable Toilets and Septic
- 22 Dumpsters, Roll-Offs, Trash Receptacles
- 23 Concrete, Paint, Stucco Wash Outs

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
18	X				WM-5, 6
19	X				
20	X				WM-4,6,7,10
21	X				WM-9
22	X				WM-5
23	X				WM-8

Non-Stormwater Management BMP Items

- 24 Dewatering Operations
- 25 Paving or Grinding Operations
- 26 Concrete Curing/Finishing
- 27 Temporary Stream Crossing
- 28 Illicit Connection/Illegal Discharge Reporting
- 29 Vehicle and Equipment Cleaning
- 30 Vehicle and Equipment Fueling Area
- 31 Vehicle and Equipment Maintenance
- 32 Vehicle and Equipment Drip Pans
- 33 Spill Kits

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
24				X	NS-2
25				X	NS-3
26	X				NS-12, 14
27				X	NS-4
28	X				NS-6
29				X	NS-8
30	X				NS-9
31	X				NS-10
32	X				NS-10
33	X				WM-4

Non-Storm Water Management BMP Items

- g. Are materials and supplies in compliance with the SWPPP? _____
- h. Were damaged or dissipated materials removed from the site? _____
- i. Are appropriate spill response personnel trained? _____

Other

No discharge observed or reported

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP

Items Noted 'Repairs Required' or 'BMP Missing'

17									
----	--	--	--	--	--	--	--	--	--

CONTRACTOR: CORRECTIVE ACTIONS REQUIRED WITHIN 72 HOURS.

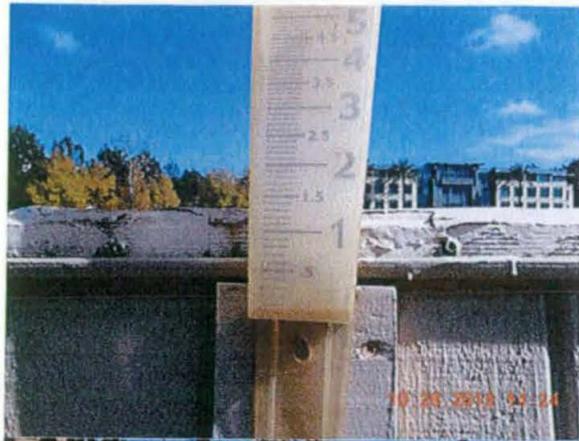
ITEM	Inspection Observation and Corrective Actions Summary	Assigned to	Date Completed
17	17. Sweep tracking as needed. Visually inspect daily.		
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			
Response:			

NOTE: Not all instances are necessarily photographed. All items apply throughout site.

Refer to the California Stormwater Quality Association (CASQA) Best Management Practices (BMP) Details and Cut Sheets in your SWPPP for installation, maintenance and usage standards.

Inspection Report Received by: _____

Date: _____





Ground Service Technology, Inc.

SWPPP/EROSION CONTROL DIVISION

2280 Micro Place

Phone 760-745-2010

Escondido, CA 92029

Fax 760-741-1363

www.erosioncontroller.com

CA Lic #847034 A & B

RISK LEVEL 2 SITE INSPECTION REPORT

Owner: Torrey Garden Hills
 Contractor: Garden Communities
 Job No./Project: 24243 Torrey Garden Hills
 Site Address: Calle Mar de Mariposa/ W. Ocean Dr.
 Cross Streets/Area: Del mar
 Performed by: Michael P. Duff, JD, CESSWI, QSP
 Title: QSP # 24369

WDID#: 9 37C362854
 Project Dates:
 Site Area: 8.4 Acres
 Exposed Area: 50%
 Site Contact: Rod Fink
 Contact Number: (619) 572-1114
 Report Date: 10/29/2013

Inspector Signature: Michael Duff

Inspection Date: 10/29/2013

Time: 2:30 PM

Type of Inspection: After Actual Storm Event

Additional Report: NO

Phase(s) of Construction: 1 Vertical Const.

2

Summary of Completed Activities

Weather & Rain Event Data Current: Clear

Rain Gauge Reading: 0.3

End date of Last Rain Event: _____

Was it a Qualifying Rain Event (QRE)? NO

Today is Day 1 of 1 predicted rain event days.

Cumulative Rain: 0.3

Is inspection during or after a QRE of .5" or more? NO

Number of QREs since July 1: 1

NOAA Forecast Chance of Precipitation

0%	Monday, October 28, 2013
25%	Tuesday, October 29, 2013
10%	Wednesday, October 30, 2013
0%	Thursday, October 31, 2013

0%	Friday, November 01, 2013
5%	Saturday, November 02, 2013
20%	Sunday, November 03, 2013
20%	Monday, November 04, 2013

Sampling Did first two hours of discharge occur during business hours? NO

Estimated start of rain: 12am

Was any storm water discharged from site? NO

During normal business hours? _____

Were water samples taken? NO

If NO, please explain: _____

*If Yes, fill out and print Water Sample Report.

SWPPP Questions

- a. Is there a SWPPP on-site?
- b. Is a Wall Map updated?
- c. Are structural controls installed per the SWPPP?

YES
YES b2. Require updating? NO

d. If the SWPPP is not implemented, is there an effective combination of Erosion & Sediment control BMPs appropriate for the current stage of construction?

YES
NO If Yes, plan for sampling at next rain.

e. Is there any leak, breach or malfunction to indicate non-visible pollutants?

NO If Yes, sample and document.

f. Did you observe any floating materials, oil, grease, odor, toxins, and/or sediment at any outfalls, discharge points, or downstream locations?

NO
 What was observed? _____

The following pages provide inspection observation results. Results are to be cross-referenced with attached photographs.

Soil Stabilization Items

- 1 Berms and Dikes
- 2 Slope protection
- 3 Vegetation
- 4 Surface erosion
- 5 Storage of Materials
- 6 Soil Stockpiles
- 7 Other Stockpiles
- 8 V-ditches & Slope Drains

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
1				x	EC-3, 6, 7, 8
2	x				EC-4
3	x				EC-2
4	x				WM-1, 2
5		x			WM-3
6	x				WM-3
7		x			SE-4, EC-11
8	x				

Sediment Control Items

- 9 Fiber Rolls / Straw Wattles
- 10 Check Dams
- 11 Burlap / Poly Rock Bags
- 12 Silt Fence
- 13 Drain Inlet Protection
- 14 Basins

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
9	x				SE-5
10	x				SE-4
11	x				SE-6
12	x				SE-1
13	x				SE-10
14				x	SE-2, 3

Wind Control Items

- 15 Dust Control

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
15	x				WE-1

Tracking Control Items

- 16 Construction Entrance
- 17 Tracking on Street

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
16	x				TC-1, 2, 3
17		x			SE-7

Good House Keeping & Waste Management Items

- 18 Debris Clean-up
- 19 Disposal Areas (Export Sites)
- 20 Spills or Leaks on Vehicles, Equipment or Materials
- 21 Portable Toilets and Septic
- 22 Dumpsters, Roll-Offs, Trash Receptacles
- 23 Concrete, Paint, Stucco Wash Outs

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
18		x			WM-5, 6
19	x				
20	x				WM-4,6,7,10
21	x				WM-9
22	x				WM-5
23	x				WM-8

Non-Stormwater Management BMP Items

- 24 Dewatering Operations
- 25 Paving or Grinding Operations
- 26 Concrete Curing/Finishing
- 27 Temporary Stream Crossing
- 28 Illicit Connection/Illegal Discharge Reporting
- 29 Vehicle and Equipment Cleaning
- 30 Vehicle and Equipment Fueling Area
- 31 Vehicle and Equipment Maintenance
- 32 Vehicle and Equipment Drip Pans
- 33 Spill Kits

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
24				x	NS-2
25				x	NS-3
26	x				NS-12, 14
27				x	NS-4
28	x				NS-6
29				x	NS-8
30	x				NS-9
31	x				NS-10
32		x			NS-10
33	x				WM-4

Non-Storm Water Management BMP Items

- g. Are materials and supplies in compliance with the SWPPP? _____
- h. Were damaged or dissipated materials removed from the site? _____
- i. Are appropriate spill response personnel trained? _____

Other

No discharge observed or reported

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP

Items Noted "Repairs Required" or "BMP Missing"

5	7	17	18	32					

CONTRACTOR: CORRECTIVE ACTIONS REQUIRED WITHIN 72 HOURS.

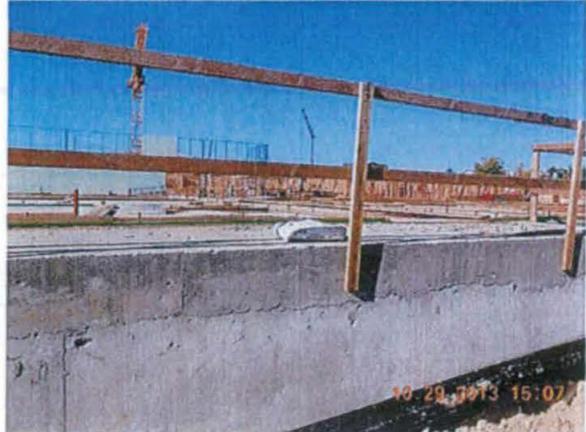
ITEM	Inspection Observation and Corrective Actions Summary	Assigned to	Date Completed
5	5. Bagged materials require palletization and to be covered if stored outdoors. Materials are not to be stored within 50' of s		
Response:			
7	7. Remove or cover any concrete or misc. debris type stockpiles		
Response:			
17	17. Sweep tracking as needed. Visually Inspect daily.		
Response:			
18	18. Properly dispose of construction debris/trash.		
Response:			
32	32. Place drip pans underneath stored and/or idle equipment.		
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			
Response:			

NOTE: Not all instances are necessarily photographed. All items apply throughout site.

Refer to the California Stormwater Quality Association (CASQA) Best Management Practices (BMP) Details and Cut Sheets in your SWPPP for installation, maintenance and usage standards.

Inspection Report Received by: _____

Date: _____



No Warnings or Advisories In Effect for this Point.
 For warnings and/or advisories in effect for adjacent areas to this point,
 see <http://www.wrh.noaa.gov/sgx>

Forecast For Lat/Lon: 32.9570/-117.2540 (Elev. 335 ft)
 Del Mar CA

Forecast Created at: 8am PDT Oct 29, 2013

Custom Weather Forecast Table

	Tue Oct 29				Wed Oct 30				Thu Oct 31				Fri Nov 01				Sat Nov 02				Sun Nov 03				Mon Nov 04								
Weather	Scattered Rain Showers	Chance Rain Showers	Chance Rain Showers	Chance Rain Showers	Patchy Fog													Patchy Fog					Slight Chance Rain										
Daily-Temp	High 63 Low 56				High 85 Low 52				High 70 Low 56				High 73 Low 57				High 71 Low 56				High 65 Low 55				High 63 Low 54								
Chance of Precip	50%	25%	25%	25%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	5%	5%	5%	20%	20%	10%	10%	5%					
Precip	0.08"	0.03"	0.06"	0.02"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"					
12-hr Snow Total	0"				0"				0"				0"				0"				0"				0"								
FRET	0.08"				0.09"				0.10"				0.10"				0.11"				0.07"				0.07"								
6-Hour Temp	5am 57	11am 60	5pm 61	11pm 57	5am 55	11am 61	5pm 63	11pm 59	5am 57	11am 65	5pm 66	11pm 59	5am 57	11am 66	5pm 69	11pm 60	5am 56	11am 65	5pm 67	11pm 60	5am 57	11am 61	5pm 62	11pm 57	5am 55	11am 60	5pm 62	11pm 57					
Cloudiness	70%	56%	48%	42%	43%	16%	5%	7%	7%	4%	3%	3%	3%	3%	3%	3%	3%	21%	21%	99%	99%	26%	26%	92%	92%	38%	38%	12%					
Dewpoint	51	51	51	51	50	51	52	52	49	50	51	52	49	49	51	51	49	50	52	53	52	53	53	53	51	51	52	53					
Relative Humidity	83%	71%	71%	83%	84%	70%	68%	79%	77%	58%	58%	76%	75%	54%	53%	72%	76%	58%	57%	76%	83%	73%	71%	85%	88%	73%	72%	86%					
Wind	W 8	W 6	W 8	N 5	E 6	N 3	W 8	NE 5	E 6	W 3	NW 7	N 3	E 6	E 6	NW 3	E 6	E 7	SW 5	W 8	E 3	E 6	SW 7	W 10	S 3	SE 7	SW 3	W 8	E 3					
Snow Level (ft)	5551	5848	6789	6603																									6403	6403	0	0	0

Soil Stabilization Items

- 1 Berms and Dikes
- 2 Slope protection
- 3 Vegetation
- 4 Surface erosion
- 5 Storage of Materials
- 6 Soil Stockpiles
- 7 Other Stockpiles
- 8 V-ditches & Slope Drains

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
1				X	EC-3, 6, 7, 8
2	X				EC-4
3	X				EC-2
4	X				WM-1, 2
5	X				WM-3
6		X			WM-3
7		X			SE-4, EC-11
8	X				

Sediment Control Items

- 9 Fiber Rolls / Straw Wattles
- 10 Check Dams
- 11 Burlap / Poly Rock Bags
- 12 Silt Fence
- 13 Drain Inlet Protection
- 14 Basins

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
9	X				SE-5
10	X				SE-4
11	X				SE-6
12	X				SE-1
13	X				SE-10
14				X	SE-2, 3

Wind Control Items

- 15 Dust Control

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
15	X				WE-1

Tracking Control Items

- 16 Construction Entrance
- 17 Tracking on Street

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
16	X				TC-1, 2, 3
17		X			SE-7

Good House Keeping & Waste Management Items

- 18 Debris Clean-up
- 19 Disposal Areas (Export Sites)
- 20 Spills or Leaks on Vehicles, Equipment or Materials
- 21 Portable Toilets and Septic
- 22 Dumpsters, Roll-Offs, Trash Receptacles
- 23 Concrete, Paint, Stucco Wash Outs

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
18		X			WM-5, 6
19	X				
20	X				WM-4,6,7,10
21	X				WM-9
22	X				WM-5
23	X				WM-8

Non-Stormwater Management BMP Items

- 24 Dewatering Operations
- 25 Paving or Grinding Operations
- 26 Concrete Curing/Finishing
- 27 Temporary Stream Crossing
- 28 Illicit Connection/Illegal Discharge Reporting
- 29 Vehicle and Equipment Cleaning
- 30 Vehicle and Equipment Fueling Area
- 31 Vehicle and Equipment Maintenance
- 32 Vehicle and Equipment Drip Pans
- 33 Spill Kits

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
24				X	NS-2
25				X	NS-3
26	X				NS-12, 14
27				X	NS-4
28	X				NS-6
29				X	NS-8
30	X				NS-9
31	X				NS-10
32	X				NS-10
33	X				WM-4

Non-Storm Water Management BMP Items

- g. Are materials and supplies in compliance with the SWPPP? _____
- h. Were damaged or dissipated materials removed from the site? _____
- i. Are appropriate spill response personnel trained? _____

Other

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP

Items Noted "Repairs Required" or "BMP Missing"

6	7	17	18						

CONTRACTOR: CORRECTIVE ACTIONS REQUIRED WITHIN 72 HOURS.

ITEM	Inspection Observation and Corrective Actions Summary	Assigned to	Date Completed
6	6. Cover and berm inactive soil stockpiles.		
Response:			
7	7. Remove or cover any concrete or misc. debris type stockpiles		
Response:			
17	17. Sweep tracking as needed. Visually inspect daily.		
Response:			
18	18. Properly dispose of construction debris/trash.		
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			
Response:			

NOTE: Not all instances are necessarily photographed. All items apply throughout site.

Refer to the California Stormwater Quality Association (CASQA) Best Management Practices (BMP) Details and Cut Sheets in your SWPPP for installation, maintenance and usage standards.

Inspection Report Received by: _____

Date: _____



Warnings and/or Advisories In Effect for this Point:

Beach Hazards Statement

Hazardous Weather Outlook

For warnings and/or advisories in effect for adjacent areas to this point,

see <http://www.wrh.noaa.gov/sgx>

Forecast For Lat/Lon: 32.8410/-117.2590 (Elev. 348 ft)

San Diego-La Jolla CA

Forecast Created at: 7am PST Nov 5, 2013

Custom Weather Forecast Table

Weather	Tue Nov 05				Wed Nov 06				Thu Nov 07				Fri Nov 08				Sat Nov 09				Sun Nov 10				Mon Nov 11											
									Patchy Fog																											
Daily-Temp	High 69 Low 54				High 75 Low 57				High 74 Low 58				High 87 Low 58				High 64 Low 56				High 68 Low 56				High 66 Low 56											
Chance of Precip	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	5%	5%	5%	5%	5%	5%	5%				
Precip	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"				
12-hr Snow Total	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"				
FRET	0.10"				0.12"				0.11"				0.08"				0.06"				0.07"				0.08"											
6-Hour Temp	4am	10am	4pm	10pm	4am	10am	4pm	10pm																												
Temp	55	67	66	59	58	72	70	61	59	72	69	61	59	68	64	58	57	63	62	58	57	64	63	58	57	64	63	58	57	64	63	58				
Cloudiness	5%	4%	5%	5%	4%	5%	8%	15%	18%	20%	16%	58%	67%	11%	11%	96%	96%	20%	20%	98%	98%	21%	21%	98%	98%	27%	27%	98%	98%	27%	27%	98%				
Dewpoint	51	37	42	40	36	36	44	43	37	40	47	50	47	50	54	53	51	53	54	53	52	52	53	52	49	49	51	51	49	49	51	51				
Relative Humidity	86%	34%	43%	49%	43%	26%	38%	50%	42%	31%	45%	68%	64%	58%	71%	84%	82%	69%	76%	84%	83%	63%	68%	80%	76%	56%	65%	78%	76%	56%	65%	78%				
Wind	NE	NW	NW	NE	E	W	N	SE	SE	NW	NW	SE	SE	W	W	S	SE	SW	SW	SW	SE	SW	SW	SW	SE	SW	W	SW	SE	SW	W	SW				
Snow Level (ft)	5	3	5	2	2	2	8	3	5	5	5	0	5	3	7	2	3	5	8	2	3	6	8	3	5	6	9	2	8926	8926	9138	9138	8697	8697		

Soil Stabilization Items

- 1 Berms and Dikes
- 2 Slope protection
- 3 Vegetation
- 4 Surface erosion
- 5 Storage of Materials
- 6 Soil Stockpiles
- 7 Other Stockpiles
- 8 V-ditches & Slope Drains

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
1				X	EC-3, 6, 7, 8
2	X				EC-4
3	X				EC-2
4	X				WM-1, 2
5	X				WM-3
6		X			WM-3
7		X			SE-4, EC-11
8	X				

Sediment Control Items

- 9 Fiber Rolls / Straw Wattles
- 10 Check Dams
- 11 Burlap / Poly Rock Bags
- 12 Silt Fence
- 13 Drain Inlet Protection
- 14 Basins

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
9	X				SE-5
10	X				SE-4
11	X				SE-6
12	X				SE-1
13	X				SE-10
14				X	SE-2, 3

Wind Control Items

- 15 Dust Control

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
15	X				WE-1

Tracking Control Items

- 16 Construction Entrance
- 17 Tracking on Street

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
16	X				TC-1, 2, 3
17		X			SE-7

Good House Keeping & Waste Management Items

- 18 Debris Clean-up
- 19 Disposal Areas (Export Sites)
- 20 Spills or Leaks on Vehicles, Equipment or Materials
- 21 Portable Toilets and Septic
- 22 Dumpsters, Roll-Offs, Trash Receptacles
- 23 Concrete, Paint, Stucco Wash Outs

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
18		X			WM-5, 6
19	X				
20	X				WM-4,6,7,10
21	X				WM-9
22		X			WM-5
23		X			WM-8

Non-Stormwater Management BMP Items

- 24 Dewatering Operations
- 25 Paving or Grinding Operations
- 26 Concrete Curing/Finishing
- 27 Temporary Stream Crossing
- 28 Illicit Connection/Illegal Discharge Reporting
- 29 Vehicle and Equipment Cleaning
- 30 Vehicle and Equipment Fueling Area
- 31 Vehicle and Equipment Maintenance
- 32 Vehicle and Equipment Drip Pans
- 33 Spill Kits

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
24				X	NS-2
25				X	NS-3
26	X				NS-12, 14
27				X	NS-4
28	X				NS-6
29				X	NS-8
30	X				NS-9
31	X				NS-10
32	X				NS-10
33	X				WM-4

Non-Storm Water Management BMP Items

- g. Are materials and supplies in compliance with the SWPPP? _____
- h. Were damaged or dissipated materials removed from the site? _____
- i. Are appropriate spill response personnel trained? _____

Other

- Repair S fence on north side
- keep soil from exting under fence on north side

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
		X			
		X			

Items Noted "Repairs Required" or "BMP Missing"

6	7	17	18	22	23					

CONTRACTOR: CORRECTIVE ACTIONS REQUIRED WITHIN 72 HOURS.

ITEM	Inspection Observation and Corrective Actions Summary	Assigned to	Date Completed
6	6. Cover and berm Inactive soil stockpiles.		
Response:			
7	7. Remove or cover any concrete or misc. debris type stockpiles		
Response:			
17	17. Sweep tracking as needed. Visually Inspect daily.		
Response:			
18	18. Properly dispose of construction debris/trash.		
Response:			
22	22. Dumpsters need to be covered and the end of each workday and prior/during a rain event.		
Response:			
23	23. Ensure appropriate washout facilities are provided per plan and CASQA BMP standards. Clean up trace washout per standards.		
Response:			
0			
Response:			
0			
Response:			

NOTE: Not all instances are necessarily photographed. All items apply throughout site.

Refer to the California Stormwater Quality Association (CASQA) Best Management Practices (BMP) Details and Cut Sheets in your SWPPP for installation, maintenance and usage standards.

Inspection Report Received by: _____

Date: _____

#17
JEEP
BACKING
elected



#7
Remove
Asphalt or
Cover.



#23



#6
Cover
Stockpile.



spair
INCE
SEP DIRT
DM EXITING
ider Fence.



#18
DEBRIS



#22
over
JUMPSTER
T END OF
JAY



#18
DEBRIS



No Warnings or Advisories In Effect for this Point.
 For warnings and/or advisories in effect for adjacent areas to this point,
 see <http://www.wrh.noaa.gov/sgx>

Forecast For Lat/Lon: 32.9570/-117.2540 (Elev. 335 ft)
 Del Mar CA

Forecast Created at: 10am PST Nov 12, 2013

Custom Weather Forecast Table

	Tue Nov 12				Wed Nov 13				Thu Nov 14				Fri Nov 15				Sat Nov 16				Sun Nov 17				Mon Nov 18			
Weather																	Slight Chance Rain Showers				Pachy Fog							
Daily-Temp	High 73 Low 55				High 80 Low 58				High 73 Low 59				High 70 Low 55				High 67 Low 53				High 65 Low 53				High 69 Low 55			
Chance of Precip	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	5%	5%	5%	5%	5%	5%	15%	15%	10%	10%	5%	5%	5%	5%	5%	5%
Precip	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"
12-hr Snow Total	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"
FRET	0.08"				0.11"				0.11"				0.08"				0.06"				0.06"				0.07"			
6-Hour Temp	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm												
Cloudiness	56	70	69	61	59	77	75	63	61	71	68	58	56	68	66	56	54	65	63	58	54	63	62	57	56	67	65	56
Dewpoint	52	50	51	53	49	46	51	54	52	46	55	52	48	49	56	52	48	50	55	53	49	50	55	52	49	49	56	48
Relative Humidity	88%	49%	53%	74%	69%	34%	43%	73%	72%	41%	63%	80%	73%	52%	70%	87%	80%	58%	75%	90%	83%	63%	75%	84%	77%	53%	72%	75%
Wind	N	NW	NW	NE	E	S	N	SE	E	S	S	S	S	W	W	E	SE	S	S	NE	NE	NW	W	E	E	W	NW	NE
Snow Level (ft)	5	6	10	3	6	3	8	7	7	9	8	10	12	6	7	6	6	8	8	1	5	1	5	6	6	3	7	6
																	7953	7953	0	0	0	0	0	0				



Ground Service Technology, Inc.
 SWPPP/EROSION CONTROL DIVISION
 2280 Micro Place Phone 760-745-2010
 Escondido, CA 92029 Fax 760-741-1363
 www.erosioncontroller.com CA Lic #847034 A & B

RISK LEVEL 2 SITE INSPECTION REPORT

Owner: Torrey Garden Hills
 Contractor: Garden Communities
 Job No./Project: 24243 Torrey Garden Hills
 Site Address: Calle Mar de Mariposa/ W. Ocean Dr.
 Cross Streets/Area: Del mar
 Performed by: WES UDWIN
 Title: QSP # 24185

WDID#: 9 37C362854
 Project Dates:
 Site Area: 8.4 Acres
 Exposed Area: 50%
 Site Contact: Rod Fink
 Contact Number: (619) 572-1114
 Report Date: 11/21/2013

Inspector Signature: [Signature]

Inspection Date: 11/21/2013
 Time: 12:00 PM

Type of Inspection: During Extended Storm Event Additional Report: NO

Phase(s) of Construction: 1 Vertical Const. 2

Summary of Completed Activities

Weather & Rain Event Data Current: Cloudy Rain Gauge Reading: .1"

End date of Last Rain Event: 10/29/13 Was it a Qualifying Rain Event (QRE)? YES

Today is Day 2 of 3 predicted rain event days. Cumulative Rain: .1"

Is inspection during or after a QRE of .5" or more? YES Number of QREs since July 1: 3

NOAA Forecast Chance of Precipitation

20%	Wednesday, November 20, 2013
70%	Thursday, November 21, 2013
70%	Friday, November 22, 2013
30%	Saturday, November 23, 2013

5%	Sunday, November 24, 2013
0%	Monday, November 25, 2013
0%	Tuesday, November 26, 2013
5%	Wednesday, November 27, 2013

Sampling
 Did first two hours of discharge occur during business hours?
 Was any storm water discharged from site?
 Were water samples taken?
 *If Yes, fill out and print Water Sample Report.

NO Estimated start of rain: 11/21/13 4AM
NO During normal business hours? No
NO If NO, please explain:

SWPPP Questions

- a. Is there a SWPPP on-site? YES
 - b. Is a Wall Map updated? YES b2. Require updating? NO
 - c. Are structural controls installed per the SWPPP?
 - d. If the SWPPP is not implemented, is there an effective combination of Erosion & Sediment control BMPs appropriate for the current stage of construction? YES
 - e. Is there any leak, breach or malfunction to indicate non-visible pollutants? NO If Yes, plan for sampling at next rain.
 - f. Did you observe any floating materials, oil, grease, odor, toxins, and/or sediment at any outfalls, discharge points, or downstream locations? NO If Yes, sample and document.
- What was observed?

The following pages provide inspection observation results. Results are to be cross-referenced with attached photographs.

Soil Stabilization Items

- 1 Berms and Dikes
- 2 Slope protection
- 3 Vegetation
- 4 Surface erosion
- 5 Storage of Materials
- 6 Soil Stockpiles
- 7 Other Stockpiles
- 8 V-ditches & Slope Drains

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
1				X	EC-3, 6, 7, 8
2	X				EC-4
3	X				EC-2
4	X				WM-1, 2
5	X				WM-3
6		X			WM-3
7		X			SE-4, EC-11
8	X				

Sediment Control Items

- 9 Fiber Rolls / Straw Wattles
- 10 Check Dams
- 11 Burlap / Poly Rock Bags
- 12 Silt Fence
- 13 Drain Inlet Protection
- 14 Basins

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
9	X				SE-5
10	X				SE-4
11	X				SE-6
12	X				SE-1
13	X				SE-10
14				X	SE-2, 3

Wind Control Items

- 15 Dust Control

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
15	X				WE-1

Tracking Control Items

- 16 Construction Entrance
- 17 Tracking on Street

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
16	X				TC-1, 2, 3
17	X				SE-7

Good House Keeping & Waste Management Items

- 18 Debris Clean-up
- 19 Disposal Areas (Export Sites)
- 20 Spills or Leaks on Vehicles, Equipment or Materials
- 21 Portable Toilets and Septic
- 22 Dumpsters, Roll-Offs, Trash Receptacles
- 23 Concrete, Paint, Stucco Wash Outs

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
18		X			WM-5, 6
19	X				
20	X				WM-4,6,7,10
21	X				WM-9
22		X			WM-5
23		X			WM-8

Non-Stormwater Management BMP Items

- 24 Dewatering Operations
- 25 Paving or Grinding Operations
- 26 Concrete Curing/Finishing
- 27 Temporary Stream Crossing
- 28 Illicit Connection/Illegal Discharge Reporting
- 29 Vehicle and Equipment Cleaning
- 30 Vehicle and Equipment Fueling Area
- 31 Vehicle and Equipment Maintenance
- 32 Vehicle and Equipment Drip Pans
- 33 Spill Kits

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
24				X	NS-2
25				X	NS-3
26	X				NS-12, 14
27				X	NS-4
28	X				NS-6
29				X	NS-8
30	X				NS-9
31	X				NS-10
32	X				NS-10
33	X				WM-4

Non-Storm Water Management BMP Items

- g. Are materials and supplies in compliance with the SWPPP? _____
- h. Were damaged or dissipated materials removed from the site? _____
- i. Are appropriate spill response personnel trained? _____

Other

- Repair S fence on north side
- keep soil from exting under fence on north side

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
		X			
		X			

Items Noted "Repairs Required" or "BMP Missing"

6	7	18	22	23					

CONTRACTOR: CORRECTIVE ACTIONS REQUIRED WITHIN 72 HOURS.

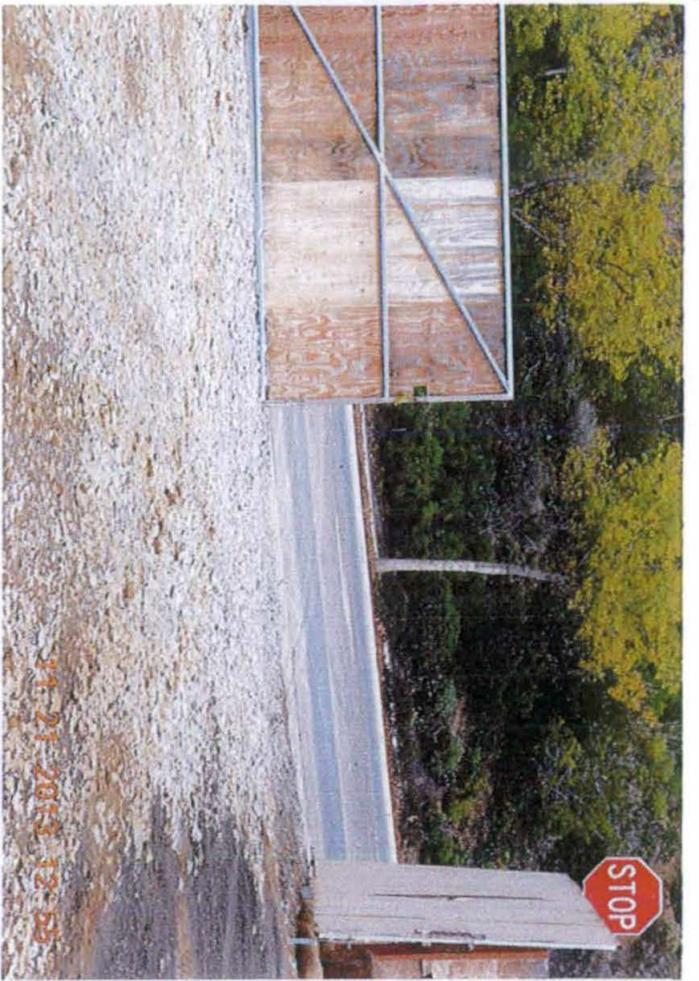
ITEM	Inspection Observation and Corrective Actions Summary	Assigned to	Date Completed
6	6. Cover and berm inactive soil stockpiles.		
Response:			
7	7. Remove or cover any concrete or misc. debris type stockpiles		
Response:			
0	N/A		
Response:			
18	18. Properly dispose of construction debris/trash.		
Response:			
22	22. Dumpsters need to be covered and the end of each workday and prior/during a rain event.		
Response:			
23	23. Ensure appropriate washout facilities are provided per plan and CASQA BMP standards. Clean up trace washout per standards.		
Response:			
0			
Response:			
0			
Response:			

NOTE: Not all instances are necessarily photographed. All items apply throughout site.

Refer to the California Stormwater Quality Association (CASQA) Best Management Practices (BMP) Details and Cut Sheets in your SWPPP for installation, maintenance and usage standards.

Inspection Report Received by: _____

Date: _____



11-21-2013 13:55



11-21-2013 12:54



11-21-2013 12:36

Warnings and/or Advisories In Effect for this Point:

[Hazardous Weather Outlook](#)

For warnings and/or advisories in effect for adjacent areas to this point,

see <http://www.wrh.noaa.gov/sgx>

Forecast For Lat/Lon: 32.8380/-117.2850 (Elev. 0 ft)

San Diego-La Jolla CA

Forecast Created at: 11am PST Nov 21, 2013

Custom Weather Forecast Table

	Thu Nov 21				Fri Nov 22				Sat Nov 23			Sun Nov 24			Mon Nov 25			Tue Nov 26			Wed Nov 27								
Weather	Rain Showers	Likely Rain Showers	Likely Rain Showers and TStorms	Chance Rain Showers and TStorms	Chance Rain Showers and TStorms	Slight Chance Rain Showers																							
Daily-Temp	High 63 Low 59				High 63 Low 58				High 63 Low 57			High 63 Low 57			High 63 Low 56			High 63 Low 57			High 63 Low 57								
Chance of Precip	95%	70%	70%	30%	30%	25%	25%	15%	15%	20%	20%	15%	15%	15%	5%	10%	10%	5%	5%	0%	0%	0%	0%	5%	5%	5%	5%	10%	
Precip	0.09"	0.13"	0.07"	0.06"	0.02"	0.05"	0.01"	0.02"	0.01"	0.01"	0.01"	0.02"	0.02"	0.00"															
12-hr Snow Total	0"			0"				0"		0"		0"		0"		0"													
FRET		0.06"				0.06"				0.06"				0.06"				0.06"				0.06"				0.05"			
6-Hour Temp	4am 59	10am 63	4pm 63	10pm 60	4am 58	10am 63	4pm 63	10pm 60	4am 57	10am 62	4pm 63	10pm 60	4am 57	10am 62	4pm 63	10pm 59	4am 56	10am 62	4pm 63	10pm 60	4am 57	10am 62	4pm 63	10pm 60	4am 57	10am 62	4pm 63	10pm 60	
Cloudiness	97%	85%	77%	87%	72%	55%	56%	56%	54%	52%	52%	43%	43%	32%	32%	18%	18%	15%	15%	34%	34%	21%	21%	35%	35%	44%	44%	91%	
Dewpoint	56	55	55	54	52	52	54	52	50	51	54	53	52	53	56	54	53	54	56	55	53	54	56	55	53	53	55	54	
Relative Humidity	91%	77%	76%	79%	80%	69%	72%	76%	79%	66%	72%	78%	83%	72%	78%	84%	89%	73%	78%	83%	86%	73%	78%	83%	87%	72%	76%	81%	
Wind	S 10	W 10	W 9	W 6	NE 3	SW 5	W 3	SE 5	E 6	NW 1	NW 7	NE 6	NE 6	E 6	N 7	NE 6	NE 5	N 2	NW 7	NE 5	E 5	E 3	N 3	NE 3	E 3	S 2	SW 5	SE 3	
Snow Level (ft)	8169	7694	6653	6151	5924	6030	6030	5906	5906	5859	5859	6047	6047	6201	6201														

No Warnings or Advisories In Effect for this Point.
 For warnings and/or advisories in effect for adjacent areas to this point,
 see <http://www.wrh.noaa.gov/sqx>

**Forecast For Lat/Lon: 32.8410/-117.2590 (Elev. 348 ft)
 San Diego-La Jolla CA**

Forecast Created at: 9am PDT Oct 15, 2013

Custom Weather Forecast Table

	Tue Oct 15				Wed Oct 16				Thu Oct 17				Fri Oct 18				Sat Oct 19				Sun Oct 20				Mon Oct 21							
Weather	Patchy Fog																Patchy Fog															
Daily-Temp	High 73 Low 56				High 78 Low 58				High 72 Low 57				High 72 Low 58				High 74 Low 58				High 73 Low 56				High 71 Low 58							
Chance of Precip	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Precip	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"
12-hr Snow Total	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"
FRET	0.10"				0.12"				0.13"				0.11"				0.13"				0.11"				0.11"							
6-Hour Temp	5am	11am	5pm	11pm	5am	11am	5pm	11pm																								
Cloudiness	0%	3%	4%	43%	33%	3%	5%	5%	7%	8%	28%	66%	66%	3%	3%	3%	3%	7%	7%	6%	6%	5%	5%	4%	4%	4%	4%	4%	5%	5%	5%	5%
Dewpoint	54	51	52	53	51	49	47	47	46	45	46	47	46	46	47	48	47	47	48	50	49	50	51	52	51	51	51	51	51	51	51	51
Relative Humidity	92%	50%	55%	81%	81%	39%	40%	61%	64%	41%	44%	61%	64%	42%	46%	68%	70%	41%	46%	70%	77%	48%	52%	77%	82%	52%	57%	78%	82%	52%	57%	78%
Wind	E	SW	W	NE	E	W	NW	E	E	W	NW	SE	E	W	NW	E	E	W	NW	E	E	W	W	E	E	W	W	E	E	W	W	E
	2	2	3	1	5	3	6	3	5	7	7	0	3	6	7	3	3	5	7	2	3	3	7	2	2	2	6	8	2	6	8	2

Soil Stabilization Items

- 1 Berms and Dikes
- 2 Slope protection
- 3 Vegetation
- 4 Surface erosion
- 5 Storage of Materials
- 6 Soil Stockpiles
- 7 Other Stockpiles
- 8 V-ditches & Slope Drains

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
1				X	EC-3, 6, 7, 8
2	X				EC-4
3	X				EC-2
4	X				WM-1, 2
5		X			WM-3
6	X				WM-3
7		X			SE-4, EC-11
8	X				

Sediment Control Items

- 9 Fiber Rolls / Straw Wattles
- 10 Check Dams
- 11 Burlap / Poly Rock Bags
- 12 Silt Fence
- 13 Drain Inlet Protection
- 14 Basins

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
9	X				SE-5
10	X				SE-4
11	X				SE-6
12		X			SE-1
13		X			SE-10
14				X	SE-2, 3

Wind Control Items

- 15 Dust Control

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
15	X				WE-1

Tracking Control Items

- 16 Construction Entrance
- 17 Tracking on Street

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
16	X				TC-1, 2, 3
17		X			SE-7

Good House Keeping & Waste Management Items

- 18 Debris Clean-up
- 19 Disposal Areas (Export Sites)
- 20 Spills or Leaks on Vehicles, Equipment or Materials
- 21 Portable Toilets and Septic
- 22 Dumpsters, Roll-Offs, Trash Receptacles
- 23 Concrete, Paint, Stucco Wash Outs

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
18		X			WM-5, 6
19	X				
20	X				WM-4,6,7,10
21	X				WM-9
22	X				WM-5
23	X				WM-8

Non-Stormwater Management BMP Items

- 24 Dewatering Operations
- 25 Paving or Grinding Operations
- 26 Concrete Curing/Finishing
- 27 Temporary Stream Crossing
- 28 Illicit Connection/Illegal Discharge Reporting
- 29 Vehicle and Equipment Cleaning
- 30 Vehicle and Equipment Fueling Area
- 31 Vehicle and Equipment Maintenance
- 32 Vehicle and Equipment Drip Pans
- 33 Spill Kits

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
24				X	NS-2
25				X	NS-3
26	X				NS-12, 14
27				X	NS-4
28	X				NS-6
29				X	NS-8
30	X				NS-9
31	X				NS-10
32	X				NS-10
33	X				WM-4

Non-Storm Water Management BMP Items

- g. Are materials and supplies in compliance with the SWPPP? _____
- h. Were damaged or dissipated materials removed from the site? _____
- i. Are appropriate spill response personnel trained? _____

Other

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP

Items Noted "Repairs Required" or "BMP Missing"

5	7	12	13	17	18					

CONTRACTOR: CORRECTIVE ACTIONS REQUIRED WITHIN 72 HOURS.

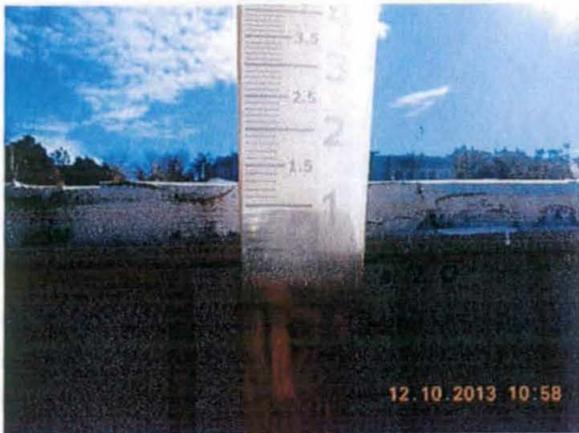
ITEM	Inspection Observation and Corrective Actions Summary	Assigned to	Date Completed
5	5. Liquid or powder type construction material needs to have secondary containment and should be covered.		
Response:			
7	7. Remove or cover any concrete or misc. debris type stockpiles		
Response:			
12	12. Replace missing or damaged silt fence as needed.		
Response:			
13	13. Maintain existing inlet protection.		
Response:			
17	17. Sweep tracking as needed. Visually inspect daily.		
Response:			
18	18. Properly dispose of construction debris/trash.		
Response:			
0			
Response:			
0			
Response:			

NOTE: Not all instances are necessarily photographed. All items apply throughout site.

Refer to the California Stormwater Quality Association (CASQA) Best Management Practices (BMP) Details and Cut Sheets in your SWPPP for installation, maintenance and usage standards.

Inspection Report Received by: _____

Date: _____



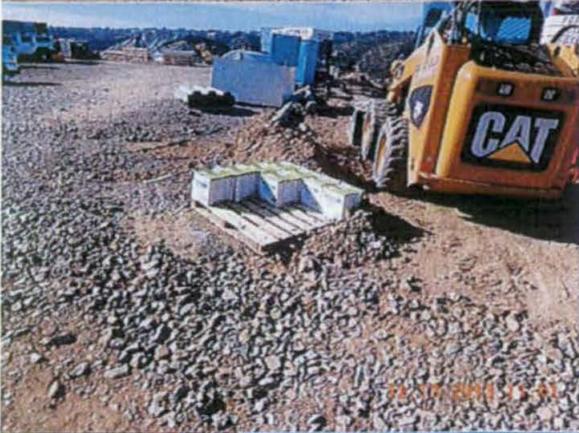
#18
Debris



#18
Debris



#18
Debris



5



#18
Debris



#18
Debris



#13
Clean
around
Drain
Inlet

#19
Debris



Remove
Debris
FROM
Silt
fence.
#12

#5



Concrete
Stockpile
#7

#12



Silt fence.

#18



Debris

Soil Stabilization Items

- 1 Berms and Dikes
- 2 Slope protection
- 3 Vegetation
- 4 Surface erosion
- 5 Storage of Materials
- 6 Soil Stockpiles
- 7 Other Stockpiles
- 8 V-ditches & Slope Drains

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
1				X	EC-3, 6, 7, 8
2	X				EC-4
3	X				EC-2
4	X				WM-1, 2
5	X				WM-3
6	X				WM-3
7	X				SE-4, EC-11
8	X				

Sediment Control Items

- 9 Fiber Rolls / Straw Wattles
- 10 Check Dams
- 11 Burlap / Poly Rock Bags
- 12 Silt Fence
- 13 Drain Inlet Protection
- 14 Basins

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
9	X				SE-5
10	X				SE-4
11	X				SE-6
12		X			SE-1
13	X				SE-10
14				X	SE-2, 3

Wind Control Items

- 15 Dust Control

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
15	X				WE-1

Tracking Control Items

- 16 Construction Entrance
- 17 Tracking on Street

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
16		X			TC-1, 2, 3
17		X			SE-7

Good House Keeping & Waste Management Items

- 18 Debris Clean-up
- 19 Disposal Areas (Export Sites)
- 20 Spills or Leaks on Vehicles, Equipment or Materials
- 21 Portable Toilets and Septic
- 22 Dumpsters, Roll-Offs, Trash Receptacles
- 23 Concrete, Paint, Stucco Wash Outs

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
18		X			WM-5, 6
19	X				
20	X				WM-4,6,7,10
21	X				WM-9
22		X			WM-5
23	X				WM-8

Non-Stormwater Management BMP Items

- 24 Dewatering Operations
- 25 Paving or Grinding Operations
- 26 Concrete Curing/Finishing
- 27 Temporary Stream Crossing
- 28 Illicit Connection/Illegal Discharge Reporting
- 29 Vehicle and Equipment Cleaning
- 30 Vehicle and Equipment Fueling Area
- 31 Vehicle and Equipment Maintenance
- 32 Vehicle and Equipment Drip Pans
- 33 Spill Kits

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
24				X	NS-2
25				X	NS-3
26	X				NS-12, 14
27				X	NS-4
28	X				NS-6
29				X	NS-8
30	X				NS-9
31	X				NS-10
32	X				NS-10
33	X				WM-4

Non-Storm Water Management BMP Items

- g. Are materials and supplies in compliance with the SWPPP? _____
- h. Were damaged or dissipated materials removed from the site? _____
- i. Are appropriate spill response personnel trained? _____

Other

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP

Items Noted "Repairs Required" or "BMP Missing"

12	16	17	18	22						

CONTRACTOR: CORRECTIVE ACTIONS REQUIRED WITHIN 72 HOURS.

ITEM	Inspection Observation and Corrective Actions Summary	Assigned to	Date Completed
12	12. Replace missing or damaged silt fence as needed.		
Response:			
16	16. Maintain your existing construction entrances.		
Response:			
17	17. Sweep tracking as needed. Visually inspect daily.		
Response:			
18	18. Properly dispose of construction debris/trash.		
Response:			
22	22. Trash receptacles need to have lids or covers.		
Response:			
0			
Response:			
0			
Response:			
0			
Response:			

NOTE: Not all instances are necessarily photographed. All items apply throughout site.

Refer to the California Stormwater Quality Association (CASQA) Best Management Practices (BMP) Details and Cut Sheets in your SWPPP for installation, maintenance and usage standards.

Inspection Report Received by: _____

Date: _____

#18
Lubris



12.16.2013 10:52



* Good Job
w/ Clean up

12.16.2013 10:52

#18
Debris



12.16.2013 10:51



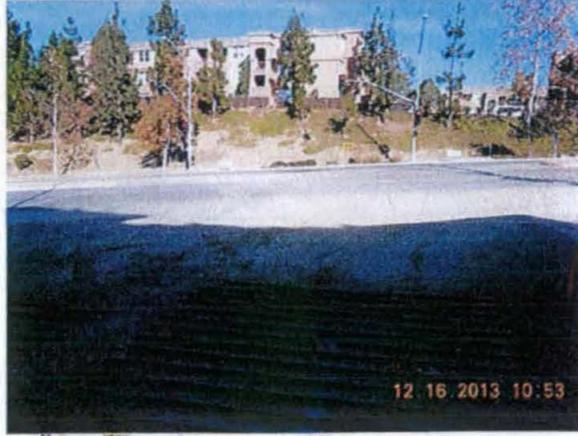
#22
Trash
Can

12.16.2013 10:53

#18
Debris



12.16.2013 10:51



#17
Tracking

12.16.2013 10:53

#18
Debris



12.16.2013 10:52



#16
Entrance

12.16.2013 10:53

#18
Debris



#18
Debris



#18/
#22
Debris
Rash
PAN Lid.



#12
Silt
Fence



#18
Debris



Warnings and/or Advisories In Effect for this Point:
Beach Hazards Statement
 For warnings and/or advisories in effect for adjacent areas to this point,
 see <http://www.wrh.noaa.gov/sax>

Forecast For Lat/Lon: 32.8410/-117.2690 (Elev. 348 ft)
 San Diego-La Jolla CA

Forecast Created at: 8am PST Dec 16, 2013

Custom Weather Forecast Table

	Mon Dec 16				Tue Dec 17				Wed Dec 18				Thu Dec 19				Fri Dec 20				Sat Dec 21				Sun Dec 22									
Weather																	Patchy Fog	Slight Chance Rain Showers																
Daily-Temp	High 75 Low 56				High 70 Low 55				High 62 Low 53				High 58 Low 49				High 60 Low 47				High 63 Low 49				High 65 Low 50									
Chance of Precip	0% 0% 0% 0%				0% 0% 0% 0%				0% 0% 0% 15%				25% 40% 40% 30%				30% 10% 10% 10%				10% 5% 5% 5%				5% 0% 0% 0%									
Precip	0.00" 0.00" 0.00" 0.00"				0.00" 0.00" 0.00" 0.00"				0.00" 0.00" 0.00" 0.00"				0.04" 0.11" 0.04"																					
12-hr Snow Total	0"				0"				0"				0"				0"				0"													
FRET	0.09"				0.08"				0.05"				0.05"				0.06"				0.07"				0.07"									
6-Hour Temp	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm						
Temp	56	72	70	60	55	68	66	58	53	61	59	53	49	57	55	50	47	58	57	52	49	61	60	54	50	63	61	55						
Cloudiness	37%	35%	35%	34%	36%	37%	35%	32%	81%	43%	71%	87%	91%	80%	90%	63%	63%	40%	40%	33%	33%	38%	38%	30%	30%	21%	21%	16%						
Dewpoint	28	22	37	39	32	35	44	45	40	41	49	51	47	47	49	47	41	40	45	44	39	40	46	46	41	43	49	48						
Relative Humidity	34%	15%	30%	45%	41%	30%	46%	63%	81%	48%	71%	96%	91%	68%	79%	88%	79%	51%	64%	75%	69%	46%	61%	75%	69%	49%	63%	79%						
Wind	E	W	N	SE	SE	S	S	SE	S	SW	W	S	S	S	S	SE	E	NW	NW	NE	NE	NE	N	NE	SE	E	E	E						
Wind	3	2	3	3	3	1	2	2	2	5	3	7	7	8	9	5	5	2	7	3	5	6	6	3	5	5	7	8						
Snow Level (ft)																	7581	6647	4905	4905	4569	4569	5557	5557	6292	6292	6292	7322	7322	7873	7873	8244	8244	0

Soil Stabilization Items

- 1 Berms and Dikes
- 2 Slope protection
- 3 Vegetation
- 4 Surface erosion
- 5 Storage of Materials
- 6 Soil Stockpiles
- 7 Other Stockpiles
- 8 V-ditches & Slope Drains

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
1				X	EC-3, 6, 7, 8
2	X				EC-4
3	X				EC-2
4	X				WM-1, 2
5	X				WM-3
6	X				WM-3
7	X				SE-4, EC-11
8	X				

Sediment Control Items

- 9 Fiber Rolls / Straw Wattles
- 10 Check Dams
- 11 Burlap / Poly Rock Bags
- 12 Silt Fence
- 13 Drain Inlet Protection
- 14 Basins

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
9	X				SE-5
10	X				SE-4
11	X				SE-6
12	X				SE-1
13	X				SE-10
14				X	SE-2, 3

Wind Control Items

- 15 Dust Control

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
15	X				WE-1

Tracking Control Items

- 16 Construction Entrance
- 17 Tracking on Street

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
16	X				TC-1, 2, 3
17		X			SE-7

Good House Keeping & Waste Management Items

- 18 Debris Clean-up
- 19 Disposal Areas (Export Sites)
- 20 Spills or Leaks on Vehicles, Equipment or Materials
- 21 Portable Toilets and Septic
- 22 Dumpsters, Roll-Offs, Trash Receptacles
- 23 Concrete, Paint, Stucco Wash Outs

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
18	X				WM-5, 6
19	X				
20	X				WM-4,6,7,10
21	X				WM-9
22	X				WM-5
23	X				WM-8

Non-Stormwater Management BMP Items

- 24 Dewatering Operations
- 25 Paving or Grinding Operations
- 26 Concrete Curing/Finishing
- 27 Temporary Stream Crossing
- 28 Illicit Connection/Illegal Discharge Reporting
- 29 Vehicle and Equipment Cleaning
- 30 Vehicle and Equipment Fueling Area
- 31 Vehicle and Equipment Maintenance
- 32 Vehicle and Equipment Drip Pans
- 33 Spill Kits

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
24				X	NS-2
25				X	NS-3
26	X				NS-12, 14
27				X	NS-4
28	X				NS-6
29				X	NS-8
30	X				NS-9
31	X				NS-10
32	X				NS-10
33	X				WM-4

Non-Storm Water Management BMP Items

- g. Are materials and supplies in compliance with the SWPPP? _____
- h. Were damaged or dissipated materials removed from the site? _____
- i. Are appropriate spill response personnel trained? _____

Other

No discharge observed or reported

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP

Items Noted "Repairs Required" or "BMP Missing"

17									
----	--	--	--	--	--	--	--	--	--

CONTRACTOR: CORRECTIVE ACTIONS REQUIRED WITHIN 72 HOURS.

ITEM	Inspection Observation and Corrective Actions Summary	Assigned to	Date Completed
17	17. Sweep tracking as needed. Visually inspect daily.		
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			
Response:			

NOTE: Not all instances are necessarily photographed. All items apply throughout site.

Refer to the California Stormwater Quality Association (CASQA) Best Management Practices (BMP) Details and Cut Sheets in your SWPPP for installation, maintenance and usage standards.

Inspection Report Received by: _____

Date: _____



Soil Stabilization Items

- 1 Berms and Dikes
- 2 Slope protection
- 3 Vegetation
- 4 Surface erosion
- 5 Storage of Materials
- 6 Soil Stockpiles
- 7 Other Stockpiles
- 8 V-ditches & Slope Drains

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
1				X	EC-3, 6, 7, 8
2	X				EC-4
3	X				EC-2
4	X				WM-1, 2
5	X				WM-3
6	X				WM-3
7	X				SE-4, EC-11
8	X				

Sediment Control Items

- 9 Fiber Rolls / Straw Wattles
- 10 Check Dams
- 11 Burlap / Poly Rock Bags
- 12 Silt Fence
- 13 Drain Inlet Protection
- 14 Basins

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
9	X				SE-5
10	X				SE-4
11	X				SE-6
12		X			SE-1
13	X				SE-10
14				X	SE-2, 3

Wind Control Items

- 15 Dust Control

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
15	X				WE-1

Tracking Control Items

- 16 Construction Entrance
- 17 Tracking on Street

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
16	X				TC-1, 2, 3
17		X			SE-7

Good House Keeping & Waste Management Items

- 18 Debris Clean-up
- 19 Disposal Areas (Export Sites)
- 20 Spills or Leaks on Vehicles, Equipment or Materials
- 21 Portable Toilets and Septic
- 22 Dumpsters, Roll-Offs, Trash Receptacles
- 23 Concrete, Paint, Stucco Wash Outs

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
18		X			WM-5, 6
19	X				
20	X				WM-4,6,7,10
21	X				WM-9
22	X				WM-5
23	X				WM-8

Non-Stormwater Management BMP Items

- 24 Dewatering Operations
- 25 Paving or Grinding Operations
- 26 Concrete Curing/Finishing
- 27 Temporary Stream Crossing
- 28 Illicit Connection/Illegal Discharge Reporting
- 29 Vehicle and Equipment Cleaning
- 30 Vehicle and Equipment Fueling Area
- 31 Vehicle and Equipment Maintenance
- 32 Vehicle and Equipment Drip Pans
- 33 Spill Kits

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
24				X	NS-2
25				X	NS-3
26	X				NS-12, 14
27				X	NS-4
28	X				NS-6
29				X	NS-8
30	X				NS-9
31	X				NS-10
32	X				NS-10
33	X				WM-4

Non-Storm Water Management BMP Items

- g. Are materials and supplies in compliance with the SWPPP? _____
- h. Were damaged or dissipated materials removed from the site? _____
- i. Are appropriate spill response personnel trained? _____

Other

No discharge observed or reported

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP

Items Noted "Repairs Required" or "BMP Missing"

12	17	18							

CONTRACTOR: CORRECTIVE ACTIONS REQUIRED WITHIN 72 HOURS.

ITEM	Inspection Observation and Corrective Actions Summary	Assigned to	Date Completed
12	12. Replace missing or damaged silt fence as needed.		
Response:			
17	17. Sweep tracking as needed. Visually inspect daily.		
Response:			
18	18. Properly dispose of construction debris/trash.		
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			
Response:			

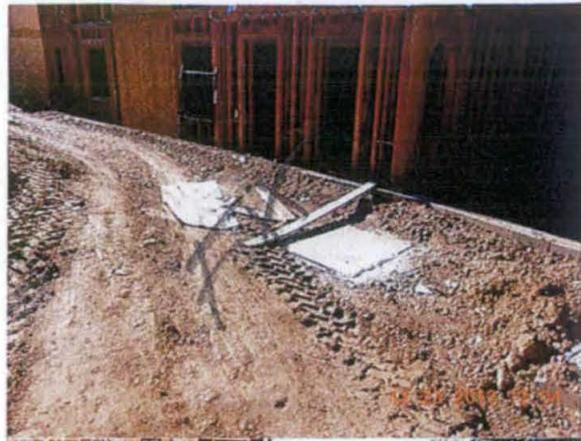
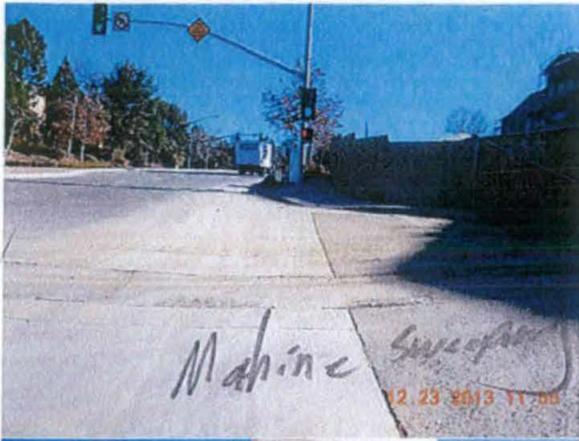
NOTE: Not all instances are necessarily photographed. All items apply throughout site.

Refer to the California Stormwater Quality Association (CASQA) Best Management Practices (BMP) Details and Cut Sheets in your SWPPP for installation, maintenance and usage standards.

Inspection Report Received by: _____

Date: _____

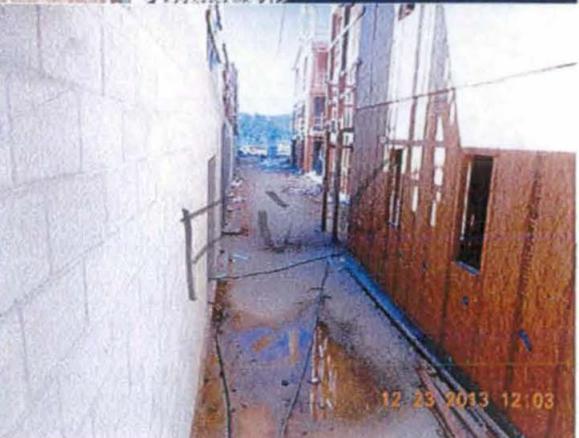
#17



#17



#18



#12



FIX

#18



FIX

#18



FIX

Warnings and/or Advisories In Effect for this Point:

[Beach Hazards Statement](#)

For warnings and/or advisories in effect for adjacent areas to this point,

see <http://www.wrh.noaa.gov/sax>

Forecast For Lat/Lon: 32.9570/-117.2540 (Elev. 335 ft)
Del Mar CA

Forecast Created at: 8am PST Dec 23, 2013

Custom Weather Forecast Table

	Mon Dec 23				Tue Dec 24				Wed Dec 25				Thu Dec 26				Fri Dec 27				Sat Dec 28				Sun Dec 29											
Weather																					Patchy Fog				Patchy Fog											
Daily-Temp	High 69 Low 48				High 69 Low 52				High 72 Low 62				High 73 Low 62				High 72 Low 63				High 68 Low 52				High 66 Low 51											
Chance of Precip	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	10%	10%	10%	10%	10%	10%	10%	10%
Precip 12-hr	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"				
Snow Total	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"				
FRET	0.09"				0.09"				0.09"				0.12"				0.12"				0.09"				0.08"											
6-Hour Temp	4am	10am	4pm	10pm	4am	10am	4pm	10pm																												
Cloudiness	7%	0%	0%	0%	6%	12%	9%	15%	15%	20%	20%	20%	20%	15%	15%	20%	20%	25%	25%	30%	30%	44%	44%	58%	58%	35%	35%	48%	48%	35%	35%	48%				
Dewpoint	40	41	43	44	40	41	41	41	37	38	40	40	35	35	36	37	32	33	36	38	34	36	44	48	44	44	46	48	44	44	46	48				
Relative Humidity	72%	44%	47%	66%	62%	42%	44%	58%	55%	35%	39%	54%	51%	31%	33%	47%	44%	29%	34%	50%	48%	36%	51%	80%	76%	52%	58%	79%	76%	52%	58%	79%				
Wind	NE	E	N	E	E	S	N	SE	E	W	N	E	E	E	NE	E	E	E	NE	E	E	NE	W	E	E	SW	NW	NE	E	E	SW	NW				
	7	5	8	7	6	1	3	5	3	2	5	7	7	6	3	7	7	7	5	5	5	3	6	5	7	6	7	5	7	6	7	5				

Soil Stabilization Items

- 1 Berms and Dikes
- 2 Slope protection
- 3 Vegetation
- 4 Surface erosion
- 5 Storage of Materials
- 6 Soil Stockpiles
- 7 Other Stockpiles
- 8 V-ditches & Slope Drains

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
1				X	EC-3, 6, 7, 8
2	X				EC-4
3	X				EC-2
4	X				WM-1, 2
5	X				WM-3
6	X				WM-3
7	X				SE-4, EC-11
8	X				

Sediment Control Items

- 9 Fiber Rolls / Straw Wattles
- 10 Check Dams
- 11 Burlap / Poly Rock Bags
- 12 Silt Fence
- 13 Drain Inlet Protection
- 14 Basins

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
9	X				SE-5
10	X				SE-4
11	X				SE-6
12		X			SE-1
13		X			SE-10
14				X	SE-2, 3

Wind Control Items

- 15 Dust Control

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
15		X			WE-1

Tracking Control Items

- 16 Construction Entrance
- 17 Tracking on Street

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
16		X			TC-1, 2, 3
17		X			SE-7

Good House Keeping & Waste Management Items

- 18 Debris Clean-up
- 19 Disposal Areas (Export Sites)
- 20 Spills or Leaks on Vehicles, Equipment or Materials
- 21 Portable Toilets and Septic
- 22 Dumpsters, Roll-Offs, Trash Receptacles
- 23 Concrete, Paint, Stucco Wash Outs

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
18		X			WM-5, 6
19	X				
20	X				WM-4,6,7,10
21	X				WM-9
22		X			WM-5
23		X			WM-8

Non-Stormwater Management BMP Items

- 24 Dewatering Operations
- 25 Paving or Grinding Operations
- 26 Concrete Curing/Finishing
- 27 Temporary Stream Crossing
- 28 Illicit Connection/Illegal Discharge Reporting
- 29 Vehicle and Equipment Cleaning
- 30 Vehicle and Equipment Fueling Area
- 31 Vehicle and Equipment Maintenance
- 32 Vehicle and Equipment Drip Pans
- 33 Spill Kits

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
24				X	NS-2
25				X	NS-3
26	X				NS-12, 14
27				X	NS-4
28	X				NS-6
29				X	NS-8
30	X				NS-9
31	X				NS-10
32	X				NS-10
33	X				WM-4

Non-Storm Water Management BMP Items

- g. Are materials and supplies in compliance with the SWPPP? _____
- h. Were damaged or dissipated materials removed from the site? _____
- i. Are appropriate spill response personnel trained? _____

Other

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP

Items Noted "Repairs Required" or "BMP Missing"

12	13	15	16	17	18	22	23			

CONTRACTOR: CORRECTIVE ACTIONS REQUIRED WITHIN 72 HOURS.

ITEM	Inspection Observation and Corrective Actions Summary	Assigned to	Date Completed
12	12. Replace missing or damaged silt fence as needed.	GSS	12/30
Response:			
13	13. Maintain existing inlet protection.	labour	12/30
Response:			
15	15. Control dust by using an approved method.		
Response:			
16	16. Maintain your existing construction entrances.	labour	12/30
Response:			
17	17. Sweep tracking as needed. Visually inspect daily.	llll	llll
Response:			
18	18. Properly dispose of construction debris/trash.	All trades	12/30
Response:			
22	22. Dumpsters need to be covered and the end of each workday and prior/during a rain event.	daily (end of day)	
Response:			
23	23. Maintain full concrete cleanout devices.		
Response:			

NOTE: Not all instances are necessarily photographed. All items apply throughout site.

Refer to the California Stormwater Quality Association (CASQA) Best Management Practices (BMP) Details and Cut Sheets in your SWPPP for installation, maintenance and usage standards.

Inspection Report Received by: _____

Date: _____

#12



#18



#23



#22



#13



#16/17



#18



#15



#18



#12



#18



#18



#12



No Warnings or Advisories In Effect for this Point.
 For warnings and/or advisories in effect for adjacent areas to this point,
 see <http://www.wrh.noaa.gov/sgx>

Forecast For Lat/Lon: 32.8380/-117.2850 (Elev. 0 ft)
 San Diego-La Jolla CA
 Forecast Created at: 8am PST Dec 30, 2013

Custom Weather Forecast Table

	Mon Dec 30				Tue Dec 31				Wed Jan 01				Thu Jan 02				Fri Jan 03				Sat Jan 04				Sun Jan 05							
Weather																																
Daily-Temp	High 64 Low 62				High 61 Low 62				High 59 Low 62				High 63 Low 63				High 62 Low 64				High 63 Low 65				High 62 Low 63							
Chance of Precip	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	5%	5%	5%	5%	5%	5%	5%	5%	0%	0%	0%	0%
Precip	0.00" 0.00" 0.00" 0.00" 0.00" 0.00" 0.00" 0.00" 0.00" 0.00" 0.00" 0.00" 0.00" 0.00" 0.00" 0.00"																															
12-hr Snow Total	0" 0" 0" 0" 0" 0" 0" 0" 0" 0" 0" 0"																															
FRET	0.08"				0.06"				0.06"				0.06"				0.07"				0.07"				0.08"							
6-Hour Temp	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm	4am	10am	4pm	10pm
Temp	53	60	63	57	54	58	60	56	53	57	58	56	54	60	62	58	55	59	61	58	56	60	62	57	55	59	61	57	55	59	61	57
Cloudiness	9%	7%	13%	21%	27%	27%	26%	27%	33%	25%	25%	27%	27%	22%	22%	14%	14%	21%	21%	25%	25%	27%	27%	18%	18%	13%	13%	12%	18%	13%	13%	12%
Dewpoint	37	40	47	45	43	46	49	48	48	48	49	46	45	47	50	47	45	45	47	45	43	43	43	40	37	39	41	40	37	39	41	40
Relative Humidity	53%	48%	56%	63%	65%	64%	68%	76%	81%	73%	71%	71%	71%	64%	65%	67%	68%	60%	59%	61%	62%	52%	50%	52%	52%	47%	48%	52%	52%	47%	48%	52%
Wind	E	NW	NW	N	NE	NW	N	N	NE	NW	N	NE	NE	N	NW	E	NE	W	W	SE	E	N	NE	NE	E	E	N	NE	E	E	N	NE
	6	2	6	2	2	7	6	5	3	8	8	2	2	3	7	3	5	3	6	3	2	1	7	7	5	5	2	3	5	5	2	3

Soil Stabilization Items

- 1 Berms and Dikes
- 2 Slope protection
- 3 Vegetation
- 4 Surface erosion
- 5 Storage of Materials
- 6 Soil Stockpiles
- 7 Other Stockpiles
- 8 V-ditches & Slope Drains

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
1				X	EC-3, 6, 7, 8
2	X				EC-4
3	X				EC-2
4	X				WM-1, 2
5		X			WM-3
6	X				WM-3
7	X				SE-4, EC-11
8	X				

Sediment Control Items

- 9 Fiber Rolls / Straw Wattles
- 10 Check Dams
- 11 Burlap / Poly Rock Bags
- 12 Silt Fence
- 13 Drain Inlet Protection
- 14 Basins

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
9	X				SE-5
10	X				SE-4
11	X				SE-6
12		X			SE-1
13		X			SE-10
14				X	SE-2, 3

Wind Control Items

- 15 Dust Control

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
15	X				WE-1

Tracking Control Items

- 16 Construction Entrance
- 17 Tracking on Street

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
16	X				TC-1, 2, 3
17		X			SE-7

Good House Keeping & Waste Management Items

- 18 Debris Clean-up
- 19 Disposal Areas (Export Sites)
- 20 Spills or Leaks on Vehicles, Equipment or Materials
- 21 Portable Toilets and Septic
- 22 Dumpsters, Roll-Offs, Trash Receptacles
- 23 Concrete, Paint, Stucco Wash Outs

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
18		X			WM-5, 6
19	X				
20	X				WM-4, 6, 7, 10
21	X				WM-9
22	X				WM-5
23	X				WM-8

Non-Stormwater Management BMP Items

- 24 Dewatering Operations
- 25 Paving or Grinding Operations
- 26 Concrete Curing/Finishing
- 27 Temporary Stream Crossing
- 28 Illicit Connection/Illegal Discharge Reporting
- 29 Vehicle and Equipment Cleaning
- 30 Vehicle and Equipment Fueling Area
- 31 Vehicle and Equipment Maintenance
- 32 Vehicle and Equipment Drip Pans
- 33 Spill Kits

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
24				X	NS-2
25				X	NS-3
26	X				NS-12, 14
27				X	NS-4
28	X				NS-6
29				X	NS-8
30	X				NS-9
31	X				NS-10
32	X				NS-10
33	X				WM-4

Non-Storm Water Management BMP Items

- g. Are materials and supplies in compliance with the SWPPP? _____
- h. Were damaged or dissipated materials removed from the site? _____
- i. Are appropriate spill response personnel trained? _____

Other

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP

Items Noted "Repairs Required" or "BMP Missing"

5	12	13	17	18					
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CONTRACTOR: CORRECTIVE ACTIONS REQUIRED WITHIN 72 HOURS.

ITEM	Inspection Observation and Corrective Actions Summary	Assigned to	Date Completed
5	5. Liquid or powder type construction material needs to have secondary containment and should be covered.	laborer	1/9
Response:			
12	12. Replace missing or damaged silt fence as needed.	laborer	1/9
Response:			
13	13. Maintain existing inlet protection.		
Response:			
17	17. Sweep tracking as needed. Visually inspect daily.	(Daily by hand) 3x per week	w/ sweeps
Response:			
18	18. Properly dispose of construction debris/trash.	laborer	1/9
Response:			
0			
Response:			
0			
Response:			
0	23. Maintain full concrete cleanout devices.		
Response:			

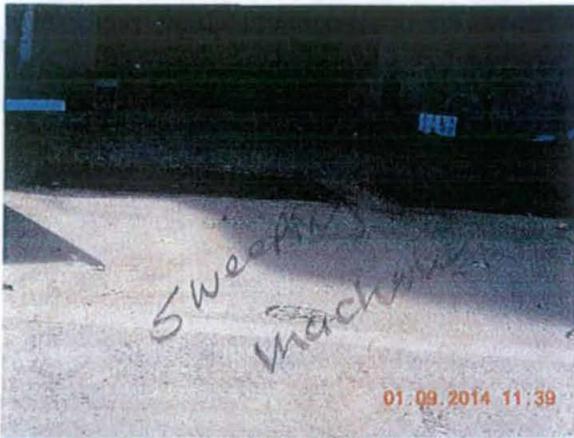
NOTE: Not all instances are necessarily photographed. All items apply throughout site.

Refer to the California Stormwater Quality Association (CASQA) Best Management Practices (BMP) Details and Cut Sheets in your SWPPP for installation, maintenance and usage standards.

Inspection Report Received by: _____

Date: _____

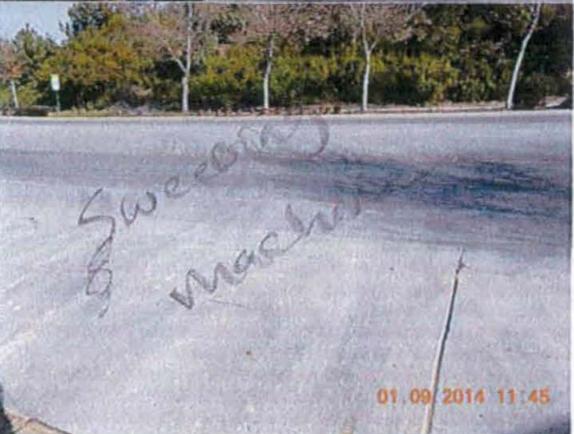
#17
TRACKING



#17
lot
part of
project



#17
acking



Add
H
ence
AS
discussed
/ rod



#13
DRAIN
INLET



#18
Debris



#18
Debris



#5
liquid type
Conservation
material



#18
Debris



#18
Debris



#18
Debris



#12
Silt
fence



#18
Debris



Soil Stabilization Items

- 1 Berms and Dikes
- 2 Slope protection
- 3 Vegetation
- 4 Surface erosion
- 5 Storage of Materials
- 6 Soil Stockpiles
- 7 Other Stockpiles
- 8 V-ditches & Slope Drains

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
1				X	EC-3, 6, 7, 8
2	X				EC-4
3	X				EC-2
4	X				WM-1, 2
5	X				WM-3
6	X				WM-3
7		X			SE-4, EC-11
8	X				

Sediment Control Items

- 9 Fiber Rolls / Straw Wattles
- 10 Check Dams
- 11 Burlap / Poly Rock Bags
- 12 Silt Fence
- 13 Drain Inlet Protection
- 14 Basins

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
9	X				SE-5
10	X				SE-4
11	X				SE-6
12		X			SE-1
13	X				SE-10
14				X	SE-2, 3

Wind Control Items

- 15 Dust Control

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
15	X				WE-1

Tracking Control Items

- 16 Construction Entrance
- 17 Tracking on Street

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
16	X				TC-1, 2, 3
17		X			SE-7

Good House Keeping & Waste Management Items

- 18 Debris Clean-up
- 19 Disposal Areas (Export Sites)
- 20 Spills or Leaks on Vehicles, Equipment or Materials
- 21 Portable Toilets and Septic
- 22 Dumpsters, Roll-Offs, Trash Receptacles
- 23 Concrete, Paint, Stucco Wash Outs

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
18		X			WM-5, 6
19	X				
20	X				WM-4,6,7,10
21		X			WM-9
22		X			WM-5
23	X				WM-8

Non-Stormwater Management BMP Items

- 24 Dewatering Operations
- 25 Paving or Grinding Operations
- 26 Concrete Curing/Finishing
- 27 Temporary Stream Crossing
- 28 Illicit Connection/Illegal Discharge Reporting
- 29 Vehicle and Equipment Cleaning
- 30 Vehicle and Equipment Fueling Area
- 31 Vehicle and Equipment Maintenance
- 32 Vehicle and Equipment Drip Pans
- 33 Spill Kits

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
24				X	NS-2
25				X	NS-3
26	X				NS-12, 14
27				X	NS-4
28	X				NS-6
29				X	NS-8
30	X				NS-9
31	X				NS-10
32	X				NS-10
33	X				WM-4

Non-Storm Water Management BMP Items

- g. Are materials and supplies in compliance with the SWPPP? _____
- h. Were damaged or dissipated materials removed from the site? _____
- i. Are appropriate spill response personnel trained? _____

Other

Adjacent project responsible for south slope

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP

Items Noted "Repairs Required" or "BMP Missing"

7	12	17	18	21	22				

CONTRACTOR: CORRECTIVE ACTIONS REQUIRED WITHIN 72 HOURS.

ITEM	Inspection Observation and Corrective Actions Summary	Assigned to	Date Completed
7	7. Remove or cover any concrete or misc. debris type stockpiles		
Response:			
12	12. Replace missing or damaged silt fence as needed.	labored	1/16
Response:			
17	17. Sweep tracking as needed. Visually inspect daily.	GC labored	
Response:			
18	18. Property dispose of construction debris/trash.	GC/labored	
Response:			
21	21. Portable toilets need to be secured.		
Response:			
22	22. Dumpsters need to be covered and the end of each workday and prior/during a rain event.	labored	
Response:			
0			
Response:			
0	23. Maintain full concrete cleanout devices.		
Response:			

NOTE: Not all instances are necessarily photographed. All items apply throughout site.

Refer to the California Stormwater Quality Association (CASQA) Best Management Practices (BMP) Details and Cut Sheets in your SWPPP for installation, maintenance and usage standards.

Inspection Report Received by: _____

Date: _____

#17
racking



#22
Dumpster



Garden Not
Common



#7
Concrete/
Asphalt
Stockpile



#18
noise



#12
Silt
fence



#18
Debris



#21
Portable
Toilets
Secure
From
Tipping



#18
Debris



#18
Debris



'8
Debris



Warnings and/or Advisories In Effect for this Point:

Beach Hazards Statement

For warnings and/or advisories in effect for adjacent areas to this point,

see <http://www.wrh.noaa.gov/sgx>

**Forecast For Lat/Lon: 32.9270/-117.1390 (Elev. 462 ft)
San Diego-Mira Mesa CA**

Forecast Created at: 8am PST Jan 16, 2014

Custom Weather Forecast Table

Weather	Thu Jan 16				Fri Jan 17				Sat Jan 18				Sun Jan 19				Mon Jan 20				Tue Jan 21				Wed Jan 22							
Daily-Temp	High 83 Low 56				High 80 Low 55				High 77 Low 54				High 76 Low 53				High 76 Low 53				High 78 Low 54				High 75 Low 56							
Chance of Precip	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Precip	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"
12-hr Snow Total	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"
FRET	0.21"				0.15"				0.18"				0.15"				0.14"				0.16"				0.13"							
6-Hour Temp	4am	10am	4pm	10pm	4am	10am	4pm	10pm																								
Temp	58	76	78	60	57	74	73	59	56	71	71	57	55	70	70	57	55	70	70	58	56	72	72	60	58	70	69	57	58	70	69	57
Cloudiness	0%	0%	0%	0%	0%	0%	0%	1%	11%	18%	18%	17%	17%	11%	11%	11%	11%	17%	17%	22%	22%	27%	27%	30%	30%	22%	22%	17%	30%	22%	22%	17%
Dewpoint	19	22	20	15	13	22	33	22	15	21	37	30	19	19	30	30	23	24	33	33	23	23	31	30	25	30	37	39	25	30	37	39
Relative Humidity	21%	13%	12%	17%	17%	14%	23%	24%	20%	15%	30%	35%	24%	14%	23%	35%	28%	17%	26%	39%	28%	16%	22%	31%	28%	22%	31%	52%	28%	22%	31%	52%
Wind	E	SE	NE	SE	SE	SW	NE	E	E	W	N	E	E	S	W	E	E	E	NW	E	E	E	NW	E	E	E	NW	W	E	E	NW	W
	8	6	12	5	6	6	1	8	8	7	2	6	8	5	6	6	6	6	3	7	8	8	3	5	5	5	6	6	5	6	6	3

Soil Stabilization Items

- 1 Berms and Dikes
- 2 Slope protection
- 3 Vegetation
- 4 Surface erosion
- 5 Storage of Materials
- 6 Soil Stockpiles
- 7 Other Stockpiles
- 8 V-ditches & Slope Drains

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
1				X	EC-3, 6, 7, 8
2	X				EC-4
3	X				EC-2
4	X				WM-1, 2
5		X			WM-3
6	X				WM-3
7		X			SE-4, EC-11
8	X				

Sediment Control Items

- 9 Fiber Rolls / Straw Wattles
- 10 Check Dams
- 11 Burlap / Poly Rock Bags
- 12 Silt Fence
- 13 Drain Inlet Protection
- 14 Basins

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
9	X				SE-5
10	X				SE-4
11	X				SE-6
12	X				SE-1
13	X				SE-10
14				X	SE-2, 3

Wind Control Items

- 15 Dust Control

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
15	X				WE-1

Tracking Control Items

- 16 Construction Entrance
- 17 Tracking on Street

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
16	X				TC-1, 2, 3
17	X				SE-7

Good House Keeping & Waste Management Items

- 18 Debris Clean-up
- 19 Disposal Areas (Export Sites)
- 20 Spills or Leaks on Vehicles, Equipment or Materials
- 21 Portable Toilets and Septic
- 22 Dumpsters, Roll-Offs, Trash Receptacles
- 23 Concrete, Paint, Stucco Wash Outs

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
18		X			WM-5, 6
19	X				
20	X				WM-4,6,7,10
21	X				WM-9
22		X			WM-5
23	X				WM-8

Non-Stormwater Management BMP Items

- 24 Dewatering Operations
- 25 Paving or Grinding Operations
- 26 Concrete Curing/Finishing
- 27 Temporary Stream Crossing
- 28 Illicit Connection/Illegal Discharge Reporting
- 29 Vehicle and Equipment Cleaning
- 30 Vehicle and Equipment Fueling Area
- 31 Vehicle and Equipment Maintenance
- 32 Vehicle and Equipment Drip Pans
- 33 Spill Kits

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
24				X	NS-2
25				X	NS-3
26	X				NS-12, 14
27				X	NS-4
28	X				NS-6
29				X	NS-8
30	X				NS-9
31	X				NS-10
32	X				NS-10
33	X				WM-4

Non-Storm Water Management BMP Items

- g. Are materials and supplies in compliance with the SWPPP? _____
- h. Were damaged or dissipated materials removed from the site? _____
- i. Are appropriate spill response personnel trained? _____

Other

Adjacent project responsible for south slope

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP

Items Noted "Repairs Required" or "BMP Missing"

5	7	18	22						
---	---	----	----	--	--	--	--	--	--

CONTRACTOR: CORRECTIVE ACTIONS REQUIRED WITHIN 72 HOURS.

ITEM	Inspection Observation and Corrective Actions Summary	Assigned to	Date Completed
5	5. Liquid or powder type construction material needs to have secondary containment and should be covered.	1/31	
Response:			
7	7. Remove or cover any concrete or misc. debris type stockpiles	1/31	
Response:			
18	18. Properly dispose of construction debris/trash.	1/31	1 laborer
Response:			
22	22. Dumpsters need to be covered and the end of each workday and prior/during a rain event.	daily	
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			
Response:			

NOTE: Not all instances are necessarily photographed. All items apply throughout site.

Refer to the California Stormwater Quality Association (CASQA) Best Management Practices (BMP) Details and Cut Sheets in your SWPPP for installation, maintenance and usage standards.

Inspection Report Received by: _____

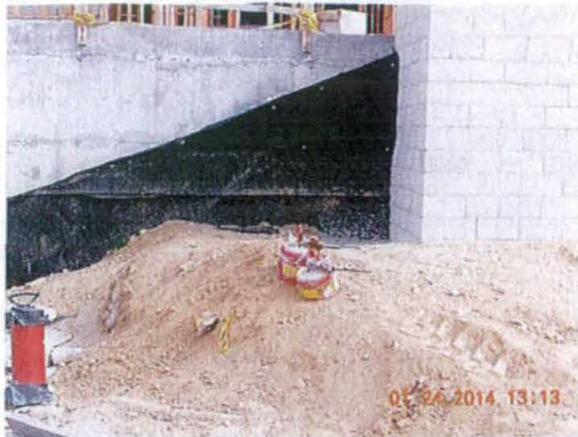
Date: _____

Weeper
N Site.



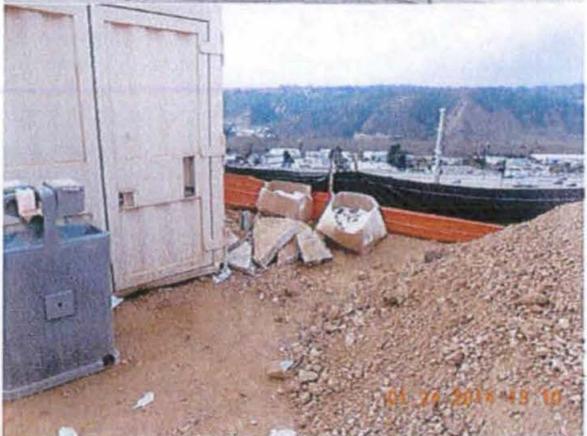
01-24-2014 13:08

#5
Fuel
Cans



01-24-2014 13:13

#18
Debris



01-24-2014 13:10

#18
Debris



01-24-2014 13:18

#18
Debris



01-24-2014 13:11

Need
to replace
Bmp.



01-24-2014 13:15

#22
Dumpster



01-24-2014 13:12

#18
Debris



01-24-2014 13:18



#18
Debris



#7
Asphalt
Stockpile.



#10
Debris



#8
Debris.
Empty
Trash
CAN.

Warnings and/or Advisories In Effect for this Point:

High Surf Advisory

For warnings and/or advisories in effect for adjacent areas to this point,

see <http://www.wrh.noaa.gov/spx>

Forecast For Lat/Lon: 32.8380/-117.2850 (Elev. 0 ft)
San Diego-La Jolla CA

Forecast Created at: 8am PST Jan 24, 2014

Custom Weather Forecast Table

	Fri Jan 24				Sat Jan 25				Sun Jan 26				Mon Jan 27				Tue Jan 28				Wed Jan 29				Thu Jan 30							
Weather																	Patchy Fog															
Daily-Temp	High 66 Low 56				High 64 Low 56				High 62 Low 55				High 61 Low 55				High 65 Low 55				High 65 Low 56				High 63 Low 56							
Chance of Precip	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%
Precip	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"
12-hr Snow Total	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"
FRET	0.06"				0.07"				0.06"				0.05"				0.07"				0.08"				0.08"							
6-Hour Temp	4am	10am	4pm	10pm	4am	10am	4pm	10pm																								
Temp	58	63	64	60	58	62	63	59	55	61	61	58	55	60	60	58	55	63	64	60	56	63	64	60	56	62	62	59	56	62	62	59
Cloudiness	76%	81%	65%	41%	29%	23%	40%	47%	59%	35%	35%	81%	81%	23%	23%	21%	21%	17%	17%	22%	22%	22%	22%	16%	16%	18%	18%	23%	16%	18%	18%	23%
Dewpoint	47	46	51	49	48	48	52	52	52	52	53	52	52	52	53	50	49	48	50	48	47	47	51	49	48	48	52	51	48	48	52	51
Relative Humidity	72%	54%	62%	66%	72%	59%	67%	77%	88%	74%	74%	80%	89%	76%	77%	75%	78%	57%	61%	64%	70%	55%	63%	67%	74%	62%	69%	73%	74%	62%	69%	73%
Wind	E	N	N	NE	N	NW	NW	NW	E	W	W	E	NE	W	NW	NE	E	W	NW	NE	E	NW	W	SE	E	S	SW	SE	E	S	SW	SE
	2	2	1	2	3	3	7	2	2	5	3	2	2	6	7	2	2	3	7	2	3	2	6	3	5	5	8	2	5	5	8	2



Ground Service Technology, Inc.
 SWPPP/EROSION CONTROL DIVISION
 2280 Micro Place Phone 760-745-2010
 Escondido, CA 92029 Fax 760-741-1363
 www.erosioncontroller.com CA Lic #847034 A & B

RISK LEVEL 2 SITE INSPECTION REPORT

Owner: Torrey Garden Hills
 Contractor: Garden Communities
 Job No./Project: **24243 Torrey Garden Hills**
 Site Address: Calle Mar de Mariposa/ W. Ocean Dr.
 Cross Streets/Area: Del mar
 Performed by: Wes Udwin
 Title: QSP/D # 24185

WDID#: 9 37C362854
 Project Dates:
 Site Area: 8.4 Acres
 Exposed Area: 50%
 Site Contact: Rod Fink
 Contact Number: (619) 572-1114
 Report Date: 1/31/2014

Inspection Date: 1/31/2014
 Time: 9:30 AM

Inspector Signature: _____

Type of Inspection:

Additional Report:

Phase(s) of Construction:

Summary of Completed Activities

Weather & Rain Event Data Current: Rain Gauge Reading:

End date of Last Rain Event: _____ Was it a Qualifying Rain Event (QRE)?

Today is Day _____ of _____ predicted rain event days. Cumulative Rain:

Is inspection during or after a QRE of .5" or more? Number of QREs since July 1: _____

NOAA Forecast Chance of Precipitation

30%	Thursday, January 30, 2014
45%	Friday, January 31, 2014
10%	Saturday, February 01, 2014
40%	Sunday, February 02, 2014

0%	Monday, February 03, 2014
0%	Tuesday, February 04, 2014
0%	Wednesday, February 05, 2014
0%	Thursday, February 06, 2014

Sampling
 Did first two hours of discharge occur during business hours? Estimated start of rain:
 Was any storm water discharged from site? During normal business hours?
 Were water samples taken? If NO, please explain: _____
 *If Yes, fill out and print Water Sample Report.

SWPPP Questions

- a. Is there a SWPPP on-site?
- b. Is a Wall Map updated? b2. Require updating?
- c. Are structural controls installed per the SWPPP?
 If the SWPPP is not implemented, is there an effective combination of
- d. Erosion & Sediment control BMPs appropriate for the current stage of construction?
- e. Is there any leak, breach or malfunction to indicate non-visible pollutants? If Yes, plan for sampling at next rain.
- f. Did you observe any floating materials, oil, grease, odor, toxins, and/or sediment at any outfalls, discharge points, or downstream locations? If Yes, sample and document.
 What was observed? _____

The following pages provide Inspection observation results. Results are to be cross-referenced with attached photographs.

Soil Stabilization Items

- 1 Berms and Dikes
- 2 Slope protection
- 3 Vegetation
- 4 Surface erosion
- 5 Storage of Materials
- 6 Soil Stockpiles
- 7 Other Stockpiles
- 8 V-ditches & Slope Drains

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
1				X	EC-3, 6, 7, 8
2	X				EC-4
3	X				EC-2
4	X				WM-1, 2
5		X			WM-3
6	X				WM-3
7		X			SE-4, EC-11
8	X				

Sediment Control Items

- 9 Fiber Rolls / Straw Wattles
- 10 Check Dams
- 11 Burlap / Poly Rock Bags
- 12 Silt Fence
- 13 Drain Inlet Protection
- 14 Basins

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
9	X				SE-5
10	X				SE-4
11	X				SE-6
12	X				SE-1
13	X				SE-10
14				X	SE-2, 3

Wind Control Items

- 15 Dust Control

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
15	X				WE-1

Tracking Control Items

- 16 Construction Entrance
- 17 Tracking on Street

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
16	X				TC-1, 2, 3
17	X				SE-7

Good House Keeping & Waste Management Items

- 18 Debris Clean-up
- 19 Disposal Areas (Export Sites)
- 20 Spills or Leaks on Vehicles, Equipment or Materials
- 21 Portable Toilets and Septic
- 22 Dumpsters, Roll-Offs, Trash Receptacles
- 23 Concrete, Paint, Stucco Wash Outs

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
18		X			WM-5, 6
19	X				
20	X				WM-4,6,7,10
21	X				WM-9
22		X			WM-5
23	X				WM-8

Non-Stormwater Management BMP Items

- 24 Dewatering Operations
- 25 Paving or Grinding Operations
- 26 Concrete Curing/Finishing
- 27 Temporary Stream Crossing
- 28 Illicit Connection/Illegal Discharge Reporting
- 29 Vehicle and Equipment Cleaning
- 30 Vehicle and Equipment Fueling Area
- 31 Vehicle and Equipment Maintenance
- 32 Vehicle and Equipment Drip Pans
- 33 Spill Kits

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP
24				X	NS-2
25				X	NS-3
26	X				NS-12, 14
27				X	NS-4
28	X				NS-6
29				X	NS-8
30	X				NS-9
31	X				NS-10
32	X				NS-10
33	X				WM-4

Non-Storm Water Management BMP Items

- g. Are materials and supplies in compliance with the SWPPP? _____
- h. Were damaged or dissipated materials removed from the site? _____
- i. Are appropriate spill response personnel trained? _____

Other

Adjacent project responsible for south slope

	BMP Acceptable	Repairs Required	BMP Missing	Not Applicable	CASQA BMP

Items Noted "Repairs Required" or "BMP Missing"

	7	18	22						

CONTRACTOR: CORRECTIVE ACTIONS REQUIRED WITHIN 72 HOURS.

ITEM	Inspection Observation and Corrective Actions Summary	Assigned to	Date Completed
0	N/A		
Response:			
7	7. Remove or cover any concrete or misc. debris type stockpiles	1/31	
Response:			
18	18. Properly dispose of construction debris/trash.	1/31	laborer
Response:			
22	22. Dumpsters need to be covered and the end of each workday and prior/during a rain event.	Valley	
Response:			
0			
Response:			
0			
Response:			
0			
Response:			
0			
Response:			

NOTE: Not all instances are necessarily photographed. All items apply throughout site.

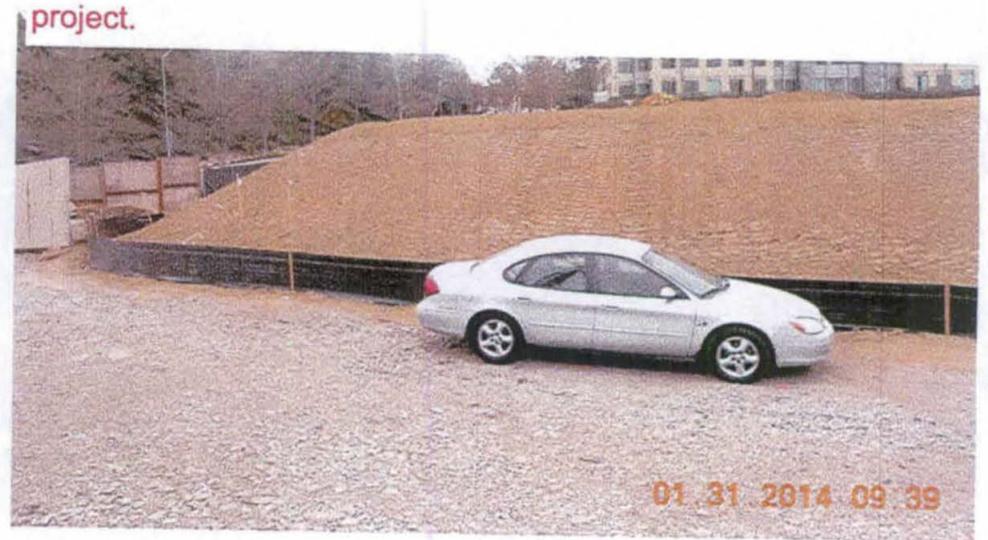
Refer to the California Stormwater Quality Association (CASQA) Best Management Practices (BMP) Details and Cut Sheets in your SWPPP for installation, maintenance and usage standards.

Inspection Report Received by: 
 Date: 1/31

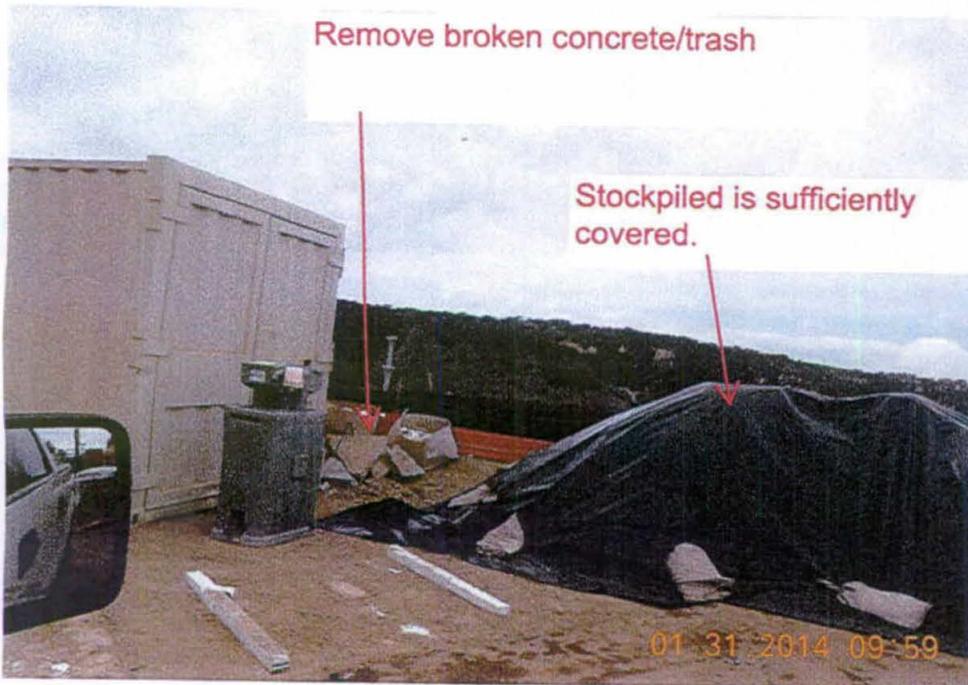
Stockpile is sufficiently covered



Finished slope on neighbor's property needs to be stabilized to mitigate potential for a discharge onto Garden Communities' project.



Remove broken concrete/trash



Remove any litter/trash/debris



Exhibit No. 8 Economic Benefit Calculation Violation No. 2

Run Name = Viol 2

Present Values as of Noncompliance Date (NCD),	<u>25-Oct-2010</u>
A) On-Time Capital & One-Time Costs	\$1,926
B) Delay Capital & One-Time Costs	\$0
C) Avoided Annually Recurring Costs	\$0
D) Initial Economic Benefit (A-B+C)	\$1,926
E) Final Econ. Ben. at Penalty Payment Date,	
	<u>10-Jul-2014</u>
	<u>\$2,433</u>

C-Corporation w/ CA tax rates

Discount/Compound Rate	6.5%
Discount/Compound Rate Calculated By:	BEN
Compliance Date	26-Oct-2010

Capital Investment:

Cost Estimate	\$0
Cost Estimate Date	N/A
Cost Index for Inflation	N/A
Consider Future Replacement (Useful Life)	N/A (N/A)

One-Time, Nondepreciable Expenditure:

avoided

Cost Estimate	\$2,000
Cost Estimate Date	21-Aug-2014
Cost Index for Inflation	PCI
Tax Deductible?	N

Annually Recurring Costs:

Cost Estimate	\$0
Cost Estimate Date	N/A
Cost Index for Inflation	N/A

User-Customized Specific Cost Estimates:

N/A

On-Time Capital Investment
Delay Capital Investment
On-Time Nondepreciable Expenditure
<u>Delay Nondepreciable Expenditure</u>

Exhibit No. 8 Economic Benefit Calculation Violation No. 3

Run Name = Viol 3

Present Values as of Noncompliance Date (NCD),	01-Oct-2010
A) On-Time Capital & One-Time Costs	\$32,530
B) Delay Capital & One-Time Costs	\$32,384
C) Avoided Annually Recurring Costs	\$0
D) Initial Economic Benefit (A-B+C)	\$146
E) Final Econ. Ben. at Penalty Payment Date,	
<u>10-Jul-2014</u>	<u>\$185</u>

C-Corporation w/ CA tax rates

Discount/Compound Rate	6.5%
Discount/Compound Rate Calculated By:	BEN
Compliance Date	27-Oct-2010

Capital Investment:

Cost Estimate	\$0
Cost Estimate Date	N/A
Cost Index for Inflation	N/A
Consider Future Replacement (Useful Life)	N/A (N/A)

One-Time, Nondepreciable Expenditure:

Cost Estimate	\$31,208
Cost Estimate Date	01-Jul-2007
Cost Index for Inflation	PCI
Tax Deductible?	N

Annually Recurring Costs:

Cost Estimate	\$0
Cost Estimate Date	N/A
Cost Index for Inflation	N/A

User-Customized Specific Cost Estimates:

On-Time Capital Investment	N/A
Delay Capital Investment	
On-Time Nondepreciable Expenditure	
<u>Delay Nondepreciable Expenditure</u>	

Table 4-1. Installed Cost Ranges for Soil Stabilization BMPs

BMP Type & Description	Installed Cost (cost/acre)							
	Small Project ¹				Large Project ²			
	Category 1 ³		Category 2 ⁴		Category 1 ³		Category 2 ⁴	
	Mean ⁵	Range	Mean ⁵	Range	Mean ⁵	Range	Mean ⁵	Range
Wood (bark) Mulching	\$20,000	\$16,000 — \$24,000	\$23,000	\$18,400 — \$27,600	\$13,676	\$10,941 — \$16,411	\$19,901	\$15,921 — \$23,881
Straw with Tackifier	\$3,020	\$2,416 — \$3,624	\$3,417	\$2,734 — \$4,100	\$1,823	\$1,458 — \$2,187	\$2,172	\$1,738 — \$2,607
Crimped or Punched Straw	\$2,349	\$1,879 — \$2,819	\$2,968	\$2,374 — \$3,562	\$2,033	\$1,626 — \$2,440	\$2,778	\$2,223 — \$3,334
Hydraulic Mulch Fiber with Polyacrylamide (PAM)	\$3,226	\$2,581 — \$3,871	\$3,378	\$2,702 — \$4,054	\$2,537	\$2,030 — \$3,044	\$2,438	\$1,950 — \$2,926
Temporary Hydroseed	\$3,149	\$2,519 — \$3,779	\$3,473	\$2,778 — \$4,168	\$1,951	\$1,561 — \$2,341	\$2,150	\$1,720 — \$2,580
Temporary Hydraulic Mulch	\$2,862	\$2,290 — \$3,434	\$3,103	\$2,482 — \$3,724	\$1,688	\$1,351 — \$2,026	\$1,861	\$1,488 — \$2,233
Bonded Fiber Matrix	\$4,057	\$3,246 — \$4,868	\$5,222	\$4,178 — \$6,266	\$3,901	\$3,121 — \$4,682	\$4,219	\$3,375 — \$5,063
Caltrans Erosion Control Type C	\$4,705	\$3,764 — \$5,646	\$5,077	\$4,062 — \$6,092	\$2,816	\$2,253 — \$3,380	\$3,284	\$2,627 — \$3,940
Caltrans Erosion Control Type D	\$7,291	\$5,833 — \$8,749	\$5,537	\$4,430 — \$6,644	\$3,390	\$2,712 — \$4,069	\$3,841	\$3,073 — \$4,610
Erosion Control Blanket	\$14,162	\$11,330 — \$16,994	\$15,334	\$12,267 — \$18,401	\$12,445	\$9,956 — \$14,934	\$14,238	\$11,390 — \$17,086
Erosion Control Netting	\$17,468	\$13,974 — \$20,962	\$19,120	\$15,296 — \$22,944	\$14,971	\$11,977 — \$17,965	\$16,523	\$13,218 — \$19,828
Temporary Cementitious Binder	\$3,048	\$2,438 — \$3,658	\$3,198	\$2,558 — \$3,838	\$3,012	\$2,410 — \$3,615	\$3,179	\$2,543 — \$3,815

NOTES:

¹ *Small Projects: 0.12 acres (5,000 sq ft) to 0.5 acres (22,000 sq ft); slope inclination of 2:1 and slope length that does not exceed 30 feet*

² *Large Projects: 2.0 - 5.0 acres; 2:1 slope and slope length from 50 - 100 feet*

³ *Category 1: Within 20 miles; access from top and bottom (but not both); shooting from the tower; no long hose runs.*

⁴ *Category 2: Further than 20 miles; access from top or bottom (but not both); long hose runs will likely be required*

⁵ *Mean was established by eliminating outlier data using professional judgement. Value ranges set at 20% above and below the mean installed costs.*

ADDITIONAL NOTES:

Contractors indicated that Category 1 & 2 (less difficult versus more difficult) had less bearing on pricing than the actual size of the project. A consistent comment was that more difficult projects are not necessarily those that require long hose deployments or areas that have steeper slopes, but consist of those projects that have existing vegetation in the form of ornamental or containerized plantings that need to be "worked around".

Violation No. 4 Failure to Implement Sediment Control BMPs (1 day)

Gravel

Discharger added 112 cubic yards of gravel to the construction entrance. Three inch minus driveway gravel costs \$30.50 per ton from Enniss, Inc. of Lakeside, CA. Rock of that size is about 1.2 tons per cubic yard.

$$\frac{112 \text{ cubic yards}}{1} \times \frac{1.2 \text{ tons}}{\text{cubic yard}} \times \frac{\$30.50}{\text{ton}} = \$4,099$$

Using BEN computer model equates to an economic benefit of \$24.

Fiber Rolls

Discharger failed to protect the site slope perimeters, approximately 1,000 feet. Twenty-five feet long eight inch diameter fiber rolls/straw wattles cost \$25 each. Fiber rolls are installed with a foot overlap on each side. Therefore 48 25 foot long wattles will cover a 2,000 foot run and cost \$1,050.

Using BEN computer model equates to an economic benefit of \$1,280.

Therefore the delayed implementation of an adequate construction entrance and the avoided cost of protecting the slope perimeter is \$1,304.

Run Name = Viol 4 gravel

Present Values as of Noncompliance Date (NCD),	01-Oct-2010
A) On-Time Capital & One-Time Costs	\$4,273
B) Delay Capital & One-Time Costs	\$4,254
C) Avoided Annually Recurring Costs	\$0
D) Initial Economic Benefit (A-B+C)	\$19
E) Final Econ. Ben. at Penalty Payment Date,	
<u>10-Jul-2014</u>	<u>\$24</u>

C-Corporation w/ CA tax rates

Discount/Compound Rate	6.5%
Discount/Compound Rate Calculated By:	BEN
Compliance Date	27-Oct-2010

Capital Investment:

Cost Estimate	\$0
Cost Estimate Date	N/A
Cost Index for Inflation	N/A
Consider Future Replacement (Useful Life)	N/A (N/A)

One-Time, Nondepreciable Expenditure:

Cost Estimate	\$4,099
Cost Estimate Date	01-Jul-2007
Cost Index for Inflation	PCI
Tax Deductible?	N

Annually Recurring Costs:

Cost Estimate	\$0
Cost Estimate Date	N/A
Cost Index for Inflation	N/A

User-Customized Specific Cost Estimates: **N/A**

On-Time Capital Investment
Delay Capital Investment
On-Time Nondepreciable Expenditure

Delay Nondepreciable Expenditure



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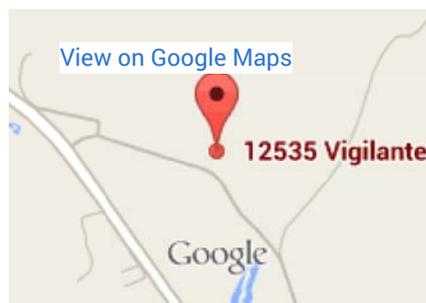
Topsoil	3/4" Crushed Rock	\$17.50 per ton
Sand	3/4" Natural Rock	\$10.50 per ton
Fill Dirt	1 1/2" Natural Rock	\$17.50 per ton
Rock Products	3/8" Pea Gravel (Natural)	\$14.50 per ton
	3" Minus Driveway Rock — Direct Ship	\$25.50 per ton
	3" Minus Driveway Rock — Pick Up Only	\$30.50 per ton
	Class II Base (Recycled)	\$10.00 per ton
	Asphalt Base (Recycled)	\$10.00 per ton
	D-G	\$18.00 per ton
	River Rock Mix (12" Minus)	\$65.00 per ton
	Mt. Woodson Rock	\$65.00 per ton
	Landscape Boulders	\$65.00 per ton
	Rip Rap (Misc.)	\$65.00 per ton



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PLANNING YOUR SAND, GRAVEL, TOPSOIL AND EXPORT MATERIAL NEEDS

Custom homes demand customized services when it comes to the basic materials which are incorporated into your site plan. Driveways, foundations, garages, parking pads, and future landscape areas all have differing material needs. Many home sites are also confronted with either an excess or shortage of fill material. Even when your site has a material balance, setbacks, protected native growth areas, and small building lots often result in a situation where excavated soils cannot be stored on site for future backfill. Sand, gravel, and topsoil companies are important partners in building that dream home at an affordable price.

One of the first things to happen at your building site is the provision of an access driveway and construction pad. A construction entrance of 4"x 8" quarry rock or another bony crushed rock is usually required to minimize tracking onto nearby streets. Once you're on site, the most popular materials for access driveways and construction pads are pit run gravel and crushed single pass. Pit run gravel, as the name implies, is unprocessed gravel straight out of the bank. Pit run includes all sizes of gravel from sand up to perhaps 8" round rocks. While pit run gravel is usually the least expensive gravel, the fact that it is round and of varying sized particles means that it may roll and pump. Another problem with pit run gravel is captured in the old adage that you can't build a 4" thick road with 8" minus pit run.

A more attractive option for entrances, driveways, and construction pads is a large crushed product with few fines or binder. This heavy crushed gravel is usually called crushed single pass or railroad ballast. It spreads smoothly and the large fractured pieces of rock lock into place providing a firm foundation. Crushed single pass can be utilized during the construction phase and later covered with a top dressing of crushed gravel or ultimately paved. Crushed single pass is particularly useful during those wet winter months when many gravels will simply disappear into the mud. If the driveway is to remain unpaved, your typical choices are 1-1/4" crushed, 1-1/4" crushed clear, 5/8" crushed, homeowner's 5/8" crushed, 5/8" crushed clear, or 3/8" crushed gravel. 1- 1/4", 5/8", and 3/8" crushed are all specification products with a larger percentage of fines or binder for packing. Both homeowner's 5/8" crushed and 5/8" clear crushed have more rock and less fines. They do not pack as tightly, but many homeowners find them more attractive as the crushed rock shows more prominently.

Once you've established your access drive, it's usually time to start digging the foundation. The cheapest option is, of course, to simply pile the excavated foundation soil nearby and use it for a future backfill. However, if your site is small or there is excess material on site, it's time to consider export alternatives. The best option is to find a nearby fill site, but given complex

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filling and grading regulations, this is not usually practical. Many sand and gravel pits accept “clean fill” for a modest tipping fee. Make sure your “clean fill” is free of any stumps, branches, or other deleterious material, as a failure to do so can sometimes result in a rejected load heading to a very expensive landfill. Some fill sites have varying charges depending on the nature of your export. Wet or muddy fill is always more expensive to dispose of than dry fill. Gravelly soils are typically easier to handle and hence cost less to dispose of than clay soils. Plan ahead and call your sand and gravel supplier to find out what “clean fill” materials they can accept and at what cost. Prices are usually quoted per cubic yard. Figure 10 or 12 cubic yards per solo dump truck load.

After the foundation is dug, some sites require a blanket of crushed or drain gravel to serve as a capillary barrier. A slab on grade almost always requires a crushed, screened, or drain gravel base. The more compacted the base, the less likely you are to experience significant cracks in the concrete slab. Either 5/8” crushed gravel or a 1” minus screened pit run will pack nicely. Pea gravel or 7/8” washed are usually the drain gravels of choice. While using a compactor or roller to compact the gravel is best, in a pinch a sprinkler or several days of rain will help settle the base material.

Once your foundation is poured it’s time for footing drains. Well drained gravels are the best choice for backfilling around the foundation. Pea gravel, 7/8” or 1-1/2” drain gravel can all work for this function. Some new construction sites with over 5,000 square feet of impervious will require an engineered on-site stormwater collection system. One cost-effective solution is to carry the stormwater from roofs and slabs to an infiltration trench lined with a perforated pipe and surrounded by drain gravel. If groundwater needs to be diverted, a French drain or cut-off ditch filled with drain gravel is an attractive option. If your new home requires a septic tank and drainfield, specification sands and gravels will be needed. Cover soil for drainfield areas can be a tricky business. Consult your drainfield installer for the proper soil mix over drainfields.

After the home and garage are constructed and the sidewalks poured, it’s time to bring it all together with attractive landscaping. The basics for landscaping around the house involve covering this former construction zone with either topsoil or beauty bark. Most construction areas have been heavily compacted which means that the native soils won’t drain as well as they once did. Many landscape contractors will skimp on the imported topsoil and put down 2-3” of topsoil over hard compacted soil. Many homeowners are later heard bemoaning the lack of well-drained topsoil as they look at a dying lawn. Have your site work contractors loosen the compacted soil using the clearing rake on a bulldozer, or you can simply build up the soil layer above compacted areas through the use of cheap fill materials such as pebbles and dirt. Topsoil manufacturing companies often screen out the small pebbles when creating topsoil. This inexpensive product can serve as a base material upon which good topsoil is ultimately placed.

When considering what kind of topsoil to use, there are a number of important factors; namely quality and depth. The manufacturing of commercial topsoil is as much an art as it is a science. Typical ingredients include native soils, sands, silts, composts, and sawdust. Avoid topsoils with a high clay content. Clay soils tend to compact easily and are typically poorly drained. If the native on-site soils are poorly drained, consider choosing a topsoil with a higher sand content for enhanced drainage. Sandy topsoils are sometimes called golf course mix. If the native soils are rocky and well to excessively

drained, consider choosing a 3-way mix with a higher soil content to help retain moisture. Whether you plan to sod or seed your site, a good quality topsoil is the key to a beautiful lawn in the future. Beauty bark and other decorative landscape materials such as quarry rock, screened oversize cobbles, red cinders, or lava rock will help accent your home and landscaping.

CUBIC YARD (C.Y.) CALCULATIONS:

CALCULATING CUBIC YARDS FOR SQUARE / RECTANGULAR AREAS:

Length x Depth x Width (all expressed in feet) = cubic feet divided by 27 = cubic yards.
NOTE: 1 cubic yard = 27 cubic feet (3' x 3' x 3').

Example: A 20-foot by 40foot rectangular area 3 inches deep.
 $20' \times 40' \times .25'$ (i.e. 3") = 200 cubic feet divided by 27 = 7.41 cubic yards

CALCULATING CUBIC YARDS FOR CIRCULAR AREAS:

Radius squared x 3.14 (Pi) x depth (all expressed in feet) = cubic feet divided by 27 = cubic yards. NOTE: 1 cubic yard = 27 cubic feet (3' x 3' x 3').

Example: A 50-foot diameter circular area, 4 inches deep. Note: the radius is 1/2 of the diameter

$25' \times 25' \times 3.14 \times .33 = 648$ cubic feet divided by 27 = 24 cubic yards

CONVERTING INCHES TO FRACTIONS OF FEET:

1"	2"	3"	4"	5"	6"	7"	8"	9"	10"	11"	12"
.08	.16	.25	.33	.42	.50	.58	.67	.75	.83	.92	1.0

ONE CUBIC YARD (C.Y.) OF MATERIAL COVERS:

338	Square feet @ 1" deep
169	Square feet @ 2" deep
108	Square feet @ 3" deep
82	Square feet @ 4" deep
64	Square feet @ 5" deep
54	Square feet @ 6" deep

SQUARE FOOTAGE (S.F.) CALCULATING:

Length x Width (or Height) (expressed in feet) = Square Footage

Example: A 3 foot high by 40' long rockery = $3' \times 40' = 120$ square feet.

CALCULATING TONNAGE NEEDED PER S.Q. OF ROCKERY:

Length x Height (all expressed in feet) divided by 18 (for half-man rocks) = tons needed.

Length x Height (all expressed in feet) divided by 15 (for one man rocks) = tons needed.

Example: A rockery 3 feet high by 40 feet long using one-man rocks.
 $3' \times 40' = 120$ square feet divided by 15 = 8 tons of one-man rocks.

APPROXIMATE POUNDS / TONS* PER CUBIC YARDS (C.Y.):

<u>PRODUCT</u>	<u>POUNDS PER C.Y.*</u>	<u>ONVERSION (TONS PER C.Y.)</u>
PIT RUN GRAVEL	3,050 lbs	1.52 +/- Tons Per C.Y.
CRUSHED GRAVEL	3,000 lbs	1.50 +/- Tons Per C.Y.

WASHED GRAVEL	2,800 lbs	1.45 +/- Tons Per C.Y.
SCREENED SAND	2,700 lbs	1.35 +/- Tons Per C.Y.
TOPSOIL	2,000 - 2,400 lbs	1.00 - 1.20 +/- Tons Per C.Y.
1/4" RED CINDERS	2,000 - 2,200 lbs	1.00 - 1.10 +/- Tons Per C.Y.
3/4" RED CINDERS	2,000 - 2,200 lbs	1.00 - 1.10 +/- Tons Per C.Y.
1/4" LAVA SAND	1,800 lbs	0.90 +/- Tons Per C.Y.
3/8" LAVA ROCK	1,500 lbs	0.75 +/- Tons Per C.Y.
1/2" - 1" LAVA ROCK	1,400 lbs	0.70 +/- Tons Per C.Y.
1" - 2 1/2" LAVA ROCK	1,350 lbs	0.65 +/- Tons Per C.Y.
SAFECO FIELD MIX	2,000 lbs	1.00 +/- Tons Per C.Y.
GOLF COURSE SAND	2,200 lbs	1.10 +/- Tons Per C.Y.
GRAY CLAY	3,000 lbs	1.50 +/- Tons Per C.Y.
COMPOST	1,000 - 1,300 lbs	0.50 - .65 +/- Tons Per C.Y.
4" QUARRY ROCK	2,400 lbs	1.20 +/- Tons Per C.Y.
4" - 8" QUARRY ROCK	2,400 lbs	1.20 +/- Tons Per C.Y.
HALF MAN ROCK	2,800 lbs	1.40 +/- Tons Per C.Y.
ONE MAN ROCK	2,800 lbs	1.40 +/- Tons Per C.Y.
BOULDERS	3,000 lbs	1.50 +/- Tons Per C.Y.

ROCKERY ROCK SPECIFICATIONS (per W.S.D.O.T. 9-13.7(1))

ROCK SIZE	ROCK WEIGHT*(LBS.)	AVERAGE DIMENSIONS
Half Man	25 - 50 lbs.	6" - 12"
One Man	50 - 200 lbs.	12" - 18"
Two Man	200 - 700 lbs.	18" - 28"
Three Man	700 - 2,000 lbs.	28" - 36"
Four Man	2,000 - 4,000 lbs.	36" - 48"
Five Man	4,000 - 6,000 lbs.	48" - 54"
Six Man	6,000 - 8,000 lbs.	54" - 60"

* NOTES: All of the product weights and conversions are approximations only and there is no warranty, expressed or implied, that our products equal those weights or conversions. There can be wide variances in the weight of various products due to a number of factors, including the moisture content, season, recent weather (dry vs. wet), the material density, the composition of the product, the absorptive qualities of the product, changes in the product, etc. As a general rule, denser material without much void space is heavier, such as rockery rock or pit run gravel. By the same token, bigger rocks and boulders are denser and thus heavier than smaller loose products, such as sand, which is lighter. The greater the capacity for a product to absorb water (particularly weather sensitive materials such as topsoil, cinders, clay, etc.) the more prone that material is to changes in weight due to moisture, rain, or other wet conditions. By the same token, well-drained materials such as pea gravel, 7/8", or 1-1/2" drain gravel are not very susceptible to weight changes due to the presence of moisture. A crushed gravel product with a higher content of fines (or sandy binder) such as State Spec. 5/8" or 1-1/4" crushed gravel (typically 50% fines) is typically heavier than a clear crushed product such as 5/8" or 1-1/4" Clear (typically 5-10% fines), due to there being more void space and the better draining characteristics of the Clear crushed product.

Run Name = Viol 4 fiber rolls

Present Values as of Noncompliance Date (NCD),	01-Oct-2010
A) On-Time Capital & One-Time Costs	\$1,009
B) Delay Capital & One-Time Costs	\$0
C) Avoided Annually Recurring Costs	\$0
D) Initial Economic Benefit (A-B+C)	\$1,009
E) Final Econ. Ben. at Penalty Payment Date,	
<u>10-Jul-2014</u>	<u>\$1,280</u>

C-Corporation w/ CA tax rates

Discount/Compound Rate	6.5%
Discount/Compound Rate Calculated By:	BEN
Compliance Date	03-Sep-2014

Capital Investment:

Cost Estimate	\$0
Cost Estimate Date	N/A
Cost Index for Inflation	N/A
Consider Future Replacement (Useful Life)	N/A (N/A)

One-Time, Nondepreciable Expenditure:

Cost Estimate	\$1,050
Cost Estimate Date	03-Sep-2014
Cost Index for Inflation	PCI
Tax Deductible?	N

Annually Recurring Costs:

Cost Estimate	\$0
Cost Estimate Date	N/A
Cost Index for Inflation	N/A

User-Customized Specific Cost Estimates:

On-Time Capital Investment	N/A
Delay Capital Investment	
On-Time Nondepreciable Expenditure	
<u>Delay Nondepreciable Expenditure</u>	

[Home](#) >> 8" x 25' Rice Straw Wattle Fiber Roll

8" x 25' Rice Straw Wattle Fiber Roll

Brand: | Product Code: 262SCRS825(White Cap # 262SCRS825)

\$24.09

Availability: Usually Ships in 1 Day



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Product Details

Description

Rice Straw Wattle, 8 in Diameter, 25 ft Length, Fiber, For Slopes to Reduce Runoff Velocity and Control or Capture Eroded Sediment

Features

- More effective, easier to install and less maintenance intensive than silt fence and other sedimentation control devices
- Used on slopes to reduce runoff velocity and control or capture eroded sediment

Specifications

- Material: **Fiber**
- Type: **0**
- Diameter: **8 in**
- Length: **25 ft**
- Usage: **For Slopes to Reduce Runoff Velocity and Control or Capture Eroded Sediment**

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Exhibit No. 11
Economic Benefit Calculation Violation No. 5

Violation No. 5, 8 days without erosion control BMPs on exterior slopes.

Estimated area unprotected: 1,467' by 67' = 98,289 ft² = 2.3 acres

Estimated cost of bonded fiber matrix: \$3,901 per acre

Cost to spray exposed slopes with bonded fiber matrix:

$$\frac{\$3,901}{\text{acre}} \times 2.3 \text{ acres} = \$8,972$$

Using the US EPA BEN Model the economic benefit for delaying compliance was \$19.

Run Name = Viol 5

Present Values as of Noncompliance Date (NCD),	02-Jan-2014
A) On-Time Capital & One-Time Costs	\$9,597
B) Delay Capital & One-Time Costs	\$9,578
C) Avoided Annually Recurring Costs	\$0
D) Initial Economic Benefit (A-B+C)	\$19
E) Final Econ. Ben. at Penalty Payment Date,	
<u>10-Jul-2014</u>	<u>\$19</u>

C-Corporation w/ CA tax rates

Discount/Compound Rate	6.7%
Discount/Compound Rate Calculated By:	BEN
Compliance Date	13-Jan-2014

Capital Investment:

Cost Estimate	\$0
Cost Estimate Date	N/A
Cost Index for Inflation	N/A
Consider Future Replacement (Useful Life)	N/A (N/A)

One-Time, Nondepreciable Expenditure:

Cost Estimate	\$8,972
Cost Estimate Date	01-Jul-2007
Cost Index for Inflation	PCI
Tax Deductible?	N

Annually Recurring Costs:

Cost Estimate	\$0
Cost Estimate Date	N/A
Cost Index for Inflation	N/A

User-Customized Specific Cost Estimates:

On-Time Capital Investment	N/A
Delay Capital Investment	
On-Time Nondepreciable Expenditure	
<u>Delay Nondepreciable Expenditure</u>	

Violation No. 6 – Sediment Control BMPs (14 days)

Downed Silt Fence: Silt fence costs approximately \$7 per linear foot to install with a 6 month lifespan¹. Estimate a 40' section each violation. There were 10 reports of downed silt fence in the inspection reports by the QSP.

10 reports	40 feet	\$7	= \$2,800
	Report	linear foot	

Economic benefit from delaying one week is \$4.

Additionally, the Regional Board observed about 100' of damaged silt fence on the northern perimeter of the site. The cost is approximately \$700.

Economic benefit from delaying one week is \$1.

Total economic benefit for silt fencing is \$5.

Inlet Protection: Average annual cost for installation and maintenance is \$200 per inlet². There were two reports of failure to maintain inlet protection by the QSP and one by the Regional Board. A \$600 delayed cost results in an economic savings of \$1.

Fiber Rolls: Discharger failed to maintain two fiber rolls on a slope on December 9, 2013. Twenty-five feet long eight inch diameter fiber rolls/straw wattles cost \$25 each. Therefore 2 25 foot long wattles will cost \$50.

Using BEN computer model equates to an economic benefit of less than one dollar.

Entrance Racks: Average annual cost for installation and maintenance may vary from \$1,200 to \$4,800 each, averaging \$2,400 per entrance. Economic benefit from delaying one week is \$3.

¹ Silt Fence, SE-1, California Stormwater BMP Handbook, Construction, California Stormwater Quality Association, November 2009

² Storm Drain Inlet Protection, SE-10, California Stormwater BMP Handbook, Construction, California Stormwater Quality Association, November 2009

Run Name = Viol 6 silt fence 40

Present Values as of Noncompliance Date (NCD),	05-Nov-2013
A) On-Time Capital & One-Time Costs	\$3,041
B) Delay Capital & One-Time Costs	\$3,037
C) Avoided Annually Recurring Costs	\$0
D) Initial Economic Benefit (A-B+C)	\$4
E) Final Econ. Ben. at Penalty Payment Date,	
<u>10-Jul-2014</u>	<u>\$4</u>

C-Corporation w/ CA tax rates

Discount/Compound Rate	6.6%
Discount/Compound Rate Calculated By:	BEN
Compliance Date	12-Nov-2013

Capital Investment:

Cost Estimate	\$0
Cost Estimate Date	N/A
Cost Index for Inflation	N/A
Consider Future Replacement (Useful Life)	N/A (N/A)

One-Time, Nondepreciable Expenditure:

Cost Estimate	\$2,800
Cost Estimate Date	01-Nov-2009
Cost Index for Inflation	PCI
Tax Deductible?	N

Annually Recurring Costs:

Cost Estimate	\$0
Cost Estimate Date	N/A
Cost Index for Inflation	N/A

User-Customized Specific Cost Estimates: **N/A**

On-Time Capital Investment
Delay Capital Investment
On-Time Nondepreciable Expenditure

Delay Nondepreciable Expenditure

Run Name = Viol 6 silt fence 100

Present Values as of Noncompliance Date (NCD),	09-Jan-2014
A) On-Time Capital & One-Time Costs	\$763
B) Delay Capital & One-Time Costs	\$762
C) Avoided Annually Recurring Costs	\$0
D) Initial Economic Benefit (A-B+C)	\$1
E) Final Econ. Ben. at Penalty Payment Date,	
<u>10-Jul-2014</u>	<u>\$1</u>

C-Corporation w/ CA tax rates

Discount/Compound Rate	6.7%
Discount/Compound Rate Calculated By:	BEN
Compliance Date	14-Jan-2014

Capital Investment:

Cost Estimate	\$0
Cost Estimate Date	N/A
Cost Index for Inflation	N/A
Consider Future Replacement (Useful Life)	N/A (N/A)

One-Time, Nondepreciable Expenditure:

Cost Estimate	\$700
Cost Estimate Date	01-Nov-2009
Cost Index for Inflation	PCI
Tax Deductible?	N

Annually Recurring Costs:

Cost Estimate	\$0
Cost Estimate Date	N/A
Cost Index for Inflation	N/A

User-Customized Specific Cost Estimates: **N/A**

On-Time Capital Investment
Delay Capital Investment
On-Time Nondepreciable Expenditure

Delay Nondepreciable Expenditure

toe of the slope, but should be constructed as far from the toe of the slope as practicable. Silt fences close to the toe of the slope will be less effective and more difficult to maintain.

- Construct the length of each reach so that the change in base elevation along the reach does not exceed $1/3$ the height of the barrier; in no case should the reach exceed 500 ft.
- Cross barriers should be a minimum of $1/3$ and a maximum of $1/2$ the height of the linear barrier.
- See typical installation details at the end of this fact sheet.

Installation Guidelines - Static Slicing Method

- Static Slicing is defined as insertion of a narrow blade pulled behind a tractor, similar to a plow blade, at least 10 inches into the soil while at the same time pulling silt geotextile fabric into the ground through the opening created by the blade to the depth of the blade. Once the geotextile is installed, the soil is compacted using tractor tires.
- This method will not work with pre-fabricated, wire backed silt fence.
- Benefits:
 - Ease of installation (most often done with a 2 person crew). In addition, installation using static slicing has been found to be more efficient on slopes, in rocky soils, and in saturated soils.
 - Minimal soil disturbance.
 - Greater level of compaction along fence, leading to higher performance (i.e. greater sediment retention).
 - Uniform installation.
 - Less susceptible to undercutting/undermining.

Costs

- It should be noted that costs vary greatly across regions due to available supplies and labor costs.
- Average annual cost for installation using the traditional silt fence installation method (assumes 6 month useful life) is \$7 per linear foot based on vendor research. Range of cost is \$3.50 - \$9.10 per linear foot.
- In tests, the slicing method required 0.33 man hours per 100 linear feet, while the trenched based systems required as much as 1.01 man hours per linear foot.

Inspection and Maintenance

- BMPs must be inspected in accordance with General Permit requirements for the associated project type and risk level. It is recommended that at a minimum, BMPs be inspected weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events.
- Repair undercut silt fences.

Run Name = Viol 6 inlet protection

Present Values as of Noncompliance Date (NCD),	09-Dec-2013
A) On-Time Capital & One-Time Costs	\$435
B) Delay Capital & One-Time Costs	\$434
C) Avoided Annually Recurring Costs	\$0
D) Initial Economic Benefit (A-B+C)	\$1
E) Final Econ. Ben. at Penalty Payment Date,	
<u>10-Jul-2014</u>	<u>\$1</u>

C-Corporation w/ CA tax rates

Discount/Compound Rate	6.6%
Discount/Compound Rate Calculated By:	BEN
Compliance Date	16-Dec-2013

Capital Investment:

Cost Estimate	\$0
Cost Estimate Date	N/A
Cost Index for Inflation	N/A
Consider Future Replacement (Useful Life)	N/A (N/A)

One-Time, Nondepreciable Expenditure:

Cost Estimate	\$400
Cost Estimate Date	01-Nov-2009
Cost Index for Inflation	PCI
Tax Deductible?	N

Annually Recurring Costs:

Cost Estimate	\$0
Cost Estimate Date	N/A
Cost Index for Inflation	N/A

User-Customized Specific Cost Estimates: **N/A**

On-Time Capital Investment
Delay Capital Investment
On-Time Nondepreciable Expenditure

Delay Nondepreciable Expenditure

- **DI Protection Type 6 - Biofilter bags** – Biofilter bags may be used as a substitute for gravel bags in low-flow situations. Biofilter bags should conform to specifications detailed in SE-14, Biofilter bags.
 1. Construct in a gently sloping area.
 2. Biofilter bags should be placed around inlets to intercept runoff flows.
 3. All bag joints should overlap by 6 in.
 4. Leave room upstream for water to pond and for sediment to settle out.
 5. Stake bags to the ground as described in the following detail. Stakes may be omitted if bags are placed on a paved surface.

Costs

- Average annual cost for installation and maintenance of DI Type 1-4 and 6 (one year useful life) is \$200 per inlet.
- Temporary geotextile inserts are proprietary and cost varies by region. These inserts can often be reused and may have greater than 1 year of use if maintained and kept undamaged. Average cost per insert ranges from \$50-75 plus installation, but costs can exceed \$100. This cost does not include maintenance.

Inspection and Maintenance

- BMPs must be inspected in accordance with General Permit requirements for the associated project type and risk level. It is recommended that at a minimum, BMPs be inspected weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events.
- Silt Fences. If the fabric becomes clogged, torn, or degrades, it should be replaced. Make sure the stakes are securely driven in the ground and are in good shape (i.e., not bent, cracked, or splintered, and are reasonably perpendicular to the ground). Replace damaged stakes. At a minimum, remove the sediment behind the fabric fence when accumulation reaches one-third the height of the fence or barrier height.
- Gravel Filters. If the gravel becomes clogged with sediment, it should be carefully removed from the inlet and either cleaned or replaced. Since cleaning gravel at a construction site may be difficult, consider using the sediment-laden stone as fill material and put fresh stone around the inlet. Inspect bags for holes, gashes, and snags, and replace bags as needed. Check gravel bags for proper arrangement and displacement.
- Sediment that accumulates in the BMP should be periodically removed in order to maintain BMP effectiveness. Sediment should be removed when the sediment accumulation reaches one-third of the barrier height.
- Inspect and maintain temporary geotextile insert devices according to manufacturer's specifications.
- Remove storm drain inlet protection once the drainage area is stabilized.

Run Name = Viol 6 fiber roll maint

Present Values as of Noncompliance Date (NCD),	<u>09-Dec-2013</u>
A) On-Time Capital & One-Time Costs	\$49
B) Delay Capital & One-Time Costs	\$49
C) Avoided Annually Recurring Costs	\$0
D) Initial Economic Benefit (A-B+C)	\$0
E) Final Econ. Ben. at Penalty Payment Date,	
<u>10-Jul-2014</u>	<u>\$0</u>

C-Corporation w/ CA tax rates

Discount/Compound Rate	6.6%
Discount/Compound Rate Calculated By:	BEN
Compliance Date	16-Dec-2013

Capital Investment:

Cost Estimate	\$0
Cost Estimate Date	N/A
Cost Index for Inflation	N/A
Consider Future Replacement (Useful Life)	N/A (N/A)

One-Time, Nondepreciable Expenditure:

Cost Estimate	\$50
Cost Estimate Date	03-Sep-2014
Cost Index for Inflation	PCI
Tax Deductible?	N

Annually Recurring Costs:

Cost Estimate	\$0
Cost Estimate Date	N/A
Cost Index for Inflation	N/A

User-Customized Specific Cost Estimates:

On-Time Capital Investment	
Delay Capital Investment	
On-Time Nondepreciable Expenditure	

Delay Nondepreciable Expenditure

[Home](#) >> 8" x 25' Rice Straw Wattle Fiber Roll

8" x 25' Rice Straw Wattle Fiber Roll

Brand: | Product Code: 262SCRS825(White Cap # 262SCRS825)

\$24.09

Availability: Usually Ships in 1 Day



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- ✓ Shipped to your door
- ✓ Shipped to a Local Store

Product Details

Description

Rice Straw Wattle, 8 in Diameter, 25 ft Length, Fiber, For Slopes to Reduce Runoff Velocity and Control or Capture Eroded Sediment

Features

- More effective, easier to install and less maintenance intensive than silt fence and other sedimentation control devices
- Used on slopes to reduce runoff velocity and control or capture eroded sediment

Specifications

- Material: **Fiber**
- Type: **0**
- Diameter: **8 in**
- Length: **25 ft**
- Usage: **For Slopes to Reduce Runoff Velocity and Control or Capture Eroded Sediment**

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Run Name = Viol 6 Entrance Rack

Present Values as of Noncompliance Date (NCD),	09-Jan-2014
A) On-Time Capital & One-Time Costs	\$2,615
B) Delay Capital & One-Time Costs	\$2,612
C) Avoided Annually Recurring Costs	\$0
D) Initial Economic Benefit (A-B+C)	\$3
E) Final Econ. Ben. at Penalty Payment Date,	
<u>10-Jul-2014</u>	<u>\$3</u>

C-Corporation w/ CA tax rates

Discount/Compound Rate	6.7%
Discount/Compound Rate Calculated By:	BEN
Compliance Date	16-Jan-2014

Capital Investment:

Cost Estimate	\$0
Cost Estimate Date	N/A
Cost Index for Inflation	N/A
Consider Future Replacement (Useful Life)	N/A (N/A)

One-Time, Nondepreciable Expenditure:

Cost Estimate	\$2,400
Cost Estimate Date	01-Nov-2009
Cost Index for Inflation	PCI
Tax Deductible?	N

Annually Recurring Costs:

Cost Estimate	\$0
Cost Estimate Date	N/A
Cost Index for Inflation	N/A

User-Customized Specific Cost Estimates:

On-Time Capital Investment	N/A
Delay Capital Investment	
On-Time Nondepreciable Expenditure	
<u>Delay Nondepreciable Expenditure</u>	

Stabilized Construction Entrance/Exit TC-1

- Select construction access stabilization (aggregate, asphaltic concrete, concrete) based on longevity, required performance, and site conditions. Do not use asphalt concrete (AC) grindings for stabilized construction access/roadway.
- If aggregate is selected, place crushed aggregate over geotextile fabric to at least 12 in. depth, or place aggregate to a depth recommended by a geotechnical engineer. A crushed aggregate greater than 3 in. but smaller than 6 in. should be used.
- Designate combination or single purpose entrances and exits to the construction site.
- Require that all employees, subcontractors, and suppliers utilize the stabilized construction access.
- Implement SE-7, Street Sweeping and Vacuuming, as needed.
- All exit locations intended to be used for more than a two-week period should have stabilized construction entrance/exit BMPs.

Inspection and Maintenance

- Inspect and verify that activity-based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMPs are under way, inspect BMPs in accordance with General Permit requirements for the associated project type and risk level. It is recommended that at a minimum, BMPs be inspected weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events.
- Inspect local roads adjacent to the site daily. Sweep or vacuum to remove visible accumulated sediment.
- Remove aggregate, separate and dispose of sediment if construction entrance/exit is clogged with sediment.
- Keep all temporary roadway ditches clear.
- Check for damage and repair as needed.
- Replace gravel material when surface voids are visible.
- Remove all sediment deposited on paved roadways within 24 hours.
- Remove gravel and filter fabric at completion of construction

Costs

Average annual cost for installation and maintenance may vary from \$1,200 to \$4,800 each, averaging \$2,400 per entrance. Costs will increase with addition of washing rack, and sediment trap. With wash rack, costs range from \$1,200 - \$6,000 each, averaging \$3,600 per entrance.

References

Manual of Standards of Erosion and Sediment Control Measures, Association of Bay Area Governments, May 1995.

Violation No. 7: Good Housekeeping BMPs

Debris: Four months of non-compliance (October, November, December 2013, and January 2014).

Lack of debris management throughout the site. Refuse total weight was 67 tons in December 2013 and 90 tons in February 2014. Estimate that 20 tons of refuse per month should have been collected. Two additional dumpsters¹ per month would have cost approximately \$700. Estimate that one additional laborer² could have been used to pick up the refuse each month. Labor cost would have been \$3,333 per month. So four months of labor and dumpsters would be $(\$3,333 + \$700) \times 4 = \$16,132$. Using the U.S. EPA BEN computer model the economic benefit of delaying compliance is \$250.

Street Sweeping: : Four months of non-compliance (October, November, December 2013, and January 2014).

A 9 cubic yard hopper street sweeper costs approximately \$100 per hour to rent³. Estimate one hour additional per day Monday through Saturday, for the time period (October 2013, 27 days; November 2013, 26 days; December 2013, 26 days; and January 2014, 26 days.) is 105 hours. $105 \text{ hours} \times \$100 \text{ per hour} = \$10,500$. Using the U.S. EPA BEN computer model the economic benefit of delaying compliance is \$179.

Concrete Washout Bin: Rental is \$475 plus 8% fuel surcharge, and \$7 daily rental⁴. There were two reports of full bins. Therefore, estimate that two rentals for 30 days equals \$1,446. Using the U.S. EPA BEN computer model the economic benefit is \$11.

The total economic benefit is \$440.

¹ 40 yard roll off cost approximately \$350 and contains an estimated 10 tons of refuse.

² Construction laborer: \$20/hour or \$3,333.33 per month based upon San Diego average salary of \$40,000 per year.

³ Street Sweeping and Vacuuming, SE-7, California Stormwater BMP Handbook, Construction, California Stormwater Quality Association, November 2009

⁴ American Concrete Washouts, www.SanDiegoConcreteWashout.com, September 15, 2014

Run Name = Viol 7 Debris

Present Values as of Noncompliance Date (NCD),	01-Oct-2013
A) On-Time Capital & One-Time Costs	\$15,840
B) Delay Capital & One-Time Costs	\$15,602
C) Avoided Annually Recurring Costs	\$0
D) Initial Economic Benefit (A-B+C)	\$238
E) Final Econ. Ben. at Penalty Payment Date,	
<u>10-Jul-2014</u>	<u>\$250</u>

C-Corporation w/ CA tax rates

Discount/Compound Rate	6.6%
Discount/Compound Rate Calculated By:	BEN
Compliance Date	01-Feb-2014

Capital Investment:

Cost Estimate	\$0
Cost Estimate Date	N/A
Cost Index for Inflation	N/A
Consider Future Replacement (Useful Life)	N/A (N/A)

One-Time, Nondepreciable Expenditure:

Cost Estimate	\$16,132
Cost Estimate Date	15-Sep-2014
Cost Index for Inflation	PCI
Tax Deductible?	N

Annually Recurring Costs:

Cost Estimate	\$0
Cost Estimate Date	N/A
Cost Index for Inflation	N/A

User-Customized Specific Cost Estimates:

On-Time Capital Investment	N/A
Delay Capital Investment	
On-Time Nondepreciable Expenditure	
<u>Delay Nondepreciable Expenditure</u>	

Run Name = Viol 7 Street Sweeping

Present Values as of Noncompliance Date (NCD),	01-Oct-2013
A) On-Time Capital & One-Time Costs	\$11,385
B) Delay Capital & One-Time Costs	\$11,215
C) Avoided Annually Recurring Costs	\$0
D) Initial Economic Benefit (A-B+C)	\$170
E) Final Econ. Ben. at Penalty Payment Date,	
<u>10-Jul-2014</u>	<u>\$179</u>

C-Corporation w/ CA tax rates

Discount/Compound Rate	6.6%
Discount/Compound Rate Calculated By:	BEN
Compliance Date	01-Feb-2014

Capital Investment:

Cost Estimate	\$0
Cost Estimate Date	N/A
Cost Index for Inflation	N/A
Consider Future Replacement (Useful Life)	N/A (N/A)

One-Time, Nondepreciable Expenditure:

Cost Estimate	\$10,500
Cost Estimate Date	01-Nov-2009
Cost Index for Inflation	PCI
Tax Deductible?	N

Annually Recurring Costs:

Cost Estimate	\$0
Cost Estimate Date	N/A
Cost Index for Inflation	N/A

User-Customized Specific Cost Estimates: **N/A**

On-Time Capital Investment	
Delay Capital Investment	
On-Time Nondepreciable Expenditure	

Delay Nondepreciable Expenditure

- If not mixed with debris or trash, consider incorporating the removed sediment back into the project

Costs

Rental rates for self-propelled sweepers vary depending on hopper size and duration of rental. Expect rental rates from \$58/hour (3 yd³ hopper) to \$88/hour (9 yd³ hopper), plus operator costs. Hourly production rates vary with the amount of area to be swept and amount of sediment. Match the hopper size to the area and expect sediment load to minimize time spent dumping.

Inspection and Maintenance

- Inspect BMPs in accordance with General Permit requirements for the associated project type and risk level. It is recommended that at a minimum, BMPs be inspected weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events.
- When actively in use, points of ingress and egress must be inspected daily.
- When tracked or spilled sediment is observed outside the construction limits, it must be removed at least daily. More frequent removal, even continuous removal, may be required in some jurisdictions.
- Be careful not to sweep up any unknown substance or any object that may be potentially hazardous.
- Adjust brooms frequently; maximize efficiency of sweeping operations.
- After sweeping is finished, properly dispose of sweeper wastes at an approved dumpsite.

References

Stormwater Quality Handbooks - Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), November 2000.

Labor Surcharge and Equipment Rental Rates, State of California Department of Transportation (Caltrans), April 1, 2002 – March 31, 2003.

Run Name = Viol 7 Washout Bins

Present Values as of Noncompliance Date (NCD),	01-Nov-2013
A) On-Time Capital & One-Time Costs	\$1,422
B) Delay Capital & One-Time Costs	\$1,412
C) Avoided Annually Recurring Costs	\$0
D) Initial Economic Benefit (A-B+C)	\$10
E) Final Econ. Ben. at Penalty Payment Date,	
<u>10-Jul-2014</u>	<u>\$11</u>

C-Corporation w/ CA tax rates

Discount/Compound Rate	6.6%
Discount/Compound Rate Calculated By:	BEN
Compliance Date	01-Jan-2014

Capital Investment:

Cost Estimate	\$0
Cost Estimate Date	N/A
Cost Index for Inflation	N/A
Consider Future Replacement (Useful Life)	N/A (N/A)

One-Time, Nondepreciable Expenditure:

Cost Estimate	\$1,446
Cost Estimate Date	15-Sep-2014
Cost Index for Inflation	PCI
Tax Deductible?	N

Annually Recurring Costs:

Cost Estimate	\$0
Cost Estimate Date	N/A
Cost Index for Inflation	N/A

User-Customized Specific Cost Estimates:

On-Time Capital Investment	N/A
Delay Capital Investment	
On-Time Nondepreciable Expenditure	
<u>Delay Nondepreciable Expenditure</u>	



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- Unlike any other washout provider, we offer both the ramp & rampless style EPA compliant, portable, watertight, patented Concrete Washout System (CWS). Our CWS is a 5.5 cubic yard bin that on average will accommodate a 360 cubic yard pour. (approximately 36 mixer trucks and 2 pump trucks)
 - Established in 2004, we are the industries trusted service provider for infrastructure, military, commercial & residential projects. Some of our customers include:
 Kiewit, Sundt, Hensel Phelps, McCarthy, Flatiron, Granite, Balfour Beatty, Coffman & many more builders/constructors to name a few.
 - Our roll off tucks have a built in vacuum system, allowing us to service job sites, on average, with a single truck.
 - As the preferred service provider, we not only properly handle and recycle the concrete washout material, we properly handle and recycle the caustic, high PH water collected.
- Our company participates in the **RapidGate** program to access military base projects.

Cost by services from Mission Valley	Within 20 miles	Within 20 to 40 miles	Within 40 to 60 miles
Each Ramped or Rampless Concrete Washout	\$475 each	\$525	\$575
300 gallon vacuum at removal or swap	No Charge	No Charge	No Charge
Daily rental	\$7	\$7	\$7
Removal fee	None	None	None
Environmental surcharge	None	None	None
Mileage surcharge	None	None	None
Fuel surcharge	8% and up	8% and up	8% and up
Diversion reporting - LEED	None	None	None
Water vacuums or relocates if needed	\$275 each	\$325	\$375
AVOID THESE SURCHARGES BELOW - NO PLASTIC OR TRASH - CALL AHEAD			
Trash or plastic debris in bin	\$75 PER TON	\$75 PER TON	\$75 PER TON
Saw cuttings or grindings	\$300	\$300	\$300
Same day service fee - if able	\$175	\$175	\$175

Exhibit No. 14
Economic Benefit Calculation Violation No. 8

Violation 8, Checklist

Estimate that employees receive \$20 per hour.

Estimate that employee works five hours per week reviewing and implementing weekly inspection form.

12 weeks of failure to implement checklist.

$$\frac{12 \text{ weeks}}{1} \times \frac{5 \text{ hours}}{\text{week}} \times \frac{\$20}{\text{hour}} = \$1,200$$

Using the EPA BEN model results in an economic savings of \$1,238.

Run Name = Viol 8 checklist

Present Values as of Noncompliance Date (NCD),	01-Oct-2013
A) On-Time Capital & One-Time Costs	\$1,178
B) Delay Capital & One-Time Costs	\$0
C) Avoided Annually Recurring Costs	\$0
D) Initial Economic Benefit (A-B+C)	\$1,178
E) Final Econ. Ben. at Penalty Payment Date,	
<u>10-Jul-2014</u>	<u>\$1,238</u>

C-Corporation w/ CA tax rates

Discount/Compound Rate	6.6%
Discount/Compound Rate Calculated By:	BEN
Compliance Date	15-Jan-2014

Capital Investment:

Cost Estimate	\$0
Cost Estimate Date	N/A
Cost Index for Inflation	N/A
Consider Future Replacement (Useful Life)	N/A (N/A)

One-Time, Nondepreciable Expenditure:

avoided

Cost Estimate	\$1,200
Cost Estimate Date	19-Sep-2014
Cost Index for Inflation	PCI
Tax Deductible?	N

Annually Recurring Costs:

Cost Estimate	\$0
Cost Estimate Date	N/A
Cost Index for Inflation	N/A

User-Customized Specific Cost Estimates:

N/A

On-Time Capital Investment	
Delay Capital Investment	
On-Time Nondepreciable Expenditure	
<u>Delay Nondepreciable Expenditure</u>	

Exhibit No. 15 Staff Cost Summary
--

STAFF HOURS PRE 7-1-14

STAFF	HOURS	MONTHLY SALARY	Hourly	Hourly total	Benefits	Total
CCLEMENTE		6775	\$39.09	\$0.00	\$0.00	\$0.00
RSTEWART		6208	\$35.82	\$0.00	\$0.00	\$0.00
FMELBOURN	0	8630	\$49.79	\$0.00	\$0.00	\$0.00

TOTAL COSTS \$0.00

STAFF HOURS POST 7-1-14

STAFF	HOURS	MONTHLY SALARY	Hourly	Hourly total	Benefits	Total
CCLEMENTE	0	6911	\$39.87	\$0.00	\$0.00	\$0.00
RSTEWART	0	6332	\$36.53	\$0.00	\$0.00	\$0.00
FMELBOURN	152.5	8630	\$49.79	\$7,592.89	\$3,280.89	\$10,873.77

TOTAL COSTS \$10,873.77

Discharge Violation: Potential for Harm

Violations	Harm/Potential Harm to Beneficial Uses [0 -5]	Physical, Chemical, Biological or Thermal Characteristics [0 -4]	Susceptibility to Cleanup or Abatement [0 or 1]	Total Potential for Harm [0 - 10]
Violation 1	3	2	1	6

Discharge Violation

Violations	Total Potential for Harm [0 - 10]	Deviation from Requirement [minor, moderate, major]	Total per Day Factor	Days of Violation	Statutory Max per Day [WC § 13385]	Culpability [0.5 - 1.5]	Cleanup and Cooperation [0.75 - 1.5]	History of Violations	Liability Amount ¹	Economic Benefit	Liability	
											Minimum	Maximum
Violation 1	6	major	0.22	1	\$10,000	1.5	1.0	1.0	\$3,300	\$0	\$0	\$10,000

Non-Discharge Violations

Violations	Potential for Harm minor, moderate, major	Deviation from Requirement [minor, moderate, major]	Total per Day Factor	Days of Violation	Statutory Max per Day [WC § 13385]	Culpability [0.5 - 1.5]	Cleanup and Cooperation [0.75 - 1.5]	History of Violations	Liability Amount ¹	Economic Benefit	Liability	
											Minimum	Maximum
Violation 2	moderate	major	0.55	1	\$10,000	1.5	1.0	1.0	\$8,250	\$2,433	\$2,676	\$10,000
Violation 3	moderate	moderate	0.35	2	\$10,000	1.3	1.0	1.0	\$9,100	\$185	\$204	\$20,000
Violation 4	moderate	moderate	0.35	3	\$10,000	1.3	1.0	1.0	\$13,650	\$1,304	\$1,434	\$30,000
Violation 5	moderate	moderate	0.35	11	\$10,000	1.3	1.0	1.0	\$50,050	\$19	\$21	\$110,000
Violation 6	moderate	moderate	0.35	14	\$10,000	1.3	1.0	1.0	\$63,700	\$9	\$10	\$140,000
Violation 7	moderate	moderate	0.35	16	\$10,000	1.3	1.0	1.0	\$72,800	\$440	\$484	\$160,000
Violation 8	moderate	moderate	0.35	12	\$10,000	1.3	1.0	1.0	\$54,600	\$1,238	\$1,362	\$120,000

Ability to Pay & Continue in Business	
[Yes, No, Partly, Unknown]	Other
Yes	N/A

Other Factors as Justice May Require	
Costs of Investigation & Enforcement	Other
\$10,874	N/A

Total Liability (All liabilities plus staff costs)
\$286,324

¹ (per day factor) x (days of violation) x (statutory maximum) x (culpability) x (cleanup & cooperation) x (history of violations) = Liability Amount