# California Regional Water Quality Control Board San Diego Region

# Municipal Separate Storm Sewer System (MS4) Construction Management Program Audit Report for the City of San Diego

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#### I. List of Abbreviations

BMP Best Management Practice

DSD Development Services Department,

Inspection Services Division,

City of San Diego

FED Public Works Department, Field Engineering

Division, City of San Diego

FY Fiscal Year

JRMP Jurisdictional Runoff Management Program

MEP Maximum Extent Practicable

MS4 Municipal Separate Storm Sewer System

NOV Notice of Violation

Order Order Number R9-2007-0001

RE Resident Engineer

San Diego Water Board California Regional Water Quality Control Board,

San Diego Region

SOP Standard Operating Procedure

SWPPP Storm Water Pollution Prevention Plan

### II. Background and Purpose

On April 8-10, 2014, the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) conducted an audit of the City of San Diego (City) construction management program element of the Municipal Separate Storm Sewer System (MS4) program. The audit was conducted as a follow-up to the San Diego Water Board issuance of Notice of Violation (NOV) No. R9-2014-0024 to the City on March 7, 2014 (Attachment 1). NOV No. R9-2014-0024 was issued to the City for failing to implement the minimum construction management requirements of Order No. R9-2007-0001, the municipal storm water permit in effect at the time the NOV was issued. The NOV cited numerous instances of noncompliance at construction sites within the City's jurisdiction documented by the San Diego Water Board during routine construction site inspections.

The purpose of this audit was to review the City's construction management program and identify deficiencies where correction action is needed both to address current noncompliance issues cited in NOV No. R9-2014-0024, and to avoid future instances of noncompliance. NOV No. R9-2014-0024 alleges that the City failed to require implementation of designated minimum best management practices (BMPs) at construction sites, and failed to implement an escalating enforcement process to reduce, eliminate, and prevent reoccurrence of noncompliance at construction sites where deficiencies were noted. In 2011, the San Diego Water Board issued an NOV (NOV No. R9-2011-0027; Attachment 2), which also cited the City for failing to implement the minimum construction management requirements. Thus, in light of the two NOVs which have been issued over the span of three years, the San Diego Water Board has concluded that the City has not taken the necessary steps to substantially improve the construction management program and continues to be out of compliance with applicable requirements as set forth in further detail below. The goal of the audit was to identify impediments within the City's structure or internal processes that prevent the City from implementing an adequate construction management program to control discharges of pollutants from construction sites.

#### A. Audit Process

Preliminary preparation for the audit consisted of a review of the City's Jurisdictional Runoff Management Plan (JRMP), JRMP Annual Reports for fiscal years (FY) 2012 and 2013, and the San Diego Storm Water Management and Discharge Control Ordinance (Municipal Code at Section 43.04 et seq.). Other reviewed documents included the City's *Storm Water Standards Manual*, which describes the minimum storm water BMP requirements, and several inspection reports for two construction sites prepared by City inspectors.

On April 8, 2014, the San Diego Water Board met with City staff of two primary departments within the City that are responsible for construction management and

oversight: 1) the Public Works Department, Field Engineering Division (FED), and 2) the Development Services Department, Inspection Services Division (DSD). The meeting covered the basic elements of the City's construction management program including the City's legal authority to control pollutant discharges at construction sites, project tracking, and the review process for storm water pollution prevention plans (SWPPPs; also referred to as Water Quality Control Plans for smaller sites). The April 8, 2014 meeting agenda is included as **Attachment 3**. The San Diego Water Board subsequently met separately with each of the two departments to better understand the responsibilities and structure of each department in detail. The inspection audit conducted on April 9 and 10, 2014 consisted of San Diego Water Board staff "shadowing" several City inspectors at multiple construction sites to observe the inspections and, if applicable, enforcement processes.

This Audit Report does not attempt to comprehensively describe all aspects of the City's construction management program, fully document all lines of questioning conducted during personnel interviews, or document all in-field verification activities conducted during site visits. The findings listed in section III below describe both violations of the Order, as well as observations of inefficiencies or inconsistencies in the City's construction management program.

The primary contact at the City for this audit was Ms. Julie Ballesteros (Senior Civil Engineer, FED). Ms. Christina Arias, Water Resource Control Engineer, served as the lead auditor for the San Diego Water Board.

#### **B. Municipal MS4 Permit**

Discharges from the City's MS4 are regulated by San Diego Water Board Order No. R9-2013-0001 (National Pollutant Discharge Elimination System (NPDES) permit number CAS0109266). Order No. R9-2013-0001 was adopted on May 8, 2013 and became effective on June 27, 2013. Prior to the adoption of this Order, discharges from the City's MS4 were regulated by Order No. R9-2007-0001. Due to a 24-month program implementation schedule, the requirements pertaining to construction management are still governed by Order No. R9-2007-0001, as provided in Provision E of Order No. R9-2013-0001. Therefore, the audit consisted of evaluating the City's compliance with Provision D.2, Construction (Management) Component, of Order No. R9-2007-0001 (Order) including but not limited to requirements pertaining to:

- a. Ordinance Update and Approval Process;
- b. Source Identification;
- c. BMP Implementation;
- d. Inspection of Construction Sites;
- e. Enforcement at Construction Sites; and
- f. Reporting of Non-Compliant Sites.

### III. Audit Findings

### A. Fiscal Years 2012 and 2013 JRMP Annual Reports

The San Diego Water Board reviewed the FY 2012 and 2013 JRMP Annual Reports and found evidence of noncompliance and other information indicating that the City's construction site enforcement process had not been functioning effectively. These items are discussed below.

### 1. The City Lacks a Watershed-Based Construction Site Inventory and Identification of Sites Draining to Sediment-Impaired Waterbodies

Provision D.2.b of the Order requires that the City must maintain and update monthly a watershed-based inventory of all construction sites within the City's jurisdiction. Provision D.2.c.(4) requires that the City implement, or require implementation of, additional controls for construction sites tributary to Clean Water Act section 303(d) waterbody segments impaired for sediment. However, Appendices D and E of the FY 2012 Annual Report, which list all active construction sites or sites with building permits, did not specify the watershed location of the sites. Attachment 1 to the FY 2013 Annual Report states that out of 11,216 construction sites, 8,006 fall under a category "Unable to Identify Watershed at this Time." Since there is no evidence that the City updated the inventory on a monthly basis to include geo-location by watershed, the City cannot readily identify sites that drain to waterbody segments impaired for sediment. Without this information, the City cannot require additional controls for such sites. The City's lack of a watershed-based construction site inventory is a violation of Provision D.2.b of the Order. The City's inability to require additional controls for construction sites upstream of sediment-impaired waterbodies because there is no watershed-based inventory is a violation of Provision D.2.c(4) of the Order.

**Recommendation:** The City must update its construction site inventory to include geolocation of each construction site by watershed and require additional controls for construction sites upstream of sediment impaired waterbodies.

## 2. The Inspection and Enforcement Processes are not Effective at Ensuring BMP Implementation and Preventing Sediment Discharges from Construction Sites

Provision D.2.d of the Order requires that the City conduct inspections at all construction sites at a minimum frequency that is based on priority (threat to water quality) and the season. The City's Annual Reports indicate that the minimum number of construction site inspections required under this Provision was met. For FY 2012, between the FED and DSD departments, the City conducted 58,249 inspections for the reporting period. In terms of enforcement, the City took 420 actions (e.g. Corrective Notices, Stop Inspection Notices) for the reporting period. This is an enforcement rate (number of enforcement actions/number of inspections conducted) of approximately 0.7

percent. Similarly, for FY 2013, the City conducted 64,066 inspections, and took 226 enforcement actions. This is an enforcement rate of approximately 0.3 percent. The City did not issue any Stop Work Orders for either reporting period.

The City of San Diego Storm Water Division is responsible for responding to complaints and instances of actual discharges of material into the City storm drain system. For each complaint received, the Storm Water Division launches an investigation to find out the source of the discharge, and take corrective measures as necessary. According to the FY 2012 Annual Report, the Storm Water Division inspected 140 unique locations where construction-related waste had reached the storm drain system. To correct the violations, the Storm Water Division issued 53 Administrative Citations and 43 Notices of Violations to construction sites for the fiscal year. Presumably, the 140 construction sites had inadequate BMPs, which is why the discharges occurred. Assuming that the construction sites had inadequate BMPs which caused the observed discharges, then the regularly scheduled construction site inspections conducted by FED and DSD, and the follow-up enforcement processes, were not effective. Although the City met the minimum inspection frequency required by the Order, the City is nonetheless in violation of Provision D.2 which states that "Each Copermittee shall implement a construction program which ... reduces construction site discharges of pollutants from the MS4 to the maximum extent practicable (MEP), and prevents construction site discharges from the MS4 from causing or contributing to a violation of water quality standards."

**Recommendation:** The City must make substantial improvements to its construction management program to prevent discharges of sediment from construction sites within its jurisdiction and avoid further enforcement action from the San Diego Water Board.

### B. Meetings and Inspections with Field Engineering Division and Development Services Department

On April 8, 2014, San Diego Water Board met with representatives from FED, DSD, and the City Attorney's office to learn about the City's internal processes for managing construction sites. The sign-in sheet for this meeting is included as **Attachment 4**. The presentations by both FED and DSD are included as **Attachments 5 and 6**, respectively. On April 9-10, 2014, the San Diego Water Board staff "shadowed" multiple City inspectors from both departments on their normal routines. In this Audit Report, a BMP inspector from FED is referred to as a "Resident Engineer" (RE) and a BMP inspector from DSD is referred to as a trade inspector. The construction management program deficiencies noted during the three audit days are described in the following findings.

### 3. The City does not Emphasize Minimization of Exposure Time of Disturbed Areas

During the audit meeting and field days, the San Diego Water Board noted that the concept of "project planning" as a BMP to minimize the exposure time of disturbed areas at construction sites is not well understood by the City nor is its implementation

required by the City at construction sites. Project planning as a BMP is an important element of general site management expressed in several provisions of the Order. Provision D.2.c.(1)(a) of the Order requires the City to designate minimum BMPs for general site management and also includes the following requirements pertaining to minimization of exposure time of disturbed areas and project planning:

- ".....iii. Minimization of areas that are cleared and graded to only the portion of the site that is necessary for construction;
- iv. Minimization of exposure time of disturbed soil areas;
- v. Minimization of grading during the wet season and correlation of grading with seasonal dry weather periods to the extent feasible;
- vi. Limitation of grading to a maximum disturbed area as determined by each Copermittee before either temporary or permanent erosion control controls are implemented to prevent storm water pollution........"

The City's *Storm Water Standards Manual* describes the minimum BMP requirements for all construction sites within the City's jurisdiction. Although the *Storm Water Standards Manual* includes a maximum disturbed area limitation of 5 acres, it does not include requirements to implement project planning as a means of minimizing the exposure time of disturbed areas. During the field days, the San Diego Water Board observed that both REs and trade inspectors were not instructing contractors to minimize exposure time of disturbed areas and therefore not enforcing this requirement. The City's failure to specify project planning as a minimum required BMP is a violation of Provisions D.2.c.(1)(a)iii – v of the Order.

**Recommendation:** The *Storm Water Standards Manual* must be revised to include requirements for project planning in order to minimize the exposure time of disturbed soils, and inspectors must enforce this requirement.

### 4. Literature Provided to Dischargers is Not Consistent with the Storm Water Standards Manual

Provision D.2.c.(1)(b) of the Order describes minimum BMPs for erosion and sediment controls that the City must require at all construction sites. The provision states that erosion prevention is to be used as the most important measure for keeping sediment on-site during construction, and that sediment controls are to be used as a supplement to erosion prevention. Furthermore, slope stabilization is required on all inactive slopes during the rainy season, and on all active slopes during rain events regardless of the season. Finally, the Provision requires permanent re-vegetation or landscaping as early as feasible.

The Storm Water Standards Manual describes requirements for erosion control, such as:

- a. Deployment of physical or vegetation erosion control BMPs must commence as soon as grading and/or excavation is completed for any portion of the site. The project proponent may not continue to rely on the ability to deploy standby BMP materials to prevent erosion of graded areas that have been completed;
- b. Protect and stabilize all slopes during rain events; and
- c. Materials needed to install standby BMPs necessary to completely protect the exposed portions of the site from erosion, and to prevent sediment discharges, must be stored on site.

The Storm Water Standards Manual is consistent with the requirements of the Order and clearly describes the expectations for erosion control by the discharger. However, this information is not accurately conveyed to construction site personnel. The City's trade inspectors routinely distribute brochures to construction site personnel describing construction site BMPs (Attachment 7); however, this brochure is not consistent with the Storm Water Standards Manual. While the brochure describes erosion control measures, the emphasis is on temporary BMPs such as straw wattles and erosion control blankets. In contrast, the Storm Water Standards Manual emphasizes permanent erosion control BMPs for all completed areas, and requires standby BMPs for unfinished areas. The brochure does not appear to emphasize erosion control as the most important measure for controlling sediment discharges, and does not emphasize re-vegetation or permanent erosion control, as required by the Storm Water Standards Manual. This misunderstanding is evident not only in the literature provided to the dischargers, but throughout the discussions with the departments and the field inspectors, as described in Finding 10.

**Recommendation**: The City should consider revising its literature to reflect the requirements of the *Storm Water Standards Manual* and emphasize permanent erosion control BMPs.

#### 5. Use of Two Separate Databases Causes Communication Gap

During the audit, FED explained that it uses a software program referred to as "SD Share SWPPP database" to document inspection results. REs are required to log in the inspections into the database as part of their normal routine.

Similarly, DSD uses a database called "Project Tracking System" to document inspection results. DSD does not have access to FED's database; therefore any observations, open enforcement cases, inspection history, or other relevant information is not readily available to all inspectors responsible for inspecting BMPs. Furthermore, in cases where a construction site has not requested an inspection, a trade inspector may inspect a site for the sole purpose of meeting the minimum required inspection frequency, not knowing that the RE assigned to the site has already (or has planned to) inspect the site that same week. This illustrates that the City's inspection responsibility

structure causes confusion within both departments, as to who has primary responsibility of BMP inspection and enforcement. During the field portion of the audit, this scenario (inspectors from both departments at one site inspecting BMPs simultaneously) actually occurred.

**Recommendation**: The City should have a shared database between FED, DSD, and any other department charged with construction site management.

#### 6. BMP Adequacy Is Tied to the SWPPP and not the Site

FED's Standard Operating Procedure (SOP) for the REs (**Attachment 8**) includes instructions for conducting inspections. REs are instructed to ensure that BMPs are implemented in accordance with the site's SWPPP or Water Pollution Control Plan. Similarly, DSD's internal procedures (**Attachment 9**) instruct the trade inspectors to first locate the SWPPP (and presumably verify BMPs are consistent with the SWPPP). Although these are "living documents," neither FED's SOP nor DSD's internal procedures instruct the inspectors to require more or better BMPs if the SWPPPs are outdated or inadequate. During the field days, the San Diego Water Board noted that inspectors reviewed the SWPPP and used it as a basis for determining compliance, even though site conditions warranted different BMPs than were described in the SWPPP.

**Recommendation**: The City must ensure that its inspectors are knowledgeable and empowered to require BMPs on the spot that are not declared in the SWPPP, as warranted by site conditions.

### 7. Field Engineering Division's Inspection Process is Predictable and Does Not Include Acknowledgement from Contractor

During the audit, the City explained that the REs are expected to proceed with BMP inspections with some degree of unpredictability, to the extent feasible. However, FED's SOP does not have any instruction to this effect. This expectation is not routinely being met, as was noted by the San Diego Water Board field inspectors during separate routine inspections apart from the audit.

The SOP is also unclear as to the need to issue BMP Inspection Notices to contractors. The SOP states that the RE shall inspect the site *and* issue BMP Inspection Notices "as needed", but simultaneously states that it shall be done at the required frequency based on the project priority ranking. Therefore it is unclear if BMP Inspection Notices are required for every inspection, or just when deficiencies are noted. There is no language instructing the REs to obtain a confirmation signature from the contractors when a BMP Inspection Notice is issued, but this is the expectation, as explained during the audit meeting. REs do not routinely leave BMP Inspection Notices with contractors nor obtain confirmation signatures from the contractors acknowledging receipt of the Notices, as was noted by San Diego Water Board field inspectors during separate routine

inspections apart from the audit.

**Recommendation**: The SOP should be amended to clarify expectations of the REs. The SOP should include language instructing REs to inspect sites with some degree of unpredictability and to obtain confirmation signatures from the contractors acknowledging receipt of Inspection Notices. REs should also verify and document that required corrections associated with a BMP Inspection Notice on a construction site have been made.

### 8. Resident Engineers' Workload is Prohibiting BMP Inspection and Enforcement Effectiveness

The REs are responsible for conducting BMP inspections of private projects with grading permits, and for construction management, including BMP inspections, of public capital improvement projects (CIPs). In addition to BMP-related responsibilities, REs are also responsible for contract management, reviewing change orders and design changes, dispute resolution, utility coordination, permanent (post-construction) BMP inspections, project closeout, and various other items. Currently, the City has over 1,500 active permits that 68 REs oversee. During the audit, the City explained that at times it is challenging for the REs to meet the required minimum inspection frequency of the Order due to the large number of active construction sites and the number of items for which each RE is responsible. The difficulty in handling and completing the daily workload was observed by the San Diego Water Board during the field days. This difficulty has most likely contributed to the City being in violation of the MEP standard as required by Provision D.2 of the Order.

**Recommendation**: The City should consider hiring more REs, or otherwise adjusting the workload to allow more thorough BMP inspections.

### 9. Multiple Trade Inspectors Having Shared BMP Inspection Responsibility is Ineffective and Inefficient

During the audit, the City explained that the DSD's Inspection Services Division is responsible for conducting inspections at sites where building permits are issued. The Inspection Services Division conducts structural, mechanical, electrical, plumbing, and other special inspections for customers needing approvals before further work on the construction project, or tenant improvement project, can proceed. In addition, each inspector is responsible for inspecting BMPs. Customers call the Department to request an inspection, and the Department attempts to schedule and complete the inspection on that same day. Trade inspectors typically inspect 12-15 sites per day.

Some construction sites request multiple inspections each week, depending on the stage of construction and the individual needs of the site. As a result, one construction site could have several City staff inspecting BMPs in any given week. This has led to the following problems:

- a. **Inconsistency**-- Each inspector could be giving different feedback regarding BMP expectations to the customer, causing unnecessary confusion;
- Redundancy-- For a smaller construction site, or one that is not in a particularly dynamic stage, it is redundant for a trade inspector to inspect BMPs if another inspector already did a thorough job that same week;
- c. Lack of ownership-- Putting every trade inspector in charge of BMP inspections creates confusion as to who is in charge or who is the lead on an open enforcement case. Because of workload, one inspector may opt to skip or truncate BMP inspections, knowing that another inspector already performed BMP inspections earlier in the week, or knowing that another inspector will be at the site later in the week:
- d. Discontinuity-- Trade inspectors issue BMP Notices when corrections are needed. Other trade inspectors are allowed to sign off on the corrections, which may be problematic if the first inspector's expectations are not met;
- e. **BMP Inspections are secondary**-- The City's inspection process is customer service driven. Inspectors are called to sites for the primary purpose of performing trade inspections, with storm water BMP inspections as an added responsibility. The structure of this inspection process does not support adequate BMP inspection and implementation (i.e., a customer does not request a BMP inspection).

The current system is inefficient because multiple inspectors have shared tasks, and ineffective because of the problems described above. Furthermore, as with the REs, the trade inspectors' workload is preventing effective BMP inspection and enforcement. These problems most likely contributed to violations noted by San Diego Water Board at two separate construction sites (*Torrey Hills Unit 19* and *Casa Mira View*).

The City has 12,470 active construction sites<sup>1</sup>, and approximately 110 inspectors (REs and trade inspectors) responsible for conducting BMP inspections at these sites. Additionally, each inspector is tasked with other responsibilities that often take precedent over BMP inspections. As stated in Finding 8, the workload and ineffective inspection program have most likely contributed to the City being in violation of the MEP standard as required by Provision D.2 of the Order.

**Recommendation**: DSD should consider restructuring the BMP inspection program to relieve some trade inspectors from BMP inspection job duties. The BMP inspection job duties should be assigned to specific inspection staff (not all staff) to avoid confusion,

<sup>&</sup>lt;sup>1</sup> This number differs from the approximately 11,000 active construction sites listed in the FY 2013 JRMP Annual Report because the Annual Report erroneously omitted trenching projects in the City's right-of-way, according email dated May 14, 2014 from Julie Ballesteros, City of San Diego, to Christina Arias, San Diego Water Board.

clarify job expectations, and avoid redundancy and inefficiency. Alternatively, the City should consider hiring inspectors for the primary purpose of inspecting BMPs.

### 10. Resident Engineers and Trade Inspectors Lack Understanding of Minimum BMP Requirements and Confidence

The San Diego Water Board noted that inspectors were not aware of all the minimum BMP requirements as described in the *Storm Water Standards Manual*, and also lacked confidence in conducting inspections. Photos and observations from the field days are included in **Attachment 10**. The major findings are summarized below:

- Inspectors were competent and comfortable in identifying the presence or absence of sediment control BMPs, such as perimeter controls, inlet protection, and construction site entrances.
- Inspectors were less competent in identifying the need for erosion control BMPs and often confused erosion control BMPs with sediment control BMPs.
- c. There was little understanding of the minimum required BMPs of the Storm Water Standards Manual. Inspectors were unaware of the requirement to implement permanent erosion control BMPs (vegetation) for finished areas, or the need for preparation of unfinished areas for future storm events (stockpiling extra temporary BMPs, such as plastic sheeting, bonded fiber matrix, or erosion control blankets).
- d. Inspectors did not always conduct thorough inspections. Large construction sites (several acres) were not always inspected in totality.
- e. Inspectors did not always identify inadequate housekeeping and material storage BMPs.
- f. Inspectors did not always identify non-storm water discharges.
- g. Inspectors were not confident in making assessments of BMP adequacy, or requiring more or better BMPs on the spot.

The deficiencies described above are contributing to violations of Provisions D.2.c(1)(b) and D.2.c(3) of the Order, which require implementation of minimum BMP requirements, specifically erosion and sediment controls. Additionally, these deficiencies most likely have contributed to the City being in violation of the MEP standard as required by Provision D.2.

**Recommendation**: Inspectors are in need of additional training. Inspectors must improve their knowledge of the minimum BMP requirements in the *Storm Water Standards Manual*. Training should include field days to better understand what to look for in their inspections.

#### 11. The City's Escalating Enforcement Process Does Not Compel Compliance

REs must follow a complicated escalating enforcement process when they encounter cases of noncompliance such as inadequate or poorly implemented BMPs. The appropriate procedure as described in the SOP is determined based on considerations such as the season, the threat of rain in the 7-day forecast, and whether the violation is considered major or minor. Contractors are given anywhere from 24 to 72 hours to correct the noncompliance, depending on how many prior BMP Inspection Notices have been issued.

REs are instructed to issue "1<sup>st</sup> BMP Inspection Notices" describing the actions needed to correct the noncompliance and the contractor has a given amount of time to make the necessary corrections. If the noncompliance has not been corrected within the time allowed, the RE must issue a "2<sup>nd</sup> BMP Inspection Notice" to the contractor and provide notification of an impending Stop Work Order. Depending on the severity of the noncompliance, the RE may issue a "3<sup>rd</sup> BMP Inspection Notice" giving the contractor one more chance to comply. REs do not have the authority to issue administrative citations; thus, according to the SOP, the REs have no recourse other than issuing a Stop Work Order if a contractor does not ultimately comply with the BMP Inspection Notices.

During the audit, the City explained that Stop Work Orders are rarely used because of potential costs to the developer. Between 2007 and 2013, the City issued only 5 Stop Work Orders, one of which was prompted by a San Diego Water Board inspector. In essence, REs are powerless to compel compliance—they are hesitant to issue a Stop Work Order because of the severity of the action, yet no other intermediate recourse is readily available. The City explained that REs may request assistance from the City's Neighborhood Code Compliance Department in issuing administrative citations, but the process for requesting this assistance is not documented in the SOP and does not appear to actually occur.

FED's endless loop of repeated BMP Inspection Notice issuances to address the same noncompliance incident is apparent from inspection reports of two separate construction sites cited in NOV No. R9-2014-0024. For the *Estates at Costa del Mar* and *Casa Mira View* construction sites, inspection reports between October 2013, and January 2, 2014 (**Attachments 11 and 12**, respectively) show that REs noted BMP deficiencies at both sites on multiple visits. The record does not show that the contractor was given a limited amount of time to take corrective actions, that the corrections were verified, or that a 2<sup>nd</sup> BMP Inspection Notice was ever issued to contractors at either site. Thus noncompliance was not corrected at these two sites until San Diego Water Board inspectors conducted their own inspections and implemented follow-up enforcement processes.

In contrast to the RE compliance process described above, trade inspectors can issue "Stop Inspection Notices" that do not allow construction to proceed until after BMP

deficiencies have been corrected. This appears to be an effective deterrent from noncompliance. However, trade inspectors cannot issue a Stop Work Order immediately; they must first consult with and gain approval from the City Attorney's Office. Thus without this enforcement tool, trade inspectors cannot *immediately* compel compliance at even the worst construction sites. In summary, REs are operating without effective intermediate-level enforcement tools, and trade inspectors are operating without effective high-level enforcement tools.

Because the City has not effectively implemented follow up actions necessary to compel compliance, it is in violation of Provision D.2.d(5) of the Order, which states that "Based upon site inspection findings, each Copermittee shall implement all follow-up actions (i.e. reinspection, enforcement) necessary to comply with this Order." Further, the City is in violation of Provision D.2.e of the Order, which states that "Each Copermittee shall develop and *implement* an escalating enforcement process that achieves *prompt* corrective actions at construction sites for violations of the Copermittee's water quality protection requirements and ordinances. This enforcement process shall include authorizing the Copermittee's construction site inspectors to take *immediate enforcement actions* where appropriate and necessary..." (emphasis added). Finally, such deficiencies most likely have contributed to the City being in violation of the MEP standard as required by Provision D.2.

**Recommendations**: City inspectors need access to a variety of enforcement tools that provide for progressive levels of enforcement, as necessary, to achieve compliance at construction sites. In order to immediately compel compliance, inspectors need expanded enforcement powers at the intermediate level, such as the ability to issue administrative citations, as well as at the higher level, such as the ability to issue a Stop Work Order.

#### IV. Conclusions and Additional Recommendations

- 1. The City's current construction management program structure, responsibilities, and staffing are inadequate to implement the requirements of the Order.
- To date, the City's inspection and enforcement processes have been ineffective.
   The focus of the City's program appears to be meeting the required frequency of inspections and not ensuring adequate BMPs implementation at construction sites.
- 3. The City has failed to make substantial improvements to its construction management program since issuance of NOV No. R9-2011-0027 on January 27, 2011.
- 4. The City of San Diego construction management program inadequacies documented in this audit report are violations of specific provisions of the Order as set forth in the table below:

Order Provision:	Pertaining to:	As described in:
A.1	Discharges into and from MS4s causing pollution are prohibited	NOV No. R9-2011-0027
A.2	Discharges from MS4s containing pollutants not reduced to MEP are prohibited	NOV No. R9-2011-0027
D.2	Program to reduce pollutants in construction site discharges from the MS4 to the maximum extent practicable	Audit Findings 2, 8, 9, 10, 11, NOV No. R9-2014-0024, NOV No. R9-2011-0027
D.2.a.(2)(a)	Requirement to implement designated minimum BMPs within the City's jurisdiction prior to permit issuance	Audit Finding 2, NOV No. R9-2014-0024, NOV No. R9-2011-0027
D.2.b	Watershed-based inventory	Audit Finding 1, NOV No. R9-2014-0024
D.2.c(1)(a)(iii)	Minimization of cleared areas to only necessary portion	Audit Finding 3
D.2.c(1)(a)(iv)	Minimization of exposure time of disturbed soils	Audi Finding 3
D.2.c(1)(a)(v)	Minimization of grading during wet season; correlation of grading with dry season to extent feasible	Audit Finding 3
D.2.c(1)(a)(vi)	Limitation of grading to maximum disturbed area	NOV No. R9-2011-0027
D.2.c(1)(b)	Implementation of minimum BMPs, specifically erosion and sediment controls	Audit Finding 10, NOV No. R9-2011-0027
D.2.c(3)	Requirement to implement designated minimum BMPs	Audit Finding 10, NOV No. R9-2014-0024, NOV No. R9-2011-0027
D.2.c(4)	Additional controls for sites upstream	Audit Finding 1,

	of sediment-impaired waters	NOV No. R9-2014-0024
D.2.d(5)	Implementation of follow-up actions as	Audit Finding 11,
	necessary	NOV No. R9-2014-0024
D.2.e	Implementation of escalating	Audit Finding 11,
	enforcement process	NOV No. R9-2014-0024
D.2.f	Notification of issuance of Stop Work Order	NOV No. R9-2014-0024
J.3.a.(3)(b)v	Annual Report to include confirmation of implementation of maximum disturbed area	NOV No. R9-2011-0027

5. The violations described in item 4 above are subject to further enforcement pursuant to the California Water Code, 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.

#### CIWIQS:

Tech Staff Info & Use				
WDID	9 000000510			
Reg. Measure ID	397228			
Place ID	255222			
Inspection ID	16359933			
Violation ID	964457, 889367			