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October 4, 2007

John H. Robertus, Executive Officer
California Regional Water Quality Control Board,
San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123

Attn.: Ben Neill

Re: Administrative Civil Liability Compliant No. R9-2007-0093

Dear Mr. Robertus:

The North County Transit District ("NCTD") respectfully submits this letter and attached appendices in response to the Administrative Civil Liability Complaint No. R9-2007-0093 ("ACL") issued by the California Regional Water Quality Control Board, San Diego Region ("Regional Board") on August 31, 2007. The ACL alleges that NCTD violated the Statewide General Permit for Storm Water Discharges Associated with Construction Activity ("Permit"), and seeks monetary penalties in the amount of $160,000. The ACL is based on the results of two inspections of NCTD's Sprinter construction site occurring on February 20, and March 19, 2007.

NCTD is aware that at the time of the inspections there were deficiencies associated with storm water management measures at the Sprinter construction site. These inadequate measures were identified in two Notices of Violation ("NOV") issued by the Regional Board in March and April of 2007, and again in the ACL. While the ACL clearly identifies these short comings, it also seeks the maximum penalties allowed for each alleged violation. In so doing, the ACL fails to credit NCTD for the numerous positive steps it has taken to limit storm water pollution both at the Sprinter construction site, and in general. These steps directly reflect NCTD's voluntary cleanup efforts, economic benefit, and "other matters as justice may require."

It is therefore NCTD's position that the civil monetary penalties sought in the ACL are neither appropriate, nor reflective of NCTD's past and present efforts to control storm water discharges. In order the help correct this inconsistency, NCTD respectfully submits this letter

and its appendices to provide the Regional Board with documentation of NCTD's efforts to reduce storm water pollution emanating from its construction sites and facilities.

This response addresses each violation alleged in the ACL and, where applicable, provides documentation of NCTD's current compliance with the Permit. This response additionally discusses the factors listed at Water Code section 13385(e), and explains how they weigh against imposing the maximum penalties in this case. In light of this documentation, NCTD requests that the Regional Board reevaluate the proposed civil monetary penalty included in the ACL, and revise it to appropriately reflect NCTD's level of compliance with the Permit. NCTD's response is as follows:

DESCRIPTION OF ALLEGED VIOLATIONS AND NCTD'S RESPONSE

1. **"NCTD failed to implement and maintain adequate Best Management Practices (BMPs) at the site in violation of Order No. 99-08-DWQ Special Provision C.2 and section A.1.c on at least two days: February 20; and March 21, 2007." (ACL, p. 1.)**

The ACL alleges that NCTD failed to implement BMPs on at least two (2) days as observed by the Regional Board. It further states that the maximum liability for failure to implement and maintain effective BMPs is $10,000 per day. The ACL seeks a $20,000 penalty for NCTD's alleged failure to implement and maintain BMPs on the days at issue.

The ACL does not specifically cite examples of NCTD's failure to maintain BMPs, although the NOVs did allege specific maintenance failures. Photographs of the Sprinter construction site documenting NCTD's efforts to remedy those failures are included in **Appendix 1**. As can be seen from a review of **Appendix 1**, once the Regional Board brought the inadequate BMP implementation and maintenance to NCTD's attention, NCTD took immediate action to correct the alleged violations.

Since the NOVs were issued in March and April, 2007, NCTD has continued construction at the Sprinter construction site. The project is nearing completion, and most of the areas identified in the NOVs have been transitioned from temporary construction zones to areas protected by permanent, site design BMPs. For example, the storage yard located at Escondido Avenue in Vista, California was identified as non-compliant in the March 19 NOV. The yard has been shut down, and all necessary BMPs have been implemented at the site. Photographs of the permanent BMPs implemented throughout the Sprinter construction site are included in **Appendix 2**. As can be seen from the photographs in **Appendix 2**, implementation of permanent BMPs at the Sprinter construction site removes the possibility of future storm water violations.

2. **"On February 19, 20; and March 20, 21, 2007, NCTD violated the requirements of Special Provisions C.2 and C.4 and sections A.11 and B.3 of Order No. 99-08-DWQ by inaccurately assessing the condition and effectiveness of implemented BMPs in a total of four inspection reports." (ACL, p. 1.)**

The ACL alleges that NCTD inaccurately assessed the condition and effectiveness of implemented BMPs at the Sprinter construction site in violation of Sections C.2 and C.4 of the Permit in a total of four inspection reports. It further states that the maximum liability for violating inspection requirements is $10,000 per violation, and seeks a $40,000 penalty for NCTD's alleged failure to accurately assess BMPs at the Sprinter construction site.

Permit Sections A.11, and B.3 require permittees to implement and conduct an inspection and reporting program. Neither section dictates the standard of care required for compliance, other than requiring implementation of the program. Importantly, neither section states that an "inadequate" inspection report is a violation of the Permit. Additionally, although Permit Section C.12 does provide sanctions for violations of the inspection reporting program, that section states "any person who *knowingly* makes any false material statement, representation, or certification in any record or other document required to be maintained under this General Permit . . ." shall be punished by a fine of not more than $10,000. (Permit, Section C.12, emphasis added.)

No NCTD employee or contractor *knowingly* generated or submitted false or otherwise inaccurate inspection reports. As a practical matter, any incongruity between the conditions reported in NCTD's inspection reports, and those observed by Regional Board staff are attributable to the large size, and linear nature of the Sprinter construction site. The Sprinter site is 22 miles long. Linear projects of this size are inherently difficult to monitor and inspect. The incongruities noted in the ACL are therefore not a function of training or proper identification of storm water problems, but are instead a function of the large size and nature of the Sprinter project site.

Since the NOVs were issued, NCTD has retrained its staff, as well as construction personnel, to ensure that they are aware of storm water control efforts, and NCTD's responsibilities pursuant to the Permit. Copies of some of the training materials are included in **Appendix 3**. As of June, 2007, five (5) supervisors attended crew training sessions, fifteen (15) cement masons, and 59 general construction workers were given training on the SWPPP, and storm water compliance in general. This training continued throughout the summer months for additional laborers and operators.

NCTD additionally hired a new storm water compliance officer to monitor and ensure SWPPP compliance at the Sprinter construction site. The new compliance officer, and her assistant, will make certain that all inspection reports are accurate and effective throughout the coming rainy season, and for the remainder of the Sprinter Project.

3. **"NCTD discharged sediment to a Municipal Separate Storm Sewer System (MS4) and navigable waters of the United States in the San Diego Region in violation of State Board Order No. 99-08-DWQ, Discharge Prohibition A.2." (ACL, p. 2.)**

The ACL alleges that NCTD discharged sediment and sediment laden water into neighboring MS4s and waters of the United States in at least ten instances. It further states that the maximum liability for illicit discharges is $10,000 per violation, and $10 per gallon discharged. The ACL seeks a $100,000 penalty for NCTD's alleged illicit discharges.

The Permit prohibits discharges of non-storm water unless they "do not cause or contribute to a violation of any water quality standard and are controlled through implementation of appropriate BMPs." (Permit, Special Provisions C.3.) Discharges of sediment are prohibited by the Water Quality Control Plan for the San Diego Basin if they cause a nuisance or adversely effect beneficial uses of water bodies in the San Diego Region.

Please note that the discharges at issue in the ACL were, for the most part, controlled with appropriate BMPs. Additionally, with the exception of discharges to Buena Vista Creek, the ACL does not allege that the discharges caused or contributed to a violation of any water quality standard, or caused a condition of nuisance.

NCTD was notified of the discharges in the March 19, and April 3 NOVs. NCTD immediately made significant efforts to improve maintenance of its BMPs and effectively prohibit discharges of non-storm water. Photographs of the Sprinter construction site documenting NCTD's efforts to bring those portions of the Sprinter construction site into compliance are included in **Appendix 1**. As can be seen from a review of **Appendix 1**, once the Regional Board brought the discharges to NCTD's attention, NCTD took swift action to correct the alleged violations.

As stated above, the Sprinter Project is nearing completion. BMPs in the majority of the areas identified as non-compliant in the NOVs have been transitioned from temporary to permanent. Photographs of several permanent BMPs implemented throughout the Sprinter construction site are included in **Appendix 2**. As can be seen from the photographs in **Appendix 2**, implementation of permanent BMPs at the Sprinter construction site removes the possibility of future sediment discharges from the Sprinter construction site.

Lastly, we further note that the Sprinter Project will be NCTD's last major construction project. All future large capital projects that involve NCTD operations, with the exception of certain localized and minor projects, will be conducted by the San Diego Association of Governments ("SANDAG"). SANDAG will train all new engineers on storm water management and Permit compliance, and will provide all construction

personnel annual training. Any employees or personnel transferring to SANDAG from NCTD will receive the same training.

MAXIMUM PENALTIES AND WATER CODE § 13385(E)

The ACL seeks the maximum penalties available for all alleged violations at the Sprinter construction site. Water Code § 13385(e) states that when pursuing civil monetary penalties for violations of permits issued pursuant to the Federal Clean Water Act, Regional Boards must consider several relevant factors. With respect to the violator, these factors include "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."

As applied to NCTD, the section 13385(e) factors clearly weigh against seeking the maximum penalties available in this case. NCTD acknowledges that at the time of the Regional Board's inspections there were deficiencies associated with storm water management measures at the Sprinter construction site. Imposition of maximum penalties, however, fails to give NCTD credit for the positive steps it has taken to limit storm water pollution. Seeking maximum penalties under such circumstances appears extreme and contrary to the intent of section 13385(e).

Voluntary Cleanup Efforts

As acknowledged in the ACL, NCTD has engaged in voluntary cleanup of sediment and anthropogenic trash not attributable to construction at the Sprinter construction site. Specifically, NCTD cleaned up the Loma Alta Creek channel in the City of Oceanside, and restored habitat along Escondido Creek in the unincorporated area of San Diego County. NCTD's habitat restoration efforts will pay dividends with regard to clean water in the Carlsbad Watershed, as the restored areas will have an ongoing impact on preventing sediment and other pollutants from reaching Escondido Creek. While the restoration activities were done to reduce the biological impacts related to the Sprinter Project, the location and manner of restoration was voluntary, and as such qualifies for consideration under section 13385(e).

Assessing maximum penalties against an entity that voluntarily engages in activity that is beneficial to water quality in the region is counter-intuitive, and contrary to the requirements of Water Code section 13385(e). The penalties sought in the ACL should therefore be reduced.

Prior History of Violations at the Sprinter construction site

Although the ACL asserts that NCTD has a history of violations related to the Sprinter construction site, this is simply not the case. Prior to the March 19, 2007 NOV, NCTD had not been subject to any enforcement action or other sanction for Permit violations at the Sprinter construction site. Assessing maximum penalties against an entity that has no history of

violations at the site in question appears unfair, unnecessary, and contrary to the intent of Water Code section 13385(e). Accordingly, the penalties sought in the ACL should be reduced.

Economic Benefit or Savings

The ACL alleges that adequate compliance at the Sprinter construction site should cost approximately $560,000 per year, and implies that by failing to comply with the Permit, NCTD received an economic benefit equal to that amount. Again, this is simply not the case. As of September 28, 2007, NCTD has spent more than $2.6 million on storm water compliance measures at the Sprinter construction site. This breaks down to expenditures totaling $885,318 per year. NCTD's expenditures exceed the Regional Board's estimates by more than $300,000 per year. Clearly, NCTD has not received an economic benefit from the alleged non-compliance.

The Water Code and the Clean Water Act generally require regulatory agencies to recoup all economic benefits that a discharger gained from non-compliance. Assessing maximum penalties when there were no economic benefits is contrary to the requirements of Water Code section 13385(e) which essentially reserves maximum penalties for instances where there is an economic benefit. The penalties sought in the ACL should therefore be reduced.

Other Matters as Justice May Require

Water Code section 13385(e) requires Regional Boards to take "other matters as justice may require" into account when assessing penalties against dischargers. Such factors may include efforts by the discharger to reduce its environmental footprint in an overall sense, as well as on-site factors such as input from neighboring properties, and the nature of the site itself. Here, the linear nature of the Sprinter construction site, and its proximity to stream beds and other potentially sensitive areas makes compliance at the site unusually difficult.

The Sprinter construction site is 22 miles long, has at least 44 miles of perimeter to maintain, and numerous potential discharge points to monitor. Linear projects of this size and nature are fundamentally different than traditional construction projects, which are enclosed and have fewer potential discharge points. Maintaining storm water compliance at a project such as the Sprinter is significantly more difficult. NCTD respectfully requests the Regional Board recognize the inherent difficulty in linear construction and adjust the penalties sought accordingly.

An additional factor weighing in favor of penalty reductions is NCTD's voluntary creation of a district-wide Storm Water Management Plan ("SWMP"). A copy of the plan is attached as **Appendix 4**. NCTD is one of the few agencies in the County to take a proactive approach to storm water. At considerable expense to itself, it drafted the attached SWMP to set policy, create procedures and address the six minimum control measures required by the Small MS4 Permit. NCTD was not required to draft or implement this plan, as it is not one of the entities listed in Attachment 3 of the Small MS4 Permit. Nor was the SWMP prepared in order

to comply with any other compliance measure or mandate. NCTD's efforts were entirely voluntary.

As a public agency, NCTD understands that it has a responsibility to maintain the environment, and to reduce its impacts to water quality. The Regional Board should recognize NCTD's efforts and not seek the maximum penalties available.

CONCLUSION

We appreciate this opportunity to inform the Regional Board about NCTD's storm water program. NCTD is committed to the protection of water quality and implementation of the Permit requirements. It therefore looks forward to working with you to discuss and resolve the ACL and any further issues related to the Sprinter construction site on or before October 11, 2007. If you should have any questions, please do not hesitate to contact me.

Sincerely,

Marguerite S. Strand
of BEST BEST & KRIEGER LLP

MSS:am

cc: Tom Lichterman
Don Bullock

APPENDIX 1

N C T D

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April 6, 2006

Mr. John H. Roburtus
Executive Officer
Attn: Ben Neil
California Regional Water Quality Control Board,
San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123

Re: Required Technical Report in Response Notice of Violation NO. R9-2007-0050, WDID NO. 9 37C322900, reference number CWU:10-3022900.02:neilb

Dear Mr. Roburtus:

The North County Transit District ("NCTD") respectfully submits this letter and attached Required Technical Report ("RTR") in accordance with the requirements of the California Regional Water Quality Control Board, San Diego Region ("Board") correspondence and Notice of Violation ("NOV") dated March 19, 2007. This letter and its attachments address alleged violations of NCTD's NPDES Storm Water Permit for Discharges Associated with Construction Activity ("Construction General Permit") identified during site inspections conducted on February 20, 2007.

NCTD views the site inspection process and any other feedback it receives from the Board as an opportunity to improve its ability to manage storm water while constructing much needed rail access corridors throughout the North County region. Protecting California's precious natural resources is a goal that all public agencies share. To that end, NCTD welcomes your comments, and looks forward to working with you to enhance NCTD's implementation of the Construction General Permit.

As requested, this letter and its attachments provide a description of the immediate actions that NCTD or its contractors took to remedy the alleged violations. This letter additionally includes a discussion of the current status of each site that Board Staff identified in the NOV. Lastly, this letter includes photographic evidence of the BMPs and other measures that NCTD contractors have put in place in response to the NOV.

Required Technical Report (RTR) Response to NOV No. R9-2007-0050

Response to Violations within the City of Vista

I. Failure to Prevent Prohibited Discharges

Pursuant to Water Quality Order No. 99-08, Prohibition A.2
Observation: Your site was documented as having ten unauthorized discharges of sediment and sediment-laden water to the MS4 and waters of the state/Nation. Two of the unauthorized discharges were within the City of Vista at an inlet east of Escondido Avenue and an Inlet at the Mar Vista Drive storage yard.

Immediate Action: NCTD contractors performed maintenance to the existing Best Management Practices ("BMPs") at the respective inlets, and added more BMPs to the inlet at the Mar Vista Drive storage yard. NCTD contractors have additionally removed the inlet east of Escondido Avenue, and are constructing a new drop inlet that is protected with gravel bags (photos 5 16,17, and 18).

Site Status: The added BMPs are in place and have been working adequately. No sediment has entered into the MS4 since the additional BMPs have been placed. (See Photographs 5 16,17, and 18).

II. Failure to implement/Maintain Best Management Practices

Pursuant to Water Quality Order No. 99-08, Special Provision C.2, Section A.6
Observation: Your site entirely lacked erosion control for all disturbed areas. Erosion gullies and rills were observed on all constructed slopes.

Immediate Action: NCTD contractors placed soil binder (wood fiber mulch) on all identified disturbed areas. NCTD contractors have applied a total of 600,000 square feet of soil binder to disturbed areas in the last month. More is scheduled to be placed in the coming month as slopes are completed. NCTD contractors have additionally repaired any known erosion rills.

Site Status: The added BMPs are in place and have been working. (See Photographs 6, 7, 12, 13, and 20)

Pursuant to Water Quality Order No. 99-08, Special Provision C.2, Section A.8
Observation: Your site lacked effective sediment controls along the site perimeter and at the storm drain inlets. All inlets had insufficient levels of gravel bags. Silt fences around the inlets were overwhelmed with sediment loads and failing.

Immediate Action: NCTD contractors placed additional gravel bags, fiber rolls, and silt fences along the construction site perimeter and at the storm drain inlets. NCTD contractors repaired all failed BMPs and added additional BMPs to ensure effectiveness.

Site Status: The added BMPs are in place and have been working. (See Photographs 16, 17, and 18)

Pursuant to Water Quality Order No. 99-08, Special Provision C.2, Section A.8
Observation: Construction site exits had insufficient BMPs to reduce the tracking of sediment onto paved roads. Significant sediment tracking was observed onto Escondido Avenue and Mar Vista Drive. The rock gravel apron implemented to prevent tracking was inadequate in length and width.

Immediate Action: NCTD contractors added additional aggregate to the tracking control BMPs at Mar Vista Drive and Escondido Avenue. In order to eliminate the tracking, NCTD contractors placed additional rock to levels that met the required BMP specifications for length width and depth. Three to six inches of crushed aggregate was placed at a depth of 12" for 50 feet. The re-constructed BMP is as wide as the entrance to the site.

Site Status: The added BMPs are in place and have been working adequately. (See Photographs 1, 8 and 14)

Pursuant to Water Quality Order No. 99-08, Special Provision C.2, Section A.5.b.2
Observation: Concrete rinse water spills were observed on your site west of Escondido Avenue with no BMPs in place to protect against illegal discharge.

Immediate Action: NCTD contractors cleaned up all concrete waste that was observed during the site inspections within 24 hours and disposed of it properly. NCTD contractors instructed all concrete crews ensure that they wash out their equipment in the appropriate areas e.g. the washout pits.

Site Status: The added BMPs are in place and have been working. (See Photograph 9)

Pursuant to Water Quality Order No. 99-08, Special Provision C.2, Section A.5.b.4 & b.5
Observation: Your site had inadequate BMPs to minimize or eliminate the exposure of storm water to construction waste, trash, and materials. Trash containment was nonexistent in most areas of the construction site. The only trash containers at the Escondido Avenue station were uncovered. Material storage of gasoline did not have cover or containment. An asphalt stockpile

at the Mar Vista Storage yard lacked containment and coverage to minimize contact with storm water runoff.

Immediate Action: NCTD contractors properly disposed of all construction trash in trash containers. NCTD contractors have continued to ensure that the trash container lids at Escondido Avenue remain closed when not in use. Additionally, NCTD contractors have covered and/or removed the asphalt stockpile, and put the gasoline container into secondary containment.

Site Status: All areas where trash and other construction waste is stored will be protected in the event of rain by implementation of fiber rolls, gravel bag check dams, or plastic covers to eliminate the possibility of erosion or storm water contamination. Concrete waste will continue to be dumped into the washout pits as required, and construction trash will continue to be deposited into the trash containers on site. (See photographs 2, 3, 4, and 15).

Response to Violations Observed within the County of San Diego

III Failure to Prevent Prohibited Discharges

Pursuant to Water Quality Order 99-08, Prohibition A.2
Observation: Your site was documented as having ten unauthorized discharges of sediment and sediment-laden water to the MS4 and waters of the State/Nation. One of the unauthorized discharges was within the County of San Diego at Buena Creek.

Immediate Action: NCTD contractors installed a silt fence and gravel bags to prevent further discharges at the site. Generally speaking, however, sediment that falls into the water at that site cannot go directly downstream due to an embankment built for the temporary rail line. The embankment prevents a direct discharge into the creek and acts as a desilting basin for any sediment that comes in. Any sediment settles out of suspension in the contained area. After the water reaches a certain level it is pumped over the temporary rail line onto a large rock dissipater. Therefore this does not classify as a sediment discharge (photographs 22 and 23).

Site Status: The added BMPs are in place and have been working. (See Photographs 22 and 23)

IV Failure to Implement/Maintain Best Management Practices

Pursuant to Water Quality Order No. 99-08, Special Provision C.2, Section A.6

Observation: Your site entirely lacked erosion control for all the disturbed areas. Erosion gullies and rills were observed on all construction slopes. The exposed slopes next to the bridge abutments over Buena Creek were eroding. No BMPs were implemented to prevent erosion.

Immediate Actions: Slopes and inactive areas have been sprayed with soil binder and wood fiber mulch (photos 6, 7, 12, 13, and 20).

Site Status: The added BMPs are in place and have been working. (See Photographs 6, 7, 12, 13, and 20)

Pursuant to Water Quality Order No. 99-08, Special Provision C.2, Section A.8
Observation: Construction site exits have insufficient BMPs to reduce the tracking of sediment onto paved roads. Significant sediment tracking was observed onto Buena Creek Road. The rock gravel apron implemented to prevent tracking inadequate in width and length.

Immediate Action: NCTD contractors have reconstructed and added additional aggregate to the tracking control BMPs. NCTD contractors placed the additional rock at levels that meet the required BMP specification.

Site Status: The added BMPs are in place and have been working. (See Photograph 26).

Pursuant to Water Quality Order No. 99-08, Special Provision C.2, Section A.5.b & b.5
Observation: Your site had inadequate BMPs to minimize or eliminate the exposure of storm water to construction waste, trash and materials. Trash containment was nonexistent at the Buena Creek storage yard.

Immediate Action: NCTD contractors properly placed all construction trash in trash containers (See Photographs 24 and 25).

Site Status: Areas that contain construction waste, trash and materials will be protected in the event of rain by implementation of fiber rolls, gravel bag check dams, or plastic covers to eliminate the possibility of erosion. NCTD contractors are additionally dumping concrete waste into the washout pits as required.

Response to Violations Observed within the City of San Marcos

V Failure to Prevent Prohibited Discharges

Pursuant to Water Quality Order No. 99-08, Prohibition A.2

Observation: Your site was documented as having ten unauthorized discharges of sediment and sediment-laden water to the MS4 and waters of the State/Nation. Seven of the unauthorized discharges were within in City of San Marcos storm drain inlets at the construction yard on Armorlite Drive, inlets along Barham Drive and along the railroad construction.

Immediate Action: NCTD contractors placed new or additional gravel bags around all storm drain inlets at the construction yard on Armorlite Drive, along Barham Drive and along the railroad construction site to ensure proper protection. (See Photographs 27, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40 and 41).

Site Status: The storm drain inlet protection BMPs are working properly and NCTD contractors are monitoring the inlets closely to note when maintenance is needed (See Photographs 27, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40 and 41).

VI Failure to implement/Maintain Best Management Practices

Pursuant to Water Quality Order No. 99-08, Special Provision C.2, Section A.6
Observations: Your site entirely lacked erosion control for all disturbed areas. Erosion gullies and rills were observed on all constructed slopes.

Immediate Actions: Inactive disturbed areas have been sprayed with soil binder and/or wood fiber mulch. Active areas where vehicles and equipment are moving over will be protected in the event of rain by implementation of fiber rolls, gravel bag check dams, silt fence installation or plastic covers to eliminate the possibility of erosion (photos 6, 7, 12, 13, and 20).

Site Status: The added BMPs are in place and have been working. (See Photographs 6, 7, 12, 13, and 20).

Pursuant to Water Quality Order No. 99-08, Special Provision C.2, Section A.8

Observations: Your site lacked effective sediment controls along the site perimeter and at the storm drain inlets. All inlets had insufficient levels of gravel bags. Silt fences around the inlets were overwhelmed with sediment loads and failing. Some inlets entirely lacked in sediment controls. Fiber rolls implemented along concrete ditches were not maintained. Some concrete storm drain channels entirely lacked perimeter control such as fiber rolls or silt fences.

Immediate Action: NCTD contractors have protected the site perimeter and the storm drain inlets with additional BMPs. These BMPs have been placed to help the overwhelmed silt fences around the inlets. Additionally, NCTD contractors

placed new fiber rolls and/or gravel bag check dams along the length of the channel (photos 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, and 41).

Site Status: The additional BMPs that NCTD contractors used to reinforce the overwhelmed BMPs have been working. None of the BMPs that were reinforced have failed since the addition of the new BMPs. NCTD contractors are continually checking gravel bags and fiber rolls are for breaks and rips.

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 directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including possibility of fine and imprisonment for knowing violations.

Don Bullock
Sprinter Project Manager

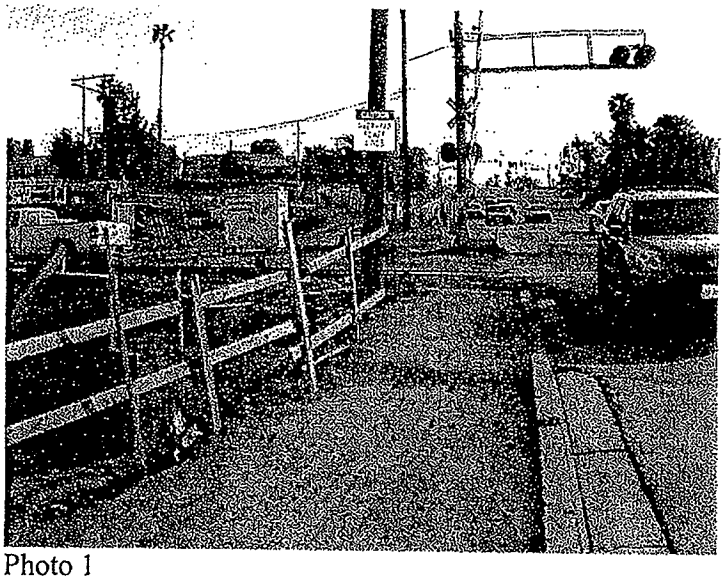

Photo 1
Tracking on Escondido Ave no longer occurring. Response to NOV Photo1.

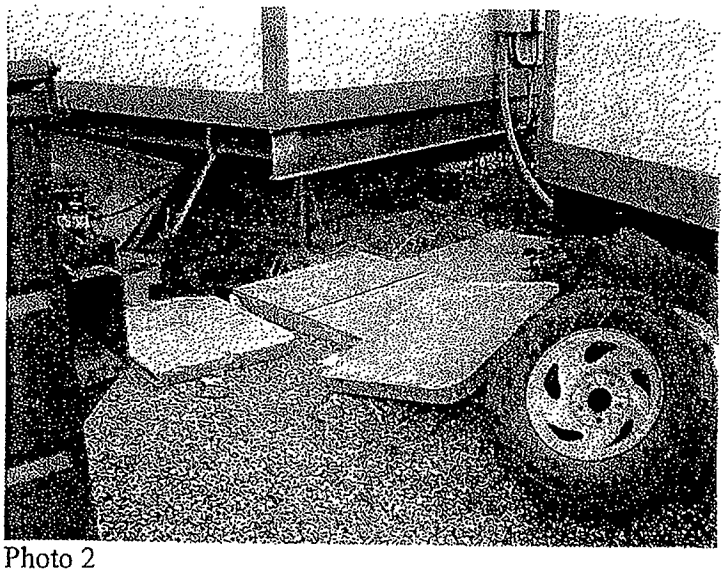

Photo 2
Gas can put into containment. Response to NOV photo 2.

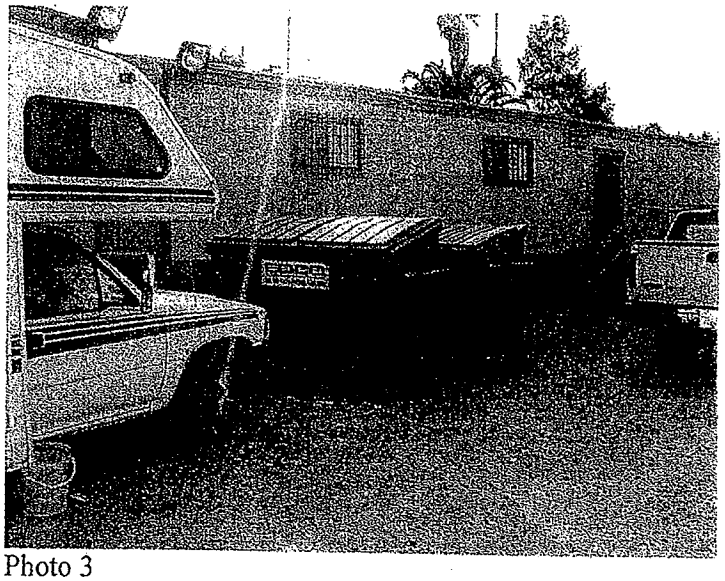

Photo 3
Trash containers in work yard are covered to keep water out. Response to NOV photo 3.

Photo 4
Trash in the materials storage area has been picked up. Response to NOV photo 4.

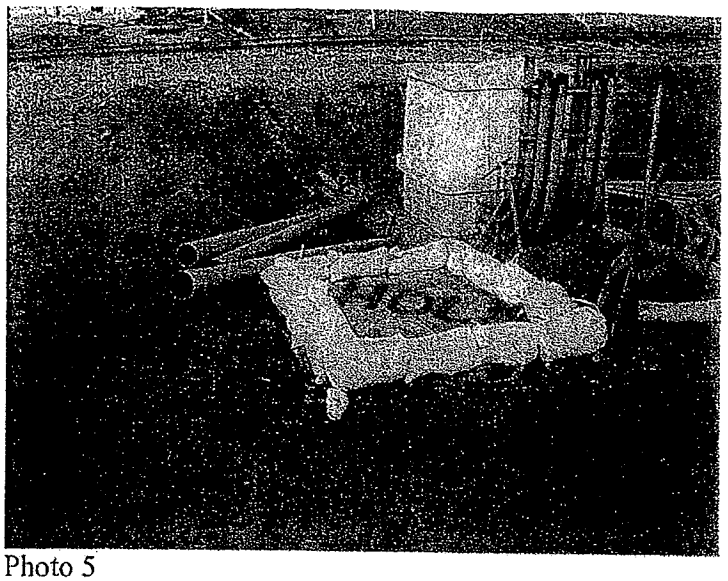

Photo 5
Inlet in NOV Photo 5 has been removed and new DI is being installed.

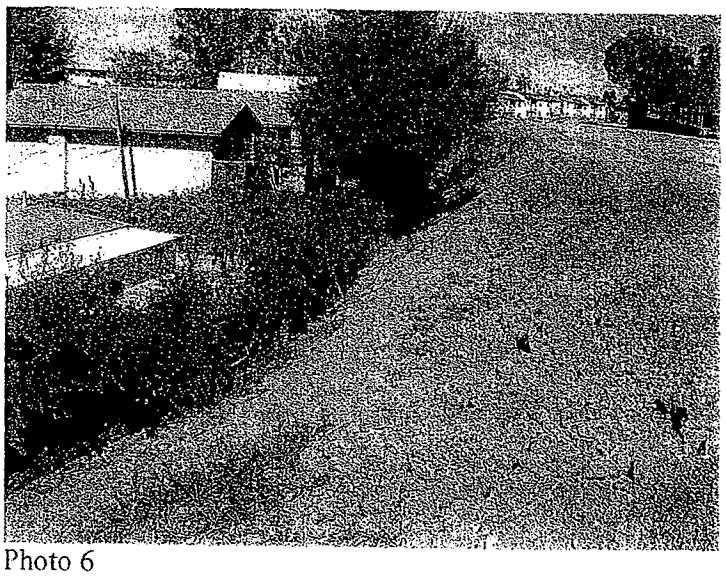

Photo 6
Slope sprayed with soil binder. Response to NOV photo #6.

Photo 7
Inactive area sprayed with soil binder. NOV Photo # 7.

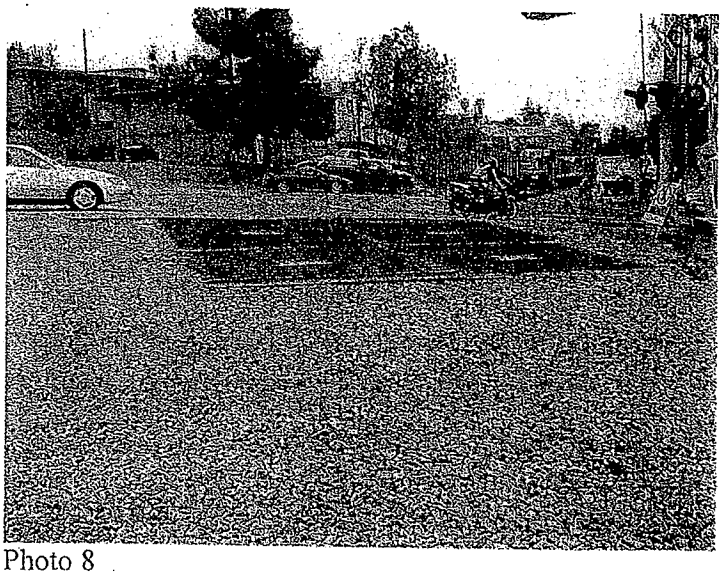

Photo 8
Tracking control BMP installed at Escondido Avenue. NOV photo 10.

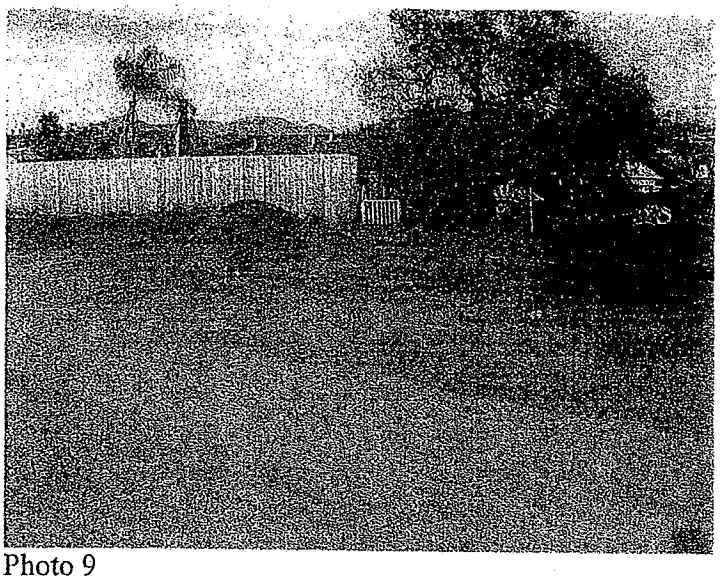

Photo 9
Concrete waste cleaned up. Response to NOV photo 11 and 12.

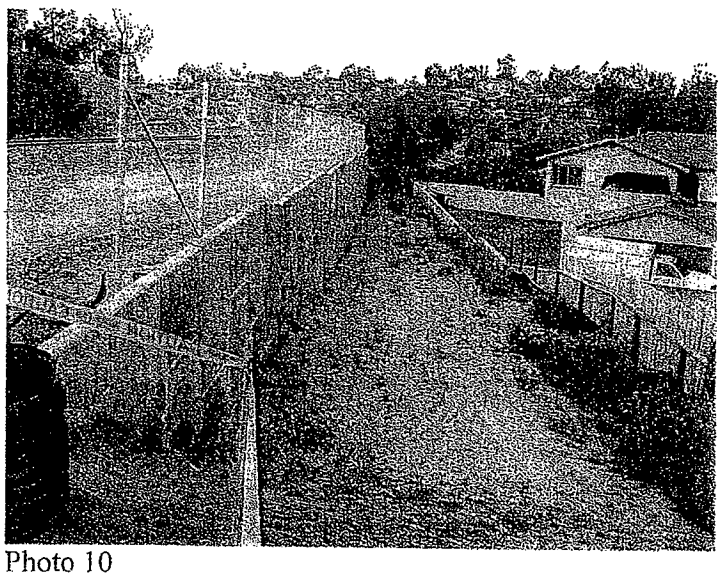

Photo 10
Trash cleaned up. Response to NOV Photo 13.

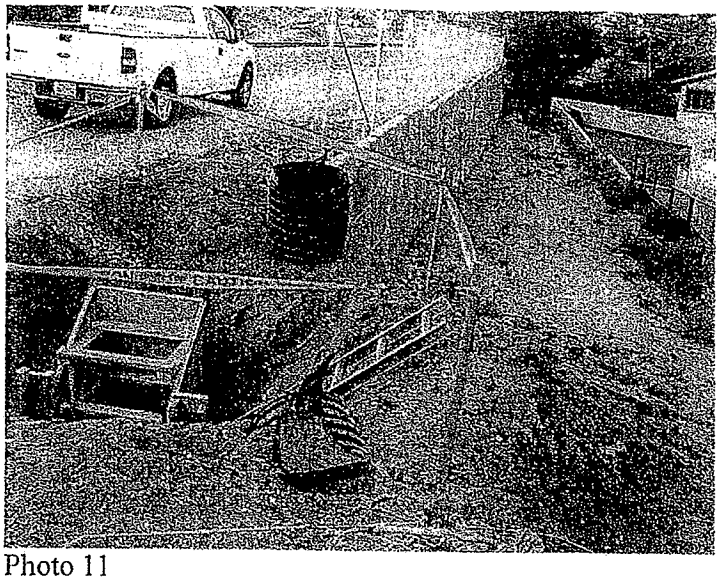

Photo 11
Area where erosion gully was has been excavated for new DI installation. Response to NOV photo 14.

Photo 12
Inactive area sprayed with soil binder. Response to NOV photo 15.

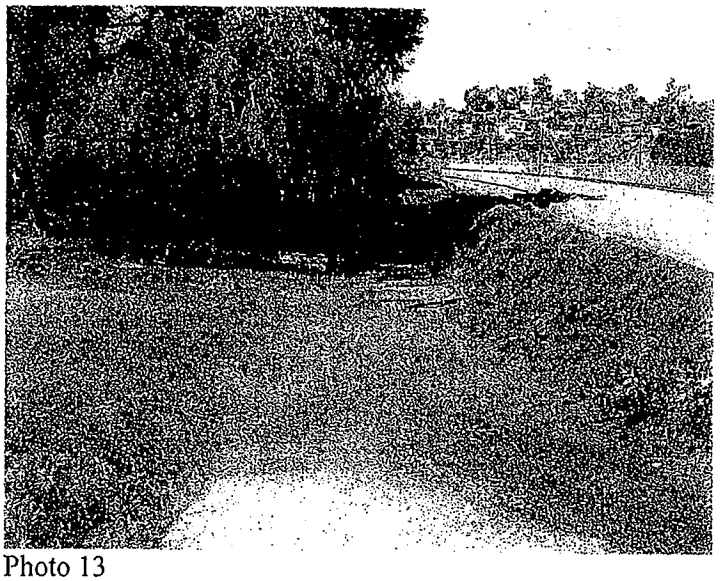

Photo 13
Inactive area sprayed with soil binder. Response to NOV photos 16 & 18.

Photo 14
Tracking control BMP installed at the Mar Vista Yard. NOV photo 19.

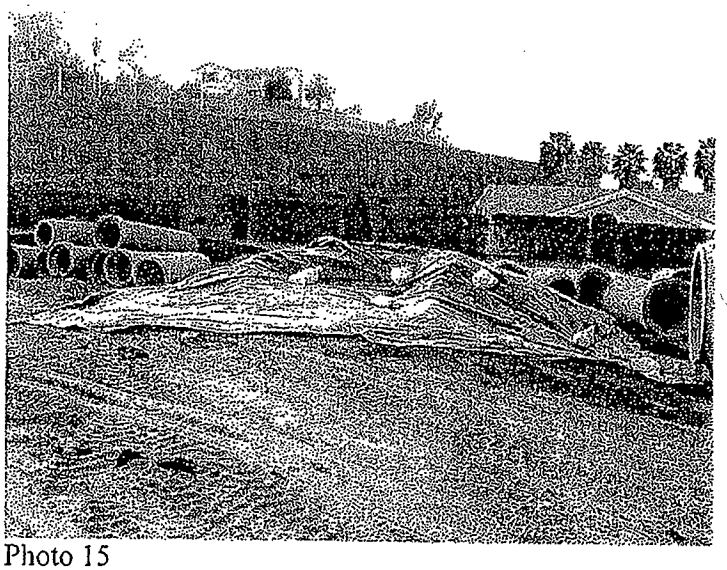

Photo 15
Asphalt stockpile has been completely covered with plastic. Response to NOV photo 21.

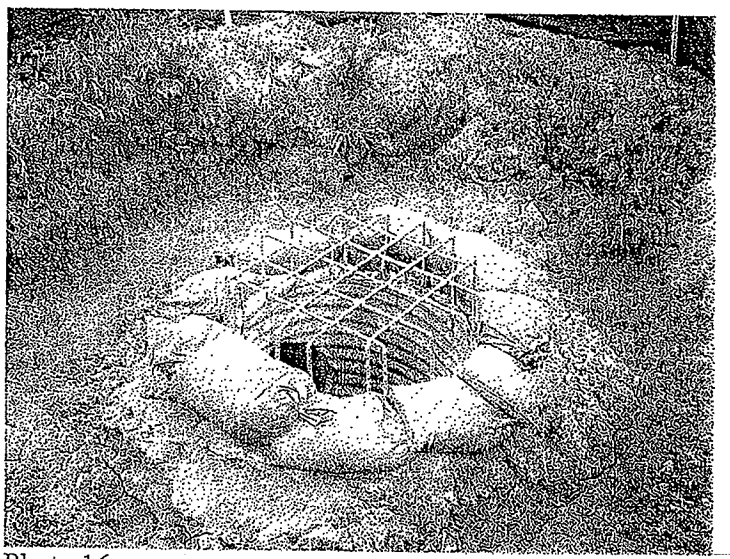

Photo 16
DI protected with gravel bags. NOV photo 22.

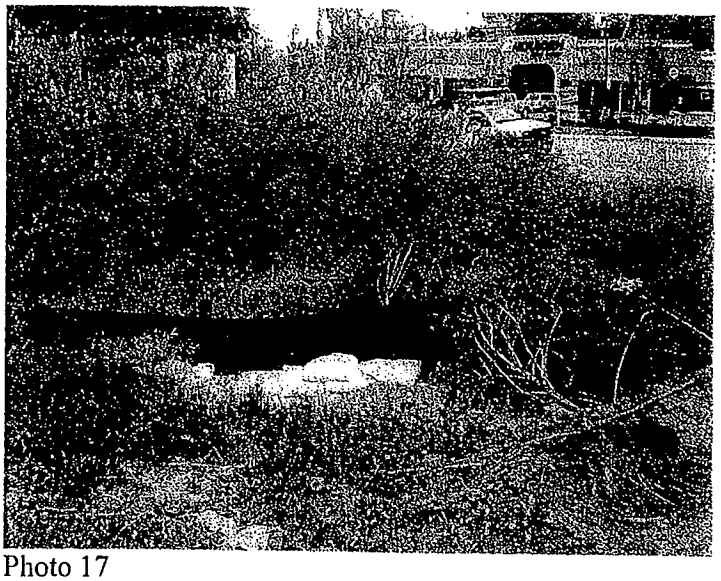

Photo 17
Additional silt fence and gravel bags placed before inlet at the Mar Vista yard. NOV photo 22.

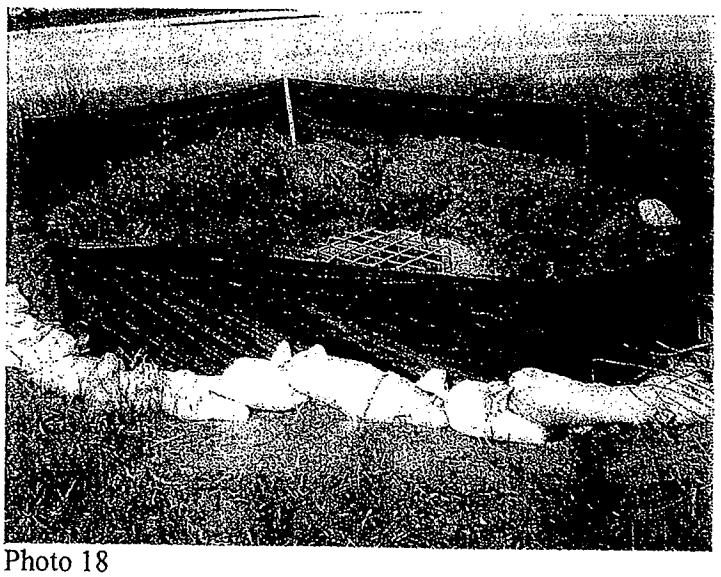

Photo 18
DI at the Mar Vista yard protected with silt fence and gravel bags. Response to NOV photo 22.

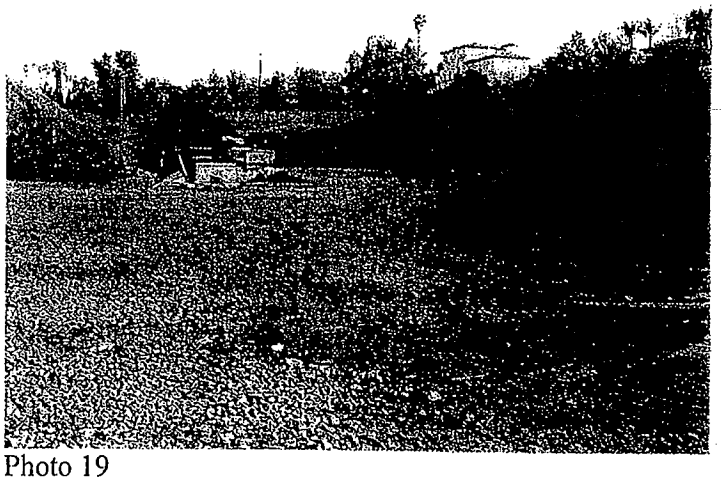

Photo 19
Response to NOV photo 23 and 24. Trash has been cleaned up and properly disposed of. Soil stockpiles are active.

Photo 20
Completed slope at the Mar Vista yard sprayed with wood fiber mulch. Response to NOV photo 25.

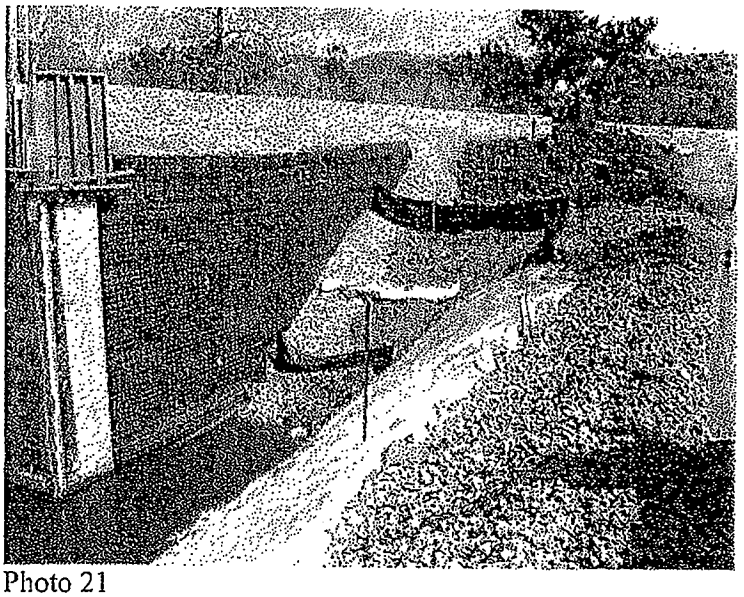

Photo 21
Slope where bridge construction is taking place. NOV photo 26 states that erosion control is needed. Slope is in active construction.

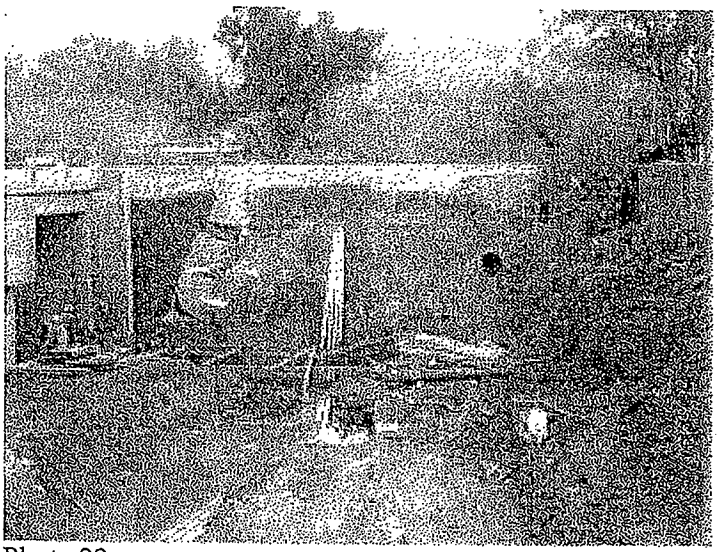

Photo 22
Active bridge construction on slope where it was stated that soil stabilization was needed.

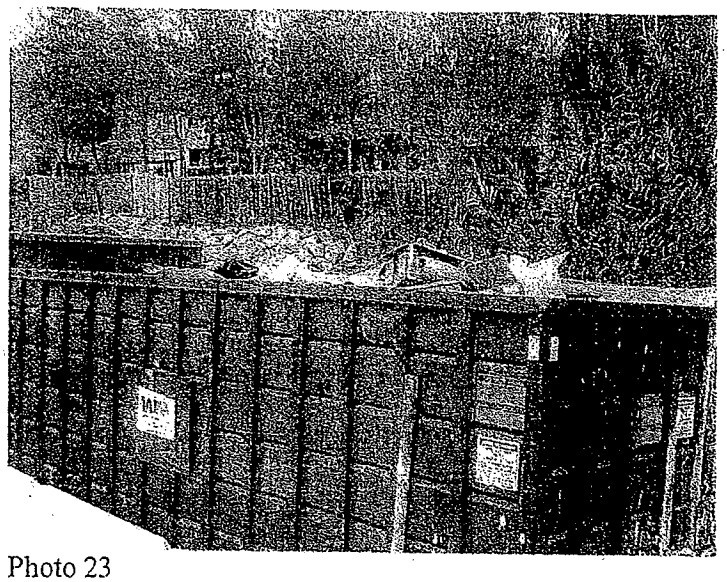

Photo 23
Trash container at Buena Creek for trash disposal. Response to NOV photo 28.

Photo 24
Area at Buena Creek where trash was piled up. Trash has been placed into the trash container. Response to NOV photo 28.

Photo 25
Tracking control BMP installed at Buena Creek. NOV photo 29.

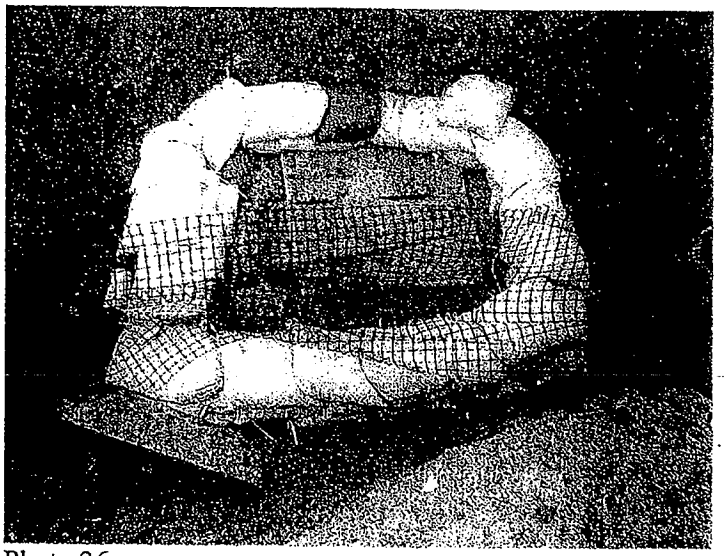

Photo 26
DI in the rear of WCRC yard protected with gravel bags. NOV photo 30.

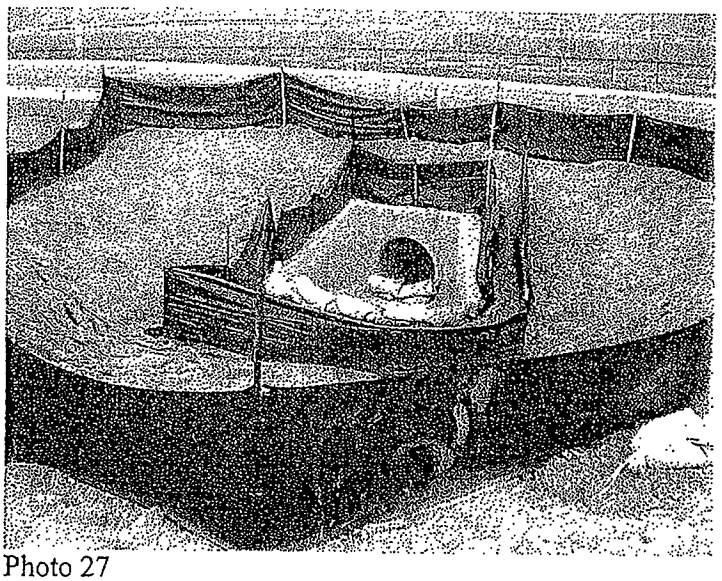

Photo 27
DI on Barham Drive in San Marcos Protected with additional BMPs. This inlet is being replaced with a grated drop inlet, which will eliminate this problem. Photo 31 in the NOV.

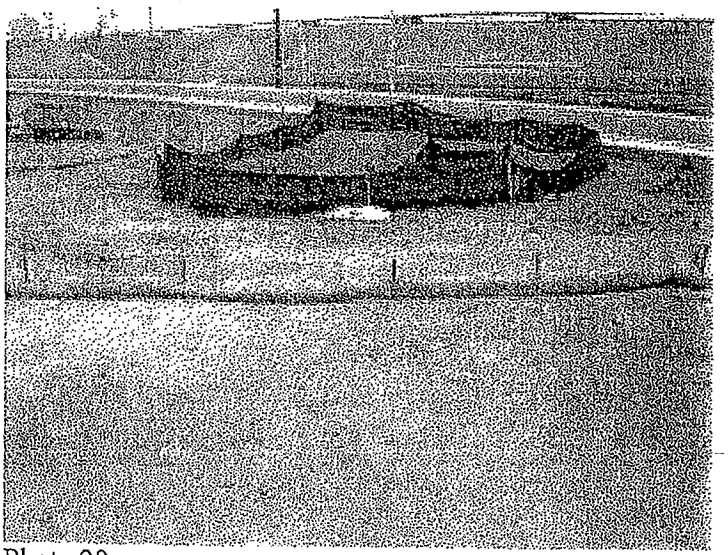

Photo 28
DI on Barham Drive in San Marcos Protected with additional BMPs. Photo 31 in the NOV.

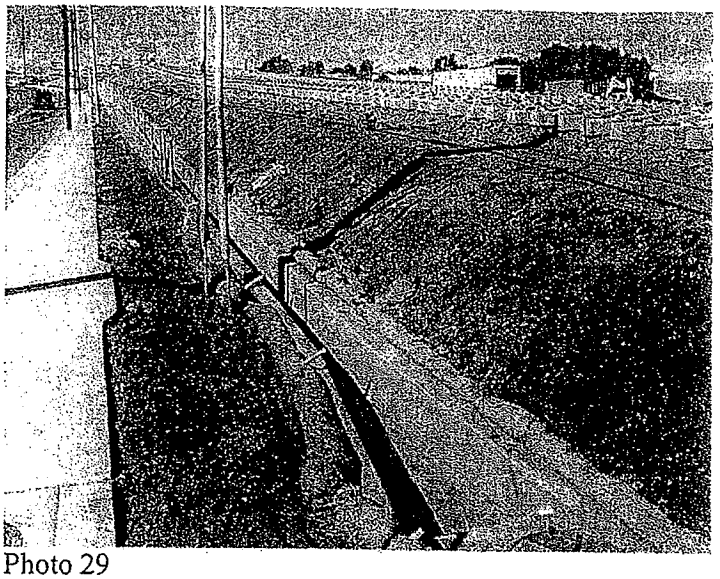

Photo 29

Response to NOV photo 32. New fiber rolls were placed along the channel. Slope was under irrigation construction. Notice the new sprinkler heads. This slope will is scheduled to be stabilized with Hydroseed, a permanent BMP.

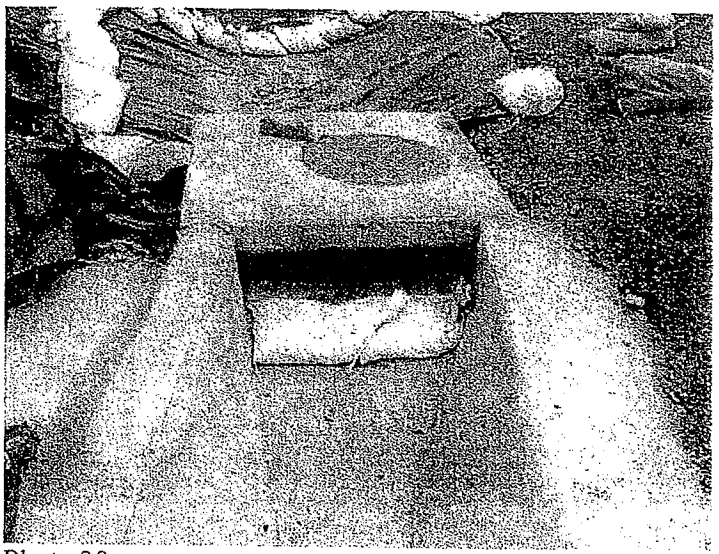

Photo 30

Response to NOV photo 33. New bags have been placed in front of the inlet.

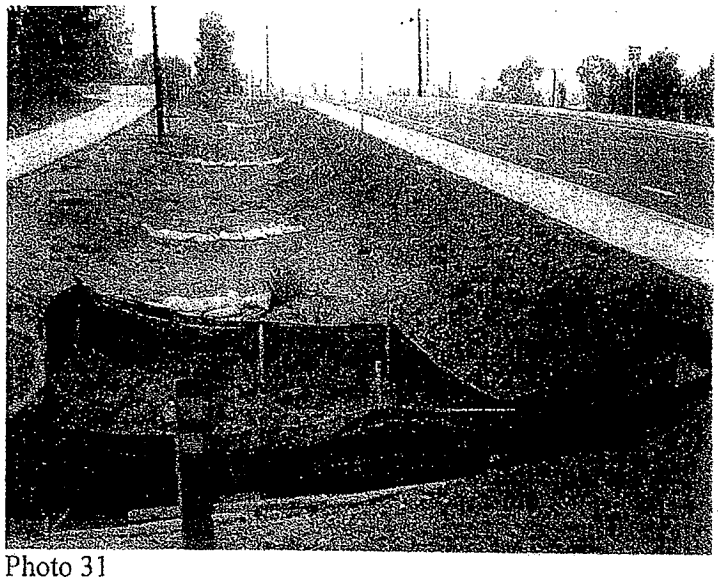

Photo 31
DI with protection of silt fence. Gravel bag check dams placed upstream. NOV photo 34.

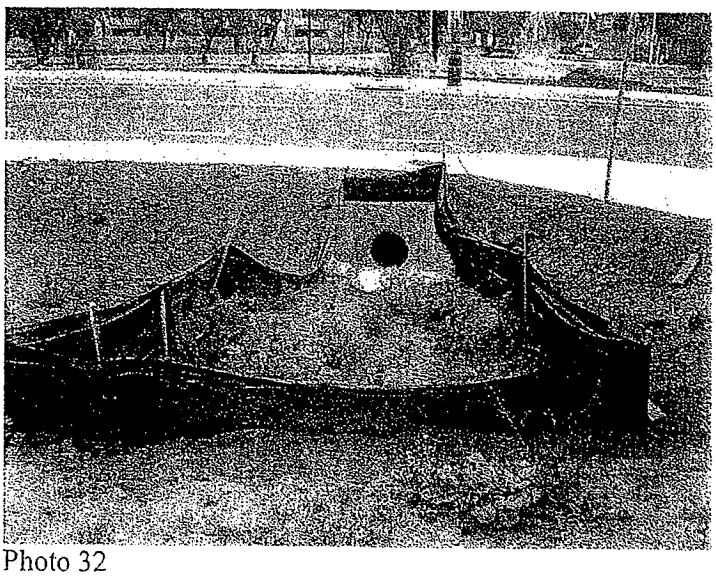

Photo 32
DI with protection of silt fence and gravel bags. NOV photo 34.

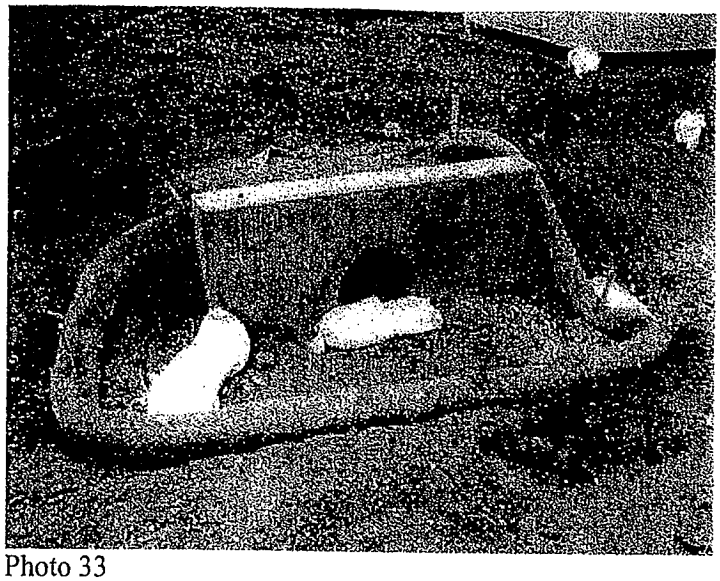

Photo 33
Response to NOV photo 35. Inlet has been protected with gravel bags and fiber rolls.

Photo 34
Response to NOV photo 37. Inlet has been well protected.

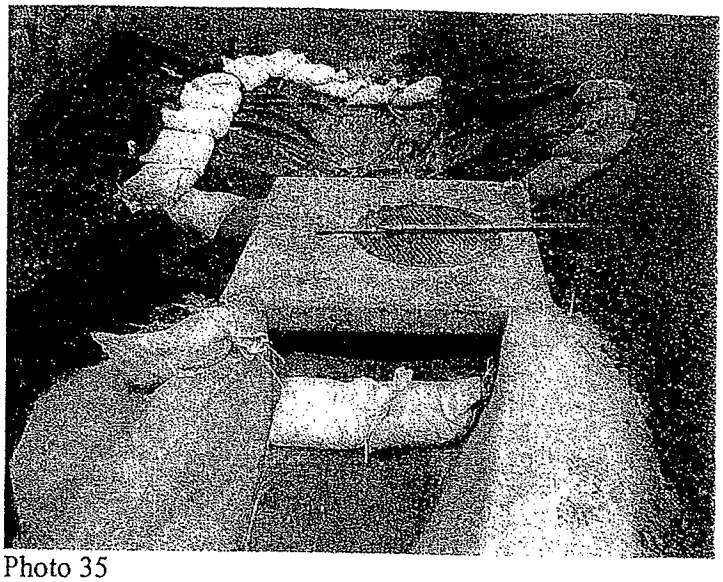

Photo 35
Inlet with gravel bag protection. NOV photo 38.

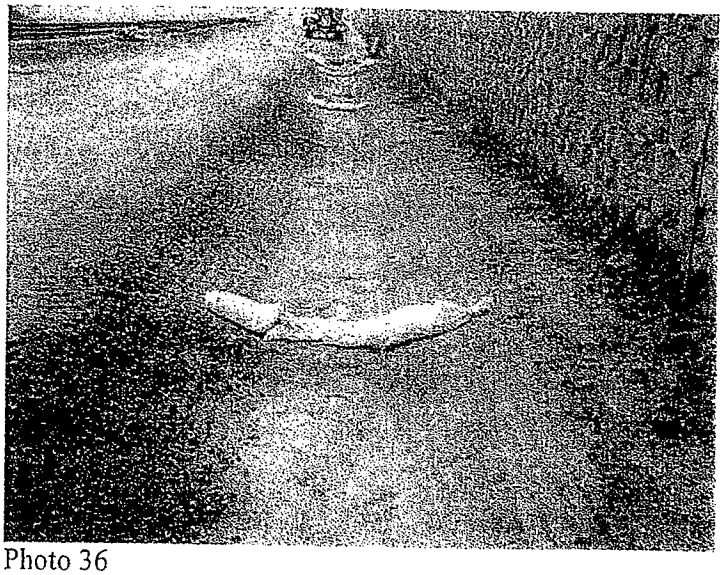

Photo 36
Earthen ditch with gravel bag check dams in it.

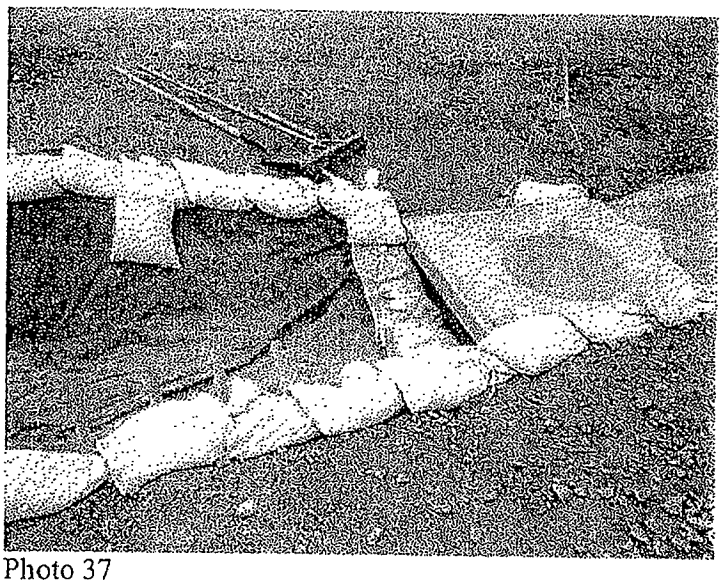

Photo 37
Inlet with gravel bag protection. NOV photo 38.

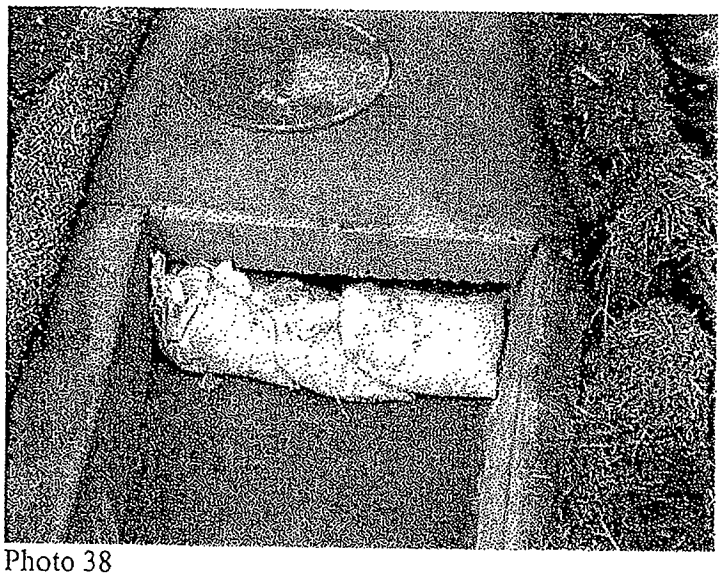

Photo 38
Inlet with gravel bag protection. NOV photo 38.

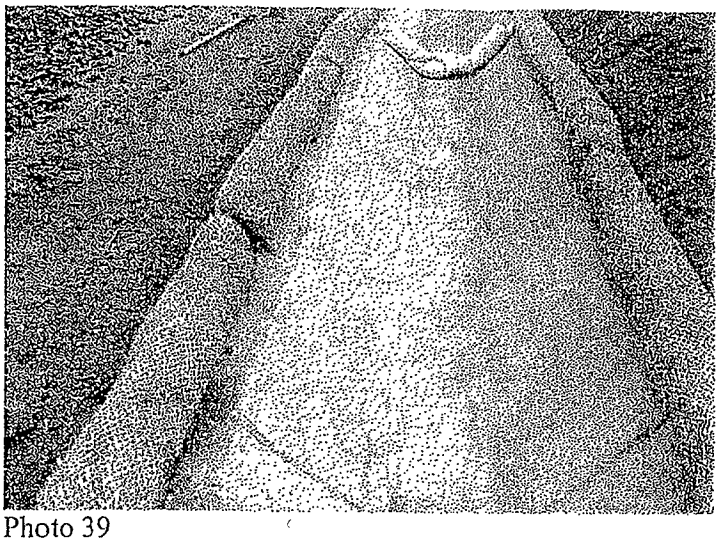

Photo 39
Concrete channel with gravel bag check dams in the channel and fiber rolls along the edge. Photo 39 of the NOV.

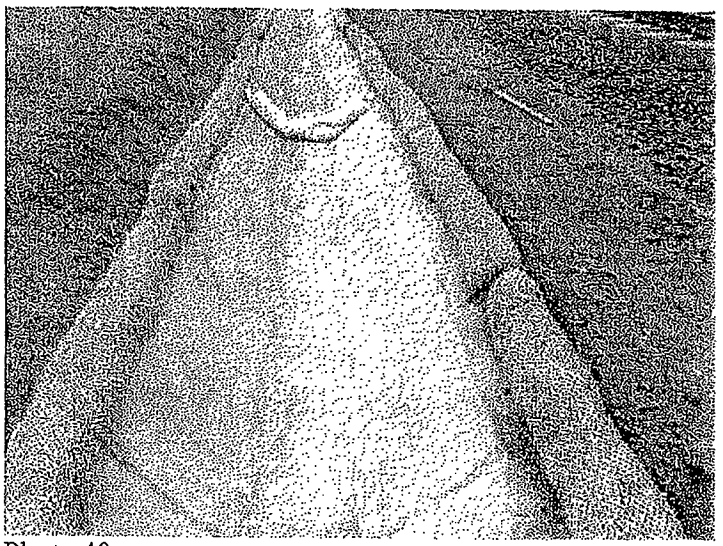

Photo 40
Concrete channel with gravel bag check dams in the channel. Photo 39 of the NOV.

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N C T D

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Oceanside, CA 92054
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Fax: 760/967-2001
www.gonctd.com

April 24, 2006

Mr. John H. Roburtus
Executive Officer
Attn: Ben Neil
California Regional Water Quality Control Board,
San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123

Re: Required Technical Report in Response Notice of Violation NO. R9-2007-0063, reference number CWU:10-3022900.02:neilb

Dear Mr. Roburtus:

The North County Transit District ("NCTD") respectfully submits this letter, attached Required Technical Report ("RTR"), and Storm Water Pollution Prevention Plan ("SWPPP") in accordance with the requirements of the California Regional Water Quality Control Board, San Diego Region ("Board") correspondence and Notice of Violation ("NOV") dated April 3, 2007. This letter and its attachments address alleged violations of NCTD's NPDES Storm Water Permit for Discharges Associated with Construction Activity ("Construction General Permit") identified during a site inspection conducted on March 21, 2007.

As stated in our letter regarding Notice of Violation NO. R9-2007-0050, NCTD views the site inspection process and any other feedback it receives from the Board as an opportunity to improve its ability to manage storm water while constructing much needed rail access corridors throughout the North County region. NCTD therefore welcomes your comments, and looks forward to working with you to enhance NCTD's implementation of the Construction General Permit.

As requested, the attached RTR provides a description of the immediate actions that NCTD or its contractors took to remedy the alleged violations. It additionally includes a discussion of the current status of each site that Board Staff identified in the NOV. Lastly, it also includes photographic evidence of the BMPs and other measures that NCTD contractors have put in place.

As requested, we have also attached an SWPPP. Included with the SWPPP is: 1) a complete copy of the onsite SWPPP; 2) copies of all pre, during, and post rainstorm inspection reports since the project start dates; and 3) a current map of the site showing all storm drain inlets and their subsequent outfalls to the waters of the State.

M C T D

810 Mission Avenue
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Mr. John H. Roburtus
Executive Officer
Attn: Ben Neil
California Regional Water Quality Control Board,
San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123

April 24, 2006

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SPRINTER

As detailed in the attached RTR, NCTD either has already or will be taking steps to ensure that its construction sites remain in full compliance with the terms of the Construction General Permit. These steps include, but are not limited to:

1) Installing silt fences and other sediment control BMPs to prevent sediment discharges to Loma Alta Creek near the El Camino Real Road Crossing, and along Oceanside Boulevard South near Union Plaza Court.

2) Replacing fiber rolls along the entire construction site perimeter.

3) Installing new gravel bags around storm drain inlets.

4) Replacing tracking control BMPs at construction site entrance/exits and adding additional aggregate to the BMPs so that they are 50 feet long and run the full width of the entrance/exit.

5) Ensuring workers use the tracking control BMPs rather than driving around them.

6) Using sweepers to reduce the impact of any sediment that is inadvertently tracked onto the street from the site.

7) Placing a silt fence around the soil stockpiles at NCTD's El Camino Real and Rancho del Oro construction yards.

8) Cleaning up and properly disposing of all trash at the construction yards and on the jobsite.

We appreciate the opportunity to work cooperatively with the Board in improving the quality of storm water runoff from NCTD's construction sites. Although it is often difficult to ensure that all of its contractors and subcontractors are abiding by both the letter and spirit of the Construction General Permit, it is NCTD's intent to continually improve the level of permit compliance at construction sites on NCTD property. NCTD is committed to the protection of water quality and correspondingly, implementation of the Construction General Permit's requirements.

Our staff looks forward to working with you to discuss and resolve any further issues as we consider iterative improvements to NCTD's water quality program. If you should have any questions, please do not hesitate to contact me, or Don Bullock, our Sprinter Project Manager. Mr. Bullock can be reached at 760.737.8625 x257.

Lastly, per the Regional Board's request, I submit the following statement:

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 directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including possibility of fine and imprisonment for knowing violations.

Very Truly Yours,

Don Bullock
Sprinter Project Manager
North County Transit District

cc: Karen King, Executive Officer, NCTD
Tom Lichterman, Director of Rail Services

bcc: C. Michael Cowett
Paula C.P. de Sousa

Required Technical Report (RTR) Response to NOV No. R9-2007-0063

Response to Violations within the City of Oceanside

I. Failure to Prevent Prohibited Discharges

Pursuant to Water Quality Order No. 99-08, Prohibition A.2
Observation: **Your site was documented as having two unauthorized discharges of sediment to Loma Alta Creek. The two unauthorized discharges were within the City of Oceanside near the El Camino Real Road crossing and along Oceanside Blvd South near Union Plaza Court.**

Immediate Actions: NCTD Contractors installed silt fences and other sediment control BMPs to provide the proper level of protection for Loma Alta Creek (see photos 5, 6, 8, & 9).

Site Status: Loma Alta creek now has the proper BMPs in place to protect against any sediment discharges. The large amount of sediment in the creek near El Camino Real Road (photo 6 in the NOV) was a preexisting condition (see photo 7 taken on 10/24/04). Recognizing that sediment is an ongoing a problem for the creek, NCTD contractors will pay extra attention to ensure that the recently upgraded BMPs are diligently maintained.

II. Failure to implement/Maintain Best Management Practices

Pursuant to Water Quality Order No. 99-08, Special Provision C.2, Section A.8
Observation: **Your site entirely lacked effective sediment controls along the site perimeter. Fiber rolls have been driven over repeatedly destroying the fiber rolls. Other areas along Oceanside Blvd and Loma Alta Creek completely lacked sediment controls such as silt fencing or fiber rolls. Storm drain inlet protection had an inadequate amount of gravel bag protection and a temporary construction road built across the corner of one inlet.**

Immediate actions: Immediately following the inspection, NCTD contractors replaced the fiber rolls along Oceanside Blvd (see photos 1 & 2). NCTD contractors likewise placed gravel bags two rows high around the drainage inlet to provide the necessary level of protection for the inlet (see photo 3).

Site Status: NCTD contractors are continuing to monitor all of the BMPs to ensure they are in good working order. The fiber rolls and gravel bags are all in good condition and working properly, and no sediment has been discharged off site.

Pursuant to Water Quality Order No. 99-08, Special Provision C.2, Section A.8
Observation: Construction site exits had insufficient BMPs to reduce the tracking of sediment onto paved roads. Significant sediment tracking was observed onto Oceanside Blvd near Rancho Del Oro. The rock gravel apron implemented to prevent tracking was inadequate in width and length. Site personnel purposefully drove around the rock apron to exit the site.

Immediate Actions: NCTD contractors have reconstructed the existing tracking control BMP. Contractors placed more aggregate around the BMP to make sure that it was the proper length (fifty feet). The BMP was additionally extended so that it covers the entire width of the entrance/exit point (photo 11). Third, NCTD instructed workers to mae sure they drove over the BMP, rather than around it, to avoid sediment tracking. Laslty, NCTD contractors are using sweepers on a regular basis to clean up any sediment tracking throughout the project.

Site Status: NCTD contractors are continuing to monitor all of the BMPs to ensure they are in good working order. The tracking control BMPs are all in good condition and working properly, and no sediment has been discharged off site

Pursuant to Water Quality Order No. 99-08, Special Provision C.2, Section A.5.b.4 & b.5
Observation: Your site had inadequate BMPs to minimize or eliminate the exposure to storm water to construction waste and trash. Near El Camino Real rail crossing, a soil stockpile and construction waste pile were uncovered and not contained to minimize exposure to storm water runoff.

Immediate Actions: NCTD contractors placed silt fencing around the soil stockpile in the El Camino real yard. That stockpile has since been removed and used as backfill on the jobsite. NCTD contractors also placed silt fencing around the soil stockpile in the Rancho del Oro yard (photo 10). These BMPs remain in place. Lastly, NCTD contractors have cleaned up and properly disposed of any construction trash or debris at both yards.

Site Status: NCTD contractors are continuing to monitor all of the BMPs to ensure they continue to remain in good working order. The silt fencing around the soil stockpile in the Rancho del Oro yard is in good condition and working properly, and no sediment has been discharged off site. Likewise, NCTD contractors are continuing to monitor construction trash and debris to ensure that if any piles accumulate, they are protected with the appropriate BMPs.

Photo 1
Repair to Photo 1 in the NOV. New fiber rolls are in place.

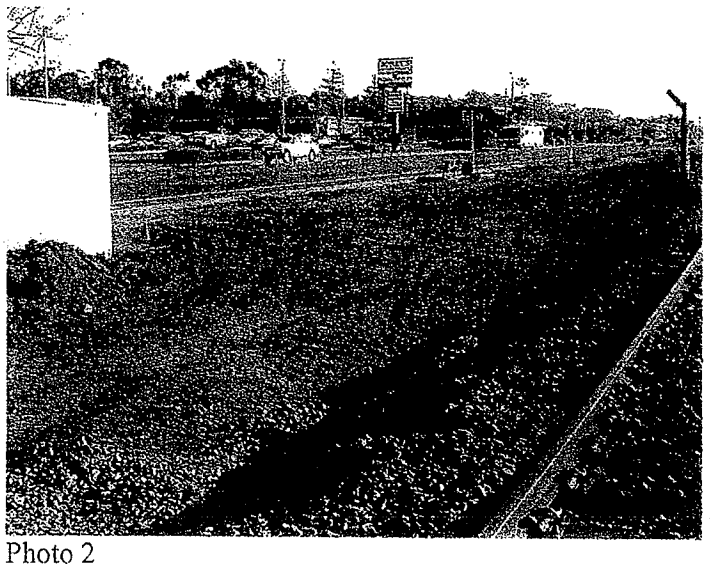


Photo 2
Repair to photo 2 in the NOV. Fiber rolls in place to provide sediment control.

Photo 3
Repair to Photo 3 in the NOV. New gravel bags in place to provide adequate inlet protection.

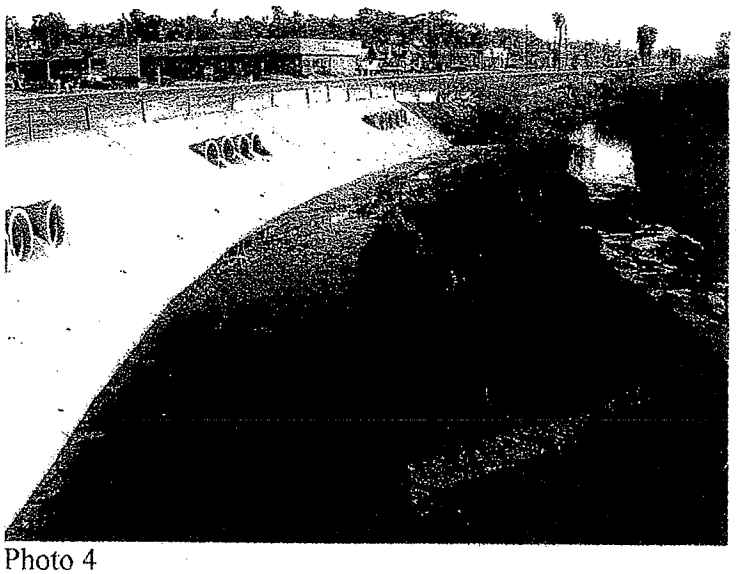


Photo 4
Repair to photo 4 in the NOV. Silt fence has been placed at the toe of slope next to the creek. The large amount of sediment in the middle was a preexisting condition.

Photo 5
Repair to Photo 5 in the NOV. Silt fence has been placed at the toe of slope next to the creek.

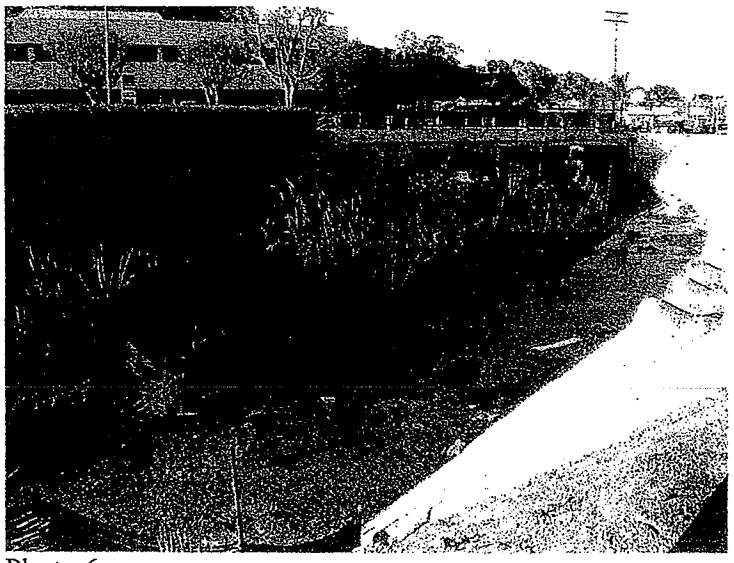


Photo 6
Repair to photo 6 in the NOV.

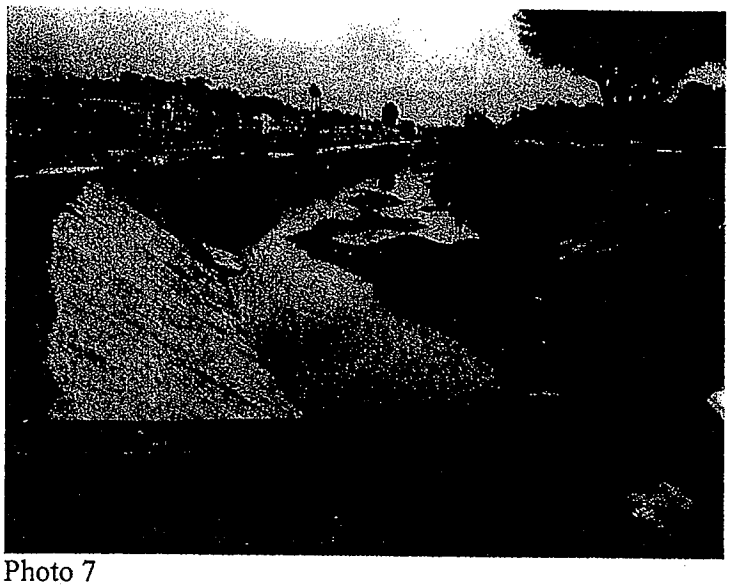


Photo 7
Preexisting condition for the area in NOV photo 6. Photo was taken on 10/26/2004.

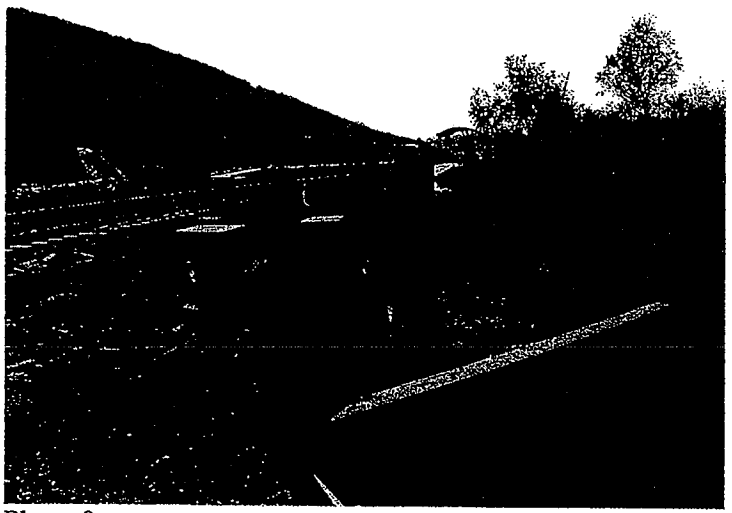


Photo 8
Repair to Photo 7 in the NOV.

Photo 9
Repair to Photo 9 in the NOV. Silt fence has been placed around new drainage structure.

Photo 10

Repair to photo 10 in the NOV. Soil stockpile has sediment perimeter control in place. Stockpile is active, but is still protected.

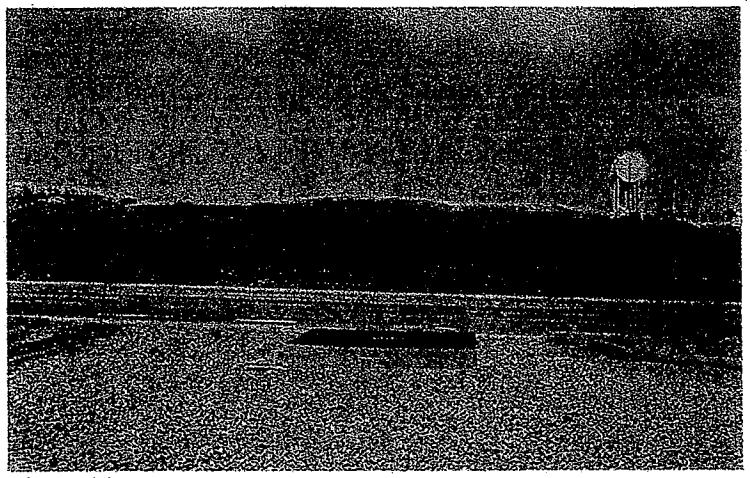
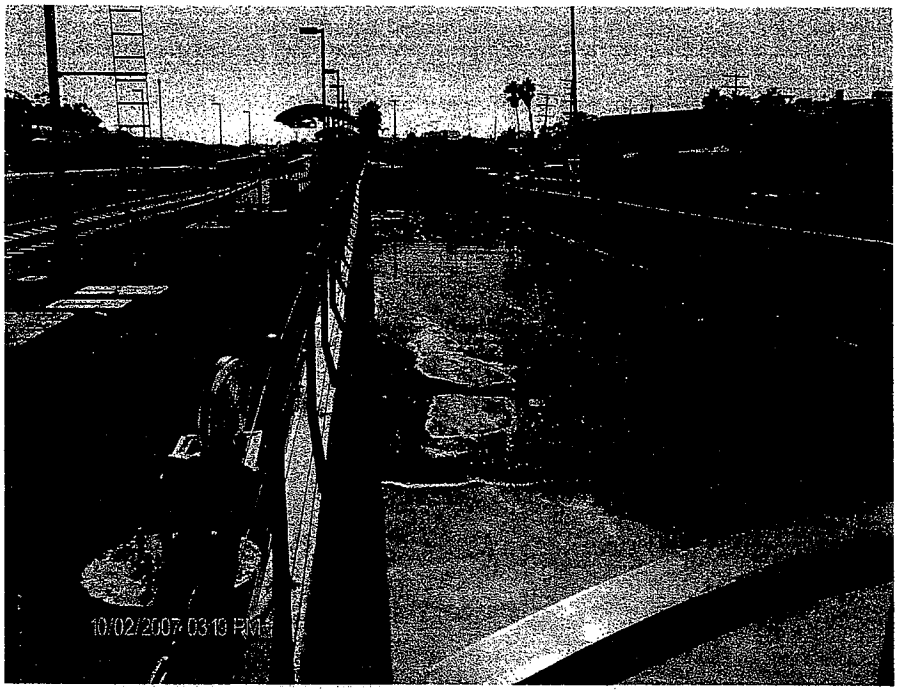


Photo 11
Repair to photo 11 in the NOV. More rock and 2 shaker plates have been placed. Rock extends the full width of the exit.

APPENDIX 2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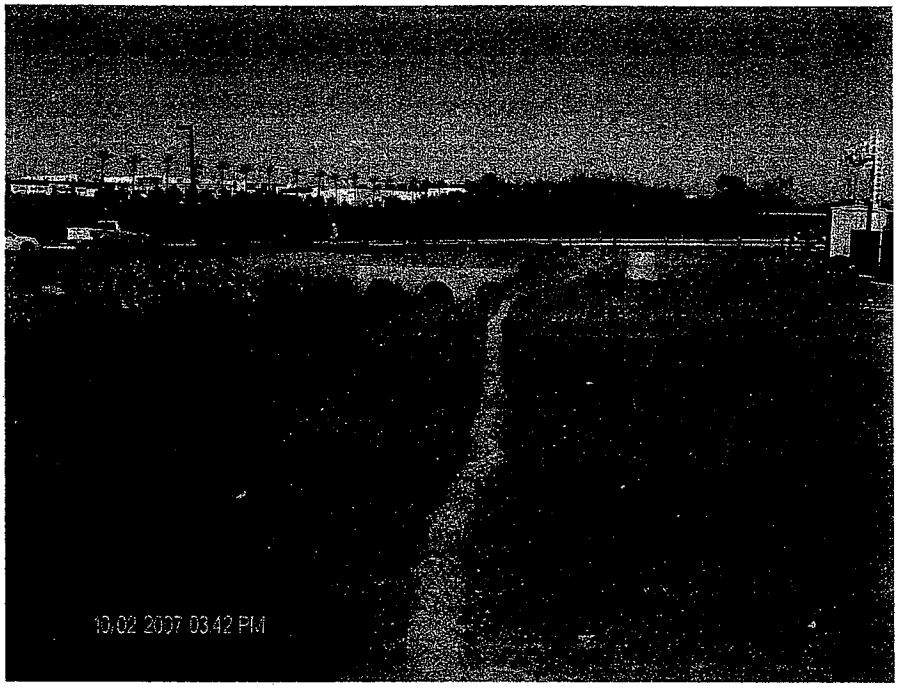
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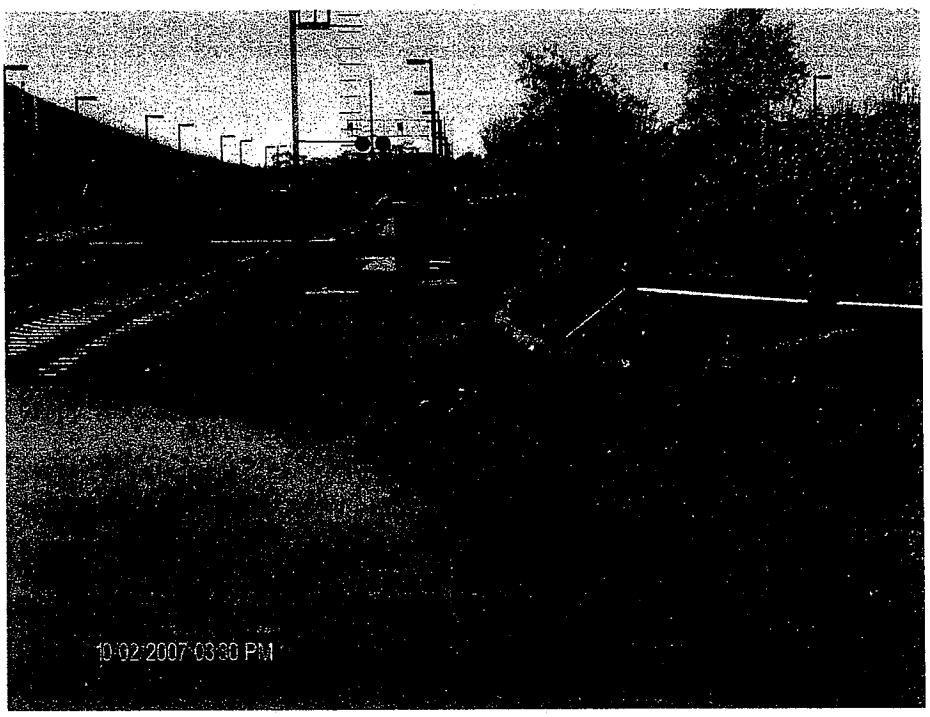
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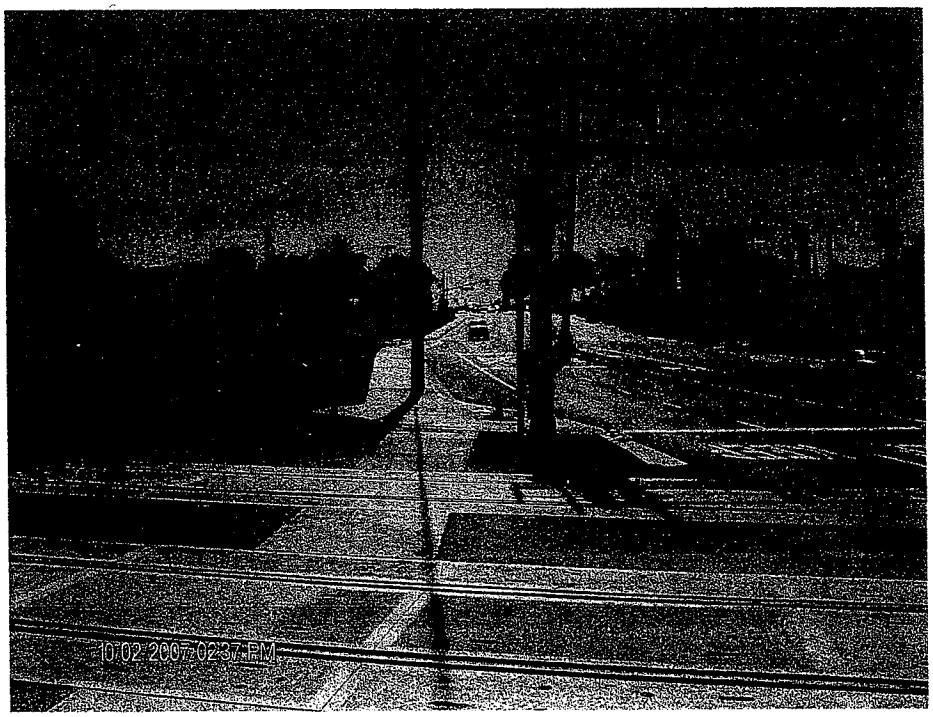
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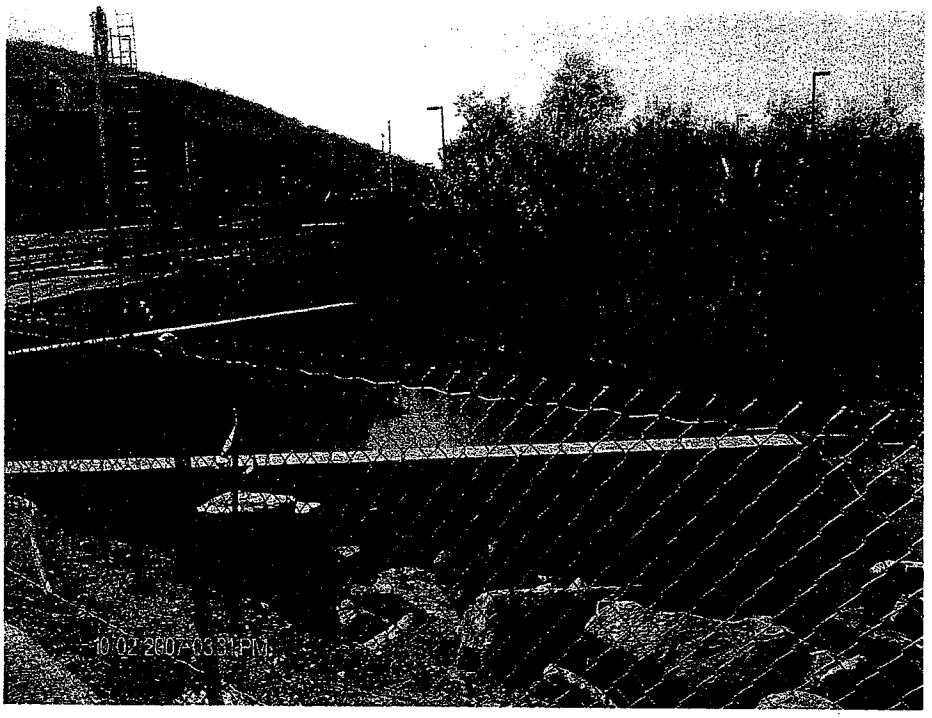

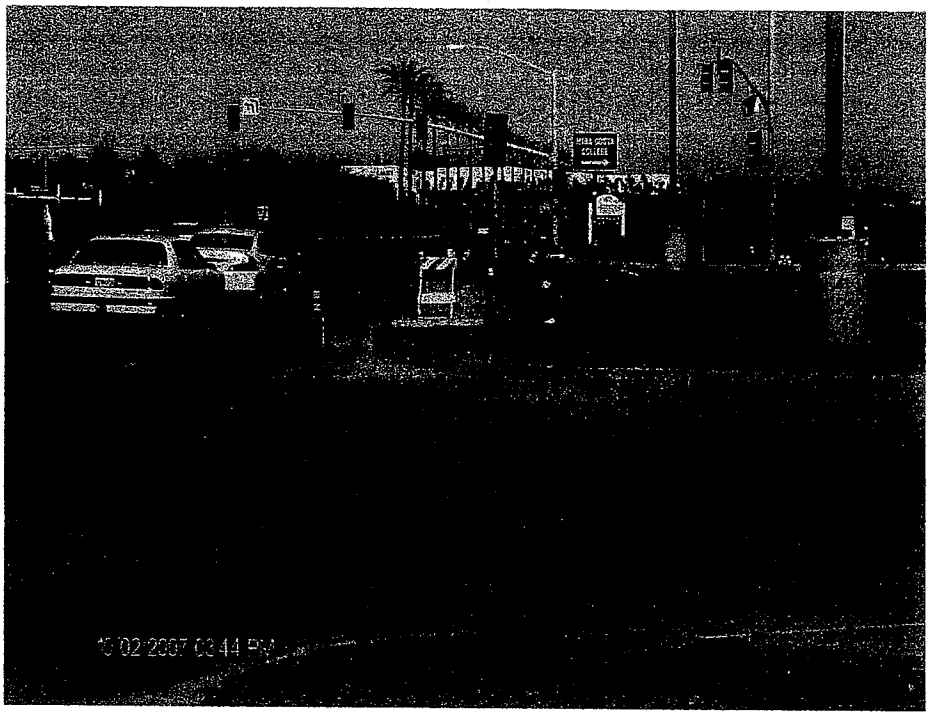

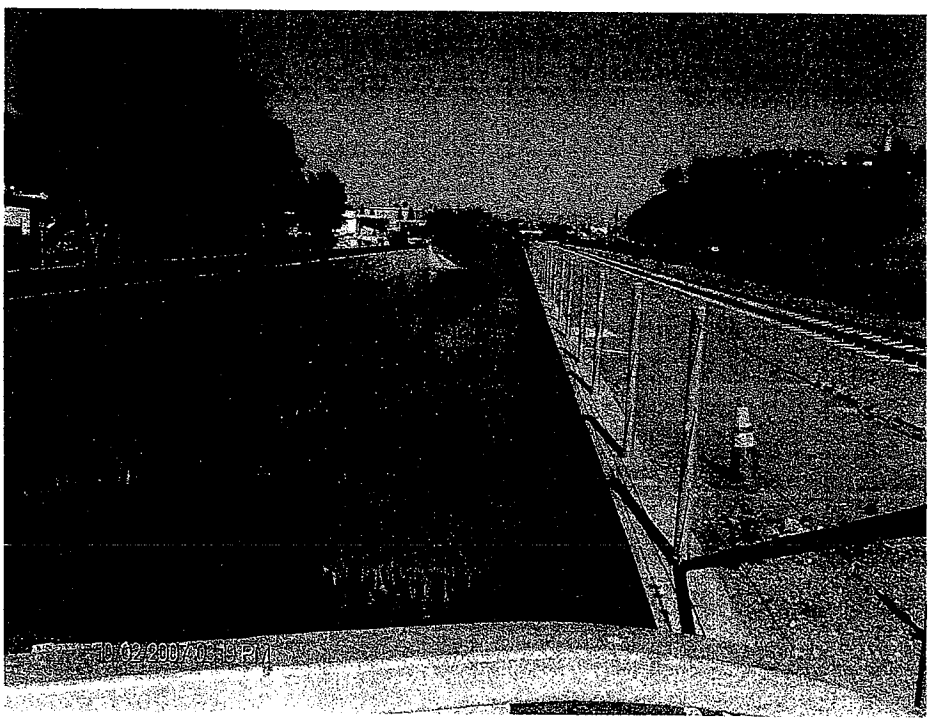

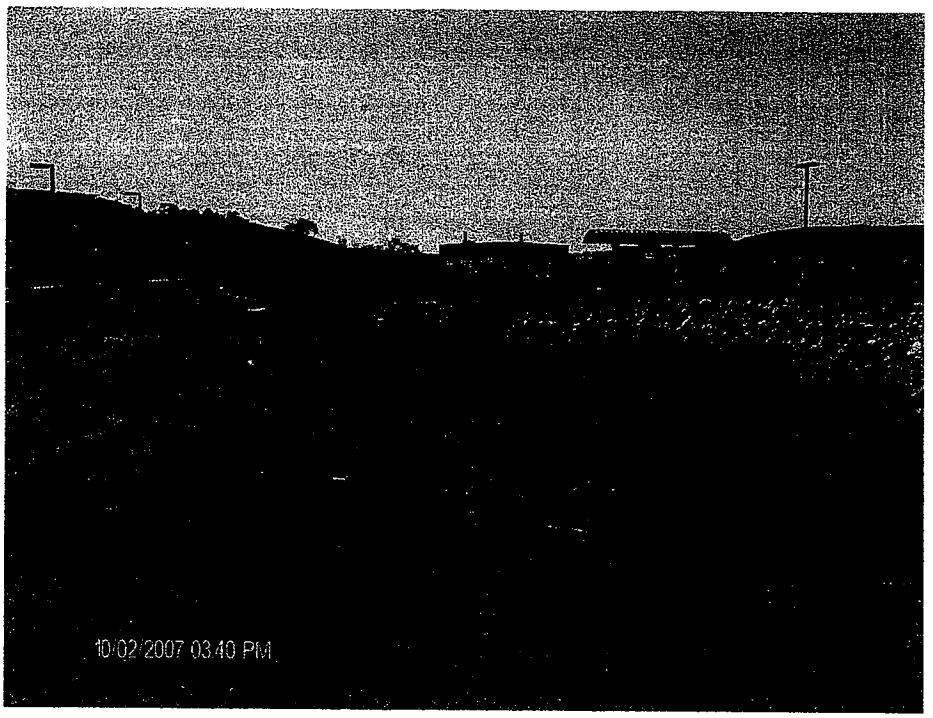
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APPENDIX 3

Introduction

- Storm Water Pollution Prevention Plan (SWPPP)
  - compliant to the National Pollution Discharge Elimination Systems (NPDES) Construction General Permit,
  - signed by the contractor PRIOR to being allowed to begin construction.
  - mandated criteria are part of the US Clean Water Act
  - mandates the utilization of Best Management Practices (BMP's)

Enforcerment

- Potential discharges into waterways and the storm drain systems are priority of:
  - Environmental Protection Agency (EPA)
  - State/Regional Water Quality Control Boards,
  - Regional and Local inspectors,
  - *Strategic* target of advocacy and environmental groups.
- **Current regulatory atmosphere is harsh.**

Results of Non-Compliance

- "Any person who knowingly violates discharge reporting requirements"....can be
  - fined up to $10,000 per day *per violation*
  - or imprisoned for up to two years. CWA§309(c)(4)
- Any citizen may commence a civil action on his or her own behalf:
  - Against any person or business
  - Against the United States
  - Against any government other governmental entity, who is alleged to be in violation of an effluent standard or limitation

Pollutants from Construction

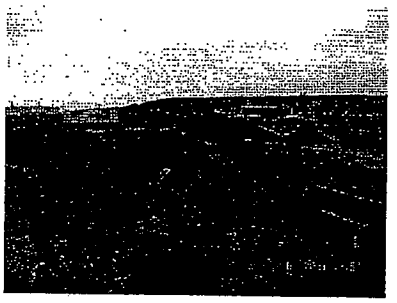
- Sediment: The most common pollutant from job sites.
  - Eroded soil contains nutrients that when carried in storm water runoff trigger algae growth
    - reducing water clarity, creating odors, depleting oxygen, and leading to fish kills.
  - Turbidity (cloudiness) from sediment
    - reduces in-stream photosynthesis, leading to reduced food supply, habitat, and spawning areas.
  - Other pollutants can attach to sediment and be carried into receiving waters.

Erosion Control vs Sediment Control

- Erosion controls prevent or reduce erosion by protecting the soil surface.
  - Erosion controls work to keep the soil in place.
- Sediment controls capture or contain soil after they have become dislodged and moved by wind or rain.
  - generally rely on filtering or settling soil particles out of the water that is transporting them.
- Erosion control (covering the soil) can be upwards of 90% effective
- Sediment control (silt fence, straw waddles, etc.) are typically 40-50% effective when properly installed and maintained.

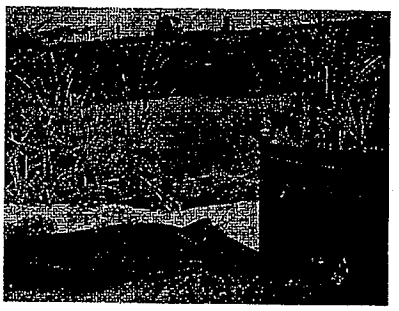
Stockpiles

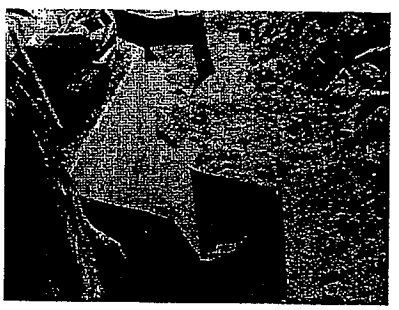
- Placement of stockpiles is very important.
- Caution should be used if placing near drains or waterways.
- If there is no alternative and placement adjacent to drains or waterways is done then proper requirements for containing and protecting (covering and perimeter protection) should be strictly adhered to.
- Any stockpile of materials with a potential to contaminate (cold mix) should not be placed directly on bare ground.



Silt fencing

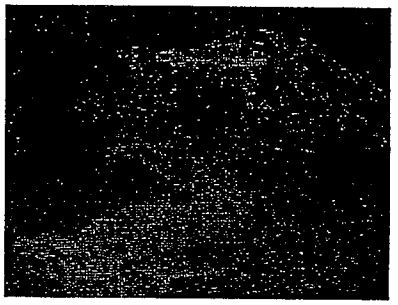
- When installed properly, is designed to be your **"back-up"** line of defense.
- When used exclusively it can quickly become overwhelmed and fail,
  - this can allow unrestrained soil to exit the site.
- To install silt fencing properly bury to "witness" line and replace when needed.
- If sediment is building up against silt fence remove as needed.





Concrete washouts

- Concrete or cementitious washout wastewater is caustic and considered to be corrosive with a pH near 12,
  - Essentially the same as **Liquid Drano, Ammonia, or other household cleaning detergents**.
- In it's inert form (dry) concrete can be disposed of as solid waste.



Straw waddles

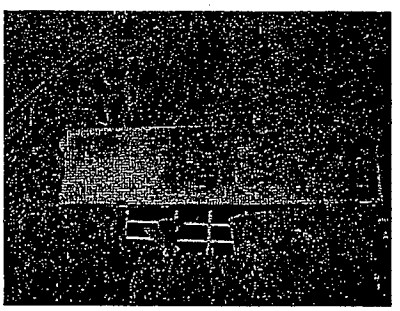
- Effective as both an energy dissipater and aiding in containing sediment flow (onto and off the site).
- Porous and allows water to filter through while trapping sediment.
- Must be properly secured and kept in place.
- Should not be driven/parked on
- When installing new waddles old waddles should be removed and properly disposed of.

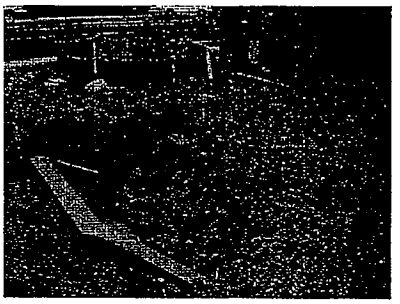
Gravel Bags

- Can be used to protect storm drain inlets.
- Can be used as check dams.
- Accumulated sediment should be removed.
- Gravel bags should be removed from an area, and disposed of properly, when no longer needed there.
- Gravel bags should be avoided as a place to park,
- Should be checked and replaced as necessary.

Inadequately Protected Drainage Inlets

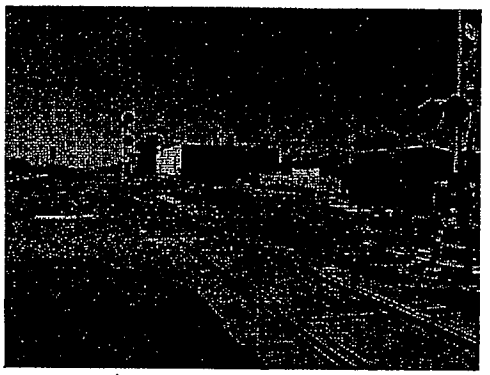
- All storm drains within the construction site and adjacent and/or downstream are required to be protected.
- Drains are required to be kept clean and sediment is not allowed to flow into the drains.
- When protection is in place site personnel should be aware of the importance of *preserving it vs. parking on it.*





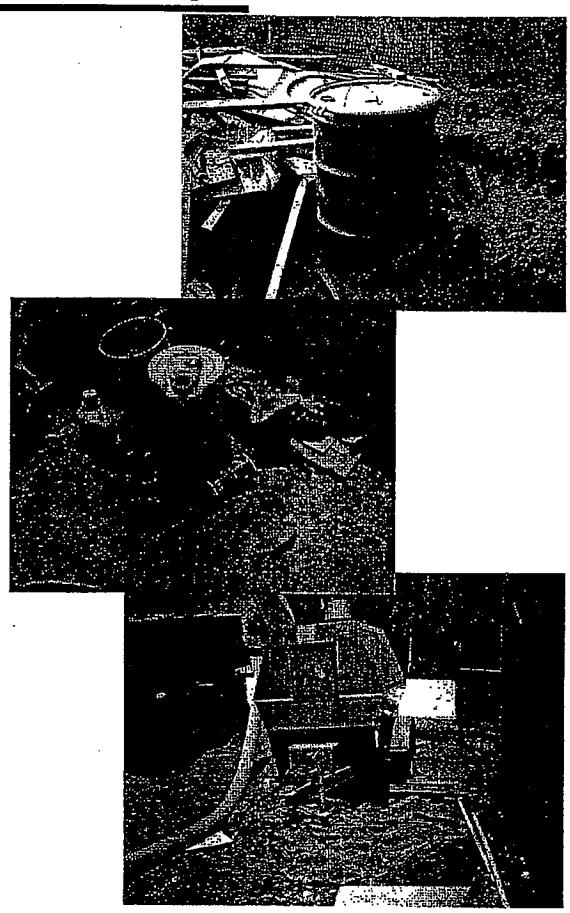
Sediment Tracking Off-Site

- Sediment tracking onto public streets should be avoided,
- shaker plates or gravel placed at all entry/exit points.
- If this is not possible or still does not provide adequate results, a street sweeper or vacuum truck can be utilized.



Hazardous Waste/Material Management

- Any equipment with a potential to leak must be adequately protected.
- If there is a spill on-site :
  - must be cleaned up properly
  - soil containerized and treated as Hazardous Waste.
- Any drums on-site must be labeled with the contents and date of first use.



Solid Waste Management (TRASH)

- Proper management of solid waste created and stock-piled on site minimizes or eliminates the discharge of pollutants to the storm drains and waterways.

Vehicle and Equipment Service

- Conduct fueling, major maintenance/repair, and washing off-site whenever feasible.
- Designate service areas away from waterways and storm drains.
- Regularly maintain and inspect for leaks.
- Proper placement and containment of areas with berms or other barriers.
- Use drip pans or diapers if necessary.
- Collect all spills and if possible recycle or properly dispose of (generally hazardous waste).

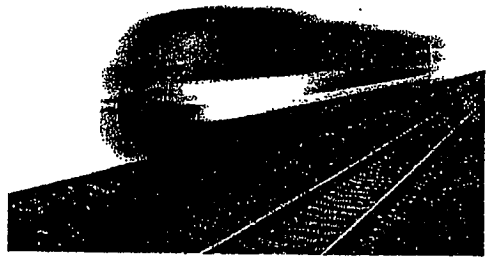
Septic Waste Management

- Leaking and portable toilets are a potential hazard.
- Proper management (not placing near storm drains or waterways) will minimize or eliminate human and natural resource exposure to hazards.
- Proper containment of portable toilets.

Conclusion

This is your environment....it's up to you

SPRINTER



Stormwater Pollution Prevention Program

Field Awareness, Monitoring and Maintenance

NCTD Sprinter Light Rail OCIP Project

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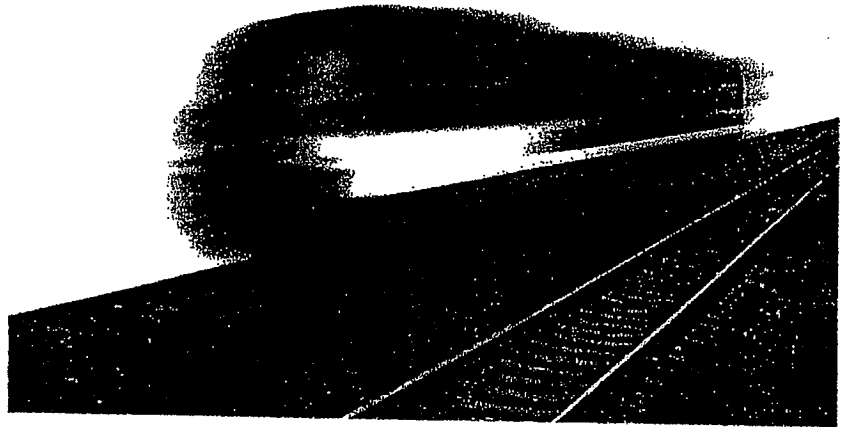


Willis Construction Practice
Willis Risk and Insurance Services of San Diego

...the issue?

- *Recent state regulatory allegations of dumping sediment illegally into creeks and storm drains along the 22-mile Sprinter rail line now under construction.*
- *12 alleged SWPPs violations in San Marcos, Vista and Oceanside municipalities*
- *NCTD stands to be fined $10,000 a day for each violation.*
- *The state board also could seek a court injunction, criminal charges...or even personal indictments.*

...SWPPs Citations

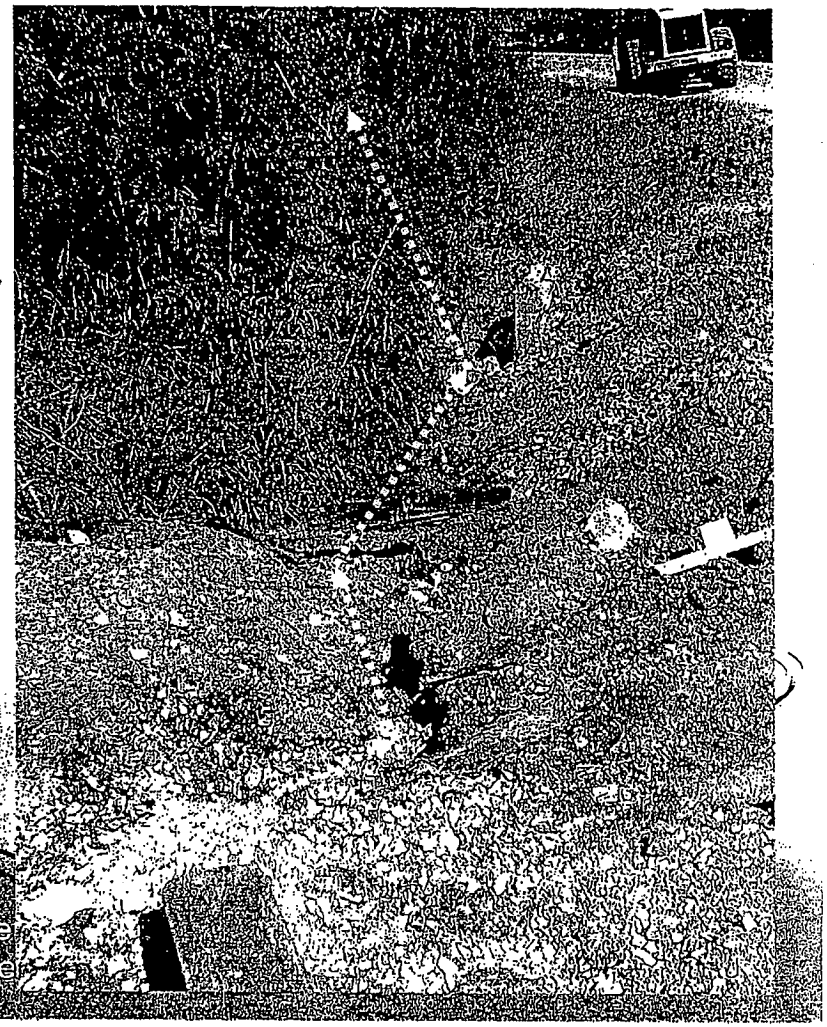
1. *...cited lack of erosion control*
2. *...cited "overwhelmed" fences designed to keep silt from the construction areas from running into the creek.*
3. *...cited trash, piles of dirt and even gasoline containers were left uncovered so rain water could wash over them and take gas, lime, gypsum and slurry either directly into Loma Alta Creek in Oceanside or into storm sewers.*
4. *...gravel bags that should have been used to stop the runoff were found in the bottom of Loma Alta Creek.*

...the purpose of SWPPs
Stormwater Pollution Prevention Plan

- *The primary goal:*

  ...to operate at a high level of activity while protecting and being sensitive to the environmental impact associated with land development and new construction.

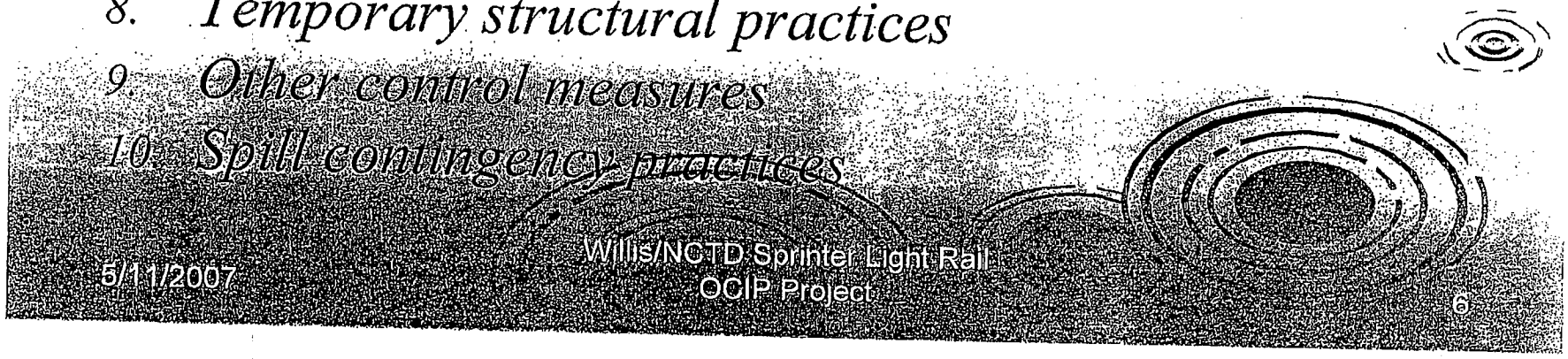
- *This will be achieved in part through awareness, education, diligence, and the delegation of responsibility and accountability in regards to the management of storm water concerns and issues.*



Types of Stormwater Pollution Prevention BMPs

**: those practice most notable on the Sprinter Project*

1. ***Erosion control measures****
2. ***Sediment control measures****
3. ***Stabilization measures****
4. ***Tracking control****
5. ***Wind erosion control****
6. *Non-storm water control*
7. *Waste management and materials pollution control*
8. *Temporary structural practices*
9. *Other control measures*
10. *Spill contingency practices*



...our role and responsibility ...as a project team

1. *Develop a proactive workforce team effort to recognize Stormwater Pollution Prevention practices*
2. *Correct **minor** defects of placed environmental best management practices*
3. *...Maintain zero tolerance of any SWPPs infractions on the Sprinter Project*

...best field practices

- *Review*
- *Repair*
- *Report*
- *Remove*

Our Improvement Plan

1. ***Recognize***

   *...**check out** the area for any environmental risk exposures*

2. ***Repair***

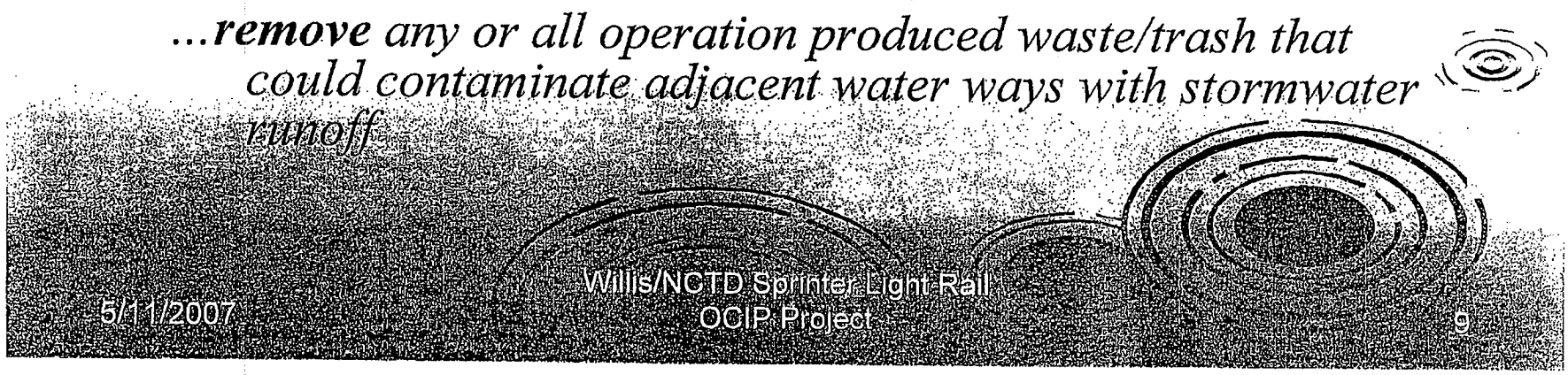
   *...**apply minor corrections** to identified BMPs with any degradation or abuse*

3. ***Report***

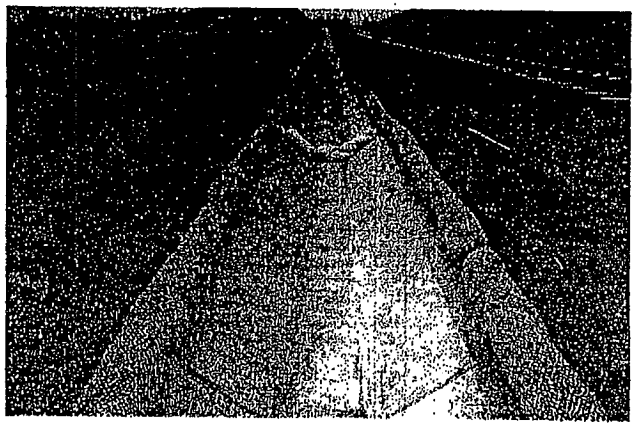
   *...**contact** the Sprinter SWPPs Coordinator or the Project Safety Manager to report any identified degraded BMPs*

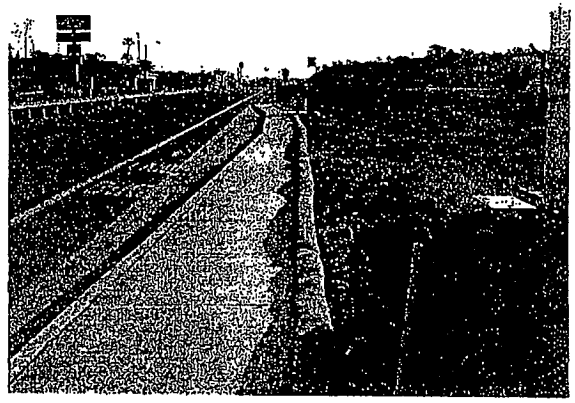
4. ***Remove***

   *...**remove** any or all operation produced waste/trash that could contaminate adjacent water ways with stormwater runoff*



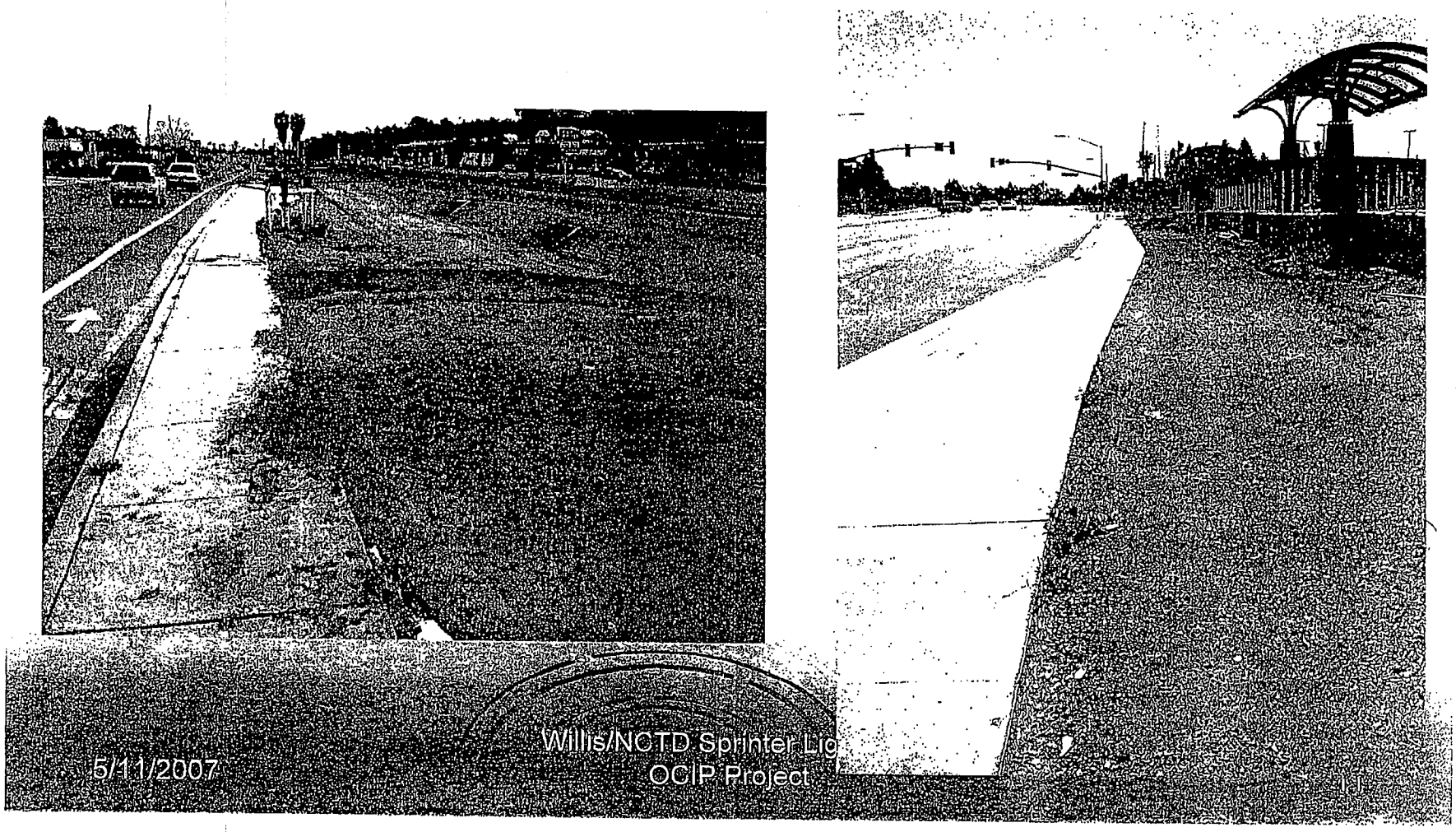
BMP: Fiber or Straw Wattles



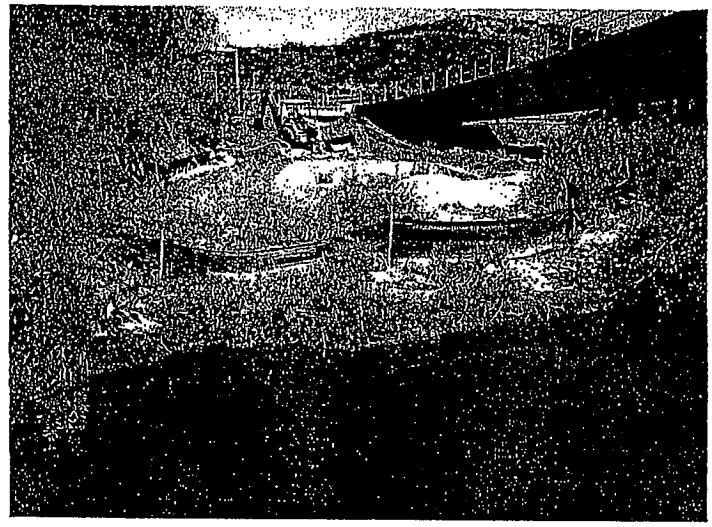


- *Provides temporary or permanent sediment control.*
- *Intended for erosion, sediment and storm water runoff control.*
- *Water passes through sediment logs decreasing velocity and trapping sediment.*

Violation:
Fiber or Straw Wattles

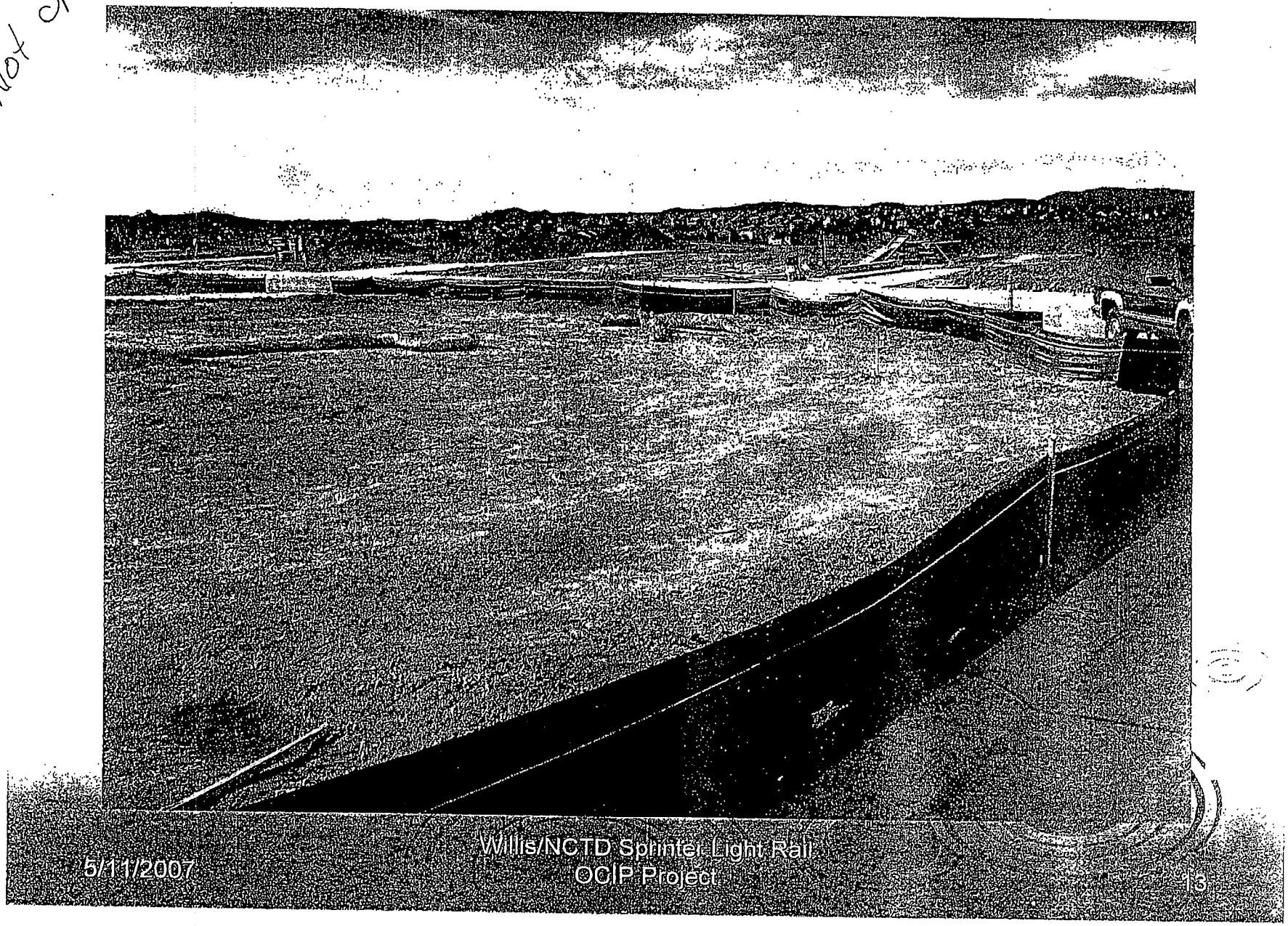


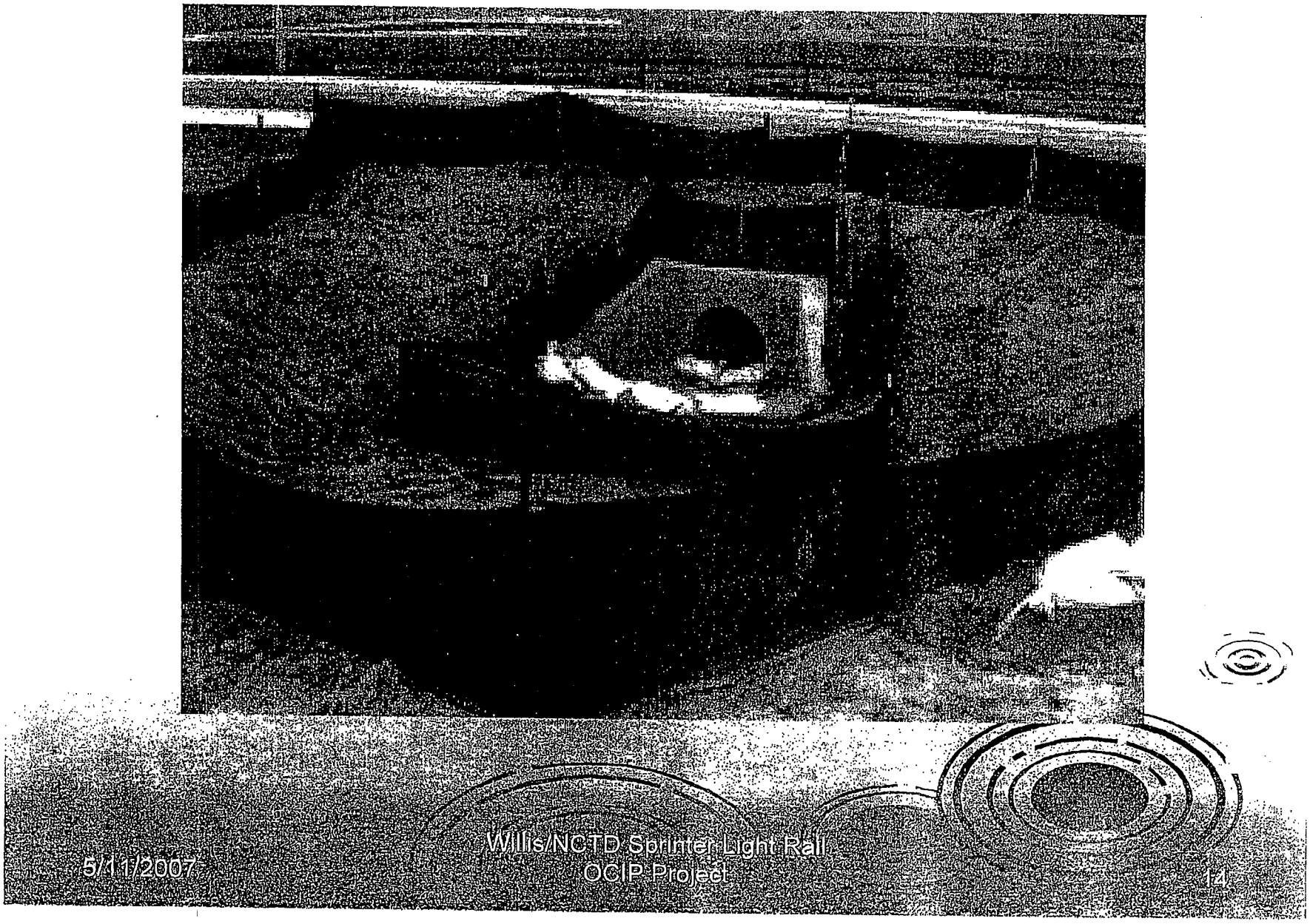
BMP: Silt Fences



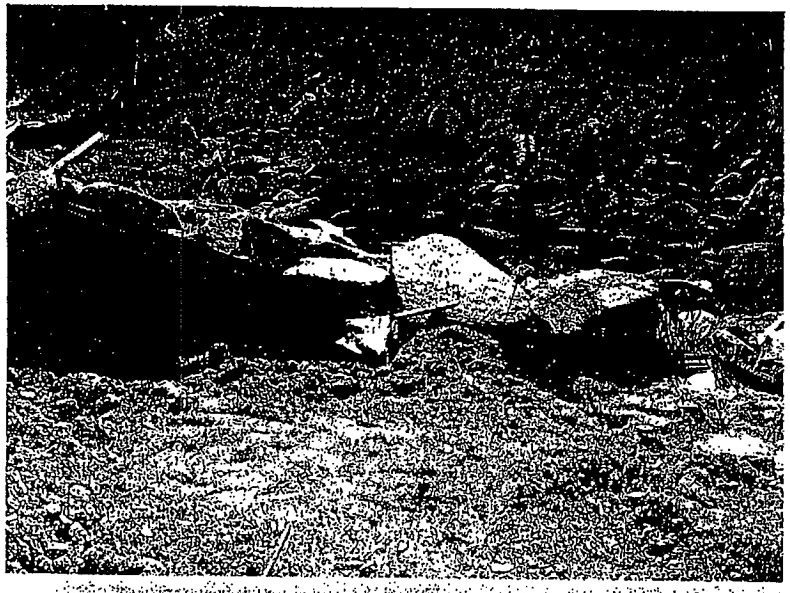
- *It is designed to handle sheet flow of water, to reduce its velocity and prevent erosion cutting of the soil and to isolate stockpiles and other disturbed areas to prevent runoff.*
- *It is also used as a sand fence in windy or arid areas.*

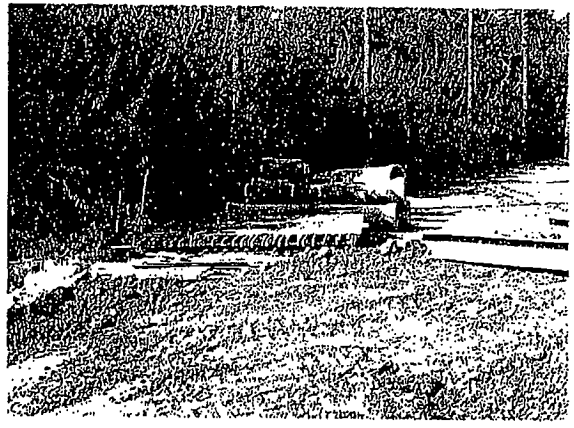
Not Sprinter





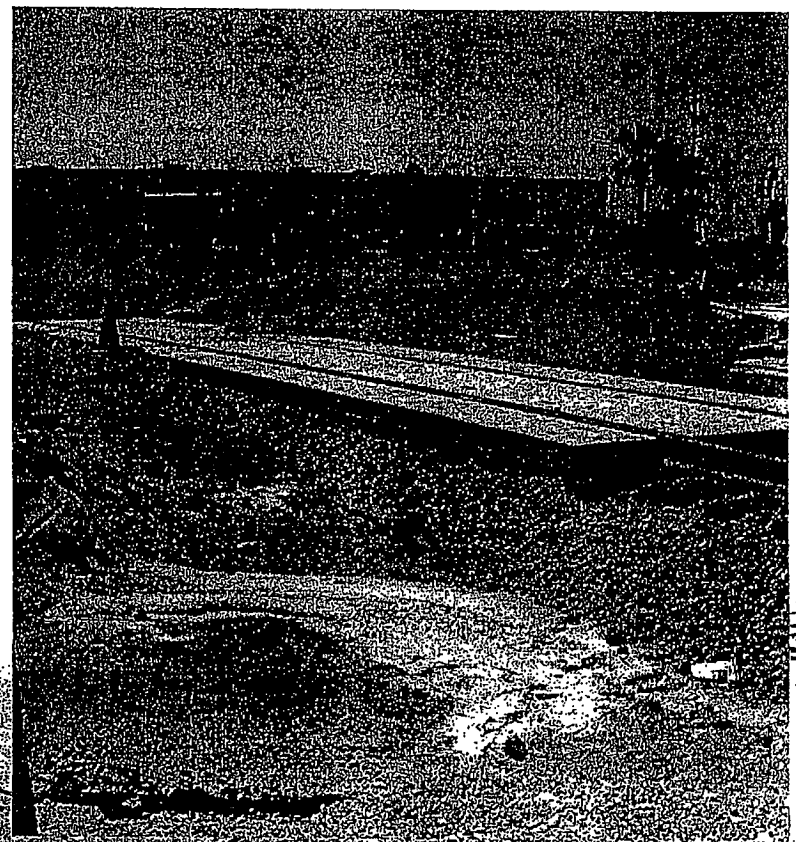
Violations: Silt Fencing



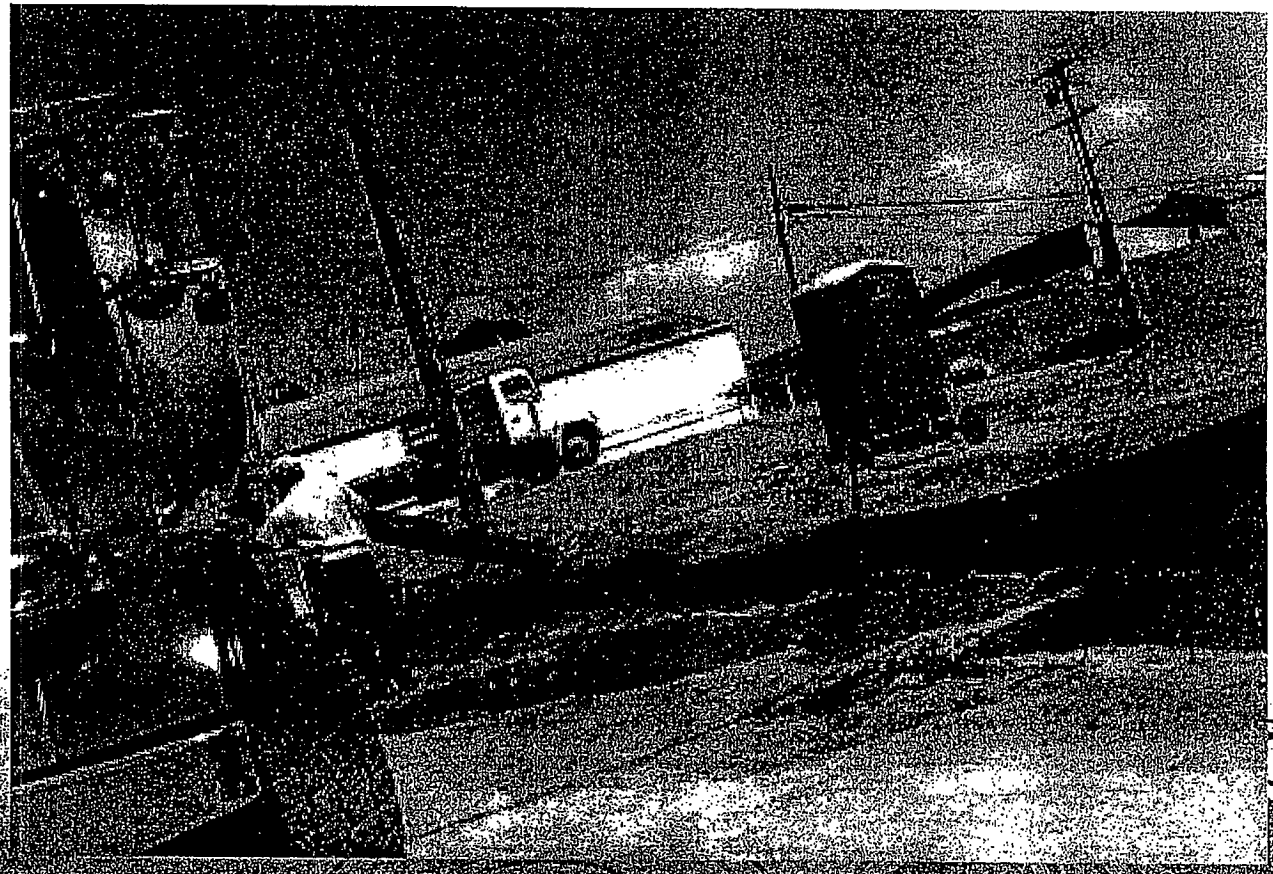


BMP: Concrete washout

- *They must have proper signage to designate their location and proper use.*
- *They must be maintained to assure that there is no potential for runoff during a storm event.*



Violations: Concrete Washout

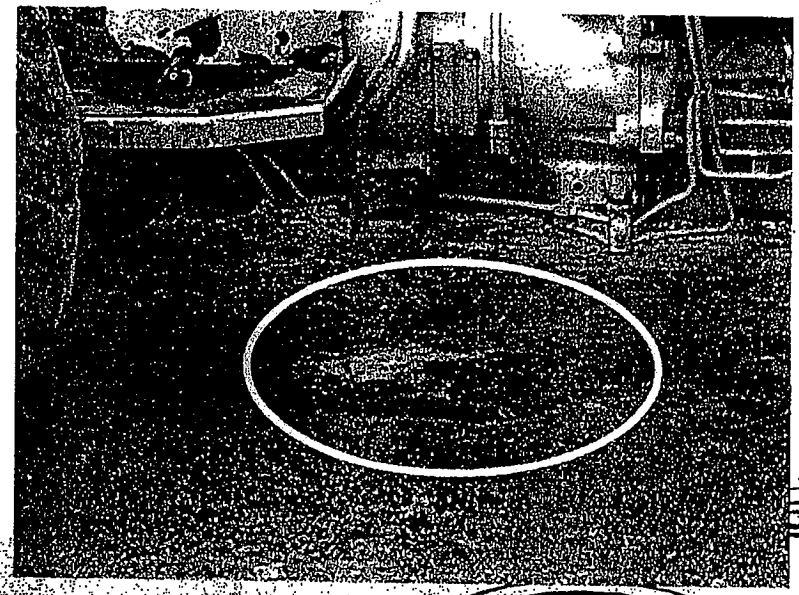


Violation: Concrete Washout

Violation:

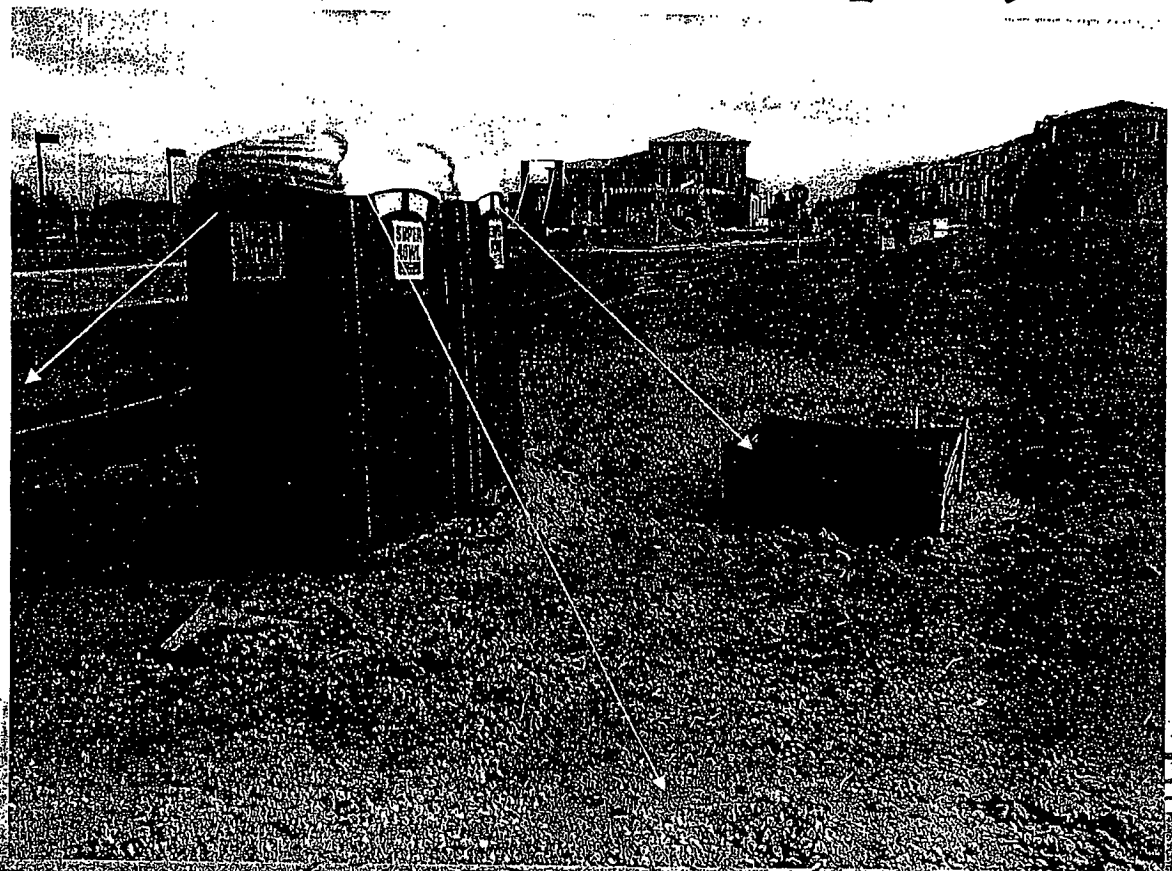
Site Equipment Spillage, Leakage or Discharge

- *In case of a hazardous spill:*
  - *Contain the spill to prevent it from spreading.*
  - *Contact your site superintendent and the project safety manager, Eric Contreras*

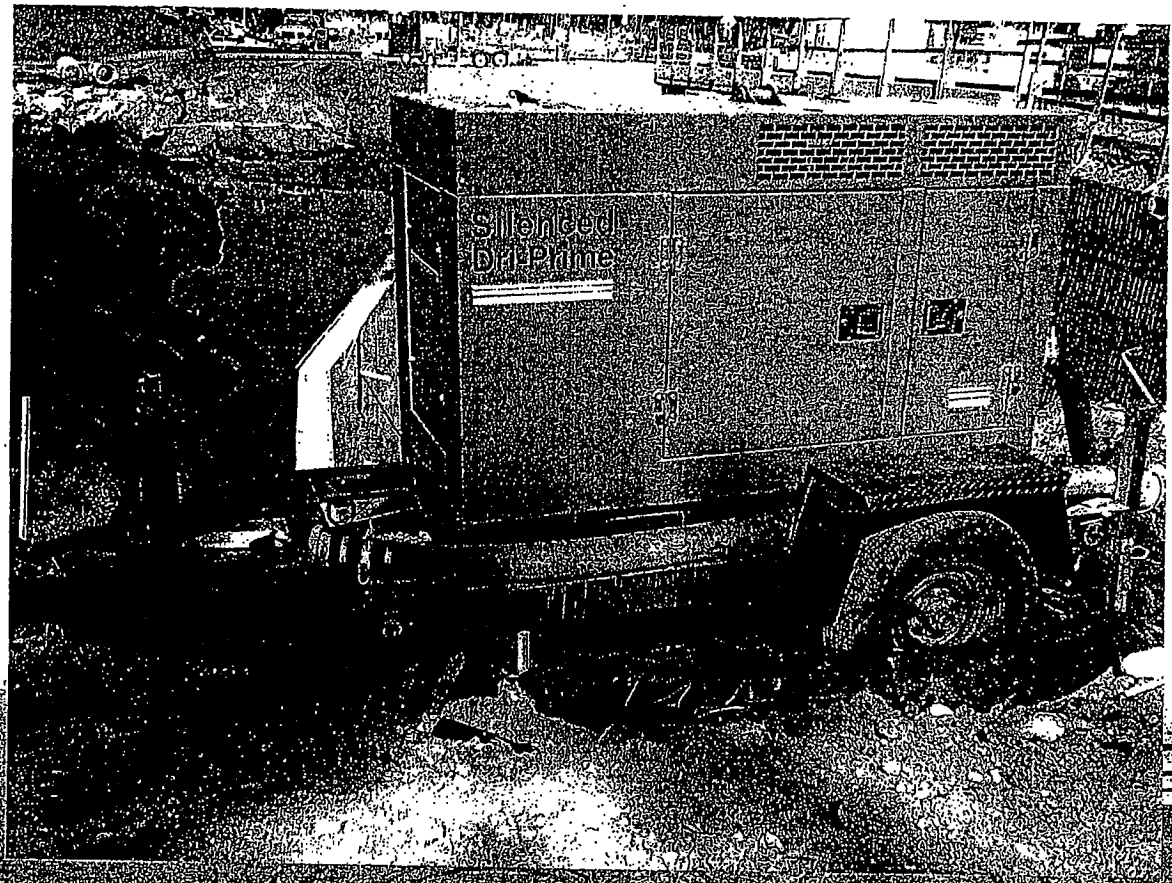


Not Sprinter

Violation: Overturned Porta-potty

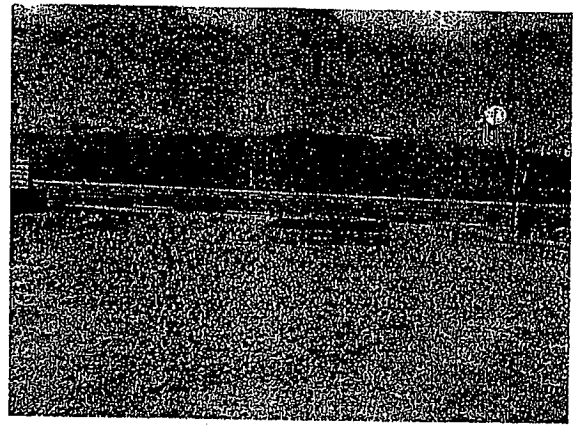


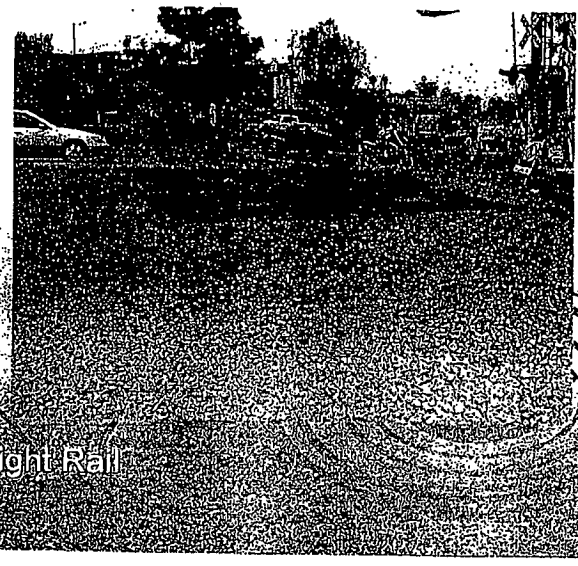
Best Management Practice: Equipment Secondary Containment



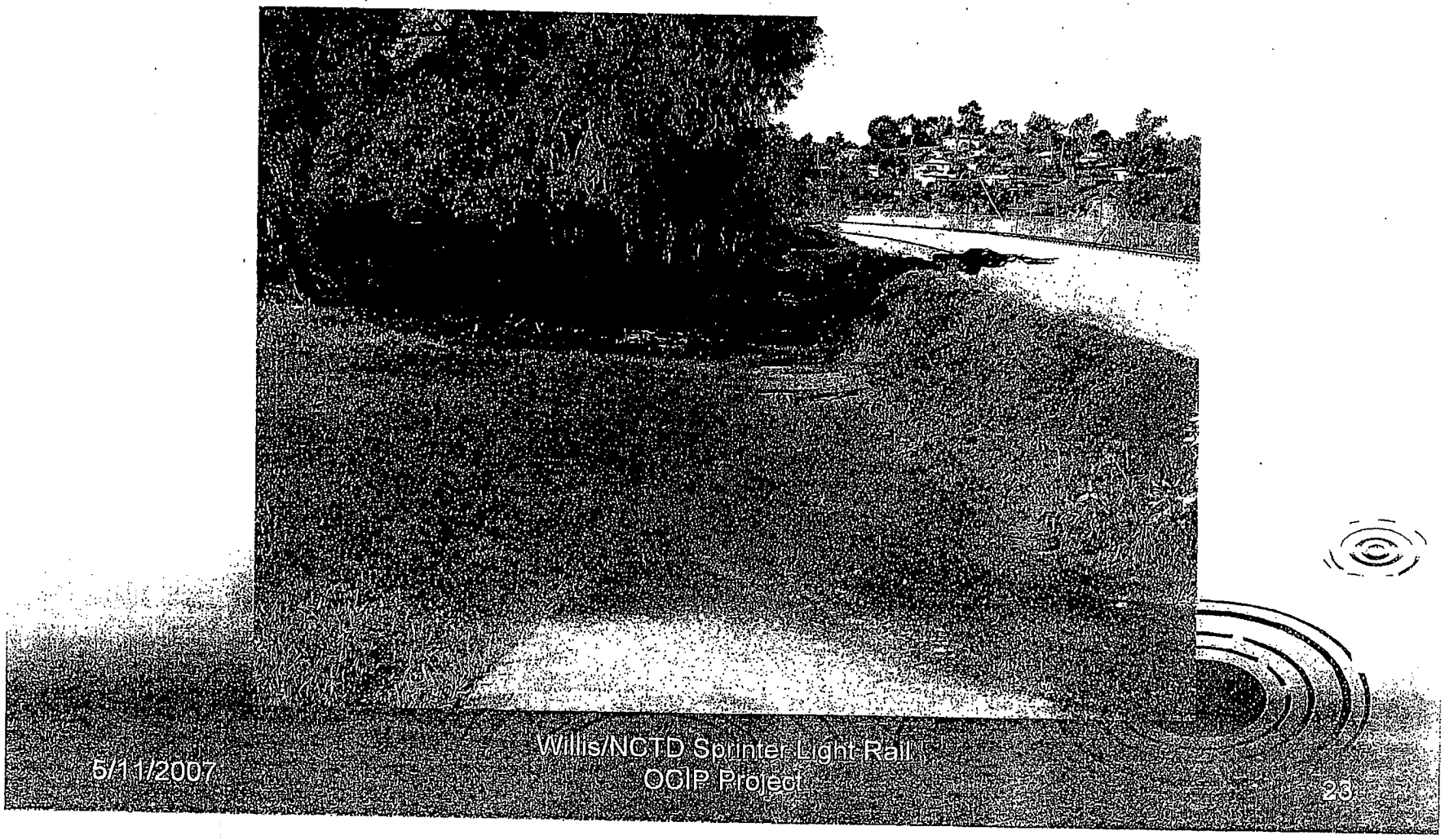
Best Management Practice: Site Mud Track-Out Control

- *The appearance of mud and dirt on the streets around the construction site is an immediate red flag to the regulatory agencies.*
- ***Whatever we can do as a team to minimize and eliminate dirt and mud from our streets, especially tracking it off site to the public roadways, is critical.***



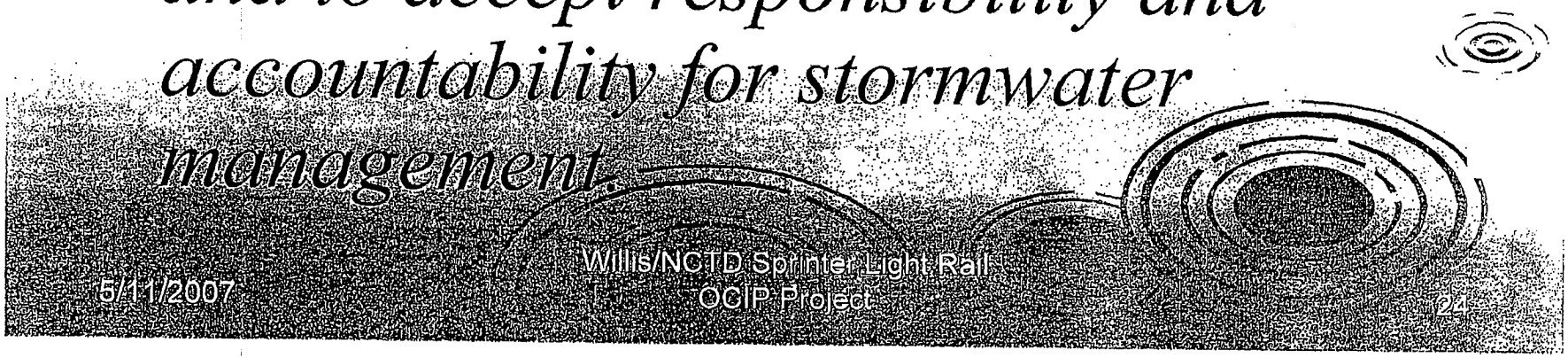


Best Management Practice: Site Hydro-seeding



Goal

- *To reach our goal of maintaining environmentally responsible worksites, everyone needs to be aware of storm water management issues, techniques for maintenance and to accept responsibility and accountability for stormwater management.*



Benefits of Goals

- *Development of an educated and informed workforce.*
- *Minimization of environmental impact.*
- *Elimination of potential fines.*
- *Reduce operating violations and associated costs.*
- *Have the cleanest and most environmentally responsible sites in the industry.*

SWPPs Coordinator Contact Number

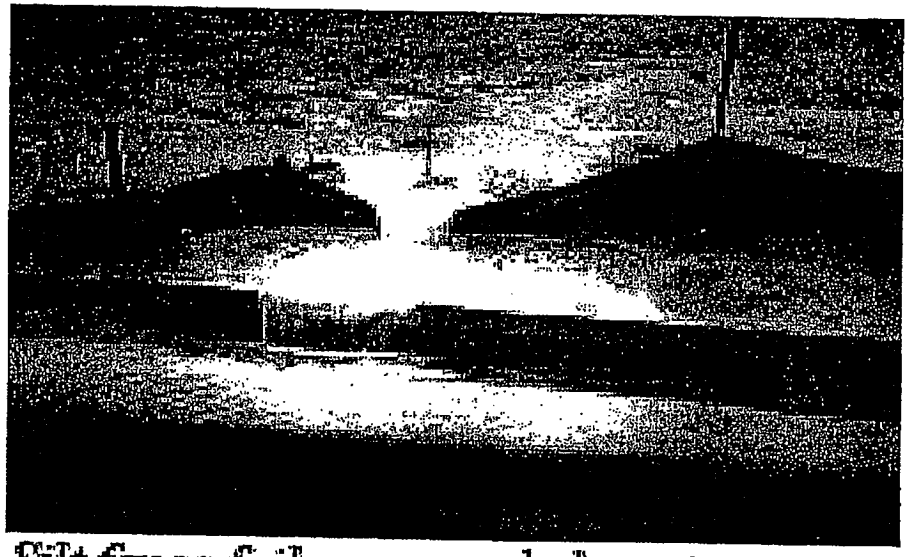
- *NCTD Sprinter Stormwater Pollution Prevention Program Coordinator:*

  Ken McGrath 562 644-3435

- *Sprinter Light Rail Project Safety Manager:*

  Eric Contreras: 760 445 6825

? ?
Not Sprinter ?



Silt fence failure overwhelms storm drain

Close and Thank You

Sprinter
SWPPP / Environmental Training Program Outline

1. Purpose
    a. Contractor Awareness
        i. People who do the work
        ii. Supervisors

    b. Preventative measures
        i. prevent Notices of Violation
        ii. prevent fines
        iii. prevent delay in the work
        iv. eliminate surprises

    c. Develop a culture of awareness
        i. Provide benefit
            1. to contractor
            2. to trades persons
            3. to District

2. Target Trainees
    a. Superintendents
    b. Foreman
    c. Trades Persons

3. Logistics
    a. Supervisor Specific Training
    b. Foremen/Superintendents/ Management
        i. Contract Requirements
        ii. Agency requirements
        iii. Awareness culture

    c. Tradespersons training.
        i. Tailgate meetings
        ii. no more than 30 minutes
        iii. Task/ Location Specific
        iv. Frequency tbd

    d. Continuous follow-up for all
        i. Tag-on to 6:30 AM Track Safety meeting
        ii. About 5 minuets
        iii. SWPPP reminder for the day
            1. from Caltrans, or other agencies
4. Training Team
    a. Team
        i. WCRS
            1. K. McBride
            2. B. O'Sullivan
        ii. SWE
            1. M. Stewart
        iii. NCTD
            1. K. McGrath
            2. E. Contreras
            3. K. Thomas
            4. N. Cohn
    b. Trainers
        i. K. McBride

ii. B. O'Sullivan

c. Technical Support to trainers
   i. K. Thomas
   ii. K. McGrath
   iii. M. Stewart, (logistics)

5. Training Program, basics
   a. Level of detail will be according type of training and
      i. requires visible WCRC Management support
      ii. will include, at a minimum:
         1. Purpose
         2. Why important
         3. Benefits to project
         4. Benefits to individuals
         5. Agencies identification
         6. Definitions of terms
         7. Purpose of regulations
         8. examples and tips

6. Minimum Documentation
   a. Record of attendance
   b. Transmit to Construction Management Consultant, (SWE)
   c. Other

7. Verification and follow-up
   a. Sign-offs
   b. Quiz
   c. Continuous Observation

8. Curriculum (Based on Willis recommendations)
   a. Short term awareness campaign
   b. Emphasis on recognition of defective BMP's
      i. Sedentary control logs
      ii. Straw wattles
      iii. Sediment traps at inlets,
      iv. Trash or waste construction materials near or in adjacent proximity to any exposed navigable water sources or ponds,
      v. Damaged silt fencing
      vi. Improper soil stabilization
      vii. Improper and exposed fueling operations
      viii. Improper placed or leaking portable toilets
      ix. Damaged erosion control blankets,

   c. <u>NCTD Light Rail OCIP Stormwater Policies and Procedures</u>
      i. Mandate for all field frontline supervisory staff
         1. Read, understand, follow

   d. Signing the <u>Policies and Procedures Acknowledgement</u>
      i. Mandate for all field frontline supervisor staff

   e. Compliance with all applicable EPA, Sate and Local Stormwater requirements

   f. Recognizing, properly handling all installed storm water management materials, BMP's

g. *Other recommendations* ***(Will revue for appropriateness for this forum)***
   i. *Reporting damages to BMP's no matter how slight*
   ii. *Maintaining clean site, everyday by sweeping and removing any dirt or construction materials from the streets and roadways*
   iii. *Containing and reporting immediately, hazardous material sills to the on-site sptd*
   iv. *Have own clean-up kit and know location of kit*
   v. *Accepting responsibility for the actions of each onsite suppliers*
   vi. *Perform all tasks in compliance with Stormwater Policies and Procedures*
   vii. *Regularly communicating SWPP maintenance*
   viii. *Stop and ask questions when in doubt*

APPENDIX 4

NORTH COUNTY TRANSIT DISTRICT
STORM WATER MANAGEMENT PLAN

May 2006

Prepared For:

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Prepared By:

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PBS&J Project No.: 491128.00

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Signed Certified Statement

North County Transit District

Storm Water Management Plan

May 2006

"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, the information submitted is, to the best of my knowledge and belief, 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."

Date: _____

Signature: _____

Printed Name: _____

Title: _____

Abbreviations and Terms

303d	EPA List of Impaired (Polluted) Waters
ADA	Americans with Disabilities Act
ASBS	Areas of Special Biological Significance
BMP	Best Management Practice
CSUSM	California State University San Marcos
CIP	Capital Improvement Program
CWA	Clean Water Act
CNG	Compressed Natural Gas
EPA	Environmental Protection Agency
ESA	Environmentally Sensitive Area
FRA	Federal Records Act
HA	Hydrologic Area
HSA	Hydrologic Service Area
HU	Hydrologic Unit
JURMP	Jurisdictional Urban Runoff Management Program
LOSSAN	Los Angeles-San Diego- San Luis Obispo
MOW	Maintenance of Way
MTDB	Metropolitan Transit Development Board
MHCP	Multiple Habitat Conservation Program
MSCP	Multiple Species Conservation Program
MS4	Municipal Separate Storm Sewer System
NPDES	National Pollutant Discharge Elimination System
NURP	Nationwide Urban Runoff Program
NCTD	North County Transit District
NOI	Notice of Intent
PY	Permit Year
RARE	Rare, threatened or endangered species
RWQCB	Regional Water Quality Control Board
SANGIS	San Diego Area GIS
SANDAG	San Diego Association of Governments
SWRCB	State Water Resources Control Board

SWMP	Storm Water Management Plan
SWPP	Storm Water Pollution Plan
TMDL	Total Maximum Daily Load
URMP	Urban Runoff Management Program
WQMP	Water Quality Management Plan

Executive Summary

Though not formally designated as a Small Municipal Separate Storm Sewer System (Small MS4) by either the State Water Resources Control Board (SWRCB) or the San Diego Regional Water Quality Control Board (RWQCB), North County Transit District (NCTD) has voluntarily prepared this Storm Water Management Plan (SWMP). NCTD's railroad rights-of-way and facilities are located in nine general purpose agency jurisdictions, each of which is designated as a Phase I MS4. Each of these general purpose agencies has developed its own set of regulations relating to storm water compliance as a requirement of the Phase I Permit. The various ordinances developed by these agencies differ from each other such that compliance is difficult for an agency that operates bus and linear rail services in all nine jurisdictions.

Therefore, to avoid violating any particular agency's storm water regulations, NCTD has elected to prepare its own SWMP covering its own facilities and operations. NCTD well appreciates that its facilities and operations may contribute to the countywide challenge to protect water quality. By voluntarily preparing, implementing and enforcing this SWMP, NCTD anticipates being a part of the solution, along with the nine general purpose agencies in which it operates, in successfully addressing the issue of water quality enhancement. By voluntarily implementing the six (6) minimum control measures described herein, on facilities and operations best managed and maintained by NCTD, NCTD looks forward to achieving the goals established by the Phase II permit.

The SWMP is a document that provides a written account of the programs to be conducted by NCTD in compliance with the permit requirements. NCTD has undertaken this effort because it recognizes the importance of clean water in the San Diego region. In addition, the SWMP allows for better coordination of NCTD's storm water management activities with other entities in the region. This is particularly important as NCTD's operations occur within eleven (11) different land use jurisdictions and eight (8) different watersheds.

NCTD was created by the state legislature in 1975 to plan, construct and operate public transit systems in the northern portion of San Diego County. NCTD operates bus and rail services in Carlsbad, Del Mar, Encinitas, Escondido, Oceanside, San Diego, San Marcos, Solana Beach, Vista, Camp Pendleton, and some areas within unincorporated San Diego County. NCTD operations are distributed throughout eight major watersheds of San Diego County which include: San Juan, Santa Margarita, San Luis Rey, Carlsbad, San Dieguito, Penasquitos, San Diego, and Pueblo San Diego.

This SWMP identifies NCTD areas and activities that have the potential to generate pollutants and specific measures to be undertaken by NCTD so as to reduce the discharge of pollutants. Pursuant to the Phase II Small MS4 Permit, the SWMP contains the following six (6) programs or minimum control measures:

- Public Education;
- Public Participation;
- Illicit Discharge Detection and Elimination;
- Construction Site Storm Water Runoff Control;
- Post Construction Storm Water Management; and
- Pollution Prevention/Good Housekeeping for Municipal Operations.

Each of these programs includes a set of activities or Best Management Practices (BMPs) that will be undertaken by NCTD. For each BMP, measurable goals and timetables for implementation are also provided. The BMPs that are specified in this SWMP are summarized in Table ES-1. A schedule summary for the measurable goals of each BMP is shown in Table ES-2. A brief summary of the various sections contained in this document is provided below:

- **Chapter 1 - Introduction and Responsibilities.** Provides an overview of NCTD, discusses applicable regulatory framework, and outlines responsibilities for implementation of the SWMP.
- **Chapter 2 - Overview of Potential Pollutant Sources.** Describes NCTD areas and activities that have the potential to generate pollutants, as well as their settings within the multiple jurisdictions and watersheds in the San Diego region.
- **Chapter 3 - Public Education.** Discusses activities NCTD plans to implement to educate the public about the importance of the storm water program and the public's role in the program.
- **Chapter 4 - Public Participation.** Discusses activities NCTD plans to undertake to include the public in the preparation and implementation of the SWMP.
- **Chapter 5 - Illicit Discharge Detection and Elimination.** Discusses activities NCTD plans to undertake to prohibit, detect, and eliminate illicit discharges from its activities that may impact BMPs.
- **Chapter 6 - Construction.** Discusses activities NCTD plans to undertake to control the discharge of pollutants from its construction sites greater than or equal to one acre in size within its permitted jurisdiction, including inspections of construction sites and enforcement actions against violators.
- **Chapter 7 - Post-Construction.** Discusses activities NCTD plans to undertake to require long-term post-construction BMPs that protect water quality and control runoff flow to be incorporated into development and significant redevelopment projects on NCTD property. Post-construction BMPs include a combination of (i) low impact design; (ii) source controls; and (iii) treatment controls.
- **Chapter 8 - Municipal Operations (Pollution Prevention/Good Housekeeping).** Discusses activities NCTD plans to undertake in order to examine its own activities and implement specific measures to prevent the discharge of pollutants from these activities, including a program to educate staff on pollution prevention, and minimize pollutant sources.
- **Chapter 9 - Reporting and Recordkeeping.** Summarizes the Phase II Small MS4 Permit requirements for reporting and recordkeeping.

Table ES-1
Summary of Planned Best Management Practices

Best Management Practice	Implementation Schedule and Measurable Goals*
A. Public Education	
A.1. Strategically post educational signs or posters with storm water messages in visible areas.	PY 1: Implement educational signage effort. PY 2 and on: Target sustainable number of signs.
A.2. Coordinate with regional, watershed, jurisdictional, or other applicable educational programs.	PY's 1-2: Coordinate with at least one other program. PY 2 and on: Increase coordination/in-kind services each year until NCTD is interacting with all municipalities in the North County and other major watershed stakeholders.
A.3. Create an NCTD storm water management plan webpage that provides information or links to information on storm water issues.	PY's 1-2: Create a webpage within NCTD's website. PY 2 and on: Continue to operate webpage.
A.4. Label major NCTD storm drain inlets with messages that prohibit dumping and identify that a natural water body is downstream.	PY 1 and on: Check all major storm drain inlets to verify labeling or legibility of labeling to the extent feasible. Label or re-label if necessary and where applicable.
B. Public Participation	
B.1. Create a webpage to provide information on NCTD's storm water program and allow for public input.	PY's 1-2: Create a webpage within NCTD's website. PY 2 and on: Continue to operate webpage.
B.2 Coordinate with regional, watershed, jurisdictional, or other applicable public participation programs.	PY's 1-2: Coordinate with at least one other program. PY 2 and on: Increase coordination/in-kind service contributions each year until NCTD is interacting with all municipalities in the North County and other major watershed stakeholders.
C. Illicit Discharge Detection and Elimination	
C.1. Develop a storm sewer system map showing NCTD pipes and channels, neighboring MS4s to the extent possible, and the names and locations of major receiving waters.	PY's 4-5: Complete preparation of the MS4 map. PY 5 and on: Update map as necessary.
C.2. Detect and correct illicit discharges reported from inspections of NCTD's facilities, rights-of-way, and activities.	PY's 2-3: Initiate tracking/recording of illicit discharges, detection and elimination activities. PY 3 and on: Increase the completeness of recorded activities as well as the percentage of detected illicit discharge that are corrected.
C.3. Develop and implement an illicit storm water review and comment process for tentative maps from jurisdictions that impact NCTD facilities, services and operations	PY 2 and on: Review tentative map submittals from adjacent jurisdictions for potential, unwanted illicit storm water discharges that may negatively impact NCTD's property.

* *NOTE:* PY indicates the Permit Year when an activity will occur measured from the time the permit is issued.

Table ES-1 (Continued)
Summary of Planned Best Management Practices

Best Management Practice	Implementation Schedule and Measurable Goals*
D. Construction	
D.1. Review Storm Water Pollution Plans (SWPPPs) for all NCTD construction projects requiring coverage under the General Construction Storm Water Permit.	PY's 1-2: Review SWPPPs for all construction projects exceeding one acre. PY's 4-5: Develop a SWPPP template
D.2. Inspect NCTD construction sites and enforce implementation of SWPPP and compliance with the General Construction Storm Water Permit.	PY's 4-5: Construction sites exceeding one acre in size shall be inspected monthly to ensure proper implementation of BMPs. PY's 4-5: Verify that contractor contracts contain a mechanism for establishing sanctions to ensure compliance.
D.3. Document, consider, and address information submitted by the public.	PY's 1-2: Create a webpage in NCTD's website that receives public comment. PY 3 and on: Evaluate and revise procedures to respond to issues.
E. Post-Construction	
E.1. Prepare Water Quality Management Plans (WQMPs) for all new NCTD development and redevelopment projects greater than one (1) acre.	PY 1: Begin preparing WQMPs for development and redevelopment projects exceeding one acre in size. PY 2 and on: Continue preparation of WQMPs for applicable projects.
E.2. Evaluate existing NCTD design standards and develop revised or new design standards.	PY 2: Conduct a post-construction evaluation of NCTD projects to identify design standard changes that will reduce or eliminate post-construction runoff pollution
F. Municipal Operations (Pollution Prevention/Good Housekeeping)	
F.1. Prepare and implement Storm Water Pollution Prevention Plans (SWPPPs) for all NCTD industrial sites requiring coverage under the General Industrial Storm Water Permit.	Present and on: Continue to maintain compliance with the General Industrial Storm Water Permit at NCTD industrial sites.
F.2. Provide education/training to appropriate NCTD employees to prevent and reduce storm water pollution from everyday operational activities.	PY 1: Obtain educational materials and train all target groups. PY 2: Initiate including storm water training and implementation in employee orientation. PY 3 and on: Continue to implement orientation training and conduct training of target groups at least once a year.
F.3. Regularly clean NCTD facilities and storm drain infrastructure.	Present and on: Continue to clean all facilities in accordance with plans for each facility.
F.4. Inspect NCTD facilities and activities to ensure adequate implementation of operational storm water BMPs.	PY 1 and on: Continue to inspect all industrial activities at least annually. PY's 2-3: Initiate annual inspections of other NCTD facilities. PY 1 and on: continue to maintain or increase number of facilities inspected and inspection frequency.

* *NOTE:* PY indicates the Permit Year when an activity will occur measured from the time the permit is issued.

Table ES-2
Best Management Practices Schedule Summary

	BMP	Measurable Goals	PERMIT YEAR** 1	2	3	4	5
Public Education	A.1	Implement Educational Signage effort	■				
	A.1	Target sustainable number of signs		■	■	■	■
	A.2	Coordinate with at least one other program	■				
	A.2	Increase coordination to interact with all municipalities		■	■	■	■
	A.3	Create a webpage with links to storm water information / issues	■				
	A.3	Continue to operate webpage		■	■	■	■
	A.4	Verify labeling/legibility of major storm drains	■	■	■	■	■
Public Participation	B.1	Create a webpage with NCTD's storm water program	■	■			
	B.1	Continue to operate webpage		■	■	■	■
	B.2	Coordinate at least one program	■	■			
	B.2	Increase coordination annually		■	■	■	■
Illicit Discharge Detection and Elimination	C.1	Complete preparation of the MS4 map				■	■
	C.1	Update Map as necessary					■
	C.2	Initiate tracking/recording of illicit discharges		■	■		
	C.2	Increase completeness of recorded activities			■	■	■
	C.3	Review tentative maps and comment		■	■	■	■
Construction	D.1	Review SWPPPs for all NCTD construction projects > 1 acre	■	■	■	■	■
	D.1	Develop SWPPP template				■	■
	D.2	Inspect BMPs monthly for NCTD construction site > 1 acre				■	■
	D.2	Verify contractor contracts include sanctions for violations				■	■
	D.3	Create website to accept public comment	■	■			
	D.3	Evaluate and review procedures in response to issues			■	■	■
Post-Construction	E.1	Prepare WQMPs for NCTD projects > 1 acre	■				
	E.1	Continue preparation of WQMPs		■	■	■	■
	E.2	Revise design standards based on post-construction evaluations		■	■	■	■
Pollution Prevention / Good Housekeeping	F.1	General Industrial Storm Water Permit compliance at NCTD industrial sites	■	■	■	■	■
	F.2	Obtain educational materials and train all target groups	■				
	F.2	Include storm water training in employee orientation		■			
	F.2	Implement orientation training and annual training of targeted employee groups			■	■	■
	F.3	Continue to clean NCTD facilities in accordance with facility plans	■	■	■	■	■
	F.4	Inspect all industrial activities at least annually	■	■	■	■	■
	F.3	Initiate annual inspections of other NCTD facilities		■	■		
	F.4	Continue to maintain / increase inspection & frequency of NCTD facilities	■	■	■	■	■

***The shaded block indicates in which year the particular BMP effort occurs.*

Chapter 1
Introduction

This Storm Water Management Plan (SWMP) was prepared by PBS&J on behalf of North County Transit District (NCTD) in accordance with the requirements of State Water Resources Control Board (SWRCB) Water Quality Order No. 2003-0005-DWQ, National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000004, and Waste Discharge Requirements for Storm Water Discharges for Small Municipal Separate Storm Sewer Systems, referred to in the document as the Small MS4 Permit. In general, this document represents the overall program to be conducted by NCTD to comply with the requirements of the permit. However, all activities described in this document are subject to modification as NCTD determines necessary to adequately comply with the requirements of this permit or as instructed by the Regional Water Quality Control Board (RWQCB). NCTD's compliance with the Small MS4 Permit is voluntary because it has not been designated a regulated Small MS4 by the SWRCB.

1.1 North County Transit District Background

The North County Transit District (NCTD) was created by California Senate Bill 802 on September 20, 1975. NCTD was created to plan, construct and operate, directly, or through a contractor, public transit systems in its area of jurisdiction. NCTD's geographical service area encompasses 1,020 square miles of northern San Diego County extending from Del Mar in the south, northeasterly to Escondido, north to the Riverside County line and west to the Orange County line (Figure 1-1). The area includes the unincorporated communities of Fallbrook and Ramona as well as the Camp Pendleton Marine Corps Base. Other cities in the service area include Solana Beach, Encinitas, Carlsbad, Oceanside, Vista and San Marcos. The total population of NCTD's service area is 823,000.

Existing transit services provided by NCTD can be broken into five main categories: commuter rail service, fixed-route service, seasonal special services, general purpose demand-response service, and ADA paratransit service. Each of these services is summarized below:

- **Commuter Rail Service** – NCTD operates commuter rail service, the Coaster, between the Oceanside Transit Center and Santa Fe Depot in downtown San Diego with intermediate stops at the Carlsbad Village, Poinsettia, Encinitas, Solana Beach, Sorrento Valley, and Old Town stations. Coaster operations mainly consist of 22 one-way trips on weekdays and eight one-way trips on Saturdays.

- **Fixed-Route Service** – NCTD currently operates 55 fixed routes on its Breeze bus service. Fixed routes are separated into express (3 routes), corridor (15 routes), and local (37 routes). All routes combined provide service on approximately 817.7 one-way route miles.

- **Seasonal Special Services** – NCTD provides a number of seasonal special services to special events that occur on an annual basis. Examples of special events include the San Diego County Fair, the Del Mar horse races and Street Scene in the City of San Diego. The purpose of providing these services is to reduce the vehicle traffic congestion associated with these events by providing effective public transit services.

- **General Purpose Demand-Response Service** – NCTD provides general purpose demand-response bus service, known as Fast and Simple Transportation or FAST, in five local

areas. Services are provided by private operators under contract to NCTD in response to passenger subscriptions or phone calls.

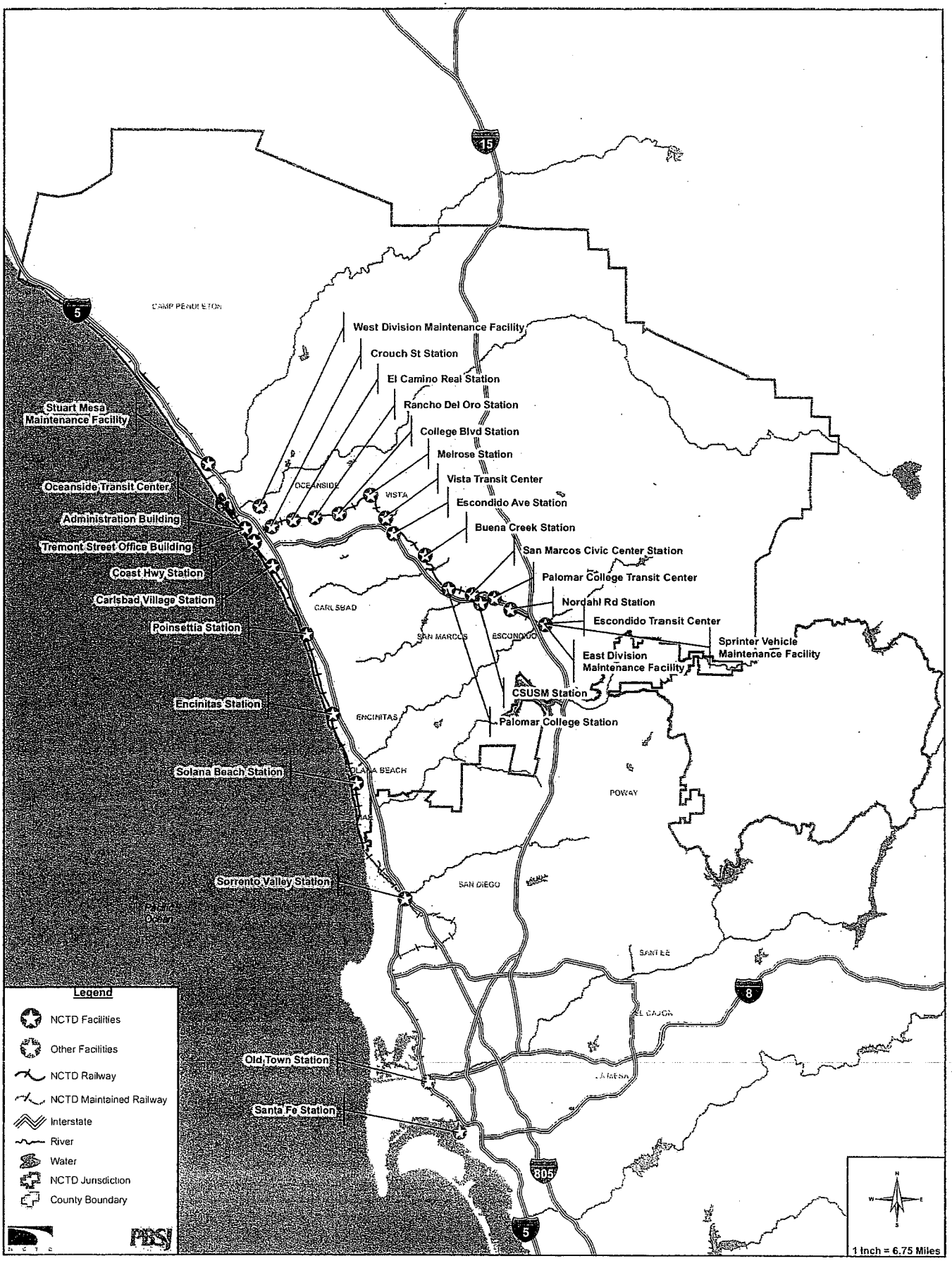
- **ADA Paratransit Service** – NCTD Americans with Disabilities Act (ADA) paratransit service is provided by request to all origins and destinations within three-quarters of a mile of each NCTD fixed route.

NCTD owns approximately 175 buses which include: 10 coaches (25 feet in length), 51 compressed natural gas (CNG) heavy duty coaches, and 10 "stockpile" buses that are not part of the active fleet but used for special occasions. In 2000, the NCTD Board of Directors adopted a policy guideline that all future purchases of heavy-duty transit vehicles in its fleet would operate on alternative fuels. The entire fleet is apportioned between two maintenance and storage facilities: 118 buses are assigned to the West Division in Oceanside; and the remaining 57 buses are assigned to the East Division in Escondido. NCTD also owns a number of rail vehicles used in the operation of the Coaster commuter rail services. In total, it owns seven locomotives, 10 bi-level cab cars, and 18 bi-level trailer cars. NCTD also maintains a fleet of 93 non-revenue vehicles used by the road supervisors, relief, bus maintenance, security, and facility maintenance.

NCTD offices and operating facilities are described further in Chapter 2. They consist of the General Administrative Office and Tremont Street office building in Oceanside, the West Division and East Division Facilities, and the Stuart Mesa Maintenance Facility in Camp Pendleton. The railroad between San Diego and Orange County Line is part of the 351-mile Los Angeles-San Diego-San Luis Obispo (LOSSAN) corridor. NCTD owns approximately 38 miles of the tracks (purchased from the Atchison, Topeka and Santa Fe Railway Company in 1992), extending from the northern incorporated City of San Diego boundary, north to the County of San Diego border with Orange County. NCTD also owns a 22-mile branch line from Oceanside to Escondido. The Metropolitan Transit Development Board (MTDB) owns the remainder of the mainline, south to downtown San Diego. However, regardless of ownership, the entire LOSSAN corridor in San Diego County is maintained by NCTD.

NCTD also owns and maintains a number of transit centers and stations to provide passengers with convenient transfer points and to enhance connectivity of NCTD services. Ten NCTD transit centers and stations are located throughout the north county and are described further in Chapter 2. Each of the transit centers and stations provide Coaster service, Breeze service, or both. NCTD also serves a number of other transit centers and stations that are owned and operated by other entities. NCTD also serves over 2,200 bus stops throughout North County. Stops range in complexity with some marked with a pole and sign, and others that contain passenger facilities such as benches and shelters. NCTD does not own the property where stops are located but often purchases, installs, and maintains the stop facilities.

NCTD is currently constructing the Sprinter light rail project along the 22-mile rail corridor from Oceanside to Escondido. The Sprinter will connect to three existing NCTD transit centers and will service 15 new stations (described further in Chapter 2). NCTD will purchase a number of



North County Transit District Jurisdiction and Facilities

Figure 1-1

new vehicles to provide the Sprinter service; maintenance for the Sprinter vehicles will take place at the Sprinter Vehicle Maintenance Facility in Escondido.

On January 1, 2003, Senate Bill 1703 transferred future transit planning, programming, project development and construction functions to the San Diego Association of Governments (SANDAG), San Diego's regional planning agency. NCTD will continue to operate the Breeze; own, operate and maintain the Mainline and Coaster service; build, and operate the Sprinter light rail project; and provide integrated public transit service within San Diego County. In addition, NCTD will continue to be responsible for the management of potential pollutants associated with daily operations that can impact water quality and compliance with applicable permits and regulations.

1.2 Regulatory Background

The Federal Clean Water Act (CWA) Section 402 prohibits the discharge of pollutants into waters of the United States from any point source without an NPDES permit. The NPDES program initially focused on point source discharges of municipal and industrial wastewater. However, in 1983, the U.S. Environmental Protection Agency (EPA) reported in a summary of the Nationwide Urban Runoff Program (NURP) that urban storm water was one of the primary causes of water quality impairment across the nation. Since then, the U.S. EPA has used the authorities of the CWA to adopt urban runoff and storm water regulations, and developed a two-phased NPDES permit program for urban runoff.

1.2.1 NPDES Permit Program

The following sections briefly describe the two-phased NPDES permit program developed by the U.S. EPA in conformance with the CWA. In California, program implementation has been delegated to the State, as is discussed in Section 1.2.2.

NPDES Permit Program – Phase I

In November 1990, under Phase I of the urban runoff management strategy, the U.S. EPA published NPDES permit application requirements for municipal, industrial, and construction storm water discharges. The application requirements for municipalities were directed at those that owned and operated separate storm drain systems serving populations of 100,000 or more, or those that contributed significant amounts of pollutants to waters of the United States. Such entities must obtain coverage under municipal storm water NPDES permits, and develop and implement an urban runoff management program. The municipal urban runoff management program was required to address activities to reduce pollutants in urban runoff and storm water discharges that were contributing a substantial pollutant load to their systems. Rather than establishing numeric effluent limits, the U.S. EPA established narrative effluent limits for urban runoff, including the requirement to implement appropriate best management practices (BMPs). Phase I regulations were also directed at certain facilities that discharge storm water associated with industrial activity, and construction activities that disturbed five or more acres. Although the municipal component of the Phase I program does not apply to NCTD, the industrial and construction components are applicable to facilities and activities under NCTD control that meet the permitting requirements.

NPDES Permit Program – Phase II

The Phase II Final Rule, published in the Federal Register on December 8, 1999, requires NPDES permit coverage for storm water discharges from:

- Certain regulated small municipal separate storm sewer systems (MS4s); and
- Construction activity disturbing between one to five acres of land (i.e., small construction activities).

As in Phase I, the Phase II Program requires the development and implementation of storm water management plans to reduce pollutant discharges.

As a public agency that owns and maintains infrastructure systems that convey urban drainage and storm water, NCTD is considered a municipal separate storm sewer systems or MS4. Small MS4s are any MS4s not covered by the Phase I regulations, and therefore, NCTD is a member of this category. In addition, the construction component of the Phase II program is also applicable to NCTD activities that meet the permitting requirements.

1.2.2 State of California NPDES Permits

In many states, the U.S. EPA has delegated administration of the NPDES permit program to the state water quality control authority. In California, the SWRCB and its RWQCBs administer the NPDES permit program. Industrial and construction activities subject to Phase I and II NPDES regulations must obtain coverage under statewide general industrial and construction storm water NPDES permits issued by the SWRCB. The SWRCB also developed a small MS4 statewide general storm water NPDES permit for public agencies that fall under that Phase II NPDES regulations. The RWQCBs administer compliance with the SWRCB permits and also develop and implement permits on a more localized level. For example, the RWQCBs develop and administer the Phase I municipal urban runoff NPDES permit programs, which are issued as area-wide permits or on an individual basis.

San Diego Municipal Storm Water Permit

In 1990, under authority of the CWA, but prior to finalization of the Phase I NPDES permit program, the San Diego RWQCB issued its first municipal storm water permit for the San Diego region (Order 90-42). The permit named the 18 municipalities in San Diego County as Co-Permittees, as well as the County of San Diego and the Port of San Diego. At the time it was originally issued, the San Diego Municipal Permit was intended to last for five years (through 1995), but the permit life was extended by the RWQCB for an additional six years. On February 21, 2001, the San Diego RWQCB adopted Order No. 2001-01, NPDES Permit #CAS0108758, in accordance with the CWA and Phase I NPDES permit program. This order represents the second municipal permit issued to the San Diego County Co-Permittees. The permit specifies the waste discharge requirements for discharges of urban runoff from the Phase I MS4s draining the watersheds of the County of San Diego.

The 2001 San Diego Municipal Permit outlines the responsibilities of the Co-Permittees including, but not limited to, the implementation of:

- Management programs;
- BMPs; and
- Monitoring programs.

The permit also required the Co-Permittees to develop Jurisdictional Urban Runoff Management Programs (JURMPs) and prepare a document discussing the JURMPs within one year of permit adoption. Sections F.1 through F.8 in the San Diego Municipal Permit outline the components that each jurisdictional JURMP document is required to include. The components consisted of:

1. Land-Use Planning for New Development and Redevelopment
2. Construction
3. Existing Development
   a. Municipal
   b. Industrial
   c. Commercial
   d. Residential
4. Education
5. Illicit Discharge Detection and Elimination
6. Public Participation
7. Assessment of JURMP Effectiveness
8. Fiscal Analysis

Each Co-Permittee is required to further this effort by working with all other Co-Permittees in the same watershed to develop and implement a watershed urban runoff management program (or watershed URMP). The watershed URMP document was required to be completed in early 2003.

NCTD is not subject to the San Diego Municipal Permit. Although its properties lie within the jurisdictional boundaries of several local municipalities, as an entity created by state statute, NCTD is not subject to the jurisdiction of the local municipalities. As such, the urban runoff management programs that have been developed by the Co-Permittees under the permit are not applicable to NCTD. However, as discussed further in this document, NCTD has undertaken a number of efforts including development of this SWMP to ensure that the potential effects of storm water are properly managed at its property boundaries, including NCTD owned properties and rights-of-way. Similarly, it is the local municipalities' responsibilities to control storm water discharges into and out of their respective municipal storm sewer systems.

Small MS4 Permit

As part of Phase II of the NPDES permit program, the SWRCB adopted a General Permit for the Discharge of Storm Water from Small MS4s (WQ Order No. 2003-0005-DWQ) so as to provide permit coverage for smaller municipalities, including non-traditional Small MS4s, which are governmental facilities that do not contain a public residential population such as military bases, public campuses, and prison and hospital complexes. NCTD is considered a non-traditional Small MS4. Coverage under the Small MS4 Permit is only required for "regulated Small MS4s." A "regulated Small MS4s" must be designated as such by the U.S. EPA, SWRCB, or RWQCB after consideration of a number of factors including population density, growth potential, contributions to permitted MS4s, discharges to sensitive water bodies, and contribution of pollutants to waters of the U.S. NCTD is not currently designated a "regulated Small MS4," nor is it listed by the SWRCB as being anticipated for future designation. NCTD recognizes the importance of clean water to the San Diego region and the progress that has been made towards cleaner water through the efforts of the Co-Permittees, the RWQCB, local community groups, and the public. Therefore, in an effort to continue to contribute to the achievement of clean water in the San Diego region, NCTD has chosen to voluntarily comply with the Small MS4 permit.

Requirement of the Small MS4 permit include:

- Prohibition of non-storm water discharges;
- Preparation of a SWMP that describes BMPs, measurable goals, and timetables for implementation in the following six program areas (Minimum Control Measures):
  - Public Education
  - Public Participation
  - Illicit Discharge Detection and Elimination
  - Construction Site Storm Water Runoff Control
  - Post Construction Storm Water Management
  - Pollution Prevention/Good Housekeeping for Municipal Operations;
- Reduction in the discharge of pollutants to the Maximum Extent Practicable (MEP); and
- Annual reporting on the progress of SWMP implementation.

NCTD's voluntary compliance with the Small MS4 permit does not provide it coverage under the permit; nor does it identify NCTD as a "regulated Small MS4." Rather, NCTD may apply for coverage under the Small MS4 permits or other NPDES permit for storm water discharges from its MS4, at which time the RWQCB and/or SWRCB will determine whether or not coverage is necessary.

Industrial Permits

Pursuant to Phase I of the NPDES permit program, storm water runoff from industrial facilities with certain Standard Industrial Classification (SIC) Codes is governed by the SWRCB under Water Quality Order 97-03-DWQ / NPDES Permit #CAS000001. These regulations prohibit discharges of polluted storm water unless the discharge is in compliance with the general NPDES permit requirements. The RWQCBs administer and enforce the General Industrial Storm Water Permit.

To receive coverage under the General Industrial Storm Water Permit, the owner or operator of an industrial facility must submit to the SWRCB a Notice of Intent (NOI) to comply with the permit, prepare a Storm Water Pollution Prevention Plan (SWPPP), and conduct monitoring and reporting. An industrial facility has the option to request an individual, site-specific NPDES permit instead of the general permit. RWQCBs, however, typically only adopt individual permits when the facility has exceptional characteristics or poses a considerable threat to storm water.

Industrial activity at a transportation facility, as defined by the federal regulations, consists of "those portions of the facility that are either involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, airport deicing operations, or which are otherwise identified in the regulations." NCTD owns three facilities that involve activities that require permitting under the industrial NPDES program. They are the West Division, East Division, and Stuart Mesa Maintenance Facilities.

NOIs have been filed with the SWRCB for all three of these facilities. In addition, SWPPPs and monitoring programs have been prepared for each of the facilities and these programs have been implemented since the initiation of their permit coverage. In conjunction with NCTD's voluntary compliance with the Small MS4 permit, NCTD will continue to comply with the General Industrial Storm Water Permit and maintain permit coverage for these facilities.

Under the General Industrial Storm Water Permit, dischargers are required to control and eliminate sources of pollutants in storm water through the development and implementation of a SWPPP. The SWPPP is to be used as a tool for recognizing and evaluating potential sources of pollutants associated with industrial activities that may affect the quality of storm water discharges and authorized non-storm water discharges from the facility. The SWPPP is also to be used as a guide to help identify site-specific best management practices (BMPs) that are to be implemented to reduce or prevent pollutants associated with industrial activities in storm water discharges and authorized non-storm water discharges. Therefore, implementation of the SWPPPs at NCTD's maintenance facilities is a key component to the overall SWMP.

Construction Permits

Storm water runoff from construction activity that results in soil disturbances of at least one acre of total land area (and projects that meet other specific criteria) is governed by the SWRCB under Water Quality Order 99-08-DWQ, NPDES Permit #CAS000002. These regulations prohibit discharges of polluted storm water from construction projects that disturb one or more acres of soil unless the discharge is in compliance with the general NPDES permit requirements. The RWQCBs administer and enforce the General Construction Storm Water Permit. It is the responsibility of the construction site owner or landowner to obtain coverage under this General Permit prior to commencement of construction activities. To obtain coverage, the operator or owner must file a Notice of Intent (NOI) with a vicinity map and the appropriate fee with the SWRCB. The General Permit outlines the requirements for preparation of a SWPPP.

NCTD or its contractors must obtain coverage under the General Construction Storm Water Permit for any construction that it undertakes that meets or exceeds one acre of soil disturbance.

1.3 SWMP Responsibilities

NCTD's SWMP is a comprehensive plan that affects all aspects of NCTD operations and maintenance activities, and requires participation from all NCTD departments. A summary of each department's role in the implementation of minimum control measures is presented in Table 1-1.

To assist in the implementation of the SWMP, several key individuals from these departments have been chosen to participate in the planning, implementation and enforcement of the SWMP. The storm water management team will work closely with other team members, the various NCTD departments and business units, managers of facilities and operations, and contractors to ensure that the SWMP is implemented as intended and continues to meet the requirements of the Small MS4 Permit. Table 1-2 identifies the SWMP Management Team.

Table 1-1
NCTD Departments and SWMP Roles

Department	General Responsibilities	Relevant SWMP Responsibilities	SWMP Minimum Control Measures					
			Public Education	Public Participation	Illicit Discharge Program	Construction BMPs	Post-Construction BMPs	Pollution Prevention / Operations
Communications and Business Development	Plans, develops, monitors, evaluates, improves, and promotes NCTD's transit system, services.	Identifies capital projects to support the District's services. Pursues redevelopment opportunities for District real property assets. Responsible for internal and external communications and public relations.	X	X				
Rail Services	Responsible for contract operation and maintenance of rail transit services and railroad infrastructure. Also oversees construction of rail capital projects.	Oversees operation of rail vehicles. Maintains the NCTD owned right of way. Identifies and participates in the design of CIP projects. Manages and oversees construction projects on the District's rail right-of-way.	X		X	X	X	X
Bus Operations & Maintenance Services	Responsible for direct operation or contract operation of bus transit services. Provides fleet and facility maintenance.	Operates and maintains fleet of service vehicles. Maintains administrative and maintenance facilities, stations, and transit centers.	X	X	X			X
Security Services	Provides security to employees and customers.	Enforcement actions for illegal encampments and activities on District property. Patrols NCTD rail right-of-way.	X		X			

Table 1-1
NCTD Departments and SWMP Roles (Continued)

Department	General Responsibilities	Relevant SWMP Responsibilities	SWMP Minimum Control Measures					
			Public Education	Public Participation	Illicit Discharge Program	Construction BMPs	Post-Construction BMPs	Pollution Prevention / Operations
Fiscal and Support Services	Provides financial and administrative support, risk management, safety, and information services.	Safety and risk business unit actively participates in SWMP and SWPPP implementation oversight. Information services supports website.			X			X
Human Resources	Provides administrative support including labor relations, training and development, benefits and personnel.	Administers orientation training of all employees.						X

Table 1-2
NCTD SWMP Management Team

Name	Contact Information	Responsibility
Derrick Anderson Project Officer	810 Mission Avenue Oceanside, CA 92054 (760) 737-8625	Construction Projects
Anette Dombroske Safety, Risk, & Training Administrator	810 Mission Avenue Oceanside, CA 92054 (760) 966-6500	OSHA Compliance and Environmental Health Programs
Tom Gallagher Facility Maintenance Manager	810 Mission Avenue Oceanside, CA 92054 (760) 967-2897	Facility and Bus Route Maintenance
Mike Wygant Fleet Maintenance Manager	810 Mission Avenue Oceanside, CA 92054 (760) 966-6500	Fleet Maintenance
Rich Walker MOW Manager	810 Mission Avenue Oceanside, CA 92054 (760) 967-2868	Railroad Right-of-Way Maintenance

Chapter 2
Overview of Potential Pollutant Sources

This chapter provides an overview of NCTD's facilities and activities that have the potential to generate pollutants and water quality impacts. The information in this chapter is useful for prioritizing the focus of SWMP activities, and formulating applicable best management practices.

2.1 Potential Pollutant Sources

Water quality pollutants are substances found in water that can adversely affect human and/or environmental health. Table 2-1 describes the most common types of water quality pollutants. This section discusses those areas and activities under NCTD's authority that have the potential to generate or otherwise involve such pollutants.

2.1.1 NCTD Facilities

NCTD facilities include office buildings, maintenance facilities, transit centers, and stations. The primary uses of these facilities are summarized in Table 2-2. Their potential to result in the discharge of pollutants that could impact water quality are discussed below.

Transit Services

Facilities offering transit services are those that serve railroad transit, bus transit, or both. By offering these services, such facilities experience a substantial amount of public use. Pollutants associated with general public use are primarily trash and debris. The potential for these pollutants to be generated at a facility increases with the number of people that use the facility each day.

Office Buildings

Office buildings used by administrative staff and support services are not a substantial source of potential pollutants. Primary sources of pollutants related to office buildings are those associated with outside common areas such as the entry area, patios, and courtyards. Pollutants associated with these areas are mainly those of trash and debris from human use. Offices also typically include activities of landscaping, parking, and other uses that have the potential to generate various pollutants.

Table 2-1
Pollutant Category Descriptions

Sediments	Sediments are soils or other surface materials that have eroded and then been transported or deposited by the action of wind, water, ice, or gravity. Sediments can increase turbidity, clog fish gills, reduce spawning habitat, lower young aquatic organisms survival rates, smother bottom dwelling organisms, and suppress aquatic vegetation growth.
Nutrients	Nutrients are inorganic substances, such as nitrogen and phosphorus. Nutrients commonly exist in the form of mineral salts that are either dissolved or suspended in water. Primary sources of nutrients in urban runoff are fertilizers and eroded soils. Excessive discharge of nutrients into water bodies and streams can cause excessive aquatic algae and plant growth. Such excessive production, referred to as cultural eutrophication, may lead to excessive decay of organic matter in the water body, loss of oxygen in the water, release of toxins into the sediment, and the eventual death of aquatic organisms.
Metals	Metals are raw material components in non-metal products such as fuels, adhesives, paints, and other coatings. Primary source of metal pollution in storm water are typically those of commercially available metals and metal products. Metals of concern include cadmium, chromium, copper, lead, mercury, and zinc. Lead and chromium have been used as corrosion inhibitors in primer coatings and cooling tower systems. At low concentrations naturally occurring in soil, metals are not toxic. However, at higher concentrations, certain metals can be toxic to aquatic life. Humans can be impacted from contaminated groundwater resources, and bioaccumulation of metals in fish and shellfish. Environmental concerns regarding the potential for release of metals into the environment have led to the restriction of metal usage in certain applications.
Organic Compounds	Organic compounds are carbon based. Commercially available or naturally occurring organic compounds are found in pesticides, solvents, detergents, and hydrocarbons. Organic compounds can, at certain concentrations, indirectly or directly constitute a hazard to life or health. When rinsing off objects, toxic levels of solvents and cleaning compounds can be discharged into storm drains. Dirt, grease, and grime retained in the cleaning fluid or rinse water may also absorb levels of organic compounds that are harmful or hazardous to aquatic life.
Trash & Debris	Trash (such as paper, plastic, polystyrene packing foam, and aluminum materials) and biodegradable organic matter (such as leaves, grass cuttings, and food waste) are general waste products on the landscape. The presence of trash & debris may have a significant impact on the recreational value of a water body and aquatic habitat. Excess organic matter can create a high biochemical oxygen demand in a stream and thereby lower its water quality. Also, in areas where stagnant water exists, the presence of excess organic matter can promote septic conditions resulting in the growth of undesirable organisms and the release of odorous and hazardous compounds such as hydrogen sulfide.
Oxygen Demanding Substances	This category includes biodegradable organic material as well as chemicals that react with dissolved oxygen in water to form other compounds. Proteins, carbohydrates, and fats are examples of biodegradable organic compounds. Compounds such as ammonia and hydrogen sulfide are examples of oxygen demanding compounds. Oxygen demand of a substance can lead to the depletion of dissolved oxygen in a water body and possibly the development of septic conditions.
Oil and Grease	Oil and grease are categorized as high molecular weight organic compounds. Primary sources of oil and grease are petroleum hydrocarbon products, motor products from leaking vehicles, esters, oils, fats, waxes, and high molecular-weight fatty acids. Introduction of these pollutants into water bodies is very possible due to the wide uses and applications of some of these products in municipal, residential, commercial, industrial, and construction areas. Elevated oil and grease contents can decrease the aesthetic value of the water body, as well as the water quality.
Bacteria and Viruses	Bacteria and viruses are ubiquitous microorganisms that thrive under certain environmental conditions. Their proliferation is typically caused by the transport of animal or human fecal wastes from the watershed. Water containing excessive bacteria and viruses can alter the aquatic habitat and create a harmful environment for humans and aquatic life. Also, the decomposition of excess organic waste causes increased growth of undesirable organisms in the water.
Pesticides	Pesticides (including herbicides) are chemical compounds commonly used to control nuisance growth or the prevalence of organisms. Excessive application of pesticides may result in runoff containing toxic levels of its active components.

Table 2-2
Summary of Major North County Transit District Facilities

Facility Name	Address	Amtrak Service	Metrolink Service	Coaster Service	Sprinter Service	Bus Transfer Service	Offices	Vehicle Maintenance	Vehicle or Equipment Storage	Fueling	Short-Term Parking	Long-Term Parking	Outdoor Trash Facilities	Public Restrooms	Food Services
Administration Building	810 Mission Avenue, Oceanside						X				X		X		
Buena Creek Station*	Santa Fe Avenue, County of San Diego				X	X					X		X		
Carlsbad Village Station	2775 State Street, Carlsbad			X		X					X		X	X	X
Coast Highway Station*	Godfrey Street, Oceanside				X	X					X		X		
College Boulevard Station*	Avenida Del Oro, Oceanside				X	X					X		X		
Crouch Street Station*	South Oceanside Boulevard, Oceanside				X	X					X		X		
CSUSM Station*	La Moree, San Marcos				X	X					X		X		
East Division Maintenance Facility	755 Norlak Avenue, Escondido						X	X	X	X	X		X		
El Camino Real Station*	Industry Road, Oceanside				X	X					X		X		
Encinitas Station	25 East D Street, Encinitas			X		X					X		X	X	
Escondido Avenue Station*	Escondido Avenue, Vista				X	X					X		X		
Escondido Transit Center	700 West Valley Parkway, Escondido					X	X				X	X	X	X	X
Melrose Station*	Oceanside Boulevard, Oceanside				X	X					X		X		
Nordahl Road Station*	Mission Road, Escondido				X	X					X		X		
Oceanside Transit Center	195 South Tremont Street, Oceanside	X	X	X	X	X	X				X	X	X	X	X
Palomar College Station*	Armorlite Drive, San Marcos				X	X					X		X		
Palomar College Transit Center	1140 West Mission Avenue, San Marcos					X					X		X	X	
Poinsettia Station	2211 Avenida Encinas, Carlsbad			X		X					X		X	X	X
Rancho Del Oro Station*	Rancho Del Oro Drive, Oceanside				X	X					X		X		
San Marcos Civic Center Station*	Rancheros, San Marcos				X	X							X		
Solana Beach Station	105 South Cedros, Solana Beach	X		X		X					X		X	X	X
Sorrento Valley Station	11170 Sorrento Valley Road, San Diego			X		X					X		X		
Sprinter Vehicle Maintenance Facility*	1021 West Washington Ave, Escondido						X	X	X	X	X		X		
Stuart Mesa Maintenance Facility	One Coaster Way, Camp Pendleton		X	X			X	X	X	X	X		X		
Tremont Street Office Building	311 South Tremont Street, Oceanside						X				X		X		
Vista Transit Center	101 Olive Street, Vista				X	X					X		X	X	
West Division Maintenance Facility	303/305 Via del Norte, Oceanside						X	X	X	X	X		X		

* Sprinter facilities under construction

Vehicle and Equipment Maintenance, Cleaning, and Fueling

Facilities that involve the maintenance repair, cleaning, and/or fueling of vehicles and equipment have the potential to generate a variety of pollutants. There is an increased potential for the generation of organic compounds because most vehicles and equipment utilize substantial amounts of fuels, oils, grease, and other hydrocarbons to operate. Other organic compounds, such as solvents, are also widely used at these facilities. These pollutants can be released through leaks, spills, and wash waters. Metals are also common constituents in a number of products used for maintenance, such as fuels, lubricants, and paints. In addition, metals can also be generated from brake pads and the normal wear of other vehicle and equipment parts manufactured with metals. Lastly, sediment removed by washing vehicles and equipment has the potential to collect.

Vehicle or equipment maintenance, repair, cleaning, and/or fueling activities at transportation facilities are considered industrial activities under the NPDES program and are required to obtain coverage under an NPDES permit. All NCTD facilities that involve these activities have obtained coverage under the California General Industrial Storm Water Permit.

Parking, Bus Loading/Unloading, and Vehicle Storage

Areas that are used for parking, bus loading/unloading, and/or vehicle storage are potential generators of a number of pollutants, particularly those that may be deposited or leaked from vehicles. These pollutants are primarily oils, greases and some metals. The potential for these pollutants to appear increases with patron usage and is affected by the duration of vehicle parking. In addition, parking areas that receive a substantial amount of use have the potential to generate trash and debris from patron use.

Food Services

Food services have the potential to be a substantial generator of trash and debris. Food debris can be an oxygen demanding substance and may increase bacteria and viruses. Food services that involve cooking also can generate grease.

Other Uses and Activities

There are a number of other uses and activities that occur at NCTD facilities that have the potential to result in pollutant discharges. Erosion from barren or landscaped areas at facilities can result in sediment. Maintenance of these areas may involve fertilizer and pesticides, which can also be discharged if applied in excess or incorrectly. Other general maintenance activities such as cleaning and painting can generate other pollutants.

2.1.2 NCTD Railroad Rights-of-Way

NCTD owns and maintains approximately 38 miles of railroad right-of-way extending north along the coast from the northern boundary of the City of San Diego to the San Diego/Orange County Border, and maintains approximately 22 miles of railroad right-of-way within the City of San Diego. NCTD also owns and maintains approximately 22 miles of railroad right-of-way extending from Oceanside to Escondido. In general, these rights-of-way have a very low potential for generating pollutants. Rights-of-way range in width from 100 to 300 feet and contain one to four tracks, Maintenance of Way (MOW) facilities, structures, vegetated areas, and cleared or barren areas. Potential pollutants associated with rights-of-way primarily consist of sediment from erosion. Pesticides may also be generated from maintenance of the rights-of-way. Although trains have the potential to result in deposition of oils and metals, these pollutants would not be generated in any significant amounts, because most rights-of-way are pervious and typically accommodate only a handful of trips a day.

2.1.3 Other NCTD Areas and Activities

Other potential sources of pollutants associated with NCTD include its vehicles and construction activities. As discussed in Chapter 1, NCTD owns a number of buses and other vehicles that operate daily on the roads throughout San Diego County. Dirty and poorly maintained vehicles have the potential to deposit oils and other pollutants.

Construction activities have the potential to generate a variety of pollutants. Sediment is the most common pollutant associated with construction activities because construction commonly includes soil disturbance, which can result in increased exposed soils and erosion. Other pollutants associated with construction activities include the use of materials such as paints, concrete, and asphalt, and pollutants associated with construction vehicles.

2.2 Drainage System

The drainage systems at NCTD office buildings, maintenance facilities, transit centers, and stations, consist of those facilities necessary to efficiently drain NCTD's property and allow for uninterrupted operations. In most cases, runoff is conveyed off-site to the nearest public street via surface flow over parking lots and driveways. Some facilities also have onsite drainage facilities such as inlets and pipes to collect and convey runoff off-site more efficiently. These pipes connect to off-site storm drain systems of adjacent municipalities. NCTD is not responsible for the water quality of runoff discharged from the storm drain systems of surrounding jurisdictions, it is responsible for the water quality of runoff from its own properties.

The purpose of the drainage facilities within NCTD's rights-of-way are to convey runoff from surrounding areas across NCTD's right-of-way and to effectively drain the railroad right-of-way so as to allow for the continued safe operations of the railroad. Along NCTD's rights-of-way the drainage system consists primarily of: 1) perpendicular channels and pipes to allow for drainage to cross the right-of-way; and 2) parallel channels and pipes to convey runoff to the perpendicular channels and pipes.

Although no comprehensive map has been developed for NCTD's drainage system, several jurisdictions have provided and made available storm drain and drainage information to San

Diego Area GIS (SANGIS). Maps are available for individual facilities and portions of the right-of-way. Because of the geographic extent of NCTD's properties, generating a complete MS4 map would be difficult and time consuming.

2.3 Setting

This section describes important components of NCTD's location in San Diego County that have been factored into the preparation of this storm water management plan, which should also be considered during its assessment, implementation and refinement.

2.3.1 Jurisdictions

NCTD facilities and rights-of-way fall within the jurisdictional boundaries of nine incorporated municipalities (Carlsbad, Del Mar, Encinitas, Escondido, Oceanside, San Diego, San Marcos, Solana Beach, and Vista), unincorporated potions of the County of San Diego, and the Camp Pendleton Marine Corps Base. In addition, NCTD maintains rights-of-way in the City of San Diego. Although NCTD's activities occur in a number of jurisdictions and are quite dispersed throughout the County, the actual amount of land that it occupies is fairly minimal, as shown in Figure 2-1 and Table 2-3. Similarly, Table 2-4 shows the distribution of railroad (in miles) and NCTD facilities by jurisdiction.

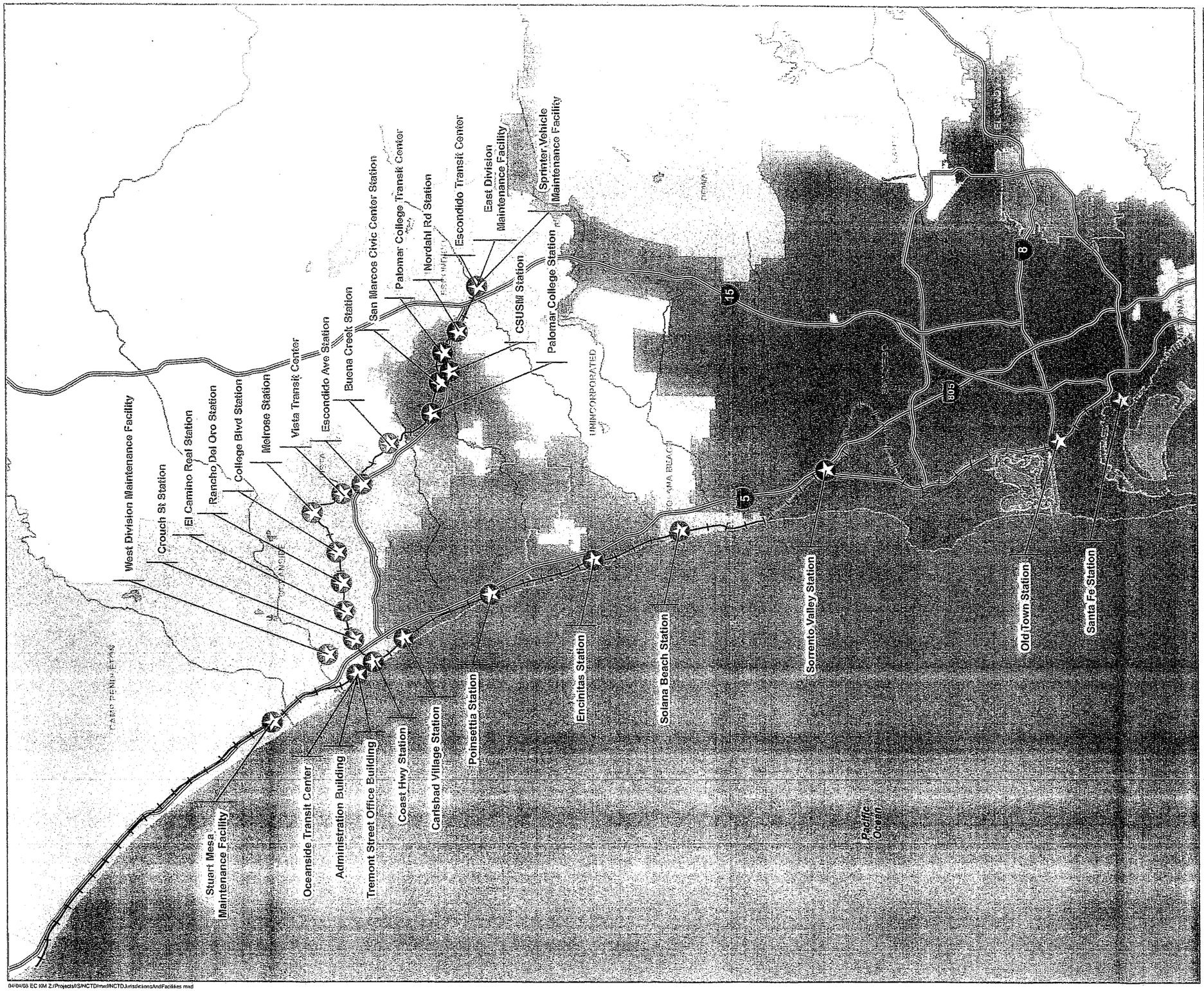
Table 2-3
Jurisdictional Breakdown of NCTD Property

Jurisdiction	Approximate Size of Jurisdiction (acres)	Approximate Area of NCTD Property (acres)
Carlsbad	25,013	137
Del Mar	1,142	59
Encinitas	12,396	100
Escondido	23,172	39
Oceanside	26,984	156
San Diego	211,129	329*
San Marcos	15,459	65
Solana Beach	2,193	37
Vista	11,905	52
Unincorporated San Diego County	2,286,213	25
Camp Pendleton	125,000	223
Total	**2,740,606**	**1,222**

* Includes NCTD maintained rights-of-way.

Jurisdictional Location of NCTD Facilities

Figure 2-1



Legend

- NCTD Facilities
- Other Facilities
- NCTD Railway
- NCTD Maintained Railway
- Interstate
- River
- Water

1 Inch Equals 4 Miles

0 1 2 4 6 8

Miles

NCTD

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Table 2-4
Jurisdictional Breakdown of NCTD Facilities

Jurisdiction	Length of NCTD Railroad (miles)	NCTD Facilities
Carlsbad	6.61	Coaster Railroad ROW Carlsbad Village Station Poinsettia Station
Del Mar	2.90	Coaster Railroad ROW
Encinitas	5.92	Coaster Railroad ROW Encinitas Station
Escondido	2.56	Sprinter Railroad ROW Escondido Transit Center East Division Maintenance Facility Sprinter Vehicle Maintenance Facility Nordahl Road Station
Oceanside	11.07	Coaster/Sprinter Railroad ROW Oceanside Transit Center Tremont Street Office Building Administration Building Coast Highway Station West Division Maintenance Facility Crouch Street Station El Camino Real Station Rancho del Oro Station College Boulevard Station Fallbrook Junction Melrose Station
San Marcos	5.39	Sprinter Railroad ROW CSUSM Station Palomar College Station Palomar College Transit Center San Marcos Civic Center Station
Solana Beach	1.64	Coaster/ Railroad Road Solana Beach Station
Vista	3.82	Sprinter Railroad Vista Transit Center Escondido Avenue Station
Unincorporated San Diego County	2.07	Sprinter Railroad ROW Buena Creek Station
Camp Pendleton	17.71	Coaster/ Railroad ROW Stuart Mesa Maintenance Facility
San Diego	21.72	NCTD Maintained Railroad ROW Sorrento Valley Station
Total	**81.41**	

All incorporated cities within the County, as well as the County of San Diego, are regulated under the San Diego Municipal NPDES Permit, which requires the Co-Permittees to regulate discharges into and control discharges from their respective municipal storm sewer systems. This SWMP is designed to be compatible with Phase I requirements as enforced by the Co-Permittees under the San Diego Phase I Municipal NPDES Permit. However, NCTD has minimal contributions to the jurisdictions in which it operates and NCTD is only responsible for those discharges resulting from its activities. The Co-Permittees are not only responsible for discharges generated from within their jurisdictions but are also much better suited to implement management strategies to address them.

Railroad rights-of-way that are owned and/or maintained by NCTD have existed for over a century, much longer than the existence of many of the cities through which they run. The railroad was developed in the late 1800s and served as a major impetus to the growth of southern California. In fact, many of the cities that the railroad rights-of-way now pass through are a result of the development of the railroad. As a result, these rights-of-way have seen a drastic change in the hydrologic and water quality characteristics of their environmental settings. Development around these railroads must respect them as the "senior" land use and avoid watershed alterations that could adversely impact the railroad and its operations.

2.3.2 Watersheds

NCTD facilities and rights-of-way also fall within a number of watersheds (Figure 2-2, Table 2-5, and Table 2-6). Many storm water and water quality management activities are implemented at the watershed level, and therefore, the distribution of NCTD's operations throughout these watersheds is relevant. However, as with the San Diego County jurisdictions, NCTD has minimal contributions to these watersheds. Implementation of this SWMP will further reduce potential effects on the watersheds to levels that are likely less than cumulatively relevant. Nevertheless, this SWMP also provides for NCTD's coordination with watershed level activities.

Table 2-5
Watershed Breakdown of NCTD Property

Watershed	Approximate Size of Watershed (acres)	Area of NCTD Property within Watershed (acres)
San Juan	317,402	184
Santa Margarita	473,971	43
San Luis Rey	359,893	15
Carlsbad	135,322	574
San Dieguito	221,307	69
Penasquitos	103,712	305*
San Diego	278,977	10*
Pueblo San Diego	36,061	22*
Total	**1,926,645**	**1,222**

* Includes NCTD maintained rights-of-way.

Watershed Location of NCTD Facilities

Figure 2-2

Legend

- NCTD Facilities
- Other Facilities
- NCTD Railway
- NCTD Maintained Railway
- Interstate
- River
- Water
- Major Watershed
- Hydrologic Unit

1 Inch Equals 4 Miles

0 1 2 4 6 8

Miles

NCTD

PBSJ

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Table 2-6
Watershed Breakdown of NCTD Facilities

Watershed	Length of Railroad within Watershed (miles)	NCTD Facilities within Watershed
San Juan	14.18	
Santa Margarita	3.71	Coaster/Sprinter Railroad ROW Fallbrook Junction Stuart Mesa Maintenance Facility
San Luis Rey	0.96	Coaster/ Sprinter Railroad ROW West Division Maintenance Facility
Carlsbad	36.65	Coaster/ Sprinter Railroad ROW Administration Building Coast Highway Station College Boulevard Station Crouch Street Station El Camino Real Station Melrose Station Oceanside Transit Center Rancho Del Oro Station Tremont Street Office Building Carlsbad Village Station Poinsettia Station Encinitas Station Sprinter Railroad CSUSM Station Palomar College Station Palomar College Transit Center San Marcos Civic Center Station Buena Creek Station Vista Transit Center Escondido Avenue Station Escondido Transit Center East Division Maintenance Facility Nordahl Road Station Sprinter Vehicle Maintenance Facility
San Dieguito	3.88	Coaster/Railroad ROW Solana Beach Station
Penasquitos	17.67	NCTD Maintained Railroad ROW Sorrento Valley Station
San Diego	0.81	NCTD Maintained Railroad ROW
Pueblo San Diego	3.38	NCTD Maintained Railroad ROW
Total	**81.24**	

2.3.3 Environmentally Sensitive Areas

Environmentally Sensitive Areas (ESAs) are defined by the RWQCB as those areas that include, but are not limited to:

- All CWA Section 303(d) impaired water bodies;
- Areas designated as Areas of Special Biological Significance (ASBS) by the SWRCB in the Water Quality Control Plan for the San Diego Basin (1994 and amendments) referred to as the Basin Plan;
- Water bodies designated with the RARE (rare, threatened or endangered species) Beneficial Use category by the SWRCB in the Basin Plan (RARE);
- Areas designated as preserves or their equivalent under the Multiple Species Conservation Program (MSCP) within the cities in the County and the County itself; and
- Any other equivalent ESAs identified by NCTD.

CWA Section 303(d) Impaired Waters

Under Section 303(d) of the 1972 CWA, territories and authorized tribes are required to develop lists of impaired water bodies. These impaired waters do not meet water quality standards or support designated water use. The federal law requires that priority rankings be established for the impaired water bodies on the 303(d) lists and that Total Maximum Daily Loads (TMDL) be developed to improve water quality. California Water Code (Section 13191.3(a)) requires the California State Water Resources Control Board (SWRCB) and its nine Regional Water Boards to post the 303(d) list and to provide an estimated completion date for each TMDL. Table 2-7 lists the identified 303(d) impaired water bodies relevant to NCTD based on the most recent adoption (2002) of the 303(d) list by the State of California.

Areas of Special Biological Significance

Two ASBSs occur within the San Diego region. They are the San Diego Marine Life Refuge and the San Diego/La Jolla Ecological Reserve. Neither is receiving water from NCTD properties or activities.

RARE Beneficial Use Designated Waters

Water bodies designated with the RARE Beneficial Use category by the SWRCB in the Basin Plan support habitats necessary, at least in part, for the survival and successful maintenance of plant or animal species established under state or federal law as rare, threatened or endangered. Receiving waters for NCTD properties and activities that are designated with the RARE Beneficial Use category are listed on the next page.

- Mission Bay
- San Diego Bay
- Mouth of San Diego River
- Los Peñasquitos Lagoon
- San Dieguito Lagoon
- Del Mar Boat Basin
- Batiquitos Lagoon
- San Elijo Lagoon
- Aqua Hedionda Lagoon

Table 2-7
303(d) Impaired Receiving Waters for NCTD Areas and Activities

Watershed	Waterbody	Impairment
San Juan	San Juan Creek	Bacteria Indicators
	San Juan Creek (mouth)	Bacteria Indicators
	Pacific Ocean Shoreline, Lower San Juan HSA	Bacteria Indicators
Santa Margarita	Santa Margarita Lagoon	Eutrophic
San Luis Rey	San Luis Rey River	Chloride Total Dissolved Solids
	Pacific Ocean Shoreline, San Luis Rey HU	Bacteria Indicators
Carlsbad	Agua Hedionda Lagoon	Bacteria Indicators Sedimentation/Siltation
	Agua Hedionda Creek	Total Dissolved Solids
	Buena Vista Lagoon	Bacteria Indicators Nutrients Sedimentation/Siltation
	Loma Alta Slough	Bacteria Indicators Eutrophic
	Pacific Ocean Shoreline, Buena Vista Creek HA	Bacteria Indicators
	Pacific Ocean Shoreline, Escondido Creek HA	Bacteria Indicators
	Pacific Ocean Shoreline, Loma Alta HA	Bacteria Indicators
Peñasquitos	Los Peñasquitos Lagoon	Sedimentation/Siltation
	Mission Bay	Bacteria Indicators Eutrophic Lead
	Pacific Ocean Shoreline, Miramar Reservoir HA	Bacteria Indicators
San Dieguito	Pacific Ocean Shoreline, San Dieguito HU	Bacteria Indicators
	Pacific Ocean Shoreline, San Marcos HA	Bacteria Indicators
	San Elijo Lagoon	Bacteria Indicators Eutrophic Sedimentation/Siltation
San Diego	Pacific Ocean Shoreline, San Diego HU	Bacteria Indicators
	San Diego River (Lower)	Fecal Coliform Low Dissolved Oxygen Phosphorus Total Dissolved Solids
Pueblo San Diego	San Diego Bay Shoreline, Vicinity of B St and Broadway Piers	Benthic Community Effects Sediment Toxicity Bacteria Indicators
	San Diego Bay Shoreline, G Street Pier	Bacteria Indicators

Habitat Preserves (MSCP and Equivalent)

The Multiple Species Conservation Program (MSCP) is a comprehensive habitat conservation planning program for southwestern San Diego County. The MSCP preserves a network of habitat and open space, protecting biodiversity and enhancing the region's quality of life. The MSCP addresses the southwestern San Diego County, and it is only relevant to those NCTD properties and activities within the City of San Diego. The City of San Diego MSCP Subarea Plan identifies preserve areas within the City's jurisdiction (available at http://www.sandiego.gov/mscp/index.shtml). Relevant preserve areas identified within the City's MSCP include the San Diego River estuary, areas within Rose Canyon, areas within Carol Canyon, and areas around Los Peñasquitos Lagoon.

A comparable program is being prepared for northwestern San Diego County called the Multiple Habitat Conservation Program (MHCP). The MHCP encompasses the cities of Carlsbad, Encinitas, Escondido, Oceanside, San Marcos, Solana Beach, and Vista. Its goal is to conserve approximately 19,000 acres of habitat, of which roughly 8,800 acres (46 percent) are already in public ownership and contribute toward the habitat preserve system for the protection of more than 80 rare, threatened, or endangered species. The MHCP Sub-regional Plan was adopted by SANDAG in 2003. A sub-area plan for the city of Carlsbad was approved in 2004. Sub-area plans for the cities of Encinitas, Escondido, Oceanside, San Marcos, and Vista are being prepared (see http://www.sandag.cog.ca.us/ for more information).

Unincorporated areas in the north county are covered by another program established in the North County MSCP Sub-area Plan. This plan is also currently being prepared and more information can be found at http://dplu-mscp.sdcounty.ca.gov//8_nocoup/ncupd.html.

Coastal Bays and Lagoons

Although not specifically identified as ESAs by the RWQCB, coastal bays and lagoons are typically viewed as more sensitive and receive a higher level of scrutiny to meet water quality standards and objectives. Coastal bays and lagoons that are receiving waters for NCTD properties and activities are listed below.

- San Mateo Lagoon
- Las Flores Lagoon
- Santa Margarita River Estuary
- San Luis Rey River Estuary
- Buena Vista Lagoon
- Agua Hedionda Lagoon
- Batiquitos Lagoon
- San Elijo Lagoon
- San Dieguito Lagoon
- Los Peñasquitos Lagoon
- Mission Bay
- San Diego Bay

Chapter 3
Public Education

Pursuant to the Small MS4 Permit, NCTD will implement a public education program to distribute educational materials to the community and/or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff. For non-traditional permittees such as NCTD, the employee and user population serves as "the public" to target for outreach and involvement. The Small MS4 Permit also provides that non-traditional small MS4s that discharge into medium and large MS4s can integrate their public education and outreach program with the existing MS4 public education and outreach programs.

3.1 Guidance

Public education and outreach is a critical component of a successful storm water management program. These measures garner public support and establish individual awareness of what is expected of themselves and the community to improve the quality of local waters. The U.S. EPA recommends three (3) action areas for successful implementation of these minimum control measures:

1. Forming Partnerships – MS4s are encouraged to form partnerships with other governmental and non-governmental entities to establish more cost-effective regional or statewide programs.

2. Using Educational Material and Strategies – MS4s may use storm water educational materials provided by the state; EPA; environmental, public interest, or trade organizations; or other MS4s and agencies. Materials should be relevant to local issues.

3. Reaching Diverse Audiences – The education program should be applicable and available to all audiences, including minorities and children.

The public education program can inform individuals and households about the steps they can take to reduce storm water pollution, such as ensuring proper septic system maintenance, ensuring the proper use and disposal of landscape and garden chemicals including fertilizers and pesticides, protecting and restoring riparian vegetation, and properly disposing of used motor oil and household hazardous wastes. EPA recommends that the program inform individuals and groups on how to become involved in local stream restoration activities, as well as activities that are coordinated by youth service and conservation corps or other citizen groups. EPA recommends that the public education program be tailored, using a mix of locally appropriate strategies, to target specific audiences and communities. Examples of strategies include distributing brochures or fact sheets, sponsoring speaking engagements before community groups, providing public service announcements, implementing educational programs targeted at school age children, and conducting community-based projects such as storm drain stenciling and watershed cleanups.

3.2 Approach

Employee education is discussed under Chapter 8, Municipal Operations. This section is directed mainly at users or patrons of NCTD's transit services. NCTD may choose to undertake some educational activities on its own; however, there are also a number of opportunities to coordinate with other agencies and organizations. Collaborating with others can improve the ability to communicate messages to the public and also reduce overall costs. The North County cities have formed an informal group to coordinate on activities related to the San Diego Municipal Phase I Permit, and may serve as a good partner for educational activities. In addition, there are a number of watershed, environmental, and community groups that are also active in communicating storm water related messages to the public, including the County's Project Clean Water and the City of San Diego's Think Blue Program.

3.3 Best Management Practices

NCTD's SWMP public education component consists of the following BMPs.

BMP A.1 - Post educational signs or posters with storm water messages in stations, terminals, transit vehicles, and other visible areas. NCTD facilities and vehicles provide great opportunities for informing large numbers of users or patrons of storm water issues. While users are waiting for their train or bus or are riding in a train or bus they are very likely to notice and read a well-presented and informative educational sign or poster. A number of storm water related signs or posters have already been developed by other organizations that may be used. If a unique or tailored sign or poster were desired, NCTD could undertake its creation independently or would likely find willing partners in neighboring jurisdictions. If possible, signs should be in both English and Spanish. The implementation of this BMP can be measured by the number of signs or posters that are displayed each year. More complex measurements could estimate the amount of users that may see the signs or posters. Also NCTD may include questions regarding the effectiveness of its educational activities in existing patron surveys.
BMP A.1 Measurable Goals and Timetables: Initiate posting of signs/posters in Permit Year 1 and increase the number of signs/posters displayed each year. Over the beginning years of implementation, a target sustainable number of signs/posters to be displayed each year should be identified. When determining the appropriate number of signs/posters, and the locations to post them, NCTD shall consider the aesthetics of its facilities and vehicles, and coordinate with mandatory signage requirements mandated for security and other regulatory requirements. Once the target is identified, the goal should be to achieve that target each year and to continue to evolve the messages to the public.

BMP A.2 - Coordinate with regional, watershed, jurisdictional, or other applicable educational programs. NCTD is limited in the variety of educational opportunities due to the types of activities and users. A broader program conducted by other organizations may serve as a more effective and less expensive means to educate the general public of storm water issues. NCTD can contribute to these programs by providing support, advertising space, staff support, and other in-kind services. **BMP A.2 Measurable Goals and Timetables:** Contribute to at least one other program in Permit Year 1. Increase coordination/contributions each year until NCTD is interacting with all municipalities in the North County and other major watershed stakeholders. Work cooperatively and collaboratively with the County of San Diego, and the Co-Permittee cities NCTD operates in, to compile existing guidance materials that may be available.

BMP A.3 - Create an NCTD storm water management plan webpage that provides information or links to information on storm water issues. The webpage is primarily a BMP for the SWMP's public participation component, which also provides a mechanism for directing users to more information on storm water issues. The SWMP should be posted on the its own webpage on the NCTD webite for the public to review. **BMP A.3 Measurable Goals and Timetables:** Create a webpage on the NCTD website in permit year 1 and continue to operate the webpage in subsequent years.

BMP A.4 – Identify and Label major NCTD storm drain inlets with messages that prohibit dumping and identify that a natural receiving water body is downstream. Labeling NCTD's storm drain inlets with stencils or glued signs is an inexpensive way to inform the public of their potential to impact downstream waters and the importance of clean runoff. **BMP A.4 Measurable Goals and Timetables:** Starting in Permit Year 1 and every year after, identify and check all major storm drain inlets within NCTD's rights-of-way and on NCTD's property to verify labeling or legibility of labeling. Label or re-label as necessary.

Chapter 4
Public Participation

Pursuant to the Small MS4 Permit, NCTD will, at a minimum, comply with applicable public notice requirements when implementing a public involvement/participation program.

4.1 Guidance

The public can play a significant role in the development and implementation of a storm water management program. Public inclusion broadens public support and provides economic and intellectual resources that are otherwise unavailable. The objective in implementing this measure is to involve a diverse group of participants incorporating various ideas and concerns. Advertising and recruiting should focus on specific sectors of the population to maximize interest and involvement.

EPA recommends that the public be included in developing, implementing, and reviewing the storm water management program, and that the public participation process make efforts toward reaching out and engaging as many sectors of the community as possible including those separated by age, income level, ethnicity, heritage or geography. Opportunities for members of the public to participate in program development and implementation include serving as citizen representatives on a local storm water management panel, attending public hearings, working as citizen volunteers to educate other individuals about the program, assisting in program coordination with other pre-existing programs, or participating in volunteer monitoring efforts.

4.2 Approach

Although NCTD does not contain a residential population, NCTD serves the residents and employees of its service area and the surrounding communities. In addition, impacts to water quality that may result from NCTD activities affect the areas downstream. Similarly, areas upstream of NCTD properties can affect the water quality of waters that NCTD is managing. Therefore, NCTD's storm water management is connected to the surrounding community. Participation by those communities in developing and implementing NCTD's program will increase its effectiveness and relevance within affected watersheds.

Because NCTD is a non-traditional MS4, there are limited opportunities for hands-on activities, volunteer efforts, and workshops under its program or on its properties. The most direct way for the public to get involved with NCTD's SWMP is to provide comments and feedback. NCTD may participate in watershed management stakeholder-led meetings to facilitate public participation and input on its programs.

4.3 Best Management Practices

NCTD's SWMP public participation component consists of the following BMPs.

BMP B.1 - Create a webpage to provide information on NCTD's storm water program and allow for public input. A webpage within NCTD's website is an effective and easy tool to educate the public of NCTD's program and to receive comments from the public and allow for

reporting of illegal discharges. **BMP B.1 Measurable Goals and Timetables:** Create a webpage in Permit Year 1 and continue to operate the webpage in subsequent years.

BMP B.2 - Coordinate with regional, watershed, jurisdictional, or other applicable public participation programs. NCTD is limited in its public participation capabilities due to the type of its activities. Some broader program conducted by other organizations, such as the regional storm water hotline (for reporting illegal discharges), may serve as a more effective and less expensive means to educate the general public of storm water issues and allow for public participation. NCTD can contribute to these programs by providing support, advertising space, staff support, and other in-kind services. **BMP B.2 Measurable Goals and Timetables:** In Permit Year 1, contribute to at least one other program such as Project Clean Water or other watershed planning efforts throughout the county. Increase coordination/in-kind service contributions each year until NCTD is interacting with all municipalities in the North County and/or other major watershed stakeholders.

Chapter 5
Illicit Discharge Detection and Elimination

Pursuant to the Small MS4 Permit, NCTD has developed a program to detect and eliminate illicit discharges (as defined at 40 CFR §122.26(b)(2)) into the regulated Small MS4 and will implement and enforce this program. This program includes:

- Developing a storm sewer system map, showing the location of all outfalls and the names and locations of all waters of the U.S. that receive discharges from those outfalls;
- Prohibiting, as allowable under local, state or federal law, non-storm water discharges into the MS4 and implement appropriate enforcement procedures and actions;
- Implementing a plan to detect and address non-storm water discharges, including illegal dumping, to the system not authorized by a separate NPDES permit; and
- Informing public employees, businesses, and the general public of the hazards that are generally associated with illegal discharges and improper disposal of waste.

The Small MS4 Permit also requires that the MS4 address the following categories of non-storm water discharges or flows (i.e., authorized non-storm water discharges) where they are identified as significant contributors of pollutants to the Small MS4:

1. Water line flushing;
2. Landscape irrigation;
3. Diverted stream flows;
4. Rising ground waters;
5. Uncontaminated ground water infiltration (as defined at 40 CFR §35.2005(20)) to separate storm sewers;
6. Uncontaminated pumped ground water;
7. Discharges from potable water sources;
8. Foundation drains;
9. Air conditioning condensation;
10. Irrigation water;
11. Springs;
12. Water from crawl space pumps;
13. Footing drains;
14. Lawn watering;
15. Individual residential car washing;
16. Flows from riparian habitats and wetlands; and
17. Dechlorinated swimming pool and fountain discharges.

NCTD has addressed these non-storm water discharges as part of its illicit discharges program.

5.1 Guidance

Federal regulations define an illicit discharge as "...any discharge to an MS4 that is not composed entirely of storm water..." with some exceptions, such as discharges from NPDES-permitted industrial sources. Illicit discharges are considered "illicit" because MS4s are not designed to accept, process, or discharge non-storm water wastes. EPA recommends that the plan to detect and address illicit discharges include the following four (4) procedures for:

- Locating priority areas likely to have illicit discharges;
- Tracing the source of an illicit discharge;
- Removing the source of the discharge; and
- Program evaluation and assessment.

EPA recommends visually screening outfalls during dry weather and conducting field tests of selected pollutants as part of the procedures for locating priority areas.

Illicit discharge education actions may include storm drain stenciling; a program to promote, publicize, and facilitate public reporting of illicit connections or discharges; and distribution of outreach materials. Educational programs such as these are addressed under the public education and municipal training component of NCTD's SWMP, which are discussed in other sections.

5.2 Approach

Potential sources of illicit discharges from NCTD activities include vehicle washing, grounds cleaning, fueling spills, and improper disposal of wash waters and vehicle maintenance toxics. The majority of these activities, which implements SWPPPs that include elimination of non-storm water discharges, are limited to NCTD's maintenance facilities, which are covered by the General Industrial NPDES Permit. At other NCTD properties, such as stations and rights-of-way, illicit discharges have limited potential to occur. However, if they do, they can be readily detected because of frequent maintenance schedules that NCTD follows for these facilities.

Another potential source of illicit discharges in NCTD's MS4 is from neighboring jurisdictions or private property owners. Because these are separate jurisdictions, NCTD does not have the ability to prohibit discharges originating within them. Such discharges are the responsibility of the originating jurisdiction. Furthermore, all neighboring municipalities (and the unincorporated County) are required under the San Diego Phase I Municipal Permit to be implementing their own illicit discharge detection and elimination programs. Therefore, each of these jurisdictions are responsible for detecting and eliminating illicit discharges within their boundaries, just as NCTD is responsible for any illicit discharges occurring within its properties. The RWQCB administers the San Diego Phase I Municipal Permit and is responsible for enforcing compliance with that permit.

Two regional stormwater hotlines are currently in operation in San Diego County. The toll free Regional Stormwater Hotline 1-888-846-0800, and the THINKBLUE Hotline at 1-888-THINKBLUE (1-888-844-6525). Both hotlines are answered by the County of San Diego, Department of Environmental Health, Mon-Fri 8:00 a.m. to 5:00 p.m. In addition to a manned service during business hours, the hotlines provide a voice mail message for 24-hour access in both English and Spanish. Through this hotline, any received complaint or information would be forwarded to the appropriate NCTD contacts for follow up and/or investigation.

When a non-storm water discharge is identified on NCTD's property, it should first be assessed to determine if it falls within an authorized non-storm water discharge and if it originates from off NCTD property. Visual screening and/or sampling may be used to determine if a potentially authorized non-storm water discharge contains significant levels of pollutants. If it is determined that the non-storm water discharge is authorized or originates off NCTD property, no corrective action by NCTD is necessary. However, the next step is to determine the specific source of the problem collaboratively with the adjacent property owner. Methods that can be used to find the

source of illicit discharges may include: dye or smoke testing in problem areas, tracing the discharge upstream in the MS4, using video to inspect MS4s, and analysis for the discharge to identify corresponding types of pollutant generators. Once the source is identified, the responsible discharger should be notified and directed to correct the problem. If the source is illegal dumping or comparable, those responsible for the property on which the illegal activity took place should be notified so that they can evaluate potential measures to discourage future occurrences. As a final step, all actions taken under this plan should be documented so that progress and effectiveness can be assessed.

5.3 Best Management Practices

NCTD's SWMP illicit discharges elimination component consists of the previously discussed BMPs identified for the public education and municipal operations components, as well as the following BMPs listed below.

BMP C.1 - Develop a storm sewer system map showing NCTD pipes and channels, neighboring MS4s to the extent possible, and the names and locations of receiving waters. The Phase II MS4 Permit requires preparation of an MS4 map which is meant to demonstrate a basic awareness of the intake and discharge areas of the system. It can be useful in determining the extent of discharged non-storm water, the possible sources of illicit discharges, and the particular water bodies that such discharge could affect. As-built drawings of NCTD facilities contain the majority of on-site data. This needs to be verified. Mapping the MS4s along NCTD's rights-of-way will pose a greater challenge due to their spatial extent and linear configuration. **BMP C.1 Measurable Goals and Timetables:** Complete preparation of the MS4 map by Permit Year 4. In subsequent years, update map as necessary.

BMP C.2 - Detect and correct illicit discharges reported from inspections of NCTD's facilities, rights-of-way, and activities. Potential illicit discharge problems are identified primarily through inspections described under NCTD's Municipal Operations described in Chapter 8. They may also be reported through the regional hotline, NCTD's website, or other mechanisms. **BMP C.2 Measurable Goals and Timetables:** Initiate tracking/recording of illicit discharge detection and elimination activities by Permit Years 2 and 3. In subsequent years, increase the completeness of recorded activities as well as the percentage of detected illicit discharges that are corrected.

BMP C.3 – Development Review Process to include Municipal Jurisdictions. NCTD currently reviews tentative maps submitted by adjacent jurisdictions. During the review, NCTD can include a review of potential, unwanted illicit storm water discharges that may negatively impact NCTD's operation. **BMP C.3 Measurable Goals and Timetables:** Incorporate into NCTD's tentative map review process by Permit Year 2, a review and comment process regarding potential illicit storm water discharges. Continue review in subsequent years.

Chapter 6
Construction

The Small MS4 Permit requires BMP-based program development, implementation, and enforcement to reduce pollutants in any storm water runoff to the Small MS4 from construction activities that result in a land disturbance of greater than, or equal to, one acre. Reduction of storm water discharges from construction activity disturbing less than one acre must be included in the program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more. The Small MS4 Permit states that the program must include the development and implementation of:

1) An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions, or other effective mechanisms, to ensure compliance, to the extent allowable under state, or local law;
2) Requirements for construction site operators to implement appropriate erosion and sediment control BMPs;
3) Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;
4) Procedures for construction site plan review which incorporate consideration of potential water quality impacts;
5) Procedures for receipt and consideration of information submitted by the public; and
6) Procedures for construction site inspection and enforcement of control measures.

6.1 Guidance

Polluted storm water runoff from construction sites often flows to MS4s and ultimately is discharged into local rivers, streams and the ocean. Sediment is usually the main pollutant of concern. Sediment runoff rates from construction sites are typically 10 to 20 times greater than those of agricultural lands, and 1,000 to 2,000 times greater than those of forest lands. During a short period of time, construction sites can contribute more sediment to streams than can be deposited naturally during several decades. The resulting siltation, and the contribution of other pollutants from construction sites, can cause physical, chemical, and biological harm to our nation's waters. For example, excess sediment can quickly fill rivers and lakes, requiring dredging and destroying aquatic habitats.

In addition to the requirements of the Small MS4 Permit, the EPA recommends: reviewing construction site BMP plans submitted by the construction site operator before ground is broken; tracking active sites; prioritizing sites for inspection and conducting frequent inspections providing guidance and education; issuing warnings and assessing penalties; and tracking submitted public information.

6.2 Approach

NCTD's construction activities are limited to capital improvement projects. NCTD projects that exceed one acre are fairly infrequent. Therefore, NCTD will rely heavily on the existing General Construction NPDES Permit, which requires permit coverage for all construction activities exceeding one acre. The general permit also requires preparation and implementation of a SWPPP, BMPs, inspections, and monitoring. Furthermore, NCTD does not maintain staff or equipment necessary to conduct large construction projects. All work carried out as a project by NCTD that would exceed one acre would be done under contract with a development, engineering, and/or construction company. Current NCTD contracts specify that the contractor is responsible for compliance with applicable requirements (such as the General Construction NPDES Permit).

6.3 Best Management Practices

NCTD's SWMP construction component consists of the following BMPs.

BMP D.1 – Develop and review Storm Water Pollution Prevention Plans (SWPPPs) for all NCTD construction projects requiring coverage under the General Construction Storm Water Permit. Prior to authorizing a contractor to proceed with construction activities on sites greater than one acre, NCTD will require a review of the SWPPP prepared by the contractor. The contractor should allow for at least two weeks for NCTD's review of the document and response to any comments. This review is only to provide an initial check of the intended BMPs for the site. It does not relieve the contractor of any responsibility and the contractor must continue to update the SWPPP to reflect current site conditions and specify new BMPs as necessary to minimize pollutant discharges from the site. Additional BMPs may be required where the receiving water body is listed as a 303(d) impaired water quality area. **BMP D.1 Measurable Goals and Timetables:** Review SWPPPs for all construction projects exceeding one acre starting in Permit Years 1 and 2. By Permit Years 4 and 5, develop a SWPPP template, which can be modified to address specific site restrictions as well as identifying additional BMPs needed to protect receiving waters on the 303(d) list of water quality impaired segments.

BMP D.2 - Inspect NCTD construction sites and enforce implementation of SWPPP and compliance with the General Construction Storm Water Permit. Although contractors are responsible for construction site inspections pursuant to the General Construction Storm Water Permit and the RWQCB is responsible for administration and enforcement of the permit, NCTD can assist with controlling construction runoff through additional levels of inspection and enforcement. **BMP D.2 Measurable Goals and Timetables:** Starting in Permit Year 4 and 5, inspect construction sites exceeding one acre in size monthly during the rainy season, and as needed during the dry season, such as prior to and soon after a rain event of 0.5 inches or more, to ensure proper implementation of BMPs and also to ensure that the contractor is complying with the General Construction Storm Water Permit. In same year, ensure that contractor contracts contain a mechanism for establishing sanctions to ensure compliance.

BMP D.3 – Document, consider and address information submitted by the public. The NCTD SWMP webpage will serve as the primary mechanism to receive comments. The storm water hotlines described in Section 6.2 will also provide a mechanism for reporting illegal

discharges from construction sites. All comments received by NCTD will be forwarded to a designated individual on the SWMP management team to adequately document and consider appropriate action. NCTD should respond accordingly to the comment and, if necessary, take steps to address issues raised in the comment. **BMP D.3 Measurable Goals and Timetables:** Create a webpage in Permit Years 1 and 2 that allows for public comment. Starting in Permit Year 3, evaluate existing procedures for receiving and responding to public comments and develop revised procedures to timely address the issues.

Chapter 7
Post-Construction

The Small MS4 Permit requires development, implementation, and enforcement of a program to address storm water runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into the Small MS4 by ensuring that controls are in place that would prevent or minimize water quality impacts. The Small MS4 Permit states that the program must:

1) Develop and implement strategies, which include a combination of structural and/or non-structural BMPs appropriate for the community;
2) Use an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects to the extent allowable under state or local law; and
3) Ensure adequate long-term operation and maintenance of BMPs.

7.1 Guidance

If water quality impacts are considered from the beginning stages of a project, new development and potentially redevelopment provide more opportunities for water quality protection. EPA recommends that the BMPs chosen:

- Be appropriate for the local community;
- Minimize water quality impacts; and
- Attempt to maintain pre-development runoff conditions.

In choosing appropriate BMPs, EPA encourages the MS4 to engage in locally based watershed planning efforts that attempt to involve diverse groups of stakeholders, including interested citizens. When developing a program that is consistent with this measure's intent, EPA recommends that a planning process be adopted that identifies the MS4's:

- Program goals (e.g., minimize water quality impacts resulting from post-construction runoff from new development and redevelopment);
- Implementation strategies (e.g., adopt a combination of structural and/or nonstructural BMPs);
- Operation and maintenance policies and procedures; and
- Enforcement procedures.

In developing the storm water management plan, the MS4 should consider assessing existing ordinances, policies, programs and studies that address storm water runoff quality. In addition to assessing these existing documents and programs, the public should be invited to participate in the development of the program.

Non-structural BMPs are preventative actions that involve management and source controls such as:

- Policies and ordinances that provide requirements and standards to direct growth to identified areas, protect sensitive areas such as wetlands and riparian areas, maintain and/or increase open space (including a dedicated funding source for open space

acquisition), provide buffers along sensitive water bodies, minimize impervious surfaces, and minimize disturbance of soils and vegetation;

- Policies or ordinances that encourage infill development in higher density urban areas, and areas with existing infrastructure; education programs for developers and the public about project designs that minimize water quality impacts;
- Existing standards that ensure suitable and effective post-construction storm runoff pollution prevention measures; and
- Minimization measures of percent impervious area after development and/or directly connected impervious areas.

Structural BMPs include:

- Storage practices such as wet ponds and extended-detention outlet structures;
- Filtration practices such as grassed swales, sand filters and filter strips; and
- Infiltration practices such as infiltration basins and infiltration trenches.

EPA recommends that the MS4 ensure the appropriate implementation of the structural BMPs by considering some or all of the following:

- Pre-construction review of BMP designs;
- Inspections during construction to verify BMPs are built as designed;
- Post-construction inspection and maintenance of BMPs; and
- Penalty provisions for the noncompliance with design, construction or operation and maintenance.

Storm water technologies are constantly being improved, and EPA recommends that the MS4 storm water management requirements be responsive to these changes, developments or improvements in control technologies

7.2 Approach

As discussed in the construction section, NCTD's development activities are limited to capital improvement projects; however, projects that exceed one acre are fairly infrequent. Therefore, this component of the SWMP will seldom be relevant. As such, a basic program is appropriate for NCTD's SWMP.

7.3 Best Management Practices

NCTD's SWMP post-construction component consists of the following BMPs:

BMP E.1 - Prepare Water Quality Management Plans for all new NCTD development and redevelopment projects greater that one (1) acre. Prior to design of a proposed project, NCTD will prepare or require an engineer to prepare a Water Quality Management Plan (WQMP) for all new projects exceeding one (1) acre in size. The WQMP will describe the proposed project, including the setting of the project such as drainage and downstream receiving waters. In addition, the WQMP will identify potential adverse water quality impacts resulting from the project. The WQMP will identify measures to be incorporated into the project

so as to reduce or avoid potential water quality impacts to the maximum extent practicable. Both site design and source control measures should be identified and incorporated into the project. Treatment control measures may also be recommended if appropriate. **BMP E.1 Measurable Goals and Timetables:** Starting in Permit Year 1, require preparation and incorporation of Water Quality Management Plans for development and redevelopment projects exceeding one acre in size.

BMP E.2 – Evaluate existing NCTD design standards and develop revised or new design standards. After construction of any project, some elements of the project could have been modified to improve the project. However, it is not cost effective to implement the change. These improvements, though, can easily be incorporated into the design standards and implemented on future projects. After completion of a project, NCTD should evaluate the project and determine whether the design could be improved to prevent or reduce post-construction runoff pollution. Changers that are not project specific should be incorporated into NCTD's design standards. **BMP E.2 Measurable Goals and Timetables.** Starting in Permit Year 2, conduct a post-construction evaluation of NCTD projects to identify design standard changes that will reduce or eliminate post-construction runoff pollution.

Chapter 8
Municipal Operations
(Pollution Prevention/Good Housekeeping)

Pursuant to the Small MS4 Permit, NCTD will develop and implement an operation and maintenance program that includes an employee training component and has the ultimate goal of preventing or reducing pollutant runoff from its transportation operations. Using training materials that are available from U.S. EPA, the state, or other organizations, the program will include employee training to prevent and reduce storm water pollution from activities such as right-of-way space maintenance, fleet maintenance, office building and service station maintenance, new construction and land disturbances, and storm water system maintenance.

8.1 Guidance

EPA recommends that the MS4 consider the following in developing the storm water management program:

- Maintenance activities, maintenance schedules, and long-term inspection procedures for structural and nonstructural storm water controls to reduce floatables and other pollutants discharged from its separate storm sewers;
- Controls for reducing or eliminating the discharge of pollutants from streets, roads, highways, parking lots, maintenance and storage yards, fleet or maintenance shops with outdoor storage areas, construction material storage locations and construction and debris disposal areas operated by NCTD;
- Procedures for properly disposing of waste removed from the separate storm sewers and areas listed above (such as dredge spoil, accumulated sediments, floatables, and other debris); and
- Ways to ensure that new flood management projects assess the impacts on water quality and examine existing projects for incorporating additional water quality protection devices or practices.

Operation and maintenance should be an integral component of all storm water management programs. This measure is intended to improve the efficiency of these programs and require new programs where necessary. Properly developed and implemented operation and maintenance programs reduce the risk of water quality problems.

8.2 Approach

This component of NCTD's SWMP applies to all operational activities and maintenance of all NCTD control areas. Therefore, it is a substantial part of the overall program. Controlling potential pollutants through NCTD activities and properties requires addressing the sources of the pollutants from various methods. Educating users of NCTD facilities and NCTD employees will reduce the overall amount of pollutants generated. Education of users is addressed under the public education component and education of NCTD employees is addressed in this section. Other ways to control potential pollutants at their source include proper handling, use, storage, and disposal of materials. Also important is proper maintenance and cleaning of vehicles, shops, and outdoor areas.

NCTD currently conducts storm water training for some personnel involved with storm water management activities. NCTD will continue to conduct this training and will expand the program to include other employees and provide additional or detailed job-specific information to target work groups or units. NCTD also currently conducts a number of good housekeeping, maintenance, and cleaning programs that address potential pollutants at their source. NCTD will continue to implement its existing programs in place now and as amended from time to time, improving upon them where appropriate. Table 8-1 provides a list of the source control BMP programs that are applicable to NCTD areas and activities. The number in parentheses corresponds with the California Municipal BMP Handbook factsheets (available at http://www.cabmphandbooks.com/).

Table 8-1
Source Control BMP Applicable to NCTD Areas and Activities

	NCTD Areas and Activities					
Non-Storm Water Management	*Railroad Rights-of-Way*	Maintenance Facilities	Stations and Transit Centers	Transit Operations	Other Facilities	All Employees
• Non-storm water Discharges (SC-10)	X	X	X	X	X	X
• Spill Prevention, Control, and Cleanup (SC-11)		X		X	X	
Vehicle and Equipment Management						
• Vehicle and Equipment Fueling (SC-20)		X		X		
• Vehicle and Equipment Cleaning (SC-21)		X		X		
• Vehicle and Equipment Repair (SC-22)		X		X		
Material and Waste Management						
• Outdoor Loading/Unloading (SC-30)		X				
• Outdoor Container Storage (SC-31)		X				
• Outdoor Equipment Maintenance (SC-32)		X				
• Outdoor Storage of Raw Materials (SC-33)		X				
• Waste Handling and Disposal (SC-34)	X	X	X	X	X	X
Building and Grounds Management						
• Buildings and Grounds Maintenance (SC-41)	X	X	X		X	
• Parking and Storage Area Maintenance (SC-43)		X	X		X	
General Storm Water Management						
• Housekeeping Practices (SC-60)		X			X	X
• Safer Alternative Products (SC-61)		X			X	X

Table 8-1 (Continued)
Source Control BMP Applicable to NCTD Areas and Activities

Non-Storm Water Management	NCTD Areas and Activities					
	Railroad Rights-of-Way	Maintenance Facilities	Stations and Transit Centers	Transit Operations	Other Facilities	All Employees
Field Program BMPs						
• Road and Street Maintenance (SC-70)			X			
• Plaza and Sidewalk Cleaning (SC-71)		X	X			
• Landscape Maintenance (SC-73)	X	X	X			
• Drainage System Maintenance (SC-74)	X	X	X			
• Waste Handling and Disposal (SC-75)	X	X	X	X	X	X

8.3 Best Management Practices

NCTD's SWMP municipal operations component consists of the following BMPs.

BMP F.1 - Prepare and implement Storm Water Pollution Prevention Plans (SWPPPs) for all NCTD industrial sites requiring coverage under the General Industrial Storm Water Permit. The General Industrial Storm Water Permit requires the preparation and implementation of a SWPPP that details best management practices to reduce the potential discharge of pollutants from a NCTD industrial facility or activity, and provide for the elimination of non-storm water discharges, inspections, and water quality monitoring. NCTD owns and operates three facilities that require coverage under the industrial permit: the West Division, East Division, and Stuart Mesa Maintenance Facilities. Also, a new facility, the Sprinter Vehicle Maintenance Facility, is currently under construction. All facilities are covered under the permit and have or will have SWPPPs. Additionally, NCTD conducts good housekeeping, maintenance, and cleaning programs that address potential pollutants at their source. Relying on the California Municipal BMP handbook as minimum standards, NCTD will continue to implement its existing programs and improve them when appropriate. **BMP F.1 Measurable Goals and Timetables:** Continue to maintain compliance with the General Industrial Storm Water Permit.

BMP F.2 - Provide education/training to appropriate NCTD employees to prevent and reduce storm water pollution from everyday operational activities. Effective implementation of the SWMP requires training of NCTD staff. Both new employee orientation and periodic refresher training will be required for NCTD employees to educate them about the program and their role. Orientation training or educational materials, such as a leaflet or e-mail announcement, will be provided to NCTD employees regarding NCTD's SWMP, the NPDES program, and general storm water practices. In addition, specific training will be provided for specific target groups working in fixed facilities or field programs, such as fleet and storm water maintenance personnel, development and construction staff, and facility managers. Training of NCTD employees will be performed periodically throughout the life of the program to accommodate changes in personnel and the program. **BMP F.2 Measurable Goals and Timetables:** Train all target groups and develop or collect general education materials by

Permit Year 1. Train target group employees and implement storm water training during orientation by Permit Year 2. In subsequent years, continue to implement orientation training and conduct training of target groups at least once a year. During this time, identify existing educational and training materials (brochures, checklists, inspection forms, etc.) or develop new ones that can be used to effectively educate and train staff.

BMP F.3 - Regularly clean NCTD facilities and storm drain infrastructure. Regular cleaning removes pollutants before they can be discharged from the site. NCTD's facilities maintenance crews conduct regularly scheduled cleaning of all facilities. **BMP F.3 Measurable Goals and Timetables:** Continue to regularly clean all facilities in accordance with the appropriate facility plan currently in use and as amended from time to time.

BMP F.4 - Inspect NCTD facilities and activities to ensure adequate implementation of operational storm water BMPs. Inspections of fixed facilities and field programs should be performed to verify that BMPs are being implemented, that they are appropriate for that facility or program, and that they continue to reduce the discharge of pollutants. Inspections generally consist of the following:

- Fixed Facilities – Inspections are typically performed by a combination of storm water program staff and on-site fixed facility managers. The inspection of a fixed facility may include spot checks of the facility and activities being performed at the facility, and interviews with key line staff.
- Field Programs– Inspections are typically performed by a combination of storm water program staff and field program supervisors. The inspection of a field program may include spot checks of activities being performed, and interviews with key staff.
- Contracted Activities – Inspections are typically performed by NCTD staff to supplement and check on self-inspections and reporting by the management staff of the contract firm performing the activity. Performance should be checked against contract/lease language.

Fixed facility or field program inspection frequency depends on the nature of the facility or program. Annual inspection is typical, with a more frequent schedule for facilities/activities that pose a greater threat to discharge pollutants (e.g. corporation yards). In the event of an observed problem, such as ineffective maintenance procedures or detected non-storm water discharges, the inspection frequency should be increased as appropriate to facilitate correction of the problem.

Inspection forms may be developed and used to properly document all inspections and gather the necessary information for record keeping and annual reporting. Examples include:

- General Inspection Forms – These primary forms provide for a general characterization of the fixed facility or field program being inspected, including the type of facility or program, the reason for inspection, activities that may take place, and BMPs applicable for the facility. A general form for all inspections and a single fixed facility specific form should be completed.
- Activity Specific Inspection Forms – These secondary forms include a series of questions or checklist items about specific activities taking place at a fixed facility or as part of a field program, as well as a list of suggested corrective action plans that can be implemented should a problem be found. All forms applicable to the activities being performed at a fixed facility or field program should be completed.

BMP F.4 Measurable Goals and Timetables: Continue to inspect all NPDES permit-related industrial activities at least annually. Initiate annual inspections of other NCTD facilities in Permit Years 2 or 3. Continue to maintain or increase number of facilities inspected and inspection frequency, as necessary.

Chapter 9
Reporting and Record Keeping

The following sections describe the reporting and recordkeeping requirements of the Small MS4 Permit. Because NCTD is voluntarily preparing this SWMP in compliance with the permit, it is not subject to these requirements until designated by the RWQCB as being covered under the permit. However, NCTD will review the level of implementation and effectiveness of the SWMP on a yearly basis and document the results of the assessment. This assessment will serve as a self-reporting mechanism to trigger any updates and modification to the SWMP in order to keep it functional and applicable to changing operations.

9.1 Reporting

The Small MS4 permit requires submittal of an annual report to the appropriate RWQCB by September 15th of each year. The report must summarize the activities performed throughout the reporting period (July 1 through June 30) and must also include:

a. The status of compliance with permit conditions;
b. An assessment of the appropriateness and effectiveness of the identified BMPs;
c. Status of the identified measurable goals;
d. Results of information collected and analyzed, including monitoring data, if any, during the reporting period;
e. A summary of the storm water activities the permittee plans to undertake during the next reporting cycle;
f. Any proposed change(s) to the SWMP along with a justification of why the change(s) are necessary; and
g. A change in the person or persons implementing and coordinating the SWMP.

Throughout the year, NCTD may be in non-compliance with the Small MS4 Permit. If NCTD is unable to certify compliance with the Permit, NCTD shall notify the RWQCB within thirty (30) days of when it first determines that compliance may not be feasible.

Additionally, NCTD should orally report instances of non-compliance resulting in emergencies (i.e., that endanger human health or the environment) to the RWQCB within twenty-four (24) hours from the time NCTD becomes aware of the circumstance and in writing to the RWQCB within five (5) days of the occurrence. The notification should identify the non-compliance event and an initial assessment of any impact caused by the event, describe the actions necessary to achieve compliance, and include a time schedule indicating when compliance will be achieved. The time schedule and corrective measures will be subject to modification by the RWQCB Executive Officer.

9.2 Recordkeeping

The Small MS4 permit requires that permittees keep records required by the permit for at least five years or the duration of the permit if continued. The RWQCB Executive Officer may specify a longer time for record retention. Record keeping for this permit shall not supersede or weaken the requirements of the Federal Records Act (FRA) applicable to NCTD or NCTD's record keeping requirements currently in place and as amended from time to time.
Permittees must submit the records to the RWQCB Executive Officer upon request and make the records, including the permit and SWMP, available to the public during regular business