APPENDIX G

PROGRAM FOR MAINTENANCE, INSPECTION, AND REPAIR OF CONSTRUCTION SITE BMPS

The contractor shall use the following guidelines for maintenance, inspection, and repair					
of BMPs identified in the SWPPP					
BEST MANAGEMENT	INSPECTION FREQUENCY				
PRACTICES (BMPs)	(all controls)	MAINTENANCE/REPAIR PROGRAM			
SE-6 Gravel Bag Berm	After a rain event that causes runoff from the construction site				

The contractor shall use the following guidelines for maintenance, inspection, and repair of BMPs identified in the SWPPP						
BEST MANAGEMENT PRACTICES (BMPs)	INSPECTION FREQUENCY (all controls)		MAINTENANCE/REPAIR PROGRAM			
WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL BMPs						
WM-3 Stockpile Management		>	Repair or replace perimeter controls, covers, and/or required stabilization to maintain effectiveness.			

#### Weekly

#### Prior to forecast storm

# After a rain event that causes runoff from the construction site

At 24-hour intervals during extended rain events

APPENDIX H

STORM WATER POLLUTION PREVENTION TRAINING LOG

# **Storm Water Pollution Prevention Training Log**

APPENDIX I

# SUBCONTRACTOR NOTIFICATION LETTER (SAMPLE) AND SUBCONTRACTOR NOTIFICATION LOG

# Subcontractor Notification Letter (Sample) Subcontractor Notification Log

# **SWPPP** Notification

ABC Construction Inc, 123 Sunset Blvd., Suite 456 Hollywood, CA 90000

Dear Sir/Madam,

# SUBCONTRACTOR NOTIFICATION LOG

Project Name:

Contract Number:

SUBCONTRACTOR COMPANY NAME	CONTACT NAME	ADDRESS	PHONE NUMBER	PAGER/ FIELD PHONE	DATE NOTIFICATION LETTER SENT	TYPE OF WORK

APPENDIX J

PERMITS AND OTHER PLANS

<u>Acres</u>	Fee	18.5% Surchar	<u>ge Total Fee</u>	<u>Acres</u>	Fee	18.5% Surchar	ge Total Fee
0	\$200.00	\$37	\$237	51	\$1,220.00	\$226	\$1,446
1	\$220.00	\$41	\$261	52	\$1,240.00	\$229	\$1,469
2	\$240.00	\$44	\$284	53	\$1,260.00	\$233	\$1,493
3	\$260.00	\$48	\$308	54	\$1,280.00	\$237	\$1,517
4	\$280.00	\$52	\$332	55	\$1,300.00	\$241	\$1,541
5	\$300.00	\$56	\$356	56	\$1,320.00	\$244	\$1,564
6	\$320.00	\$59	\$379	57	\$1,340.00	\$248	\$1,588
7	\$340.00	\$63	\$403	58	\$1,360.00	\$252	\$1,612
8	\$360.00	\$67	\$427	59	\$1,380.00	\$255	\$1,635
9	\$380.00	\$70	\$450	60	\$1,400.00	\$259	\$1,659
10	\$400.00	\$74	\$474	61	\$1,420.00	\$263	\$1,683
11	\$420.00	\$78	\$498	62	\$1,440.00	\$266	\$1,706
12	\$440.00	\$81	\$521	63	\$1,460.00	\$270	\$1,730
13	\$460.00	\$85	\$545	64	\$1,480.00	\$274	\$1,754
14	\$480.00	\$89	\$569	65	\$1,500.00	\$278	\$1,778
15	\$500.00	\$93	\$593	66	\$1,520.00	\$281	\$1,801
16	\$520.00	\$96	\$616	67	\$1.540.00	\$285	\$1.825
17	\$540.00	\$100	\$640	68	\$1,560.00	\$289	\$1.849
18	\$560.00	\$104	\$664	69	\$1,580.00	\$292	\$1.872
19	\$580.00	\$107	\$687	70	\$1.600.00	\$296	\$1.896
20	\$600.00	\$111	\$711	71	\$1.620.00	\$300	\$1,920
21	\$620.00	\$115	\$735	72	\$1.640.00	\$303	\$1,943
22	\$640.00	\$118	\$758	73	\$1,660.00	\$307	\$1,967
23	\$660.00	\$122	\$782	74	\$1,680.00	\$311	\$1,991
24	\$680.00	\$126	\$806	75	\$1,700.00	\$315	\$2.015
25	\$700.00	\$130	\$830	76	\$1,720.00	\$318	\$2.038
26	\$720.00	\$133	\$853	77	\$1 740 00	\$322	\$2,062
27	\$740.00	\$137	\$877	78	\$1,760,00	\$326	\$2,086
28	\$760.00	\$141	\$901	79	\$1,780,00	\$329	\$2,000 \$2,109
29	\$780.00	\$144	\$924	80	\$1,800,00	\$333	\$2 133
30	\$800.00	\$148	\$948	81	\$1,820,00	\$337	\$2 157
31	\$820.00	\$152	\$972	82	\$1,840,00	\$340	\$2 180
32	\$840.00	\$155	\$995	83	\$1,860.00	\$344	\$2,204
33	\$860.00	\$159	\$1.019	84	\$1,880.00	\$348	\$2.228
34	\$880.00	\$163	\$1,043	85	\$1,900.00	\$352	\$2,252
35	\$900.00	\$167	\$1,067	86	\$1,920.00	\$355	\$2,275
36	\$920.00	\$170	\$1,090	87	\$1,940.00	\$359	\$2,299
37	\$940.00	\$174	\$1 114	88	\$1,960.00	\$363	\$2,323
38	\$960.00	\$178	\$1 138	89	\$1,980.00	\$366	\$2,346
39	\$980.00	\$181	\$1,161	90	\$2,000.00	\$370	\$2,370
40	\$1,000,00	\$185	\$1,185	91	\$2,020,00	\$374	\$2,394
41	\$1,020,00	\$189	\$1,209	92	\$2,040,00	\$377	\$2 417
42	\$1,040,00	\$192	\$1,232	93	\$2,060,00	\$381	\$2 441
43	\$1,060,00	\$196	\$1,256	94	\$2,080,00	\$385	\$2,465
44	\$1,080,00	\$200	\$1,280	95	\$2 100 00	\$389	\$2 489
45	\$1 100 00	\$204	\$1,304	96	\$2 120 00	\$392	\$2,512
46	\$1 120 00	\$207	\$1 327	97	\$2 140 00	\$396	\$2,536
47	\$1 140 00	\$211	\$1,351	98	\$2 160 00	\$400	\$2,560
48	\$1,160.00	\$215	\$1,375	99	\$2,180.00	\$403	\$2,583
49	\$1,180.00	\$218	\$1,398	>100	\$2,200.00	\$407	\$2,607
50	\$1,200.00	\$222	\$1,422	- 100	<i>~_,_</i> 00.00	φ.σ <i>ι</i>	<i>\\\\\\\\\\\\\</i>
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#### FACT SHEET FOR WATER QUALITY ORDER 99-08-DWQ

#### STATE WATER RESOURCES CONTROL BOARD (SWRCB) 901 P STREET, SACRAMENTO, CALIFORNIA 95814

#### NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY (GENERAL PERMIT)

#### BACKGROUND

In 1972, the Federal Water Pollution Control Act (also referred to as the Clean Water Act [CWA]) was amended to provide that the discharge of pollutants to waters of the United States from any point source is unlawful unless the discharge is in compliance with an NPDES permit. The 1987 amendments to the CWA added Section 402(p) which establishes a framework for regulating municipal and industrial storm water discharges under the NPDES Program. On November 16, 1990, the U.S. Environmental Protection Agency (USEPA) published final regulations that establish storm water permit application requirements for specified categories of industries. The regulations provide that discharges of storm water to waters of the United States from construction projects that encompass five (5) or more acres of soil disturbance are effectively prohibited unless the discharge is in compliance with an NPDES Permit. Regulations (Phase II Rule) that became final on December 8, 1999 expand the existing NPDES program to address storm water discharges from construction sites that disturb land equal to or greater than one (1) acre and less than five (5) acres (small construction activity). The regulations require that small construction activity, other than those regulated under an individual or Regional Water Quality Control Board General Permit, must be permitted no later than March 10, 2003.

While federal regulations allow two permitting options for storm water discharges (individual permits and General Permits), the SWRCB has elected to adopt only one statewide General Permit at this time that will apply to all storm water discharges associated with construction activity, except from those on Tribal Lands, in the Lake Tahoe Hydrologic Unit, and those performed by the California Department of Transportation (Caltrans). Construction on Tribal Lands is regulated by an USEPA permit, the Lahontan Regional Water Control Board adopted a separate NPDES permit for the Lake Tahoe Hydrologic Unit, and the SWRCB adopted a separate NPDES permit for Caltrans projects. This General Permit requires all dischargers where construction activity disturbs one acre or more, to:

1. Develop and implement a Storm Water Pollution Prevention Plan (SWPPP) which specifies Best Management Practices (BMPs) that will prevent all construction pollutants from contacting storm water and with the intent of keeping all products of erosion from moving off site into receiving waters. from the U.S. Army Corps of Engineers and a CWA Section 401 Water Quality Certification from the RWQCB/SWRCB. Storm water discharges from dredge spoil placement which occurs outside of Corps jurisdiction (upland sites) and are part of construction activity which disturbs one or more acres of land are covered by this general permit. Proponents of construction projects which disturb one or more acres of land within the jurisdictional boundaries of a CWA Section 404 permit should contact the local RWQCB to determine the applicability of this permit to the project.

#### **NOTIFICATION REQUIREMENTS**

It is the responsibility of the landowner to obtain coverage under this General Permit prior to commencement of construction activities. To obtain coverage, the landowner must file an NOI with a vicinity map and the appropriate fee with the SWRCB. In addition, coverage under this permit shall not occur until the applicant develops an adequate SWPPP for the project. Section A of the General Permit outlines the required contents of a SWPPP. For proposed construction activity on easements or on nearby property by agreement or permission, the entity responsible

The BMPs shall primarily emphasize source controls such as erosion control and pollution prevention methods. The discharger shall also install structural controls, as necessary, such as sediment control which will constitute BAT and BCT and will achieve compliance with water quality standards. The narrative effluent limitations constitute compliance with the requirements of the CWA.

Elimination or reduction of nonstorm water discharges is a major goal of this General Permit. Nonstorm water discharges include a wide variety of sources, including improper dumping, spills, or leakage from storage tanks or transfer areas. Nonstorm water discharges may contribute a significant pollutant load to receiving waters. Measures to control spills, leakage, and dumping and to prevent illicit connections during construction shall be addressed through structural as well as non-structural BMPs.

This General Permit prohibits the discharge of materials other than storm water and authorized nonstorm water discharges. It is recognized that certain nonstorm water discharges may be necessary for the completion of construction projects. Such discharges include, but are not limited to irrigation of vegetative erosion control measures, pipe flushing and testing, street cleaning, and dewatering. Such discharges are allowed by this General Permit provided they are not relied upon to clean up failed or inadequate construction or post-construction BMPs designed to keep materials onsite. These authorized nonstorm water discharges shall (1) be infeasible to eliminate, (2) comply with BMPs as described in the SWPPP, and (3) not cause or contribute to a violation of water quality standards. Additionally, these discharges may be required to be permitted by the local RWQCB (e.g., some RWQCBs have adopted General Permits for dewatering discharges). This General Permit is performance-based to the extent that it prohibits the discharge of storm water that causes or threatens to cause pollution, contamination, or nuisance; but it also allows the owner/developer to determine the most economical, effective, and possibly innovative BMPs.

The requirements of this General Permit are intended to be implemented on a year-round basis, not just during the part of the year when there is a high probability of a precipitation event which results in storm water runoff. The permit should be implemented at the appropriate level and in a proactive manner during all seasons while construction is ongoing.

Weather and storm predictions or weather information concerning the 10-year, 6-hour storm event and mean annual rainfall can be obtained by calling the Western Regional Climate Center

required to take immediate corrective action and to provide a report to the appropriate RWQCB within

## FACT SHEET FOR WATER QUALITY ORDER 99-08-DWQ

#### STATE WATER RESOURCES CONTROL BOARD (SWRCB) 1001 I STREET, SACRAMENTO, CALIFORNIA 95814

## NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY (GENERAL PERMIT): Sampling and Analysis

## Contents

## 1.0 Introduction

- 1.1 Organization
- 1.2 Background
  - 1.2.1 Water Quality Standards or Objectives
  - 1.2.2 Non-Visible Pollutant Sampling
  - 1.2.3 Sediment-Impaired Water Bodies
- 1.3 Purpose of Sampling and Analysis

# 2.0 Sampling Program for Pollutants Not Visually Detectable in Storm Water

- 2.1 What the Permit Says About Sampling
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3.1 What the Permit Says About Sampling

- 3.2 Deciding When to Sample
- 3.3 Deciding What Constituent(s) Require Sampling
- 3.4 Deciding Where to Sample
- 3.5 What are the Applicable Water Quality Standards
- 3.6 Deciding How to Sample
- 3.7 How to Use Your Data

# 1.0 Introduction

This document is an amendment to the Fact Sheet to the State Water Resources Control Board's (SWRCB) National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated With Construction Activity (CGP). This Permit was modified in 2001 by Resolution No. 2001-046, "*Modification of Water Quality Order 99-08-DWQ State Water Resources Control Board (SWRCB) National Pollutant Discharge Elimination System (NPDES) General Permit For Storm Water Discharges Associated With Construction Activity (CGP)"*. The modifications to the CGP require that a sampling and analysis strategy and sampling schedule for certain discharges from construction activity be developed and kept with the project's Storm Water Pollution Prevention Plan (SWPPP). The sampling and analysis requirements are found in Section B, paragraphs 7 and 8, of the CGP. Paragraph 7 concerns monitoring for sedimentation/siltation or turbidity and Paragraph 8 concerns monitoring for pollutants that are not visually detectable in storm water. Wh

implementation of Best Management Practices (BMP) programs, and visual monitoring that are not addressed in this document.

# 1.1 Organization

Section 1: general information and background on the sampling and requirements.

Section 2: non-visible pollutant sampling and analysis.

Section 3: sediment, silt and turbidity sampling and analysis.

Section 4: sampling and analysis procedures.

Section 5: definitions.

Section 6: contact list and additional sources of information.

Section 7: general explanation of and rationale for the sampling and analysis requirements; citations to other documents that form the basis for the SWRCB's conclusions.

# 1.2 Background

The SWRCB adopted the CGP on August 19, 1999. The CGP is an NPDES permit that implements section 402(p)(2)(B) of the federal Clean Water Act. The San Francisco BayKeeper, Santa Monica BayKeeper, San Diego BayKeeper, and Orange County CoastKeeper filed a petition for writ of mandate challenging numerous aspects of the CGP in the Superior Court, County of Sacramento.

On September 15, 2000, the Court issued a judgment and writ of mandate that upheld most provisions of the CGP, but directed the SWRCB to modify the provisions of the CGP to require permittees to implement specific sampling and analytical procedures to determine whether BMPs implemented on a construction site are:

(1) preventing further impairment by sediment in storm waters discharged directly into waters listed as impaired (Clean Water Act Section 303(d) List [303(d) List]) for sediment, silt, or turbidity; and

(2) preventing other pollutants that are known or should be known by permittees to occur on construction sites and that can not be visually observed or detected in storm water discharges, from causing or contributing to exceedances of water quality objectives.

The monitoring, sampling and analysis provisions in the CGP were modified pursuant to the court order and issued as Resolution No. 2001-046, adopted by the SWRCB on April 26, 2001.

On December 27, 2001, the Court issued an Order Enforcing Writ of Mandate. In that order, the Court acknowledged that the permit had been modified, but required further actions by the SWRCB. Issuance of this fact sheet amendment is intended to respond to the Court's further instructions. In general, the Court expressed concern that certain aspects of the modifications might be ambiguous and might result in misinterpretation by dischargers. This amendment is

intended to avoid such potential ambiguities and misinterpretations and to help explain the requirements and provide suggestions for compliance.

## 1.2.1 Water Quality Standards or Objectives

The Receiving Water Limitations in the CGP require the SWPPP be designed and implemented so that storm water discharges and authorized non-storm water discharges do not cause or contribute to an exceedance of any applicable water quality standard. (CGP, Receiving Water Limitation B.2.) The modifications to the monitoring program require sampling and analysis procedures to help determine whether BMPs installed and maintained in accordance with the SWPPP are preventing pollutants in discharges from the construction site from causing or contributing to exceedance of water quality standards. In making these determinations, it is necessary to understand what are the applicable water quality standards.

Water quality standards consist of the designation of beneficial uses of surface waters and the adoption of ambient criteria necessary to protect those uses. (40 CFR §131.3(i)) When adopted by the SWRCB or a RWQCB, the criteria are termed "water quality objectives." (Water Code §13241; the terms are used interchangeably here.) If storm water runoff from construction sites contains pollutants, there is a risk that those pollutants could enter surface waters and cause or contribute to exceedance of water quality standards. For that reason, dischargers should be aware of the applicable water quality standards in their receiving waters. (The best method to ensure compliance with receiving water limitations is to implement BMPs that prevent pollutants from contact with storm water or from leaving the construction site in runoff).

In California, water quality standards are published in the Basin Plans adopted by each RWQCB, the California Toxics Rule (CTR), the National Toxics Rule (NTR), and the Ocean Plan. One way to determine the applicable standards for the receiving water for your runoff is to contact staff from the appropriate RWQCB. (See the contact list in Section 6 of this guidance.)

The SWRCB intends in the future to augment its internet site to further facilitate access to water quality standards. In the interim, dischargers can determine the applicable water quality standards by contacting RWQCB staff or from one of the following sources. The actual plans that contain the water quality standards can be viewed at the site of the appropriate RWQCB for Basin Plans (http://www.waterboards.ca.gov/regions.html), the SWRCB site for statewide plans (http://www.waterboards.ca.gov/plnspols/index.html), or the US Environmental Protection Agency (USEPA) regulations for the NTR and CTR (40 CFR Title 131). Basin Plans and statewide plans are also available by mail from the appropriate RWQCB or the SWRCB. The USEPA regulations are available at <a href="http://www.waterboards.ca.gov/">http://www.waterboards.ca.gov/</a>. Additional information concerning Water Quality Standards can be accessed through <a href="http://www.waterboards.ca.gov/stormwtr/gen\_const.html">http://www.waterboards.ca.gov/</a>.

## 1.2.2 Non-Visible Pollutant Sampling

The monitoring requirements in the CGP require sampling and analysis for pollutants that are not visually detectable in storm water discharges, which are or should be known to occur on the construction site, and which could cause or contribute to an exceedance of water quality objectives. As is explained below, the situations where non-visible pollutants may occur in runoff from a construction site are limited. Where such non-visible pollutants are known or should be known to be present and have the potential to contact runoff and to contribute to an exceedence of a water quality objective, sampling and analysis is required.

A variety of materials are used in construction or are present on construction sites. Examples of

program. The receiving water is protected when appropriate BMPs are implemented, inspected and maintained. The role of sampling is to support the visual inspection of the site when necessary.

## 1.2.3 Sediment-Impaired Water Bodies

Certain lakes, streams, rivers, creeks and other bodies of water in California have been determined by the SWRCB to be impaired by one or more pollutants. (This listing is required by Clean Water Act section 303(d).) One of the pollutants that can trigger a listing is sediment, termed variously as sedimentation, siltation, sediment, or turbidity. The water bodies listed for sediment in California are included in Attachment 3 to the CGP. Additional discharges of sediment to a sediment-impaired water body-could contribute to the exceedance of a water quality standard for that pollutant. Following listing of impaired waters, RWQCBs adopt total maximum daily loads (TMDLs) that may include waste load allocations for the impairing pollutant. Effluent limitations in NPDES permits must be consistent with the assumptions and requirements of waste load allocations (40 CFR section 122.44(d)(1)(vii)(B)), and adoption of TMDLs could result in specific requirements in the CGP or an individual or watershed-wide construction permit. Pending completion of TMDLs for sediment-impaired waters, it is necessary to ensure that sediment discharges from construction sites do not cause or contribute to exceedances of water quality. To that end, the modifications require sampling and analysis of discharges from construction activity that directly enters a water body listed in Attachment 3 to the CGP as impaired for sediment. This requirement is generally only applicable to a handful of construction projects each year.

To obtain the latest list of 303(d) water bodies, visit the SWRCB's Web site at <u>http://www.waterboards.ca.gov/</u>.

# 1.3 Purpose of Sampling and Analysis

The primary method of determining compliance with the CGP is visual inspections. The permit requires regular inspections as well as pre-storm and post-storm inspections to determine if there are areas where storm water can be or has been exposed to pollutants. It is possible to see if there is erosion and movement of soil, or if construction materials, chemicals and waste are exposed. This is the best way to determine if the site is in compliance. In some cases, verification of this compliance through sampling and analysis is api**01364.6366 bdee** permise of Sampianc7. and

Monitoring for sediment in storm water discharged directly to water bodies listed as impaired for sediment/siltation, sediment, or turbidity on the SWRCB's 303(d) list of water bodies.

The sampling and analysis results are not conclusive proof of compliance or non compliance with the permit. Specifically, Receiving Water Limitations in the CGP provide that the SWPPP must be designed and implemented so that storm water discharges shall not cause or contribute to exceedance of any applicable water quality standards. These provisions also require implementation of corrective measures, and revision of the SWPPP and monitoring requirements if storm water discharges do cause or contribute to an exceedance of an applicable water quality standard. USEPA has pointed out the difficulties and limitations of using sampling in storm water permits as a measure of compliance. (57 Fed. Reg. 11394, 11402) While sampling and analysis, as required by the CGP, may be a useful tool in pointing to areas of concern, it is of limited use in the storm water context and must be used as a diagnostic tool rather than as conclusive evidence of compliance or







#### Determine If You Must Perform Sampling and Analysis (S&A) for Pre-Existing Non-Visible Pollutants







# 2.0 Sampling Program for Pollutants Not Visually Detectable in Storm Water

The CGP requires sampling and analysis for pollutants not visually detectable in runoff, but which could cause or contribute to an exceedance of water quality objectives in the receiving water. Sample for a constituent if there is reason to expect that it may be in the discharge, regardless of whether or not it is causing or contributing to an exceedence of a water quality objective. First attempt to eliminate the exposure of construction materials to prevent pollution of storm water and thus to limit the requirement for sampling and analysis. Many construction materials, including soil amendments, fertilizers, pesticides, and even things like fencing and wood products, are intended for use outdoors. For such materials, minimize pollutant discharge through implementation of appropriate BMPs. If exposure to these products can contribute pollutants to the runoff at levels that could cause or contribute to exceedance of a water quality objective, then sampling is still required, even if they are used correctly.

# 2.1 What the Permit Says about Sampling

The CGP requires that a sampling and analysis program be developed and conducted for pollutants which:

Are not visually detectable in storm water discharges,

Are known or should be known to occur on the construction site, and

Could cause or contribute to an exceedance of water quality objectives in the receiving water.

Include all pollutants identified in this way in this sampling and analysis strategy and identify them in the SWPPP (as required by Sections A. 5. b. and A. 5. c. of the CGP). The CGP states that the SWPPP must identify a strategy for conducting the sampling and analysis, including the frequency and location(s) at which sampling will be conducted.

Sample for pollutants that would not be visible in runoff if:

Visual inspections (required before, during and after storm events) indicate that there has been a breach, malfunction, leakage or spill from a BMP that could result in the discharge of pollutants in storm water and the pollutants would not be visually detectable; or

Storm water comes into contact with soil amendments, other exposed materials, or other on site sources of pollution.

# 2.2 Deciding When to Sample

Conduct proper inspections throughout the duration of the project to make sure that appropriately selected BMPs have been implemented, are being maintained, and are effective. Sample if non-visible pollutants that are known or should be known to occur on the construction site "could cause or contribute to an exceedance of water quality objectives in the receiving water." As discussed in this document, there are numerous receiving water standards found in different documents, including narrative water quality objectives in basin plans. For that reason, and because of the difficulties associated with linking a discharge from a construction site to exceedance of water quality standards in the receiving waters, conduct sampling and analysis whenever the above conditions are met.

If a determination is made that sampling is needed, collect storm water runoff samples regardless of the time of year, status of the construction site, or day of the week. Collect samples during the first two hours of runoff (during daylight hours). Storm water inspections and sample collections are required even during non-working days (including weekends and holidays).

# 2.3 Deciding What Constituents to Sample for: What are Pollutants Which are "Known or Should be Known " to Occur on a Construction Site?

Pollutants can be considered to be known or should be known to occur on the construction site if they are currently in use or are present as a result of previous land uses. This includes materials that:

are being used in the construction activities

are stored on the construction site

were spilled during construction operations and not cleaned up

were stored (or used) in a manner that presented the potential for a release of the materials during past land use activities

were spilled during previous land use activities and not cleaned up

were applied to the soil as part of past land use activities.

Construction material inventories and the project SWPPP should provide adequate information on materials currently in use or proposed for use on the construction site.

Develop a list of potential pollutants based on a review of potential sources identified in your SWPPP (required by CGP sections A.5.b. and A.5.c.), which will include construction related materials, soil amendments, soil treatments, and historic contamination. Review existing environmental and real estate documentation to determine the potential for pollutants to be present on the construction site as a result of past land use activities. Good sources of information on previously existing pollution and past land uses include Environmental Assessments, Initial Studies, Environmental Impact Reports or Environmental Impact Statements prepared under the requirements of the National Environmental Policy Act or the California Environmental Quality Act, and Phase 1 Assessments prepared for property transfers. In some instances, the results of soil chemical analyses may be available and can provide additional information on potential contamination.

Identify from this list those pollutants that would not be visible in storm water discharges. These are the constituents that you will likely have to sample for in runoff if the materials are exposed to storm water. Consult with your analytical laboratory or water quality chemist to determine if there are field tests or indicator parameters that can be used.

# 2.4 Deciding Where to Sample

Sample at all discharge locations that drain the areas from which the pollutants may have entered the runoff and at locations that have not come in contact with the pollutants (reference sampling). This allows a comparison of reference samples with the sample(s) collected from storm water suspected of containing construction-related pollutants. The collection of this sample is important in the interpretation of the potentially contaminated sample because it provides information on the characteristics of the storm water without the exposure. For example, if storm water were to come in contact with hydrated lime products, the indicator parameter for pollution would be an elevated pH. The storm water could also be polluted with other materials or minerals, but the elevated pH will provide information necessary for the discharger to make further determinations as to the cause. In this case, a sample of storm water from the same storm event that did *not* come in contact with the hydrated lime would provide an understanding of what the pH of the uncontaminated storm water was in relation to the polluted storm water.

A more accurate background sample would have also contacted the soil and vegetation of the area, further isolating the lime as the source of the elevated pH. This gives the discharger the necessary information to take immediate steps to detain the polluted storm water or to

minimize or eliminate the exposure. Describe the sampling procedure, location and rationale for obtaining the reference sample of storm water in the SWPPP.

Identify sampling locations that provide information on both the runoff quality that is affected by material storage, historic contamination or other exposed potential pollutants, and the background runoff quality (i.e., reference sample). Material storage may be confined to a small area of the project while historic contamination or exposed materials, such as soil amendments,
undetected sources of pollutants? It may turn out that additional BMPs may be necessary on this portion of the site or that the discharge must be managed or contained.

If the "reference sample" is taken from off site and it turns out to be carrying a high level of pollutants take a sample on site to determine if the same pollutants are on site and must be managed.

# 2.5 Types of Test Methods?

The CGP requires sampling of non-visible pollutants that "could cause or contribute to an exceedance of water quality objectives in the receiving waters". Unlike sediment, for which there are a limited number of applicable water quality objectives, the applicable water quality standards for "non-visible" pollutants will depend on the material and its chemical makeup. This guidance document contains information on what pollutants may occur on construction sites and which water quality standards may be associated with those pollutants. The best assurance of complying with the receiving water limitations is to prevent or reduce runoff of all polluting substances from construction sites through implementation of effective BMPs.

The sampling and analysis language recognizes that sampling and laboratory analysis, in and of itself, does not protect water quality. Rather, field identification and detection of the source of pollution, followed by timely action is ultimately what will protect the receiving waters. Because of the short-term nature of construction, and the use of different materials during the construction period, laboratory sampling will not generally provide the information needed in an adequate time frame. It is preferable to use field-sampling techniques that can provide immediate information and allow a timely solution.

For this reason, the sampling and analysis language for non-visible pollutants contemplates field sampling using indicator parameters. The correct indicator parameter can provide a quick and immediate indication of contamination of storm water to known materials stored or used on a construction site. Field test kits and devices have been commercially available for decades and widely used for water quality applications. As an example, test strips to evaluate for ammonia, phosphate, chlorine, copper, iron, nitrate, nitrite, and low and high range pH are readily commercially available. Manufacturers and distributors provide technical support as well as training to their customers.

# 2.6 Deciding How Often to Sample

Determine the frequency of sampling for non-visible pollutants based on the exposure of pollutant sources. Sample runoff when BMPs do not effectively prevent or reduce exposure of a non-visible pollutant source to storm water. Sample runoff when inspections identify a BMP failure, which exposed pollutants to storm water. If spills are thoroughly cleaned up and the contaminated material is isolated, eliminating exposure to storm water runoff, sampling is not required. For instances when the potential for previously existing pollution is identified, perform laboratory screening analysis during the first one or two storm events of the season to determine if the potential pollutant is running off the construction site. If construction activity will disturb or mobilize such potential pollutant sources, take samples to determine if the pollutants are being mobilized by the construction activity.

Where construction materials and compounds are stored or applied such that they may come in contact with storm water runoff.

For construction projects that utilize soil amendments or soil treatments that can come in contact with storm water runoff. (If you have independent test data available that demonstrates that the soil amendments cannot result in concentration levels in storm water discharges that will cause or contribute to exceedance of applicable water quality standards, sampling and analysis may not be required. Contact the appropriate RWQCB to determine acceptable concentration(s) of the material(s) in question.)

When a leak or spill occurs that is not fully contained and cleaned prior to a storm event.

When a leak or spill occurs, during a storm event, and it cannot immediately be isolated and/or cleaned-up, and the possibility of an off-site discharge exists.

When, during regular inspections, it is discovered that cover and containment BMPs have been compromised and storm water comes in contact with materials resulting in runoff discharging into a storm drain system or water body.

When material storage BMPs have been compromised, breached, or have failed.

# 2.10 Do I Sample Storm Water Flows Diverted Around My Project for Non-Visible Pollutants?

Dischargers may be faced with a situation where the disturbed area of their construction site is adjacent to a large area that historically has drained across their site. This happens most frequently in foothill situations where schools or commercial development is undertaken alongside an existing roadway, adjacent to a large undisturbed area. In such a situation, calculate the anticipated volume of the flow in order to size a diversion structure to divert the (usually) clean storm water around or though the site. (CGP section A.5.b.1.) It is unwise to allow a large volume of water to wash across a disturbed area. Not only would the run-on cause erosion and remove the soil from the project, but also the discharge would be turbid and violate the Permit requirements. To the extent that the discharger does allow run-on of polluted water to flow across the site, and contaminants in the run-on are not visible, the sampling and analysis requirements apply. Additionally, the CGP (section A. 5. b.) requires that the RWQCB be contacted in the above situation.

The requirement to divert run-on does not authorize the creation of a new point source of pollutants, however. If the run-on contains pollutants from pre-existing pollution in the watershed, the discharger is responsible to determine this before planning the diversion. Should a discharger divert contaminated water around the site and allow it to enter surface waters, this permit does not authorize such discharge and the discharger should be aware that a separate NPDES permit may be required. (See, *Committee to Save Mokelumne River v. East Bay Municipal Utility District* (9th Cir. 1993) 13 F.3d 305, 309.) If you are planning on diverting flows from entering your site and you suspect that they contain pollutants, contact your local RWQCB for advice.

# 2.11 Deciding How to Sample

Only personnel trained in water quality sampling procedures should collect storm water samples.

Determine sampling methods and locations in advance of the runoff event in order to provide sufficient time to gather the supplies and equipment necessary to sample and plan for safe access by the sampling personnel.

General guidance for sampling procedures is provided in Section 4 of this document.

# 2.12 How to Use Your Sampling Data

#### 2.12.1 How to Analyze Your Data

Initiate corrective action where non-visible pollutant sample test results indicate presence of pollutants in the construction site storm water runoff. This can be determined by comparing your construction site's storm water test results with the background sample. BMPs must be used to control offsite discharge of any pollutant (e.g., pesticides) that is not naturally occurring, regardless of background levels of that pollutant.

Where your site's storm water test concentrations for naturally occurring substances are considerably above (or, in the case of pH, considerably above or below) the background concentrations, or where other pollutants are found, evaluate the BMPs to determine the cause. Initiate corrective action by repairing, replacing or suplementing the BMPs on your site. Conduct additional sampling during the next runoff event after corrective actions are implemented to demonstrate and document that the problems have been corrected.

This permit does not contain benchmarks. However, method of data analysis for naturally occurring substances employs a similar concept: determining whether the results are "considerably above" the background levels. The term "considerably above" is based upon guidance contained in USEPA's Multi-Sector General Permit, which does use benchmarks. These benchmarks are not numeric storm water effluent limits, are not related or necessarily protective of any specific receiving water, and exceedances of these benchmarks are not automatically considered permit violations. When sample results exceed one or more of the benchmarks, the USEPA recommends dischargers reevaluate the effectiveness of their BMPs and develop, when appropriate, additional BMPs. The use of such benchmark values is a scientifically valid indicator of the presence of pollutants associated with construction activity in the runoff. Since the non-visual pollutants that may occur on construction sites may be similar in type and cause to those on industrial sites, it is valid to use USEPA's approach here. Where a parameter in a sample is being evaluated, and a benchmark is available, the benchmark may be used for comparison purposes. (USEPA does not require any sampling and analysis in its construction permits, and therefore does not have benchmarks for construction activities.)

#### 2.12.2 Coordinating Visual Observations with Sampling Results

If visual inspection of storm water BMPs used to contain or otherwise manage (i.e., filter or treat) non-visible pollutants at a construction site indicates that a BMP has failed or been compromised, then field monitoring of any impacted storm water from the site for non-visible pollutants is required. Of course, immediately repair or replace any BMP that has been visually inspected and found breached or compromised. If feasible, contain the polluted discharge and prevent it from being discharged off site. After taking steps to correct the failed BMP, conduct field monitoring in the vicinity of the BMP to verify that pollutants are no longer in the storm water.

The intent of conducting field monitoring for non-visible pollutants is to obtain an immediate indication if storm water that is discharging from a site has been polluted. An immediate indication of a polluted discharge requires an immediate response in the form of backtracking from the point of discharge to find the source and take appropriate measures to prevent a recurrence of a polluted discharge.

## 2.12.3 What To Do If The Data Show a Potential Problem

If your data shows a problem, follow the reporting requirements as shown in the CGP Receiving Water Limitations. In addition, take the following steps as soon as possible:

Identify the source

Repair or replace any BMP that has failed

Maintain any BMP that is not functioning properly due to lack of maintenance

Evaluate whether additional or alternative BMPs should be implemented

If sampling and analysis during subsequent storm events shows that there is still a problem, then repeat the steps above until the analytical results of "upstream" and "downstream" samples are relatively comparable.

Where your site's storm water results show test concentrations considerably above (or below) background concentrations, evaluate the BMPs to determine what is causing the difference. Possible solutions may include repairing the existing BMPs, evaluating alternative BMPs that could be implemented, and/or implementing additional BMPs (cover and/or containment) which further limit or eliminate contact between storm water and non-visible pollutant sources at your site. Where contact cannot be reduced or eliminated, retain storm water that has come in contact with the non-visible pollutant source on-site and do not allow it to discharge to the storm drainage system or to a water body. Contact your RWQCB to determine whether it is permissible to discharge the retained storm water. Conduct additional sampling during the next runoff event after corrective actions are implem

appropriate RWQCB. Keep field training logs, Chain-Of-Custody (COC) forms and other documentation relating to sampling and analysis with the project's SWPPP. Records of all inspections, compliance certifications, and noncompliance reporting must be retained for a period of at least three years from the date generated or after project completion.

# 3.0 Sampling Program for Sedimentation/Siltation

# 3.1 What the Permit Says About Sampling

Soils, sediments, and fine (suspended) particles that result from grading and earthwork activities and soil erosion from disturbed, un-stabilized land areas are potentially significant sources of storm water pollution at construction sites. The CGP requires construction sites to develop, implement and maintain an effective combination of erosion control and sediment control BMPs to prevent soils, sediments, debris and solids fine enough to remain suspended from leaving the construction site and moving into receiving waters at levels above preconstruction levels.

The CGP requires that a visual survey of the site be done before, during and after a storm. If the visual survey indicates either the potential for a discharge of sediment laden water or that sediment is being discharged, steps must be taken to repair or augment the BMPs to prevent the discharge as soon as possible. Discharge of sediment above predevelopment levels is not allowed.

The CGP requires sampling and analysis for sediment/silt or turbidity when the construction site runoff discharges directly into a water body that is impaired by sedimentation/siltation, sediment, or turbidity (that is, the water body is on the 303(d) list for one or more of these pollutants.) A key point is that the discharge of storm water runoff must directly enter the impaired water body or impaired segment of a water body. Construction site runoff that flows through a tributary or storm drainage system and is commingled with other sources of flow, is not considered a direct discharge even if the flow eventually enters an impaired water body. (See the definition of direct discharge in Section 5 for further details.)

The CGP requires that the SWPPP identify a strategy for conducting the sampling and analysis, including the frequency at which sampling will be conducted. The SWPPP must also describe:

# Table 3-1 LABORATORY REQUIREMENTS<sup>1</sup> FOR STORM WATER MONITORING OF SEDIMENT, SILTATION AND/OR TURBIDITY

Parameters	Analytical Method	Target <b>Method</b> <b>Detection</b> Limit	Minimum Sample Volume ²	Container	Preservative	Holding Time
Total Suspended Solids (TSS) <sup>2</sup>	EPA 160.2	1 mg/L	100 mL	500 mL polypropylene	Store in ice or refrigerator at 4°C (39.2°F)	7 days
Setteable Solids (SS)	EPA 160.5	0.1 mL/L/hour	1 liter	1 liter mL polypropylene	Store in ice or refrigerator at 4°C (39.2°F)	48 hours
Suspended Sediment Concentration (SSC) <sup>3</sup>	ASTM D 3977-97	Contact Laboratory	200 mL	Contact Laboratory	Store in ice or refrigerator at 4°C (39.2°F)	7 days
Turbidity	EPA 180.1	1 NTU	100 mL	500 mL polypropylene or glass	Store in ice or refrigerator at 4°C (39.2°F), Dark	48 hours

<sup>1</sup> The data in this table is a summary of recommended laboratory requirements. For specific USEPA regulatory requirements, consult the sampling and analysis requirements found in 40 CFR 136.

<sup>2</sup> Minimum sample volume recommended. Specific volume requirements will vary by laboratory; please check with your laboratory when setting up bottle orders.

<sup>3</sup> Use either TSS or SSC, or both, for suspended solids analysis. Upstream and downstream samples should be analyzed by the same method.

# 3.4 Deciding Where to Sample

In-stream sampling is required, both upstream and downstream of the discharge. The CGP does not require that the effluent be sampled. However, effluent sampling is recommended. Take both upstream and downstream samples within the actual flow of the waterbody. Collect samples at the following locations:

Sample the 303(d) listed water body upstream of the construction site discharge in a location representative of the sediment load present in the water body before it is impacted by discharge from the construction site.

Sample the 303(d) listed water body at a point immediately downstream of the last point of discharge from the construction site.

Additionally, for the purpose of interpreting the results of the samples collected from the 303(d) listed water body, collect and analyze samples of the actual discharge from the construction site (effluent sample) prior to it being commingled in the receiving water. This sample can be used to verify whether the source of the sediment in-stream is emanating from the construction discharge. Remember that samples should only be collected from safely accessible locations.

In general, sample away from the bank in or near the main current. Avoid collecting samples directly from ponded, sluggish, or stagnant water. Be careful when collecting water upstream or downstream of confluences or point sources to minimize problems caused by backwater effects or poorly mixed flows. Note that samples collected directly downstream from a bridge can be contaminated from the bridge structure or runoff from the road surface.

Choose the upstream location in water that appears to represent the nature of the flow in the stream.

Downstream samples should represent the receiving water mixed with flow from the construction site. For instance if the flow from the site can be observed by either a color or a flow difference, collect the downstream sample from within the affected water.

# 3.5 What Are the Applicable Water Quality Standards

The CGP requires sampling of runoff from construction sites that discharge directly to 303(d) listed water bodies to demonstrate that discharges do not contribute to the impairment of the receiving water. Each of the listed waters is subject to water quality objectives in a RWQCB Basin Plan for sediments and solids or for turbidity. The applicable water quality objectives for each RWQCB are listed in Appendix A to this guidance document.

# 3.6 Deciding How to Sample

Only personnel trained in water quality sampling procedures should collect storm water samples.

Determine sampling methods and locations in advance of the runoff event in order to provide sufficient time to gather the supplies and equipment necessary to sample and plan for safe access by the sampling crew(s) and document them in the SWPPP.

General guidance for sampling procedures is provided in Section 4 of this document.

# 3.7 How to Use Your Data

#### 3.7.1 How to Analyze Your Data

While it is desirable for sediment concentrations from a site to be as low as possible, the amount that a site can contribute is determined by a TMDL analysis and in the absence of an implemented TMDL, the instream concentrations below the point of discharge cannot be significantly different from the upstream concentrations.

In order to allow for meaningful analysis of the data, it is necessary to establish a statistical framework for it. When sampling a body of water, it is unlikely that two samples, even taken next to each other, will have the same concentration of a pollutant. This is referred to as variability. Concentrations will vary from sample to sample, but the difference between them may not be meaningful. In order to obtain a statistically meaningful set of samples, it is necessary to determine how many samples will be necessary, the greater the variability between samples, the larger the number of samples (N) will be required. This may require that the water body be sampled before the start of construction to determine the variability. Collect sufficient numbers of samples (N) during each storm event monitored to represent the prevailing conditions of both locations (upstream and downstream). Depending upon which statistical test is used, and the variability between the samples, N will usually be more than a single sample. When comparing samples from a single storm event, a range of readings will be obtained. Almost all samples from that source will fall into that range. The likely range of readings can be expressed through the use of a statistical confidence interval for the parameter being sampled. Confidence intervals are expressed as probabilities, such as 95% confidence or 97% confidence. The size of a confidence interval will be determined by the variability in the samples from the single source and the number of samples collected.

Once the sampling is completed and results returned from the laboratory, compare the concentration of the appropriate parameter (see Section 2.3 Deciding What Constituents to Sample for)) derived from the upstream samples to the concentration of the same parameter from the downstream samples (from the same storm event). It is expected that every sample will be different. (This would be true even if there were not construction activities, in light of the variability of stream conditions, explained above.) Rather, compare the samples to see if there is a statistically significant difference between the central tendency (arithmetic mean, geometric mean, median, etc.) of the upstream samples and the downstream samples.

Estimate the magnitude of the difference in the central tendency between the upstream and downstream concentration values. The null hypothesis to be tested is: The difference between the downstream central tendency and the upstream central tendency is less than or equal to zero. The minimum acceptable confidence interval shall be 90%. Using the data, calculate a one-sided lower confidence limit (LCL) on the difference in central tendencies. If the numeric value of zero

is contained within the confidence interval (LCL), then you cannot reject the null hypothesis, and you would conclude that no impairment has occurred. If, however, the data indicates that the downstream central tendencies are significantly higher than the upstream, you cannot accept the null hypothesis. In this case there is the presumption that the discharges are contributing to the existing impairment.

If you did take samples of the effluent, and those samples are not consistent with the conclusion that the discharge is contributing to the existing impairment, take steps to determine what other source(s) is causing the increase in the downstream sampling. If you can show that there is a different source than your discharge, you should contact the appropriate RWQCB.

The hypothesis, sampling methodology, confidence interval, and statistical tests and assumptions must be defensible to the RWQCB. Since construction sites that discharge *directly* into impaired water bodies are not common in California, the local RWQCB will likely ask to review the SWPPP and the sampling and analysis strategy prior to construction activity.

#### 3.7.2 Sources of sediment, silt and turbidity in a construction discharge

Conditions or areas on a site that may be causing sediment, silt, and/or turbidity in your storm water runoff may include:

Exposed soil areas with inadequate erosion control measures

Active grading areas

Poorly stabilized slopes

Lack of perimeter sediment controls

Areas of concentrated flow on unprotected soils

Poorly maintained erosion and sediment control measures

Unprotected soil stockpiles

Failure of an erosion or sediment control measure

**Unprotected Clayey soils** 

# 3.7.3 What To Do If Your Data Shows a Statistically Significant Increase Downstream of the Discharge

The CGP requires that BMPs be implemented on the construction site to prevent a net increase of sediment load in storm water discharges relative to pre-construction levels. Although the upstream reference (background) sample may not be representative of pre-construction levels at your site, it will provide a basis for comparison with the sample taken downstream of the construction site.

collection through the analysis process. Additional documentation to track other information of interest, e.g. field conditions, or required field measurements may also be used. This type of information is recorded on a field tracking form.

Collect all samples with care to ensure that the sample is representative of the runoff being tested, use the correct type of container, preserve samples in accordance with the test method's specifications, and store at the appropriate temperature until delivered to an analytical laboratory. Some types of samples have very short holding times and must be analyzed before this holding time is exceeded. Sample handling requirements and documentation form the basis of your sampling quality assurance program.

Before starting any sampling program, contact the analytical laboratory that you plan to use to analyze your samples. Make sure to select a laboratory that will provide you with the support that you need, such as, properly cleaned and preserved sampling containers and COC forms. Some laboratories can assist in identifying courier services available to transport samples to the laboratory, or may be able to provide sampling service for you. Work out all of these details in advance of sample collection. Consult the analytical laboratory on what additional samples will be required for quality assurance and quality control purposes.

Both field and/or analytical analysis methods can be used to meet the Permit requirements. Field techniques have the advantage of providing immediate results, however, there are only a limited number of analyses that can be done in the field. Analytical laboratories can analyze for a wide range of parameters, but the data may take several weeks or longer to get back.

Some constituents (e.g. pH) can be evaluated in the field with special equipment. Field samples must be collected and analyzed according to the specifications of the manufacturer of the sampling devices employed. Field equipment must be used by trained staff and the equipment must be calibrated and maintained according to the manufacturer's specifications.

Laboratory analyses should be conducted by a laboratory that is currently accredited by the California Department of Health Services Environmental Laboratory Accreditation Program (ELAP). Analyses must be conducted in accordance with 40 CFR Part 136.

You may refer to the California Department of Transportation (Caltrans) *Guidance Manual: Stormwater Monitoring Protocols (Second Edition), July 2000* to assist you in developing a sampling and analysis program. This document may be downloaded from the Caltrans Website, at

#### http://www.dot.ca.gov/hq/construc/stormwater/SamplingGuidanceManual.pdf

Figure 4-1 is an outline for a typical comprehensive storm water sampling and analysis plan. As some laboratories may have specific requirements for sample collection and handling, specific information or requirements on your samples should be checked with your laboratory.

- 1 PROJECT OVERVIEW/DESCRIPTION
  - 1.1 Description of why the project is being conducted
  - 1.2 Description of who is conducting the project
  - 1.3 General scope of monitoring activities
  - 1.4 Project organization/roles and responsibilities
- 2 MONITORING SITES
  - 2.1 Site location (map)
  - 2.2 Written driving directions

Figure 4-1 Outline for a Typical Storm Water Sampling and Analysis Plan

# 5.0 **Definitions**

#### Chain of Custody (COC) Form

The COC Form is a form used to track sample handling as samples progress from sample collection to the analytical laboratory. The COC is then used to track the resulting analytical data from the laboratory to the client. COC forms can be obtained from an analytical laboratory upon request.

#### **Direct Discharge**

Direct discharge means storm water runoff that flows from a construction site directly into a 303(d) water body listed for sedimentation, siltation, or turbidity. Storm water runoff from the construction site is considered a direct discharge to a 303(d) listed water body unless it first flows through:

- 1) A municipal separate storm sewer system (MS4) that has been formally accepted by and is under control and operation of a municipal entity;
- 2) A separate storm water conveyance system where there is co-mingling of site storm water with off-site sources; or
- 3) A tributary or segment of a water body that is not listed on the 303d list before reaching the 303d listed water body or segment.

#### Discharger

The discharger is the person or entity subject to the CGP.

#### **Electrical Conductivity (EC)**

EC is a measure of the ability of water to carry an electric current. This ability depends on the presence of ions, their concentration, valence, mobility and temperature. EC measurements can give an estimate of the variations in the dissolved mineral content of storm water in relation to receiving waters.

#### **Field Measurements**

Field measurements refers to water quality testing performed in the field with portable field-testing kits or meters.

#### Field Tracking Form (FTF)

The FTF is a form that serves as a guide to sampling crews to obtain sampling information and to prescribe and document sample collection information in the field. The FTF usually contains sample identifiers, sampling locations, requested analyses, Quality Control (QC) sample identifiers, special instructions, and field notes.

#### **Holding Time**

Holding time is specified by the analytical method and is the elapsed time between the time the sample is collected and the time the analysis must be initiated.

The pH is universally used to express the intensity of the acid or alkaline condition of a water sample. The pH of natural waters tends to range between 6 and 9, with neutral being 7. Extremes of pH can have deleterious effects on aquatic systems.

#### **Reference Sample**

A sample taken from an undisturbed part of the construction site or from an undisturbed site immediately upstream from a construction site.

The suspended sediment concentration (SSC) test measures the concentration of suspended solid material in a water sample by measuring the dry weight of all of the solid material from a known volume of a collected water sample. Results are reported in mg/L.

#### **Total Suspended Solids (TSS)**

Suspended solids in a water sample include inorganic substances, such as soil particles and organic substances, such as algae, aquatic plant/animal waste, particles related to industrial/sewage waste, etc. The total suspended solids test (TSS) test measures the concentration of suspended solids in water by measuring the dry weight of a solid material contained in a known volume of a sub-sample of a collected water sample. Results are reported in mg/L.

#### Turbidity

# 6.0 Sources of Further Assistance

<b>Regional Water Quality</b>	,	Contact Name	
<b>Control Board</b>	Address	E-mail	Telephone/Fax
NORTH COAST	5550 Skylane Blvd., Suite A	John Short	(707) 576-2065
REGION	Santa Rosa, CA 95403	shorj@rb1.swrcb.ca.gov	FAX: (707) 523-0135
SAN FRANCISCO BAY	1515 Clay St., Suite 1400	Mark Johnson	(510) 622-2493
REGION	Oakland, CA 94612	stu36@rb2.swrcb.ca.gov	FAX: (510) 622-2460
CENTRAL COAST	895 Aerovista Place., Suite 101	Jennifer Bitting	(805) 549-3334
REGION	San Luis Obispo, CA 93401	jbitting@rb3.swrcb.ca.gov	FAX: (805) 543-0397
LOS ANGELES	320 W. 4th St., Suite 200	Ejigu Soloman (Ventura County)	213) 576-6727
REGION	Los Angeles, CA 90013	esoloman@rb4.swrcb.ca.gov	FAX: (213) 576-6686
CENTRAL 3031314EY REGION Baccamento Office	11020 Sun Center Drive, #200 Rancho Cordova, CA 95670	Sue McConnell mcconns@rb5s.swrcb.ca.gov	

## **Regional Water Quality Control Boards**

George Day DayG@rb5s.swrcb.ca.gov

Dannas Berchtold BerchtD@rb5s.swrcb.ca.gov

Regional Water Quality	,	Contact Name	
Control Board	Address	E-mail	Telephone/Fax
COLORADO RIVER	73-720 Fred Waring Dr., Suite 100	Abdi Haile	(760) 776-8939
BASIN REGION	Palm Desert, CA 92260	haila@rb7.swrcb.ca.gov	FAX: (760) 341-6820
		Rosalyn Fleming	(760) 776-8939
		flemr@rb7.swrcb.ca.gov	FAX: (760) 341-6820
SANTA ANA REGION	3737 Main St., Suite 500	Michael Roth (Riverside County)	(909) 320-2027
	Riverside, CA 92501-3339	mroth@rb8.swrcb.ca.gov	FAX: (909) 781-6288
		Aaron Buck (Orange County)	(909) 782-4469
		abuck@rb8.swrcb.ca.gov	FAX: (909) 781-6288
		Muhammad Bashir (San Bernardino County)	(909) 320-6396
		mbashir@rb8.swrcb.ca.gov	FAX: (909) 781-6288
SAN DIEGO REGION	9174 SkyPark Court, Suite 100	Benjamin Tobler	(858) 467-3272
	San Diego, CA 92123	Toblb@rb9.swrcb.ca.gov	
		Eric Becker	(858) 492-1785
		Becke@rb9.swrcb.ca.gov	
		Ben Neill	(858) 467-2983
		Neilb@rb9.swrcb.ca.gov	FAX: (858) 571-6972

State Water Resources Control Board Division of Water Quality Storm Water Permit Section P.O. Box 1977 Sacramento, CA 95812-1977 Construction Inquiry Line: (916) 341-5537 Web Site: <u>http://www.waterboards.ca.gov/</u> e-mail: <u>stormwater@waterboards.ca.gov</u>

#### How to Obtain a List of State Certified Laboratories

http://www.dhs.ca.gov/ps/ls/elap/html/lablist\_county.htm

#### **Other Useful Web Sites**

California Stormwater Quality Association <u>http://www.casqa.org/</u>

California Department of Transportation Environmental Program <u>http://www.dot.ca.gov/hq/env/index.htm</u>

Storm Water Management Program <u>http://www.dot.ca.gov/hq/env/stormwater/</u>

only 1% more. (USEPA Withdrawal of Proposed Effluent Limitation Guideline for Construction Industry, Volume 69, Federal Register 22472 et seq., April 26, 2004.) In conducting its state equivalency analysis, USEPA evaluated all states' programs, including California's, and determined that these were adequate and that further requirements were not mandated for compliance with federal law.

In USEPA's analysis of monitoring for construction (EPA-821-R-02-007), it concludes that planning monitoring for storm water is not possible because the flows are highly variable and temporarily stochastic. USEPA also notes that several of the criteria that could be used have special measurement problems because they are based on trapping efficiency, which is very difficult to measure. The most commonly used measurements, such as TSS, also have problems because to measure average or peak TSS it is necessary to measure TSS in the effluent over the duration of the outflow hydrograph as well as the flow rate. This requires that multiple samples be taken and that the samples be centered around the peak discharge. This is time consuming and difficult since the timing of an event and the timing of the peak discharge are not known beforehand. The average concentration is a weighted concentration, using flow rate as a weighting function.

USEPA also conducted an extensive evaluation of the literature to identify pollutants present in storm water discharges from construction sites. They found that while the literature contains extensive information on pollutants present in storm water discharges from urban areas, there were little data available on pollutants present in storm water discharges from construction sites during the active construction phase, other than for sediment, TSS and turbidity. USEPA was not able to identify sufficient data in the literature to warrant development of controls specific to pollutants other than sediment, TSS and turbidity in storm water discharges from construction sites. Some literature suggests that pollutants adhere to sediment, so that regulating TSS should also act as a control for other pollutants.

USEPA also evaluated the inclusion of organics, pesticides, and bacteria as potential pollutants of concern, but the literature indicated that control of these pollutants through conventional

conduct such sampling should also sample the effluent. They may use the results of such sampling to overcome this presumption should the effluent sampling not be consistent with the downstream results. The case of a direct discharge of sediment to a water body impaired by sediment is a far simpler case than discharges that are indirect, that contain pollutants for which there may be assimilative capacity, or that contain pollutants that may be diluted in the receiving water. In those cases there is no simple way to conclude from sampling and analysis whether an applicable water quality standard is impacted by the storm water discharge. Instead, the data are most useful in alerting the discharger to the need to review BMPs and source control and should trigger a visual inspection.

construction storm water permits in the region. The reference on page 63 concerns the appropriate approaches for TMDLs, not for construction storm water permits. USEPA concludes in the GLSID that the TMDL process is the appropriate means of effectively addressing persistent bio-accumulative pollutants.

Pollutants such as the Persistent Bio-accumulative and Toxic chemicals (PBT) currently being addressed under USEPA's PBT initiative

chemical and fecal contamination from portable toilets are also not CTR pollutants. Some of these constituents do have numeric water quality objectives in individual Basin Plans, but many do not and are subject to narrative water quality standards such as not causing toxicity. This Fact Sheet provides direction on how to ascertain the applicable water quality standards for the receiving water. Of more use will be information the SWRCB will distribute upon completion of a contract with the University of California, which will list the most common pollutants, describe which construction materials they are associated with, and suggest parameters for sampling. At this time, dischargers are encouraged to discuss these issues with RWQCB staff and their own knowledgeable representative or Storm Water Quality Professionals..

# 7.4 The Watershed Approach to Storm Water Permitting

USEPA has endorsed a watershed approach to storm water permitting that focuses on BMPs in lieu of numeric effluent limitations and visual inspection and indicator monitoring in lieu of sampling for individual pollutant parameters. (Questions and Answers Regarding Implementation of an Interim Permitting Approach for Water Quality-Based Effluent Limitations in Storm Water Permits, 61 Fed. Reg. 57424 (11/6/96)). In a memorandum dated November 22, 2002, USEPA issued guidance on the interaction between storm water permits and TMDLs. The memorandum explains that, even in the case where a TMDL has been finalized and a wasteload allocation established for storm water discharges, the inclusion of numeric effluent limitations will be "rare." The memorandum therefore discusses monitoring requirements in BMP-based permits. It states that the monitoring should assess the effectiveness of the BMPs (i.e., appropriate monitoring is visual inspection) and *if monitoring for storm water is required*, it should be consistent with the state's watershed approach.

# 7.5 References and Record for this Guidance Document

In preparing this guidance document, the SWRCB has relied upon numerous background materials including federal statutes, regulations and guidance materials. These materials include Clean Water Act sections 303(d) and 402(p) and federal regulations implementing section 402(p) including 40 CFR sections 122.26, 122.44, 122.48, and Part 131. The SWRCB has also relied several guidance documents from USEPA. These include the preambles to the various storm water regulatory actions: 55 Fed. Reg. 47990 et seq. (11/16/90), 57 Fed. Reg. 11394 et seq. (4/2/92), and 64 Fed. Reg. 68722 et seq. The SWRCB has relied on the Porter-Cologne Water Quality Control Act (Water Code section 13000 et seq.), and implementing state regulations at Title 23, California Code of Regulations. The SWRCB has also relied on relevant court decisions, including: *Communities for a Better Environment v. SWRCB* (2003) 109 Cal. App. 4th 1089 (hrg. denied) (Water Boards have broad discretion in adopting effluent limitations for impaired waters). The SWRCB has also reviewed the recently-adopted USEPA general construction

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interested persons including the Keepers organizations, the Building Industry Legal Defense Foundation and the California Building Industry Association.

# APPENDIX A WATER QUALITY OBJECTIVES FOR SUSPENDED MATERIALS, SETTEABLE MATERIALS, SEDIMENT AND TURBIDITY

Below is a compilation of the water quality objectives for suspended materials, setteable material, sediment and turbidity as of August 2003 for each of the Regional Water Quality Control Boards. The water quality objectives are found in chapter 3 (unless otherwise noted) of the RWQCB's Basin Water Quality Control Plan (Basin Plan). Some of the weblinks go directly to Chapter 3 and others will go to the Basin Plan.

#### North Coast Regional Water Quality Control Board - Region 1

#### http://www.waterboards.ca.gov/rwqcb1/down/032202basin-plan.pdf

#### Suspended Material

Waters shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses.

#### Setteable Material

Waters shall not contain substances in concentrations that result in deposition of material that causes nuisance or adversely affect beneficial uses.

#### Sediment

The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.

#### Turbidity

Turbidity shall not be increased more than 20 percent above naturally occurring background levels. Allowable zones of dilution within which higher percentages can be tolerated may be defined for specific discharges upon the issuance of discharge permits or waiver thereof.

#### San Francisco Bay Regional Water Quality Control Board - Region 2

#### http://www.waterboards.ca.gov/rwqcb2/Basin Plan/chap\_3\_bp.pdf

#### Sediment

The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses. Controllable water quality factors shall not cause a detrimental increase in the concentrations of toxic pollutants in sediments or aquatic life.

#### Setteable Material

Waters shall not contain substances in concentrations that result in the deposition of material that cause nuisance or adversely affect beneficial uses.

#### Turbidity

Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Increases in natural turbidity attributable to controllable factors shall not exceed the following limits:

Where natural turbidity is between 0 and 50 NTU, increases shall not exceed 20%.

Where natural turbidity is greater than 50 NTU, increases shall not exceed 10%.

Allowable zones of initial dilution within which higher concentrations will be tolerated may be defined for each discharge in specific Waste Discharge Requirements.

#### **Central Valley Regional Water Quality Control Board – Region 5**

Sacramento River and San Joaquin River Basins

http://www.waterboards.ca.gov/rwqcb5/available\_documents/basin\_plans/bsnplnab.pdf

#### Sediment

The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.

#### Setteable Material

Waters shall not contain substances in concentrations that result in the deposition of material that causes nuisance or adversely affects beneficial uses.

#### Suspended Material

Waters shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses.

#### Turbidity

Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Increases in turbidity attributable to controllable water quality factors shall not exceed the following limits:

Where natural turbidity is between 0 and 5 Nephelometric Turbidity Units (NTUs), increases shall not exceed 1 NTU.

Where natural turbidity is between 5 and 50 NTUs, increases shall not exceed 20 percent. Where natural turbidity is between 50 and 100 NTUs, increases shall not exceed 10 NTUs. Where natural turbidity is greater than 100 NTUs, increases shall not exceed 10 percent.

In determining compliance with the above limits, appropriate averaging periods may be applied provided that beneficial uses will be fully protected.

Exceptions to the above limits will be considered when a dredging operation can cause an increase in turbidity. In those cases, an allowable zone of dilution within which turbidity in excess of the limits may be tolerated will be defined for the operation and prescribed in a discharge permit.

#### Sediment

The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect the water for beneficial uses.

#### Setteable Materials

Waters shall not contain substances in concentrations that result in deposition of material that causes nuisance or that adversely affects the water for beneficial uses. For natural high quality waters, the concentration of setteable materials shall not be raised by more that 0.1 milliliter per liter.

#### Suspended Materials

Waters shall not contain suspended materials in concentrations that cause nuisance or that adversely affects the water for beneficial uses. For natural high quality waters, the concentration of total suspended materials shall not be altered to the extent that such al

Turbidity

Increases in turbidity which result from controllable water quality factors shall comply with the following:

Natural Turbidity	<u>Maximum Increase</u>		
0-50 NTU	20%		
50-100 NTU	10 NTU		
Greater than 100 NTU	10%		

All enclosed bay and estuaries of the region shall be free of changes in turbidity which adversely affect beneficial uses

#### San Diego Regional Water Quality Control Board - Region 9

http://www.waterboards.ca.gov/rwqcb9/programs/Chapter 3 Water Quality Objectives.pdf

#### Sediment

The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.

#### Suspended and Setteable Solids

Water shall not contain suspended and setteable solids in concentrations of solids that cause nuisance or adversely affect beneficial uses.

Turbidity

Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses.

Inland surface water shall not contain turbidity in excess of the numerical objectives described in Table 3-2. (This is reference to the Basin Plan; this table can be found via the weblink to the Region 9 Basin Plan).

Ground waters shall not contain turbidity in excess of the numerical objectives described in Table 3-3. (This is reference to the Basin Plan; this table can be found via the weblink to the Region 9 Basin Plan.)

The transparency of waters in lagoons and estuaries shall not be less than 50% of the depth at locations where measurement is made by means of a standard Secchi disk, except where lesser The traasu0006 dnt irl nftuarrunoffich rn Plan).

20% x

In addition, within San Diego Bay, the transparency of bay waters, insofar as it may be influenced by any controllable factor, either directly or through induced conditions, shall not be less that 8 feet in more than

20 percent of the readings in any zone, as measured by standard Secchi disk. Wherever the waster is less than 10 feet deep, the Secchi disk reading shall not be less than 80 percent of the depth in more than 20 percent of the readings in any zone.

# STATE WATER RESOURCES CONTROL BOARD (SWRCB)

- 4. To obtain authorization for proposed storm water discharges to surface waters, pursuant to this General Permit, the landowner (discharger) must submit a Notice of Intent (NOI) with a vicinity map and the appropriate fee to the SWRCB prior to commencement of construction activities. In addition, coverage under this General Permit shall not occur until the applicant develops a Storm Water Pollution Prevention Plan (SWPPP) in accordance with the requirements of Section A of this permit for the project. For proposed construction activity conducted on easements or on nearby property by agreement or permission, or by an owner or lessee of a mineral estate (oil, gas, geothermal, aggregate, precious metals, and/or industrial minerals) entitled to conduct the activities, the entity responsible for the construction activity must submit the NOI and filing fee and shall be responsible for development of the SWPPP.
- 5. If an individual NPDES Permit is issued to a discharger otherwise subject to this General Permit or if an alternative General Permit is subsequently adopted which covers storm water discharges regulated by this General Permit, the applicability of this General Permit to such discharges is automatically terminated on the effective date of the individual permit or the date of approval for coverage under the subsequent General Permit.
- 6. This action to adopt an NPDES permit is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21100, et seq.) in accordance with section 13389 of the California Water Code.
- 7. The SWRCB adopted the California Ocean Plan, and the RWQCBs have adopted and the SWRCB has approved Water Quality Control Plans (Basin Plans). Dischargers regulated by this General Permit must comply with the water quality standards in these Basin Plans and subsequent amendments thereto.
- 8. The SWRCB finds storm water discharges associated with construction activity to be a potential significant sources of pollutants. Furthermore, the SWRCB finds that storm water discharges associated with construction activities have the reasonable potential to cause or contribute to an excursion above water quality standards for sediment in the water bodies listed in Attachment 3 to this permit.
- 9. It is not feasible at this time to establish numeric effluent limitations for pollutants in storm water discharges from construction activities. Instead, the provisions of this General Permit require implementation of Best Management Practices (BMPs) to control and abate the discharge of pollutants in storm water discharges.
- 10. Discharges of non-storm water may be necessary for the completion of certain construction projects. Such discharges include, but are not limited to: irrigation of vegetative erosion control measures, pipe flushing and testing, street cleaning, and

General Permit, (d) do not require a non-storm water permit as issued by some RWQCBs, and (e) are not prohibited by a Basin Plan. If a non-storm water discharge is subject to a separate permit adopted by a RWQCB, the discharge must additionally be authorized by the RWQCB permit.

- 11. Following adoption of this General Permit, the RWQCBs shall enforce the provisions herein including the monitoring and reporting requirements.
- 12. Following public notice in accordance with State and Federal laws and regulations, the SWRCB in a public meeting on June 8, 1998, heard and considered all comments. The SWRCB has prepared written responses to all significant comments.
- 13. This Order is an NPDES permit in compliance with section 402 of the Clean Water Act (CWA) and shall take effect upon adoption by the SWRCB provided the Regional Administrator of the USEPA has no objection. If the USEPA Regional Administrator objects to its issuance, the General Permit shall not become effective until such objection is withdrawn.
- 14. This General Permit does not authorize discharges of fill or dredged material regulated by the U.S. Army Corps of Engineers under CWA section 404 and does not constitute a waiver of water quality certification under CWA section 401.
- 15 The Monitoring Program and Reporting Requirements are modified in compliance with a judgment in the case of <u>San Francisco BayKeeper, et al. v. State Water Resources</u> <u>Control Board</u>. The modifications include sampling and analysis requirements for direct discharges of sediment to waters impaired due to sediment and for pollutants that are not visually detectable in runoff that may cause or contribute to an exceedance of water quality objectives.
- 16 Storm water discharges associated with industrial activity that are owned or operated by municipalities serving populations less than 100,000 people are no longer exempt from the need to apply for or obtain a storm water discharge permit. A temporary exemption, which was later extended by USEPA, was provided under section 1068(c) of the Intermodal Surface Transportation and Efficiency Act (ISTEA) of 1991. Federal regulation 40 CFR § 122.26(e)(1)(ii) requires the above municipalities to submit permit application by March 10, 2003.
- 17 This permit may be reopened and modified to include different monitoring requirements for small construction activity than for construction activity over five (5) acres.
IT IS HEREBY ORDERED that all dischargers who file an NOI indicating their intention to be regulated under the provisions of this General Permit shall comply with the following:

## A. DISCHARGE PROHIBITIONS:

- 1. Authorization pursuant to this General Permit does not constitute an exemption to applicable discharge prohibitions prescribed in Basin Plans, as implemented by the nine RWQCBs.
- 2. Discharges of material other than storm water which are not otherwise authorized by an NPDES permit to a separate storm sewer system (MS4) or waters of the nation are prohibited, except as allowed in Special Provisions for Construction Activity, C.3.
- 3. Storm water discharges shall not cause or threaten to cause pollution, contamination, or nuisance.
- 4. Storm water discharges regulated by this General Permit shall not contain a hazardous substance equal to or in excess of a reportable quantity listed in 40 CFR Part 117 and/or 40 CFR Part 302.

## B. RECEIVING WATER LIMITATIONS:

- 1. Storm water discharges and authorized nonstorm water discharges to any surface or ground water shall not adversely impact human health or the environment.
- 2. The SWPPP developed for the construction activity covered by this General Permit shall be designed and implemented such that storm water discharges and authorized nonstorm water discharges shall not cause or contribute to an exceedance of any applicable water quality standards contained in a Statewide Water Quality Control Plan and/or the applicable RWQCB's Basin Plan.
- 3. Should it be determined by the discharger, SWRCB, or RWQCB that storm water discharges and/or authorized nonstorm water discharges are causing or contributing to an exceedance of an applicable water quality standard, the discharger shall:
  - a. Implement corrective measures immediately following discovery that water quality standards were exceeded, followed by notification to the RWQCB by telephone as soon as possible but no later than 48 hours after the discharge has been discovered. This notification shall be followed by a report within 14-calender days to the appropriate RWQCB, unless otherwise directed by the RWQCB, describing (1) the nature and cause of the water quality standard exceedance; (2) the BMPs currently being implemented; (3) any additional BMPs which will be implemented to

prevent or reduce pollutants that are causing or contributing to the exceedance of water quality standards; and (4) any maintenance or repair of BMPs. This report shall include an implementation schedule for corrective actions and shall describe the actions taken to reduce the pollutants causing or contributing to the exceedance.

- b. The discharger shall revise its SWPPP and monitoring program immediately after the report to the RWQCB to incorporate the additional BMPs that have been and will be implemented, the implementation schedule, and any additional monitoring needed.
- c. Nothing in this section shall prevent the appropriate RWQCB from enforcing any provisions of this General Permit while the discharger prepares and implements the above report.

## C. SPECIAL PROVISIONS FOR CONSTRUCTION ACTIVITY:

- 1. All dischargers shall file an NOI and pay the appropriate fee for construction activities conducted at each site as required by Attachment 2: Notice of Intent-General Instructions.
- 2. All dischargers shall develop and implement a SWPPP in accordance with Section A: Storm Water Pollution Prevention Plan. The discharger shall implement controls to reduce pollutants in storm water discharges from their construction sites to the BAT/BCT performance standard.
- 3. Discharges of non-storm water are authorized only where they do not cause or contribute to a violation of any water quality standard and are controlled through implementation of appropriate BMPs for elimination or reduction of pollutants. Implementation of appropriate BMPs is a condition for authorization of non-storm water discharges. Non-storm water discharges and the BMPs appropriate for their control must be described in the SWPPP. Wherever feasible, alternatives which do not result in discharge of nonstorm water shall be implemented in accordance with Section A.9. of the SWPPP requirements.
- 4. All dischargers shall develop and implement a monitoring program and reporting plan in accordance with Section B: Monitoring Program and Reporting Requirements.
- 5. All dischargers shall comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding discharges of storm water to separate storm sewer systems or other watercourses under their jurisdiction, including applicable requirements in municipal storm water management programs developed to comply with NPDES permits issued by the RWQCBs to local agencies.

- 6. All dischargers shall comply with the standard provisions and reporting requirements contained in Section C: Standard Provisions.
- 7. The discharger may terminate coverage for a portion of the project under this General Permit when ownership of a portion of this project has been transferred or when a phase within this multi-phase project has been completed. When

## D. REGIONAL WATER QUALITY CONTROL BOARD (RWQCB) AUTHORITIES:

## 1. RWQCBs shall:

- a. Implement the provisions of this General Permit. Implementation of this General Permit may include, but is not limited to requesting the submittal of SWPPPS, reviewing SWPPPs, reviewing monitoring reports, conducting compliance inspections, and taking enforcement actions.
- b. Issue permits as they deem appropriate to individual dischargers, categories of dischargers, or dischargers in a geographic area. Upon issuance of such permits by a RWQCB, the affected dischargers shall no longer be regulated by this General Permit.
- 2. RWQCBs may require, on a case-by-case basis, the inclusion of an analysis of potential downstream impacts on receiving waterways due to the permitted construction.
- 3. RWQCBs may provide information to dischargers on the development and implementation of SWPPPs and monitoring programs and may require revisions to SWPPPs and monitoring programs.
- 4. RWQCBs may require dischargers to retain records for more than three years.
- 5. RWQCBs may require additional monitoring and reporting program requirements including sampling and analysis of discharges to water bodies listed in Attachment 3 to this permit. Additional requirements imposed by the RWQCB should be consistent with the overall monitoring effort in the receiving waters.

## CERTIFICATION

The undersigned, Administrative Assistant to the Board, does hereby certify that the foregoing is a full, true, and correct copy of an order duly and regularly adopted at a meeting of the State Water Resources Control Board held on August 19, 1999.

AYE: James M. Stubchaer Mary Jane Forster John W. Brown Artl1MN G. Baggett, Jr

ANO:

None

A J W

## SECTION A: STORM WATER POLLUTION PREVENTION PLAN

## 1. <u>Objectives</u>

A Storm Water Pollution Prevention Plan (SWPPP) shall be developed and implemented to address the specific circumstances for each construction site covered by this General Permit. The SWPPP shall be certified in accordance with the signatory requirements of section C, Standard Provision for Construction Activities (9). The SWPPP shall be developed and amended or revised, when necessary, to meet the following objectives:

- a. Identify all pollutant sources including sources of sediment that may affect the quality of storm water discharges associated with construction activity (storm water discharges) from the construction site, and
- b. Identify non-storm water discharges, and
- c. Identify, construct, implement in accordance with a time schedule, and maintain Best Management Practices (BMPs) to reduce or eliminate pollutants in storm water discharges and authorized nonstorm water discharges from the construction site during construction, and
- d. Develop a maintenance schedule for BMPs installed during construction designed to reduce or eliminate pollutants after construction is completed (post-construction BMPs).
- e. Identify a sampling and analysis strategy and sampling schedule for discharges from construction activity which discharge directly into water bodies listed on Attachment 3. (Clean Water Act Section 303(d) [303(d)] Water Bodies listed for Sedimentation).
- f. For all construction activity, identify a sampling and analysis strategy and sampling schedule for discharges that have been discovered through visual monitoring to be potentially contaminated by pollutants not visually detectable in the runoff.

## 2. <u>Implementation Schedule</u>

- a. For construction activity commencing on or after adoption of this General Permit, the SWPPP shall be developed prior to the start of soil-disturbing activity in accordance with this Section and shall be implemented concurrently with commencement of soil-disturbing activities.
- b. Existing permittees engaging in construction activities covered under the terms of the previous General Construction Permit SWPPP (WQ Order No.92-08-DWQ) shall continue to implement their existing SWPPP and shall implement any

necessary revisions to their SWPPP in accordance with this Section of the General Permit in a timely manner, but in no case more than 90-calender days from the date of adoption of this General Permit.

- c. For ongoing construction activity involving a change of ownership of property, the new owner shall review the existing SWPPP and amend if necessary, or develop a new SWPPP within 45-calender days.
- d. Existing permittees shall revise their SWPPP in accordance with the sampling and analysis modifications prior to August 1, 2001. For ongoing construction activity involving a change of ownership the new owner shall review the existing SWPPP and amend the sampling and analysis strategy, if required, within 45 days. For construction activity commencing after the date of adoption, the SWPPP shall be developed in accordance with the modification language adopted.

## 3. <u>Availability</u>

The SWPPP shall remain on the construction site while the site is under construction during working hours, commencing with the initial construction activity and ending with termination of coverage under the General Permit.

- (1) The SWPPP shall include a vicinity map locating the project site with respect to easily identifiable major roadways, geographic features, or landmarks. At a minimum, the map must show the construction site perimeter, the geographic features surrounding the site, and the general topography.
- (2) The SWPPP shall include a site map(s) which shows the construction project in detail, including the existing and planned paved areas and buildings.
  - (a) At a minimum, the map must show the construction site perimeter; existing and proposed buildings, lots, roadways, storm water collection and discharge points; general topography both before and after construction; and the anticipated discharge location(s) where the storm water from the construction site discharges to a municipal storm sewer system or other water body.
  - (b) The drainage patterns across the project area must clearly be shown on the map, and the map must extend as far outside the site

(1) Show drainage patterns and slopes anticipated after major grading

improvements at the site and the proposed time frame to conduct those activities.

(6) The SWPPP shall list the name and telephone number of the qualified person(s) who have been assigned responsibility for prestorm, poststorm, and storm event BMP inspections; and the qualified person(s) assigned responsibility to ensure full compliance with the permit and implementation of all elements of the SWPPP, including the preparation of the annual compliance evaluation and the elimination of all unauthorized discharges.

## 6. <u>Erosion Control</u>

Erosion control, also referred to as "soil stabilization" is the most effective way to retain soil and sediment on the construction site. The most efficient way to address erosion control is to preserve existing vegetation where feasible, to limit disturbance, and to stabilize and revegetate disturbed areas as soon as possible after grading or construction. Particular attention must be paid to large mass-graded sites where the potential for soil exposure to the erosive effects of rainfall and wind is great. Mass graded construction sites may be exposed for several years while the project is being built out. Thus, there is potential for significant sediment discharge from the site to surface waters.

At a minimum, the discharger/operator must implement an effective combination of erosion and sediment control on all disturbed areas during the rainy season. These disturbed areas include rough graded roadways, slopes, and building pads. Until permanent vegetation is established, soil cover is the most cost-effective and expeditious method to protect soil particles from detachment and transport by rainfall. Temporary soil stabilization can be the single-most important factor in reducing erosion at construction sites. The discharger shall consider measures such as: covering with mulch, temporary seeding, soil stabilizers, binders, fiber rolls or blankets, temporary vegetation, permanent seeding, and a variety of other measures.

The SWPPP shall include a description of the erosion control practices, including a time schedule, to be implemented during construction to minimize erosion on disturbed areas of a construction site. The discharger must consider the full range of erosion control BMPs. The discharger must consider any additional site-specific and seasonal conditions when selecting and implementing appropriate BMPs. The above listed erosion control measures are examples of what should be considered and are not exclusive of new or innovative approaches currently available or being developed.

a. The SWPPP shall include:

- (1) An outline of the areas of vegetative soil cover or native vegetation onsite which will remain undisturbed during the construction project.
- (2) An outline of all areas of soil disturbance including cut or fill areas which will be stabilized during the rainy season by temporary or permanent erosion control measures, such as seeding, mulch, or blankets, etc.
- (3) An outline of the areas of soil disturbance, cut, or fill which will be left exposed during any part of the rainy season, representing areas of potential soil erosion where sediment control BMPs are required to be used during construction.
- (4) A proposed schedule for the implementation of erosion control measures.
- b. The SWPPP shall include a description of the BMPs and control practices to be used for both temporary and permanent erosion control measures.
- c. The SWPPP shall include a description of the BMPs to reduce wind erosion at all times, with particular attention paid to stock-piled materials.
- 7. Stabilization
  - (1) All disturbed areas of the construction site must be stabilized. Final stabilization for the purposes of submitting a NOT is satisfied when:

-All soil disturbing activities are completed AND EITHER OF THE TWO FOLLOWING CRITERIA ARE MET:

-A uniform vegetative cover with 70 percent coverage has been established OR:

-equivalent stabilization measures have been employed. These measures include the use of such BMPs as blankets, reinforced channel liners, soil cement, fiber matrices, geotextiles, or other erosion resistant soil coverings or treatments.

(2) Where background native vegetation covers less than 100 percent of the surface, such as in arid areas, the 70 percent coverage criteria is adjusted as follows: If the native vegetation covers 50 percent of the ground surface, 70 percent of 50 percent (.70 X .50=.35) would require 35 percent total uniform surface coverage.

## 8. <u>Sediment Control</u>

The SWPPP shall include a description or illustration of BMPs which will be implemented to prevent a net increase of sediment load in storm water discharge relative to preconstruction levels. Sediment control BMPs are required at appropriate locations along the site perimeter and at all operational internal inlets to the storm drain system at all times during the rainy season. Sediment control practices may include filtration devices and barriers (such as fiber rolls, silt fence, straw bale barriers, and gravel inlet filters) and/or settling devices (such as sediment traps or basins). Effective filtration devices, barriers, and settling devices shall be selected, installed and maintained properly. A proposed schedule for deployment of sediment control BMPs shall be included in the SWPPP. These are the most basic measures to prevent sediment from leaving the project site and moving into receiving waters. Limited exemptions may be authorized by the RWQCB when work on active areas precludes the use of sediment control BMPs temporarily. Under these conditions, the SWPPP must describe a plan to establish perimeter controls prior to the onset of rain.

During the nonrainy season, the discharger is responsible for ensuring that adequate sediment control materials are available to control sediment discharges at the downgrade perimeter and operational inlets in the event of a predicted storm. The discharger shall consider a full range of sediment controls, in addition to the controls listed above, such as straw bale dikes, earth dikes, brush barriers, drainage swales, check dams, subsurface drain, sandbag dikes, fiber rolls, or other controls. At a minimum, the discharger/operator must implement an effective combination of erosion and sediment control on all disturbed areas during the rainy season.

If the discharger chooses to rely on sediment basins for treatment purposes, sediment basins shall, at a minimum, be designed and maintained as follows:

Option 1: Pursuant to local ordinance for sediment basin design and maintenance, provided that the design efficiency is as protective or more protective of water quality than Option 3.

OR

Option 2: Sediment basin(s), as measured from the bottom of the basin to the principal outlet, shall have at least a capacity equivalent to 3,600 cubic feet of storage per acre draining into the sediment basin. The length of the basin shall be more than twice the width of the basin. The length is determined by measuring the distance between the inlet and the outlet; and the depth must not be less than three feet nor greater than five feet for safety reasons and for maximum efficiency.

OR

Option 3: Sediment basin(s) shall be designed using the standard equation:

$$As=1.2Q/Vs$$

Where: As is the minimum surface area for trapping soil particles of a

- b. Weather information: best estimate of beginning of storm event, duration of event, time elapsed since last storm, and approximate amount of rainfall (inches).
- c. A description of any inadequate BMPs.
- d. If it is possible to safely access during inclement weather, list observations of all BMPs: erosion controls, sediment controls, chemical and waste controls, and non-storm water controls. Otherwise, list result of visual inspection at relevant outfall, discharge point, or downstream location and projected required maintenance activities.
- e. Corrective actions required, including any changes to SWPPP necessTc -0If it is posTMCID 0 6t
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## 15. <u>Public Access</u>

The SWPPP shall be provided, upon request, to the RWQCB. The SWPPP is considered a report that shall be available to the public by the RWQCB under section 308(b) of the Clean Water Act.

## 16. <u>Preparer Certification</u>

effectiveness evaluated. One time discharges of non-storm water shall be inspected when such discharges occur.

## 4. <u>Compliance Certification</u>

Each discharger or qualified assigned personnel listed by name and contact number in the SWPPP must certify annually that construction activities are in compliance with the requirements of this General Permit and the SWPPP. This Certification shall be based upon the site inspections required in Item 3 of this Section. The certification must be completed by July 1 of each year.

## 5. <u>Noncompliance Reporting</u>

Dischargers who cannot certify compliance, in accordance with Item 4 of this Section and/or who have had other instances of noncompliance excluding exceedances of water quality standards as defined in section B. 3. Receiving Water Limitations Language, shall notify the appropriate RWQCB within 30 days. Corrective measures should be implemented immediately following discovery that water quality standards were exceeded. The notifications shall identify the noncompliance event, including an initial assessment of any impact caused by the event; describe the actions necessary to achieve compliance; and include a time schedule subject to the modifications by the RWQCB indicating when compliance will be achieved. Noncompliance notifications must be submitted within 30-calendar days of identification of noncompliance.

## 6. <u>Monitoring Records</u>

Records of all inspections, compliance certifications, and noncompliance reporting must be retained for a period of at least three years from the date generated. With the exception of noncompliance reporting, dischargers are not required to submit these records.

## 7. <u>Monitoring Program for Sedimentation/Siltation</u>

Dischargers of storm water associated with construction activity that directly enters a water body listed in Attachment 3 shall conduct a sampling and analysis program for the pollutants (sedimentation/siltation or turbidity) causing the impairment. The discharger shall monitor for the applicable parameter. If the water body is listed for sedimentation or siltation, samples should be analyzed for Settleable Solids (ml/l) and Total Suspended Solids (mg/l). Alternatively or in addition, samples may be analyzed for suspended sediment concentration according to ASTM D3977-97. If the water body is listed for turbidity, samples should be analyzed for turbidity (NTU). Discharges that flow through tributaries that are not listed in Attachment 3 or that flow into Municipal Separate Storm Sewer Systems (MS4) are not subject to these sampling and analysis requirements. The sampling and analysis parameters and procedures must be designed to determine whether the BMPs installed and maintained prevent discharges of sediment from contributing to impairment in receiving waters.

Samples shall be collected during the first two hours of discharge from rain events which result in a direct discharge to any water body listed in Attachment 3. Samples shall be collected during daylight hours (sunrise to sunset). Dischargers need not collect more than four (4) samples per month. All samples shall be taken in the receiving waters and shall be representative of the prevailing conditions of the water bodies. Samples shall be collected from safely accessible locations upstream of the construction site discharge and immediately downstream from the last point of discharge.

For laboratory analysis, all sampling, sample preservation, and analyses must be conducted according to test procedures under 40 CFR Part 136. Field samples shall be collected and analyzed according to the specifications of the manufacturer of the sampling devices employed. Portable meters shall be calibrated according to manufacturer's specification. All field and/or laboratory analytical data shall be kept in the SWPPP document, which is to remain at the construction site at all times until a Notice of Termination has been submitted and approved.

## 8. <u>Monitoring Program for Pollutants Not Visually Detectable in Storm Water</u>

A sampling and analysis program shall be developed and conducted for pollutants which are not visually detectable in storm water discharges, which are or should be known to occur on the construction site, and which could cause or contribute to an exceedance of water quality objectives in the receiving water. Pollutants that should be considered for inclusion in this sampling and analysis program are those identified in Sections A.5.b. and A.5.c.

Construction materials and compounds that are not stored in water-tight containers under a water-tight roof or inside a building are examples of materials for which the discharger may have to implement sampling and analysis procedures. The goal of the sampling and analysis is to determine whether the BMPs employed and maintained on site are effective

- a. Enter upon the discharger's premises at reasonable times where a regulated construction activity is being conducted or where records must be kept under the conditions of this General Permit;
- b. Access and copy at reasonable times any records that must be kept under the conditions of this General Permit;
- c. Inspect at reasonable times the complete construction site, including any off-site staging areas or material storage areas, and the erosion/sediment controls; and
- d. Sample or monitor at reasonable times for the purpose of ensuring General Permit compliance.

## 9. <u>Signatory Requirements</u>

- a. All Notice of Intents (NOIs), Notice of Terminations (NOTs), SWPPPs, certifications, and reports prepared in accordance with this Order submitted to the SWRCB shall be signed as follows:
  - (1) For a corporation: by a responsible corporate officer. For the purpose of this Section, a responsible corporate officer means: (a) a president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or (b) the manager of the construction activity if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
  - (2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
  - (3) For a municipality, State, Federal, or other public agency: by either a principal executive officer, ranking elected official, or duly authorized representative. The principal executive officer of a Federal agency includes the chief executive officer of the agency or the senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrator of USEPA).
  - b. All SWPPPs, reports, certifications, or other information required by the General Permit and/or requested by the RWQCB, SWRCB, USEPA, or the local storm water management agency shall be signed by a person described above or by a duly authorized representative. A person is a duly authorized representative if:
    - (1) The authorization is made in writing by a person described above and retained as part of the SWPPP; or

## 13. <u>Oil and Hazardous Substance Liability</u>

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

## 14. <u>Severability</u>

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

## 15. <u>Reopener Clause</u>

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

## 16. Penalties for Violations of Permit Conditions

- a. Section 309 of the CWA provides significant penalties for any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the CWA or any permit condition or limitation implementing any such section in a permit issued under Section 402. Any person who violates any permit condition of this General Permit is subject to a civil penalty not to exceed \$27,500 per calendar day of such violation, as well as any other appropriate sanction provided by Section 309 of the CWA.
- b. The Porter-Cologne Water Quality Control Act also provides for civil and criminal penalties which in some cases are greater than those under the CWA.

## 17. <u>Availability</u>

A copy of this General Permit shall be maintained at the construction site during construction activity and be available to operating personnel.

## 18. <u>Transfers</u>

This General Permit is not transferable. A new owner of an ongoing construction activity must submit a NOI in accordance with the requirements of this General Permit to be authorized to discharge under this General Permit. An owner who sells property covered

by this General Permit shall inform the new owner of the duty to file a NOI and shall provide the new owner with a copy of this General Permit.

## 19. <u>Continuation of Expired Permit</u>

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

#### SWRCB AND RWQCB CONTACT LIST Division of Water Quality P.O. Box 1977 Sacramento, CA 95812-1977 (916) 341-5537 FAX: (916) 341-5543 Web Page: <u>http://www.waterboards.ca.gov/stormwtr/index.html</u> Email: <u>stormwater@waterboards.ca.gov</u>

## CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARDS

NORTH COAST REGION (1) 5550 Skylane Blvd, Ste. A Santa Rose, CA 95403 (707) 576-2220 FAX: (707)523-0135 http://www.waterboards.ca.gov/rwqcb1

SAN FRANCISCO BAY REGION (2) 1515 Clay Street, Ste. 1400 Oakland, CA 94612 (510) 622-2300 FAX: (510) 622-2640 http://www.waterboards.ca.gov/rwqcb2 CENTRAL COAST REGION (3) 895 Aerovista Place, Ste 101 San Luis Obispo, CA 93401 (805) 549-3147 FAX: (805) 543-0397 http://www.waterboards.ca.gov/rwqcb3

LOS ANGELES REGION (4) 320 W. 4<sup>th</sup> Street, Ste. 200 Los Angeles, CA 90013 (213) 576-6600 FAX: (213) 576-6640 http://www.waterboards.ca.gov/rwqcb4

CENTRAL VALLEY REGION (5S) 11020 Sun Center Dr., #200 Rancho Cordova, CA 95670-6114 (916) 464-3291 FAX: (916) 464-4645 http:www.waterboards.ca.gov/rwqcb5

FRESNO BRANCH OFFICE (5F) 1685 E St. Fresno, CA 93706 (559) 445-5116 FAX: (559) 445-5910 http://www.waterboards.ca.gov/rwqcb5

REDDING BRANCH OFFICE (5R) 415 Knollcrest Drive, Ste. 100 Redding, CA 96002 (530) 224-4845 FAX: (530) 224-4857 http://www.waterboards.ca.gov/rwqcb5 LAHONTAN REGION (6 SLT) 2501 Lake Tahoe Blvd. South Lake Tahoe, CA 96150 (530) 542-5400 FAX: (530) 544-2271 http://www.waterboards.ca.gov/rwqcb6

VICTORVILLE OFFICE (6V) 15428 Civic Drive, Ste. 100 Victorville, CA 92392-2383 (760) 241-6583 FAX: (760) 241-7308 http://www.waterboards.ca.gov/rwqcb6

# COLORADO RIVER BASIN REGION (7)

73-720 Fred Waring Dr., Ste. 100 Palm Desert, CA 92260 (760) 346-7491 FAX: (760) 341-6820 http://www.waterboards.ca.gov/rwqcb7 SANTA ANA REGION (8) California Tower 3737 Main Street, Ste. 500 Riverside, CA 92501-3339 http://www.waterboards.ca.gov/rwqcb8

SAN DIEGO REGION (9) 9174 Sky Park Court, Ste. 100 San Diego, CA 92123-4340 (858) 467-2952 FAX: (858) 571-6972 http://www.waterboards.ca.gov/rwqcb9

STATE OF CALIFORNIA Arnold Schwarzenegger, Governor

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY Terry Tamminen, Secretary

STATE WATER RESOURCES CONTROL BOARD Arthur Baggett Jr., Chairman

## NOTICE OF INTENT (NOI) TO COMPLY WITH THE TERMS OF THE GENERAL PERMIT TO DISCHARGE STORM WATER ASSOCIATED WITH CONSTRUCTION ACTIVITY

## GENERAL INSTRUCTIONS

## Who Must Submit

Discharges of storm water associated with construction that results in the disturbance of one acre or more of land must apply for coverage under the General Construction Activities Storm Water Permit (General Permit). Construction activity which is a part of a larger common area of development or sale must also be permitted. (For example, if 4 acres of a 20-acre subdivision is disturbed by construction activities, and the remaining 16 acres is to be developed at a future date, the property owner must obtain a General Storm Water Permit for the 4-acre project). Construction activity includes, but is not limited to: clearing, grading, demolition, excavation, construction of new structures, and reconstruction of existing facilities involving removal and replacement that results in soil disturbance. This includes construction access roads, staging areas, storage areas, stockpiles, and any off-site areas which receive run-off from the construction project such as discharge points into a receiving water. Construction activity does not include routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of the facility.

The owner of the land where the construction activity is occurring is responsible for obtaining a permit. Owners may obtain coverage under the General Permit by filing a NOI in accordance with the following instructions. Coverage for construction activity conducted on easements (e.g., pipeline construction) or on nearby properties by agreement or permission, or by an owner or lessee of a mineral estate (oil, gas, geothermal, aggregate, precious metals, and/or industrial minerals) entitled to conduct the activities, shall be obtained by the entity responsible for the construction activity. Linear construction projects which will have construction activity occurring in one or more than one Region should contact the State Water Resources Control Board at the number listed below prior to submitting an NOI application for specific information related to the use of the NOI form.

## Construction Activity Not Covered By This General Permit

Storm water discharges in the Lake Tahoe Hydrologic Unit will be regulated by a separate permit(s) adopted by the California Regional Water Quality Control Board, Lahontan Region, and will not be covered under the State Water Resources Control Board's (SWRCB) General Permit. Storm water discharges on Indian Lands will be regulated by the U.S. Environmental Protection Agency.

## Where to Apply

The NOI form, vicinity map, and appropriate fee must be mailed to the SWRCB at the following address:

State Water Resources Control Board Division of Water Quality Attn: Storm Water Permit Unit P.O. Box 1977 Sacramento, CA 95812-1977

## When to Apply

Property owners proposing to conduct construction activioyt2 Tyw T\*[(Wd-I. Tc T\*( )Tj0.0008 Tc -0.0008 Tw

## NOI-LINE-BY-LINE INSTRUCTIONS

Please type or print when completing the NOI Form and vicinity map.

## SECTION I--NOI STATUS

Mark one of the two boxes at the top portion of the NOI. Check box 1 if the NOI is being completed for new construction. Check box 2 if the NOI is being submitted to report changes for a construction site already covered by the General Permit. An example of a change that warrants a resubmittal of the NOI is a change of total area of the construction site. The permit is non-transferable, a change of ownership requires a Notice of Termination (NOT) submittal and a new NOI. Complete only those portions of the NOI that apply to the changes (the NOI must always be signed). If box 2 is checked, the WDID number must be included.

## SECTION II--PROPERTY OWNER

Enter the construction site owner's official or legal name and address; contact person (if other than owner), title, and telephone number.

## SECTION III--DEVELOPER / CONTRACTOR INFORMATION

Enter the name of the developer's (or general contractor's) official or legal name, address, contact person, title, and telephone number. The contact person should be someone who is familiar with the construction site and is responsible for compliance and oversight of the general permit.

## SECTION IV-CONSTRUCTION PROJECT INFORMATION

Enter the project name, site address, county, city, (or nearest city if construction is occurring in an unincorporated area), zip code, and telephone number (if any) of the construction site. Include an emergency contact telephone or pager number. Construction site information should include latitude and longitude designations, tract numbers, and/or mile post markers, if applicable. The site contact person should be someone who is familiar with the project, site plans, SWPPP, and monitoring program. All NOIs must be accompanied by a vicinity map.

- Part A: Enter the total size in acres of all areas associated with construction activity, including all access roads.
- Part B: Enter the total size in acres of the area to be disturbed by construction activity and the percentage of the area listed in Part A above that this represents.
- Part C: Enter the percentage of the site that is impervious (areas where water cannot soak into the ground, such as concrete, asphalt, rooftops, etc.) before and after construction.
- Part D: Include tract numbers, if available.

- Part E: Enter the mile post marker number at the project site location.
- Part F: Indicate whether the construction site is part of a larger common plan of development or sale. For example, if the construction activity is occurring on a two-acre site which is within a development that is one acre or greater, answer yes.
- Part G: Enter the name of the development (e.g. "Quail Ridge Subdivision", "Orange Valley Estates", etc.).
- Part H: Indicate when construction will begin (month, day, year). When a NOI is being submitted due to a change in ownership, the commencement date should be the date the new ownership took effect.
- Part I: Indicate the percentage of the total project area to be mass graded.
- Part J: Enter the estimated completion dates for the mass grading activities and for the project completion.
- Part K: Indicate the type(s) of construction taking place. For example, "Transportation" should be checked for the construction of roads; "Utility" should be checked for installation of sewer, electric, or telephone systems. Include a description of the major construction activities, (e.g., 20 single family homes, a supermarket, an office building, a factory, etc.)

## SECTION V--BILLING ADDRESS

To continue coverage under the General Permit, the annual fee must be paid. Indicate where the annual fee invoice should be mailed by checking one of the following boxes:

Owner: sent to the owners address as it appears in Section II.

Developer/Contractor: sent to the developer's address as it appears in Section III.

Other: sent to a different address and enter that address in the spaces provided.

## SECTION VI--REGULATORY STATUS

Indicate whether or not the site is subject to local erosion/sediment control ordinances. Indicate whether the erosion/sediment control plan designed to comply with the ordinance addresses the construction of infrastructure and structures in addition to grading. Identify the name and telephone number of the local agency, if applicable.

## SECTION VII--RECEIVING WATER INFORMATION

Part A: Indicate whether the storm water runoff from the construction site discharges indirectly to waters of the United States, directly to waters of the United States, or to a separate storm drain system.

Indirect discharges include discharges that may flow overland across adjacent properties or rights-of-way prior to discharging into waters of the United States.

Enter the name of the owner/operator of the relevant storm drain system, if applicable. Storm water discharges directly to waters of the United States will typically have an outfall structure directly from the facility to a river, lake, creek, stream, bay, ocean, etc. Discharges to separate storm sewer systems are those that discharge to a collection system operated by municipalities, flood control districts, utilities, or similar entities.

Part B: Enter the name of the receiving water. Regardless of point of discharge, the owner must determine the receiving water for the construction site's storm water discharge. Enter the name of the receiving water.

## SECTION VIII--IMPLEMENTATION OF NPDES PERMIT REQUIREMENTS

- Part A: Indicate the status of the SWPPP, date prepared, or availability for review. Also indicate if a tentative construction schedule has been included in the SWPPP (the inclusion of a construction activity schedule is a mandatory SWPPP requirement).
- Part B: Provide information concerning the status of the development of a monitoring program, a component of the SWPPP which outlines an inspection and maintenance schedule for the proposed Best Management Practices (BMPs). Provide name and phone number of program preparer.
- Part C: Provide the name and phone numbers of the responsible party or parties designated to insure compliance with all elements of the General Permit and SWPPP.

## SECTION IX--VICINITY MAP AND FEE

Provide a "to scale" or "to approximate scale" drawing of the construction site and the immediate surrounding area. Whenever possible, limit the map to an 8.5" x 11' or 11" x 17" sheet of paper. At a minimum, the map must show the site perimeter, the geographic features surrounding the site, and general topography, and a north arrow. The map must also include the location of the construction project in relation to named streets, roads, intersections, or landmarks. A NOI containing a map which does not clearly indicate the location of the construction project will be rejected. Do not submit blueprints unless they meet the above referenced size limits.

## SECTION X--CERTIFICATIONS

This section must be completed by the owner or signatory agent of the construction site\*. The certification provides assurances that the NOI and vicinity map were completed in an accurate and complete fashion and with the knowledge that penalties exist for providing false information. Certification also requires the owner to comply with the provisions in the General Permit.

\* For a corporation: a responsible corporate officer (or authorized individual). For a partnership or sole proprietorship: a general partner or the proprietor, respectively. For a municipality, State, Federal, or other public agency: either a principal executive officer, ranking elected official, or duly authorized representative.

#### State Water Resources Control Board **NOTICE OF INTENT** TO COMPLY WITH THE TERMS OF THE GENERAL PERMIT TO DISCHARGE STORM WATER

VI.	REGULATORY STATUS									
Α.	. Has a local agency approved a required erosion/sediment control plan?		🗌 YES							
	Does the erosion/sediment control plan address construction activities such as infrastructure and structures?		🗌 YES	NO						
	Name of local agency: Phone:	-								
В.	. Is this project or any part thereof, subject to conditions imposed under a CWA Section 404 permit of 401 Water Quality Certification?		YES	No						
	If yes, provide details:									
VII.	RECEIVING WATER INFORMATION									
Α.	Does the storm water runoff from the construction site discharge to (Check all that apply):									
	1. Indirectly to waters of the U.S.									
	2. Storm drain system - Enter owner's name:									
	3. Directly to waters of U.S. (e.g. , river, lake, creek, stream, bay, ocean, etc.)									
В.	. Name of receiving water: (river, lake, creek, stream, bay, ocean):									
VIII.	. IMPLEMENTATION OF NPDES PERMIT REQUIREMENTS									
Α.	STORM WATER POLLUTION PREVENTION PLAN (SWPPP) (check one)									
	A SWPPP has been prepared for this facility and is available for review: Date Prepared://	ate Amen	ıded:/	/						
	A SWPPP will be prepared and ready for review by (enter date):									
B	A tentative schedule has been included in the SWPPP for activities such as grading, street construction, home construction, etc.									
Δ.	A monitoring and maintenance schedule has been developed that includes inspection of the construction BMPs before anticipated storm events and after actual storm events and is available for review.									
	If checked above: A qualified person has been assigned responsibility for pre-storm and post-storm BMP inspections to identify effectiveness and necessary repairs or design changes	. YES	NO							
	Name: Phone:									
C.	. PERMIT COMPLIANCE RESPONSIBILITY									
	A qualified person has been assigned responsibility to ensure full compliance with the Permit, and to implement all elements of the Storm Prevention Plan including:	ו Water Pol	lution							
	1. Preparing an annual compliance evaluation	/ES	NO							
	Name: Phone:									
	2. Eliminating all unauthorized discharges	YES	NO							
IX.	VICINITY MAP AND FEE (must show site location in relation to nearest named streets, intersections, etc.)									
Ha	ave you included a vicinity map with this submittal?	YES	NO							
Ha	ave you included payment of the annual fee with this submittal?	YES	NO							

## X. CERTIFICATIONS

"I certify under penalty of law that this document and all attachments were prepared under my direction and 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 or imprisonment. In addition, I certify that I have read the
entire General Permit, including all attachments, and agree to comply with and be bound by all of the provisions, requirements, and prohibitions of the permit, including
the development and implementation of a Storm Water Pollution Prevention Plan and a Monitoring Program Plan will be complied with."

Printed Name:	
Signature:	Date:
Title:	

## ATTACHMENT 3

303d Listed Water Bodies for Sedimentation

REGION

WATER BODY NAME

CODE

POLLUTANT

2	SAN FRANCISQUITO CREEK	1100	Sedimentation/Siltation
2	PESCADERO CREEK (REG 2)	1100	Sedimentation/Siltation
2	BUTANO CREEK	1100	Sedimentation/Siltation
3	MORRO BAY	1100	Sedimentation/Siltation
3	SAN LORENZO RIVER ESTUARY	1100	Sedimentation/Siltation
3	SHINGLE MILL CREEK	1100	Sedimentation/Siltation
3	MOSS LANDING HARBOR	1100	Sedimentation/Siltation
3	WATSONVILLE SLOUGH	1100	Sedimentation/Siltation
3	SAN LORENZO RIVER	1100	Sedimentation/Siltation
3	ELKHORN SLOUGH	1100	Sedimentation/Siltation
3	SALINAS RIVER LAGOON (NORTH)	1100	Sedimentation/Siltation
3	GOLETA SLOUGH/ESTUARY	1100	Sedimentation/Siltation
3	CARPINTERIA MARSH (EL ESTERO MARSH)	1100	Sedimentation/Siltation
3	LOMPICO CREEK	1100	Sedimentation/Siltation
3	MORO COJO SLOUGH	1100	Sedimentation/Siltation
3	VALENCIA CREEK	1100	Sedimentation/Siltation
3	PAJARO RIVER	1100	Sedimentation/Siltation
3	RIDER GULCH CREEK	1100	Sedimentation/Siltation
3	LLAGAS CREEK	1100	Sedimentation/Siltation
3	SAN BENITO RIVER	1100	Sedimentation/Siltation
3	SALINAS RIVER	1100	Sedimentation/Siltation
3	CHORRO CREEK	1100	Sedimentation/Siltation
3	LOS OSOS CREEK	1100	Sedimentation/Siltation
3	SANTA YNEZ RIVER	1100	Sedimentation/Siltation
3	SAN ANTONIO CREEK (SANTA BARBARA COUNTY)	1100	Sedimentation/Siltation
3	CARBONERA CREEK	1100	Sedimentation/Siltation
3	SOQUEL LAGOON	1100	Sedimentation/Siltation
3	APTOS CREEK	1100	Sedimentation/Siltation
4	MUGU LAGOON	1100	Sedimentation/Siltation
5	HUMBUG CREEK	1100	Sedimentation/Siltation
5	PANOCHE CREEK	1100	Sedimentation/Siltation
5	FALL RIVER (PIT)	1100	Sedimentation/Siltation
6	BEAR CREEK (R6)	1100	Sedimentation/Siltation
6	MILL CREEK (3)	1100	Sedimentation/Siltation
6	PINE CREEK (2)	1100	Sedimentation/Siltation
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б	TRUCKEE RIVER	1100	Sedimentation/Siltation

## **NEW OWNER INFORMATION AND** CHANGE OF INFORMATION (COI) FORM FOR THE **GENERAL CONSTRUCTION PERMIT NO. CAS000002**

Date: \_\_\_\_\_ Date of Last NOI Change: Signature of Preparer: \_\_\_\_\_

	Area Transferred (acres) <sup>1</sup>	Area Remaining (acres) <sup>2</sup>	Lot/Tract Numbers Transferred	Contact Person and Company Name of NewOwner(s)	Address(es) of the New Owner(s)	Phone # of New Owner	Is Const/Post Construction Complete? Yes/No	Date of Ownership Transfer
	column 1	column 2						
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								

<sup>1</sup>Use approximate area (in acres) if no exact figure is available.

<sup>2</sup>Calculate running total in this column as follows:

Enter in column 2, line 1, the area from NOI minus the area in column 1.

Enter in column 2, line 2, the area in column 2, line 1, minus the area in line 2, column 1.

Enter in column 2, line 3, the area in column 2, line 2, minus the area in line 3, column 1, and so forth.

APPENDIX K

STORM WATER QUALITY CONSTRUCTION SITE INSPECTION CHECKLIST

# SWPPP INSPECTION FORM

## **BMP AND SITE INSPECTION**

Yes No

Yes No

5

Scheduling (EC-1)

1

Preservation of Exist. Veg. (EC-2)

Water Conservation Practices (NS-1)

TEN NOTICE, OR ORDER FORM

# Notice of Discharge, Written Notice, or Order Form

To:	Date:	<u> </u>
Subject: Notice of Discharge		
Project Name: Contract Number:		

In accordance with the General NPDES Permit for Storm Water Discharges Associated with Construction Activity, the following instance of discharge is noted:

### Date, time, and location of discharge

Insert description and date of event

#### Nature of the operation that caused the discharge

Insert description of operation

#### Initial assessment of any impact cause by the discharge

Insert assessment

#### Existing BMP(s) in place prior to discharge event

List BMPs in place

#### Date of deployment and type of BMPs deployed after the discharge.

BMPs deployed after the discharge (with dates)

#### Steps taken or planned to reduce, eliminate and/or prevent recurrence of the discharge

Insert steps taken to prevent recurrence

#### Implementation and maintenance schedule for any affected BMPs

Insert implementation and maintenance schedule

If further information or a modification to the above schedule is required, notify the contact person below.

APPENDIX M

DISCHARGE REPORTING LOG

**Discharge Reporting Log** 

APPENDIX N

SAMPLE ACTIVITY LOG

# Sample Activity Log

RAIN EVENT GENERAL INFORMATION Project Name

APPENDIX O

ANALYTICAL RESULTS

Laboratory data to be included upon receipt.