

090209 BD MEETING
STAFF CHANGE SHEET #1 (CIRCULATED 081709)
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
GENERAL PERMIT FOR
STORM WATER DISCHARGES
ASSOCIATED WITH CONSTRUCTION AND LAND DISTURBANCE
ACTIVITIES (GENERAL CONSTRUCTION PERMIT)
August 17, 2009

Underline indicates proposed text added and
Strikeout indicates text removed.

FACT SHEET

Section I.F, page 5

erosivity value (R value) for their site's ~~project's~~ given location

Section I.B.1, page 7

plan of development or ~~the~~ sale of one or more

Section I.B.1, page 8 footnote 4

A construction site ~~project~~ that includes

Section II.C.1.h, page 10

~~Discharges from small (1 to 5 acre) construction activities with an approved Rainfall Erosivity Waiver (authorized by the USEPA Phase II regulations) certifying to the State Water Board that small construction activities will only occur when the rainfall R factor (erosivity value from the Revised Universal Soil Loss Equation) is less than 5.~~

Section II.D, paragraph 1, page 11

The Legally Responsible Person (LRP) ~~landowner~~ must obtain coverage

Section II.D, page 12 (add new language)

Due to Homeland Security concerns and guidelines, it is important to limit public access to certain infrastructure information essential to public utility services. Additionally, Federal Energy Regulatory Commission rules limit the disclosure of certain information regarding the schedules of utility projects. It is important that certain information not be included in LUP PRDs such as transmission circuit numbers, voltages, substation names, maps showing how new facilities fit into the overall grid, GIS shape files, and schedules indicating when associated circuits will be de-energized or energized.

Section II.D, paragraph 4, page 12

Construction projects covered under Water Quality Order No. 99-08-DWQ ~~that are beyond the design stages~~ prior to [ADOPTION DATE OF NEW CGP] shall obtain permit coverage at ~~the~~ Risk Level 1.

Section II.D, paragraph 4, page 12

The Regional Water Boards have the authority to require Risk Determination to be performed on projects currently covered under Water Quality Order No. 99-08-DWQ [and 2003-0007-DWQ](#) where they deem necessary.

Section II.D, paragraph 5, page 12

Dischargers must file a Notice of Termination (NOT) with the Regional Water Board when construction is complete [and final stabilization has been reached](#) or ownership has been transferred.

Section II.E, paragraph 1, page 12

~~This General Permit prohibits the discharge of any pollutants other than storm water and authorized non-storm water discharges.~~ [All discharges are prohibited except for the storm water and non-storm water discharges specifically authorized by this General Permit or another NPDES permit](#)

Section II.E, paragraph 1, page 13

Authorized non-storm water discharges may include those from ~~non~~ [de](#)-chlorinated potable water sources such as:

Section II.E, paragraph 2, page 13

Additionally, authorized non-storm water discharges must not ~~be~~ [be](#) used to clean up failed or inadequate construction or post-construction BMPs designed to keep materials onsite.

Section II.F.1, paragraph 4, page 15 (insert new language)

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

Section II.F.1.i, paragraph 2, page 15

Proper implementation of BMPs should result in discharges that are within the range of 6.0 to ~~8.5~~ [9.0](#) pH Units.

Section II F.1.ii, paragraph 1, page 15

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

Section II F.1.ii, paragraph 3 & 4, page 15

The turbidity NEL represents a feasible and cost effective performance standard that is demonstrated to be achievable. Although data has been collected to demonstrate that lower effluent levels may be achievable at some sites, staff cannot conclude at this time that a lower NEL is achievable within all the ecoregions of the state. The NEL represents staff determination that the NEL is the most practicable based on available data. ~~In addition to representing the minimal technology expected,~~ The turbidity NEL represents a bridge between the narrative effluent limitations and receiving water limitations. The NEL limit may be considered an interim performance standard as additional data becomes available for evaluation during the next permit cycle. To support this NEL staff analyzed construction site discharge information (some monitoring data, some estimates) and receiving water monitoring information.

Since the turbidity NEL represents ~~the minimal technology~~ an appropriate threshold level expected at a site, compliance with this value does not necessarily represent compliance with either the narrative effluent limitations (as enforced through the BAT/BCT standard)

Section II F.1.ii page 16 (insert new language)

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

Table 1 – ACL Sampling Data taken by Regional Water Board Staff

<u>WDID#</u>	<u>Region</u>	<u>Discharger</u>	<u>Turbidity (NTU)</u>
<u>5S34C331884</u>	<u>5S</u>	<u>Bradshaw Interceptor Section 6B</u>	<u>1800</u>

¹ Simon, A., W.D. Dickerson, and A. Heins. 2004. Suspended-sediment transport rates at the 1.5-year recurrence interval for ecoregions of the United States: transport conditions at the bankfull and effective discharge. *Geomorphology* 58: pp. 243-262

5S05C325110	5S	Bridalwood Subdivision	1670
5S48C336297	5S	Cheyenne at Browns Valley	1629
5R32C314271	5R	Grizzly Ranch Construction	1400
6A090406008	6T	El Dorado County Department of Transportation, Angora Creek	97.4
5S03C346861	5S	TML Development, LLC	1600
6A31C325917	6T	Northstar Village	See Subdata Set

[Subdata Set - Turbidity for point of storm water runoff discharge at Northstar Village](#)

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

[A 95% confidence interval for mean turbidity in an ACL order was constructed. The data set used was a small sample size, so the 500 NTU \(the value derived as the proposed NEL for this General Permit\) needed to be verified as a possible population mean. In this case, the population refers to a hypothetical population of turbidity measurements of which our sample of 20 represents. A Student's t-distribution was assumed due to the small sample size:](#)

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

833.68 NTU (High)

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

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

“The most effective erosion control product was wood fiber mulch applied at two different rates along with a bonding agent and grass seed in sufficient time before the tests to achieve germination. Plots treated in this way reduced influent turbidity by more than 97 percent and discharged effluent exhibiting mean and maximum turbidity values of 21 and 73 NTU, respectively. Some other mulch and blanket materials performed nearly as well. These tests demonstrated the control ability of widely available BMPs over a very broad range of erosion potential.” Other technologies studied in this report produced effluent quality at or near 100 NTU. It is the BPJ of staff that erosion control, while preferred, is not always an option on construction sites and that technology performance in a controlled study showing effluent quality directly leaving BMP is always easier and cheaper to control than effluent being discharged from the project (edge of property, etc.). As a result, it is the BPJ of staff that it is not cost effective or feasible, at this time, for all risk level and type 3 sites in California to achieve effluent discharges with turbidity values that are less than 100 NTU.

Section II F.1.ii page 17

To summarize, the analysis showed that: (1) results of the Simon et. al dataset reveals turbidity values in background receiving water in California’s ecoregions ranges from 16 NTU to 1716 NTU (with a mean of 544 NTU); (2) based on a constructed 95% confidence interval, construction sites will be subject to administrative civil liability (ACL) when their turbidity measurement falls between 190.78 – 833.68 NTU; and (3) sites with highly controlled discharges deploying and maintaining good erosion control practices can discharge effluent from the BMP with turbidity values less than 100 NTU. So the appropriate threshold to set the technology-based limit to ensure environmental

protection, effluent quality and cost-effectiveness ranges from 100 NTU to over 1700 NTU. an appropriate turbidity numeric effluent limit may fall in the range of 500 to 1650 NTU. It also bears mentioning that turbidimeters commonly used for field measurement tend to have an effective measurement range of 0-1000 NTU. To keep this parameter and the costs of compliance as low as possible, staff has determined, using its BPJ, that it is most cost effective to set the numeric effluent limitation for turbidity at 500 NTU.

Section II.F.1.a, page 17

The discharger shall determine this value using Western Regional Climate Center Precipitation Frequency Maps for 5-year 24-hour storm events in Northern and Southern California (note that these are expressed in tenths of inches – ~~multiply~~ divide by 10 to get inches).

Section II.F.2.a, page 17

This General Permit contains technology-based NALs for pH and turbidity, and requirements for effluent monitoring at all Risk level 2 & 3, and LUP Type 2 & 3 sites.

Section II.I.1, page 19

1. Traditional Construction Monitoring Requirements

This General Permit requires visual monitoring at all sites, and effluent water quality at all Risk Level 2 & 3 sites.

Section II.I.1, page 20 – Table 4

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

Section II.I.1.a, page 20

For storm-related inspections, dischargers must visually observe storm water discharges at all discharge locations within two ~~one~~ business days after a qualifying event.

Section II.I.1.c, page 21

c. ~~Water Quality~~– Effluent Monitoring

Federal regulations require effluent monitoring for discharges subject to numeric action levels and numeric effluent limitations. Subsequently, all Risk Level 2 and 3 dischargers must perform sampling and analysis of ~~storm water~~ effluent discharges to characterize

discharges associated with construction activity from the entire area disturbed by the project.

Section II.I.1.c, page 22 – Table 5

	Frequency	Effluent Monitoring (Section E, below)
Risk Level 1	no monitoring required <u>when applicable</u>	non-visible pollutant parameters (if applicable)
Risk Level 2	<u>Minimum of 3 samples per day during qualifying rain event</u> samples beginning the first hour of any new discharge² and samples during the first and last hour of every day of normal operations characterizing discharges associated with construction activity from the entire project disturbed area.	pH, turbidity, and non-visible pollutant parameters (if applicable)
Risk Level 3	<u>Minimum of 3 samples per day during qualifying rain event</u> samples beginning the first hour of any new discharge³ and samples during the first and last hour of every day of normal operations characterizing discharges associated with construction activity from the entire project disturbed area.	If NEL exceeded: pH, turbidity and suspended sediment concentration (SSC) only if turbidity NEL exceeded ; Plus non-visible pollutant parameters (if applicable)

Section II.I.1.c, page 22, Footnote 14

~~Suspended Sediment Concentration monitoring is required for any Level 2 site that exceeds its turbidity NEL.~~

Section II.I.1.d, page 23

In order to ensure that receiving water limitations are met, discharges subject to numeric effluent limitations (i.e., Risk Level 3 and ATS) must also monitor the downstream receiving water(s) for turbidity, SSC ~~(if NEL exceeded)~~, and pH, when an NEL is exceeded.

² A new discharge is defined here as any type of discharge (storm water or non-storm water) that goes beyond the property boundary after at least a 48 hour period of no discharge.

³ A new discharge is defined here as any type of discharge (storm water or non-storm water) that goes beyond the property boundary after at least a 48 hour period of no discharge.

Section II.I.1.d.i, page 23

This General Permit requires a bioassessment of receiving waters for dischargers of Risk Level 3 or LUP Type 3 construction projects equal to or larger than 30 acres.

Section II.I.1.d, page 23 (cut and insert above Section II.I.3)

3. Receiving Water Monitoring

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

a. Bioassessment Monitoring

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

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

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

Table 6- Receiving Water Monitoring Requirements

<u>Receiving Water Monitoring Parameters</u>	
<u>Risk Level 1 /LUP Type 1</u>	<u>not required</u>
<u>Risk Level 2 / LUP</u>	<u>not required</u>

Type 2	
Risk Level 3 / LUP	If NEL exceeded: pH (if applicable), turbidity, and SSC.
Type 3	Bioassessment for sites 30 acres or larger.

Section II.I.3.a, page 25

~~The purpose of this is to notify the State and Regional Water Board, stakeholder agencies and organizations and the general public of the exceedance so that they can determine whether any followup (e.g., inspection, enforcement, etc.) is necessary to bring the site into compliance.~~ The purpose of the electronic filing of the NEL Violation Report is to 1) inform stakeholder agencies and organizations and the general public, and 2) notify the State and Regional Water Board of the exceedance so that they can determine whether any follow-up (e.g., inspection, enforcement, etc.) is necessary to bring the site into compliance.

In the event that an applicable NEL has been exceeded during a storm event equal to or larger than the Compliance Storm Event, Risk level 3/LUP Type 3 dischargers shall report the on-site rain gauge reading and nearby governmental rain gauge readings for verification.

Section II.I.3.a & b, page 25

- the analytical method(s), method reporting unit(s), and method detection limit(s) of each analytical parameter (analytical results that are less than the method detection limit are to be reported as "less than the method detection limit or <MDL"); and

Section II.I.3.b, page 25

All Risk Level 3 and LUP Type 3 dischargers must electronically submit all storm event sampling results to the State and Regional Water Boards via the electronic data system no later than 5 days after the conclusion of the storm event. In the event that any effluent sample exceeds an applicable NAL, all Risk Level 2 and LUP Type 2 dischargers must electronically submit all storm event sampling results to the State and Regional Water Boards no later than 10 days after the conclusion of the storm event.

Section II.I.3.c, page 26

All dischargers must prepare and electronically submit an annual report no later than September 1 of each year using ~~SMARTS~~ ~~the Storm Water Annual Report Module (SWARM)~~. The Annual Report must include a summary and evaluation of all sampling and analysis results, original laboratory reports, chain of custody forms, a summary of all corrective actions taken during the compliance year, and identification of any compliance activities or corrective actions that were not implemented.

Section II.J.1.a, page 28

Soil loss between 15 and 75 tons/acre is **medium** risk. Soil loss over 75 tons/acre ~~acres~~ is considered **high** risk.

Section II.J.1.b, paragraph 2, page 28

Risk Level 2 dischargers that pose ~~an intermediate~~ a medium risk to water quality are subject to technology-based NALs for pH and turbidity.

Section II.J.1.d, page 29

Non-storm water discharges directly connected to receiving waters or the storm drain system have the potential to negatively impact water quality. The discharger must implement measures to control all non-storm water discharges during construction, and from dewatering activities associated with construction.

Section II.J.1.f, page 29

When erosion control techniques are ineffective, sediment control techniques should be used to capture any soil that becomes eroded. The discharger is required to consider perimeter control measures such as: installing silt fences or placing ~~hay bales or~~ straw wattles below slopes.

Section II.J.1.g, page 30

The discharger is required to ~~evaluate the quantity and quality of run-on and runoff from their project site through observation and sampling~~ manage all run-on and runoff from a project site.

Section II.J.1.i, page 30

A REAP should be designed that when implemented it protects all exposed portions of the site within 48 hours of any likely precipitation event forecast of 50% or greater probability.

Section II.J.1.i, paragraph 2, page 30

A REAP must be developed when there is likely a forecast of 50% or greater ~~chance~~ probability of precipitation in the project area.

Section II.J.2.a, paragraph 2, page 31

Based on the location and complexity of a project area or project section area, LUPs are separated into project types. ~~Once a project type for the LUP has been established, the complexity of the project must be determined.~~ As described below, LUPs have been categorized into three project types.

Section II.J.2.a.i, page 32 (add language)

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

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

Section II.J.2.c, page 33

Improper use and handling of construction materials could potentially cause a threat to water quality. In order to ensure proper site management of these construction materials, all LUP dischargers must comply with a minimum set of Good Housekeeping measures specified in [Attachment A of](#) this General Permit. ~~These requirements are identical to the good housekeeping requirements applicable to traditional construction projects.~~

Section II.J.2.d, page 33

In order to ensure control of all non-storm water discharges during construction, all LUP dischargers must comply with the Non-Storm Water Management measures specified in [Attachment A of](#) this General Permit. ~~These requirements are identical to the non-storm water management requirements applicable to traditional construction projects.~~

Section II.J.2.e, page 33

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

Section II.J.2.f, page 33

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

Section II.J.2.g, page 33

Discharges originating outside of a projects perimeter and flowing onto the property can adversely affect the quantity and quality of discharges originating from a project site. In order to ensure proper management of run-on and runoff, all LUPs must comply with the run-on and runoff control measures specified in [Attachment A of](#) this General Permit. [Due to the lower risk of impacting water quality, Type 1 LUPs are not required to implement Run-on and runoff controls unless deemed necessary by the discharger.](#) ~~These requirements are identical to the run-on and runoff control requirements applicable to traditional construction projects.~~

Section II.J.2.h, page 33

Proper inspection, maintenance, and repair activities are important to ensure the effectiveness of on-site measures to control water quality. In order to ensure that inspection, maintenance, and repair activities are adequately performed, the all LUP dischargers a re required to comply with the Inspection, Maintenance, and Repair requirements specified in [Attachment A of](#) this General Permit. ~~These requirements are identical to the inspection, maintenance and repair requirements applicable to traditional construction projects.~~

Section II.K, paragraph 3, page 34

The effective design of an ATS requires a detailed survey and analysis of site conditions. ~~All factors and statistical analysis of potential complications must be considered.~~ With ~~efficient~~ proper planning, ATS performance can provide exceptional water quality discharge and prevent significant impacts to surface water quality, even under extreme environmental conditions.

Section II.K.1, page 35

~~At this time there are two general types of systems. Both types are~~ ATS is considered reliable, and can consistently produce a discharge of less than 10 NTU and have been used successfully at many sites in several states since 1995 to reduce turbidity to very low levels.

Section II.L, paragraph 3, page 36

General Permit 99-08-DWQ ~~did not specifically address post-construction controls~~ required the SWPPP to include a description of all post-construction BMPs on a site and a maintenance schedule.

Section II.L, paragraph 8, page 39

Dischargers are given the option of using Appendix ~~2~~ 4 to calculate the required runoff volume or a watershed process-based, continuous simulation model such as the EPA's Storm Water Management Model (SWMMM) or Hydrologic Simulation Program Fortran (HSPF). Such methods used by the discharger will be reviewed by the Regional Water Board upon NOT application.

Section II.M, Table 9, page 45

~~Erosion, Sediment and Storm Water Inspector~~ Certified Professional in Erosion and Sediment Control, Inc. (CPESC), QSP Both

Section II.M, Table 9, page 45

~~Certified Professional in Erosion and Sediment Control, Inc. (CPESC)~~ Enviro Cert International Inc.

Section II.M, Table 9, page 45

~~Minimum 5 years experience developing SWPPPs~~

Section II.M, paragraph 4, page 46

The SWPPP must be implemented at the appropriate level to protect water quality at all times throughout the life of the project. The SWPPP must remain on the site during construction activities, commencing with the initial mobilization and ending with the termination of coverage under the General Permit. For LUPs the discharger shall make the SWPPP available at the construction site during working hours while construction is occurring and shall be made available upon request by a State or Municipal inspector. When the original SWPPP is retained by a crewmember in a construction vehicle and is

not currently at the construction site, current copies of the BMPs and map/drawing will be left with the field crew and the original SWPPP shall be made available via a request by radio or telephone. Once construction activities are complete, until stabilization is achieved, the SWPPP shall be available from the SWPPP contact listed in the PRDs.

DRAFT ORDER

****NOTE** All findings have been renumbered**

General

~~project~~ [site](#)

~~operator~~ [legally responsible person](#)

Title Page

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

Title, Page 1

**WASTE DISCHARGE REQUIREMENTS
FOR
DISCHARGES OF STORM WATER RUNOFF ASSOCIATED WITH CONSTRUCTION
~~ACTIVITY~~ [AND LAND DISTURBANCE ACTIVITIES](#)**

Section I.A.3, Page 2

This General Permit regulates discharges of pollutants in storm water associated with construction activity (storm water discharges) to waters of the United States from construction ~~projects~~ [sites](#) that disturb one or more acres of land surface, or that are part of a common plan of development or sale that disturbs more than one acre of land surface

Section I.A.13, Page 3

This General Permit recognizes four distinct phases of construction activities. The phases are Grading and Land Development Phase, Streets and Utilities Phase, Vertical Construction Phase, and ~~Post-Construction~~ [Final Landscaping and Site Stabilization](#) Phase. Each phase has activities that can result in different water quality effects from different water quality pollutants. This General Permit also recognizes inactive construction as a category of construction site type.

Section I.B.22, Page 4

Construction ~~projects~~ [sites](#) that intend to disturb one or more acres of land within the jurisdictional boundaries of a CWA § 404 permit should contact the appropriate Regional Water Board to determine whether this permit applies to the ~~project~~ [site](#).

Section I.C.23, Page 4

~~Emergency construction activities required to immediately protect public health and safety.~~

Section I.C.27, Page 5

Owners of construction ~~projects~~ sites in this watershed must apply for the Lahontan Regional Water Board permit rather than the statewide Construction General Permit.

Section I.C, Page 6 (insert new finding after 36)

LUPs contain information that may cause a security or other regulatory issue if accessed by the public. LUPs may not include certain infrastructure information essential to public utility services in the PRDs. Missing information will be provided directly to the Regional Water Boards upon request.

Section I.D.37, Page 6

This General Permit grants an exception from the Risk Determination requirements for existing ~~projects~~ sites under Water Quality Orders No. 99-08-DWQ, and No. 2003-0007-DWQ. For certain ~~projects~~ sites, adding additional requirements may not be cost effective. Construction sites covered under Water Quality Order No. 99-08-DWQ ~~that are beyond the design stage~~ shall obtain permit coverage at the Risk Level 1. LUPs covered under Water Quality Order No. 2003-0007-DWQ shall obtain permit coverage as a Type 1 LUP. The Regional Water Boards have the authority to require Risk Determination to be performed on ~~projects~~ sites currently covered under Water Quality Orders No. 99-08-DWQ and No. 2003-0007-DWQ where they deem it necessary.

Section I.E.38, Page 6

~~This General Permit prohibits the discharge of pollutants other than storm water and authorized non-storm water discharges.~~ All discharges are prohibited except for the storm water and non-storm water discharges specifically authorized by this General Permit or another NPDES permit. Non-storm water discharges include a wide variety of sources, including improper dumping, spills, or leakage from storage tanks or transfer areas. Non-storm water discharges may contribute significant pollutant loads to receiving waters. Measures to control spills, leakage, and dumping, and to prevent illicit connections during construction must be addressed through structural as well as non-structural Best Management Practices (BMPs). The State Water Board recognizes, however, that certain non-storm water discharges may be necessary for the completion of construction.

Section I.F, Page 7 (insert new finding after 43)

The Professional Engineers Act (Bus. & Prof. Code section 6700, et seq.) requires that all engineering work must be performed by a California licensed engineer.

Section I.G.45, Page 7

This General Permit requires dischargers to assess the risk level of a ~~project~~ site based on both sediment transport and receiving water risk. This General Permit contains requirements for Risk Levels 1, 2 and 3, and LUP Risk Type 1, 2, and 3 (Attachment A). Risk levels are established by determining two factors: first, calculating the ~~project's~~

[site's](#) sediment risk; and second, receiving water risk during periods of soil exposure (i.e. grading and site stabilization). Both factors are used to determine the site specific Risk Level(s). [LUPs can be determined to be Type 1 based on the flowchart in Attachment A.1.](#)

Section I.G.47, Page 8

Rain events can occur at any time of the year in California. Therefore, a Rain Event Action Plan (REAP) is necessary [for Risk Level 2 and 3 traditional construction projects \(LUPs exempt\)](#) to ensure that active construction sites have adequate erosion and sediment controls implemented prior to the onset of a storm event, even if construction is planned only during the dry season.

Section I.G.49, Page 8

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

Section I.J.60, page 10

For all Risk Level 3 and ~~for some~~ Risk Level 2 sites, this General Permit requires effluent ~~and receiving water~~ monitoring for pH and turbidity. Sampling, analysis and monitoring requirements for effluent ~~and receiving water~~ monitoring for pH and turbidity are contained in this General Permit.

Section I.J, Page 10 (insert new finding after 60)

[Risk Level 3 sites in violation of the Numeric Effluent Limitations contained in this General Permit and with direct discharges to receiving water are required to conduct receiving water monitoring.](#)

Section I.J.61, Page 10

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

Section I.J.65, Page 11

This General Permit requires that all dischargers maintain a paper or electronic copy of all required records for three years from the date generated or date submitted, whichever is last. These records must be available at the construction site until construction is completed. [For LUPs, these documents may be retained in a crew member's vehicle and made available upon request.](#)

Section I.K.67, Page 11

If designed, operated and maintained properly an ATS can achieve very high removal rates of suspended sediment (measured as turbidity), albeit at sometimes significantly higher costs than traditional erosion/sediment control practices. As a result, this General Permit establishes NELs consistent with the [expected](#) level of typical ATS performance.

Section I.L., Page 12 (insert new finding after 71)

[LUP projects are not subject to post-construction requirements due to the nature of their construction to return project sites to pre-construction conditions.](#)

Section I.M.72, Page 12

This General Permit requires ~~A Qualified SWPPP Developer~~ the development of ~~to develop~~ a site-specific SWPPP. The SWPPP must include ~~any and all the~~ information needed to demonstrate compliance with all requirements of this General Permit, and must be kept on the construction site and be available for review. [The discharger shall ensure that a QSD develop the SWPPP.](#)

Section I.M.73, page 12

To ensure proper project oversight, this General Permit requires a Qualified SWPPP Practitioner to ~~oversee implement~~ [implementation of](#) the BMPs required to comply with this General Permit.

Section II.A.1, Page 13

~~All underground/overhead facilities typically constructed as Linear Underground/Overhead Projects (LUPs), shall comply with Attachment A, A.1 & A.2 of this Order.~~

Section II.A.1, Page 13

[Linear Underground/Overhead Projects \(LUPs\)](#) include, but are not limited to, any conveyance, pipe, or pipeline for the transportation of any gaseous, liquid.....

Section II.A.2, Page 13

The utility company, municipality, or other public or private company or agency that owns or operates the linear underground/overhead project is responsible for obtaining coverage under the General Permit where the construction of pipelines, utility lines, fiber-optic cables, or other linear underground/overhead projects will occur across several properties [unless the LUP construction activities are covered under another construction storm water permit.](#)

Section II.A.3, Page 13 (insert new language)

[All LUPs shall comply with Attachment A, A.1 & A.2 of this Order. The balance of this Order is not applicable to LUPs except as indicated in Attachment A.](#)

Section II.B.1, Page 13

The ~~landowner~~ [Legally Responsible Person \(LRP\)](#) (see [Special Provisions, Electronic Signature and Certification Requirements, Section IV.I.1](#)) must obtain coverage under this General Permit. ~~except where there is a lease of a mineral estate (oil, gas, geothermal, aggregate, precious metals, and/or industrial metals), the lessee is responsible for obtaining coverage under the General Permit.~~

Section II.B.2, Page 14

To obtain coverage, the ~~landowner or other entity described above~~ [LRP](#) must [electronically](#) file Permit Registration Documents (PRDs) prior to the commencement of construction activity. Failure to obtain coverage under this General Permit for storm water discharges to waters of the United States is a violation of the CWA and the California Water Code.

Section II.B.4.a, Page 14

New dischargers requiring permit coverage on or after the ~~adoption~~ [effective](#) date [insert effective date of permit] shall electronically file their PRDs ~~no later than 14 days~~ prior to the commencement of construction activities, and mail the appropriate annual fee no later than seven days prior to the commencement of construction activities. Permit coverage shall not commence until the PRDs ~~are accepted~~ and the annual fee are received by the State Water Board, [and a WDID number is assigned and sent by SMARTS.](#)

Section II.B.4.c, Page 15

~~New d~~Dischargers [with new sites](#) scheduled to begin construction activities on or after the adoption date of this General Permit...

Section II.B.7, page 15

Where the ~~operator~~ [LRP](#) changes or another ~~operator~~ [LRP](#) is added during the construction project, the new ~~operator~~ [LRP](#) must also submit a waiver certification through the SMARTS system.

Section II.B.7, page 16

If the new R factor is below five (5), the discharger shall update through SMARTS all applicable information on the waiver certification and retain a copy of the revised waiver ~~on-site as part of the site SWPPP.~~

Section II.C.3, Page 17

~~Dischargers may terminate coverage for such a parcel when the parcel has either achieved "Final Stabilization" or when the parcel has been sold and the new owner files PRDs.~~ [When an LRP owns property with active General Permit coverage, and the LRP sells the property, or a parcel thereof, to another person, that person shall become an LRP with respect to whatever parcel was sold. The existing LRP shall inform the new LRP of the General Permit's requirements. In order for the new LRP to continue the construction activity on its parcel of property, the new LRP, or the new LRP's approved signatory, must submit PRDs in accordance with this General Permit's requirements.](#)

Section II.D.1, Page 17

Within 90 days of when construction is complete or ownership has been transferred, the discharger shall electronically file a Notice of Termination (NOT), a final site map, and photos through the State Water Boards SMARTS. Filing a NOT certifies that all General Permit requirements have been met. The Regional Water Board will consider a construction site complete only when all portions of the ~~project site~~ have been transferred to a new owner, or all of the following conditions have been met:

Section II.D.1.c, Page 17

~~All elements of the SWPPP have been completed, including f~~Final stabilization has been reached;

Section II.D.3, Page 18

The NOT must demonstrate through photos, RUSLE or RUSLE2, or results of testing and analysis that the ~~project site~~ meets all of the conditions above (Section II.D.1) and the final stabilization condition (Section II.D.1.a) ~~shall be is~~ attained by one of the following methods:

Section II.D.3.b, Page 18

“RUSLE or RUSLE2 method,” computational proof required

Section III.D, Page 20

Footnote: Litter, rubble, discarded refuse, and remains of ~~something~~ destroyed inorganic anthropogenic waste

Section IV.I.1, page 23

All Permit Registration Documents (PRDs) and Notices of Terminations (NOTs) shall be electronically signed, certified, and submitted via SMARTS to the State Water Board. ~~by the Legally Responsible Person (LRP) or a duly authorized representative. The LRP possesses the title for the land upon which the regulated construction activities will occur. A person is a duly authorized representative only if the LRP electronically provides the authorization via the Storm water Multi Application and Report Tracking System (SMARTS). LRP's shall electronically submit All PRDs and NOTs must be electronically submitted via SMARTS. Either the Legally Responsible Person (LRP) or a person legally authorized to sign and certify PRDs and NOTs on behalf of the LRP (the LRP's Approved Signatory) must submit all information electronically via SMARTS.~~

Section IV.I.1.a, page 23

The LRP's ~~shall be~~ Approved Signatory must be one of the following:

Section IV.I.1.a.iii., and iv., page 23

For a municipality, State, Federal, or other public agency: either a principal executive officer or 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 Administrators of U.S. EPA); or
iv. ~~An individual person who owns the property~~

Section IV.I.1.b, page 24

~~For Mineral Estates (oil, gas, geothermal, aggregate, precious metals, and/or industrial minerals) the LRP shall be:~~

~~i. For a corporation: 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 facility if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;~~

~~ii. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;~~

~~iii. For a municipality, State, Federal, or other public agency: either a principal executive officer or 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 Administrators of U.S. EPA); or~~

~~iv. An individual person who leases the property.~~

Section IV.I.1.b, Page 24 (insert new language)

Changes to Authorization. If an approved signatory's authorization is no longer accurate, a new authorization satisfying the requirements of paragraph (b) of this section must be submitted via SMARTS prior to or together with any reports, information or applications to be signed by an approved signatory.

Section IV.I.2, page 24

All SWPPP revisions, annual reports, or other information required by the General Permit (other than ~~PDR~~~~PRD~~s and NOTs) or requested by the Regional Water Board, State Water Board, USEPA, or local storm water management agency shall be certified and submitted by the LRP or the LRP's approved signatory as described above ~~or by the LRP's duly authorized representative.~~

Section IV.R, Page 27

Any person who violates any permit condition of this General Permit is subject to a civil penalty not to exceed ~~\$27,500~~ \$37,500 (footnote) per calendar day of such violation, as well as any other appropriate sanction provided by Section 309 of the CWA.

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

Section IV.S, page 27

This General Permit is not transferable. ~~A new property owner of an ongoing construction activity must submit PRDs in accordance with the requirements of this General Permit to be authorized to discharge under this General Permit. A property owner with active General Permit coverage who sells a fraction of or the entire property shall inform the new property owner(s) of this General Permit's requirements.~~

Section V.B, Table 1, Page 28

Parameter	Test Method	Discharge Type	Min. Detection Limit	Units	Numeric Action Level	Numeric Effluent Limitation
Turbidity	EPA 0180.1 and/or field test with calibrated portable instrument	Risk Level 2	0 1	NTU	250 NTU	N/A
		Risk Level 3			250 NTU	500 NTU

Section V.B.4, Page 29

If ~~an analytical sampling result is~~ [daily average sampling results](#) are outside the range of pH NELs (i.e., is below the lower NEL for pH or exceeds the upper NEL for pH) or exceeds the turbidity NEL (as listed in Table 1), the discharger is in violation of this General Permit and shall electronically file ~~the~~ [monitoring](#) results in violation within ~~3~~ [5](#) business days of obtaining the results.

Section V.C.1, Page 29

For Risk Level 2 and 3 dischargers, the lower [storm event average](#) NAL for pH is 6.5 pH units and the upper [storm event average](#) NAL for pH is 8.5 pH units. The discharger shall take actions as described below if the discharge is outside of this range of pH values.

Section V.C.2, Page 29

For Risk Level 2 and 3 dischargers, the NAL [storm event daily average](#) for turbidity is 250 NTU. The discharger shall take actions as described below if the discharge is outside of this range of turbidity values.

Section V.C.3, Page 29

Whenever the results [from a storm event daily average](#) indicate that the discharge is below the lower NAL for pH, exceeds the upper NAL for pH, or exceeds the turbidity NAL (as listed in Table 1),

Section VII.B.1.e, Page 32

A certified professional in erosion and sediment control ([CPESC](#))TM registered through ~~Certified Professional in Erosion and Sediment Control, Inc~~ [Enviro Cert International, Inc.](#);

Section VII.B.1.f, Page 32

A certified professional in storm water quality ([CPSWQ](#))TM registered through ~~Certified Professional in Erosion and Sediment Control, Inc~~ [Enviro Cert International, Inc.](#);

Section VII.B.1.g, Page 32

A certified professional in erosion and sediment control registered through the National Institute for Certification in Engineering Technologies ([NICET](#)); or

Section VII.B.1.h, Page 32

~~A minimum of five years experience in developing SWPPPs for construction sites to comply with NPDES permits.~~

Section VII.B.4.a, Page 33

A certified erosion, sediment and storm water inspector registered through ~~Certified Professional in Erosion and Sediment Control, Inc~~ [Enviro Cert International, Inc.](#); or

Section VII.B.5, Page 33

The ~~discharger~~ LRP shall list [in the SWPPP](#) the name of any ~~“duly authorized representative”~~ Approved Signatory, and [provide a copy of the legal written](#) agreement or other mechanism that provides this authority from the ~~owner~~ LRP [in the SWPPP](#).

Section XIII.A.2, Page 35

The discharger shall demonstrate compliance with the requirements of this section by submitting with their NOI a map and worksheets in accordance with the instructions in Appendix [4-2](#). [The discharger shall use non-structural controls unless the discharger demonstrates that non-structural controls are infeasible or that structural controls will produce greater reduction in water quality impacts.](#)

Section XIII.A.3, Page 35

The discharger shall, through the use of non-structural and structural measures as described in Appendix [4-2](#), replicate the pre-project water balance (for this permit, defined as the volume of rainfall that ends up as runoff) for the smallest storms up to the 85th percentile storm event (or the smallest storm event that generates runoff, whichever is larger). Dischargers shall inform Regional Water Board staff at least 30 days prior to the use of any structural control measure used to comply with this requirement. Volume that cannot be addressed using non-structural practices shall be captured in structural practices and approved by the Regional Water Board. [When seeking Regional Board approval for the use of structural practices, dischargers shall document the infeasibility of using non-structural practices on the project site, or document that there will be fewer water quality impacts through the use of structural practices.](#)

Section XIII.B, page 35

~~In addition to the requirements above, a~~All dischargers shall implement BMPs to reduce pollutants in storm water discharges that are reasonably foreseeable after all construction phases have been completed at the site (Post-construction BMPs).

Section XIV.A, Page 36

The ~~QSD~~ discharger shall ensure that the Storm Water Pollution Prevention Plans (SWPPPs) for all traditional project sites are developed and amended or revised by a QSD. The SWPPP shall be designed to address the following objectives: ~~when there is a significant change to the project to ensure that:~~

Section XIV.A.5, Page 36

Stabilization BMPs installed to reduce or eliminate pollutants after construction are completed ~~and maintained~~.

Section XIV.B, Page 36

To demonstrate compliance with this General Permit, the QSD shall include ~~any and all~~ information ~~needed in the SWPPP that supports the conclusions, selections, use, and maintenance of BMPs~~ all permit in the SWPPP.

Section XIV.C, Page 36

~~Dischargers submitting Permit Registration Documents (PRDs) to the State Water Board shall develop a site/project location SWPPP prior to the start of land disturbing activity in accordance with this Section and shall comply with this General Permit concurrently with commencement of soil disturbing activities.~~

Section XVI.D.1, Page 38

a summary and evaluation of all sampling and analysis results, including ~~original~~ copies of laboratory reports

Section XVI.D.6, Page 38

the names of individual(s) who performed the facility inspections, sampling, visual observation (inspections), and/or measurements;

ATTACHMENTS

Attachment A Note: Sections I and J have been rearranged and reformatted for clarity - Section I now defines types of LUPs while Section J incorporates all the requirements for all types into this one section. This change sheet does not show the new format. Additional substantive changes are reflected in a new, clean version of Attachment A. This new version of Attachment A is posted on our website.

Attachment B, Section B, page 1

(For example, if 0.5 acre of a 20-acre subdivision is disturbed by the construction activities of ~~landowner~~ [discharger](#) A and the remaining 19.5 acres is to be developed by ~~landowner~~ [discharger](#) B, ~~landowner~~ [discharger](#) A must obtain a General Storm Water Permit for the 0.5 acre project).

Attachment B, Section B, page 1

It is the ~~landowner's~~ [LRP's](#) responsibility to obtain coverage under this General Permit by [electronically](#) submitting ~~except in leases of mineral estates a~~ complete [PRDs](#) (Permit Registration Documents).

Attachment B, Section E, page 2

~~Property owners~~ [LRP's](#) proposing to conduct construction activities subject to this General Permit must submit their PRDs prior to the commencement of construction activity. ~~PRDs should be submitted at least 14 days prior to the earliest date that construction activities may commence to ensure timely processing.~~

Attachment B, Section H.1.a, page 2

Post- Construction Water Balance Calculator (Appendix [4 2](#))

Attachment B, Section H.3.a, page 3

Dischargers who are proposing ~~to install a sediment basin(s) shall submit~~ an alternate Risk Justification:

- ~~a. Sediment Basin Sizing Design Calculations (Appendix 2)~~
- a. Particle Size Analysis

Attachment B, Section J.5, page 4

All dischargers subject to this requirement shall complete the Water Balance Calculator (in Appendix [4 2](#)) in accordance with the provided outlined instructions

Attachment B, Section J.7, page 4

~~Sediment Basin Sizing Design Calculations~~

~~All dischargers installing one or more sediment basins must use the sediment basin calculations provided in Appendix 2. Sediment basin calculations must, upon completion, be submitted electronically to the State Water Board.~~

Attachment B, end of page 4

The submittal to obtain coverage under the General Permit must include completed PRDs. The PRD submittal is considered incomplete and will be rejected if any of the required items are missing. Upon receipt of a complete PRD submittal, the State Water Board will process the application package in the order received and assign a (WDID) number. ~~Each discharger will be mailed a receipt letter containing the WDID number. Please allow up to 30 days to receive your WDID number.~~

Attachment B, end of page 4

If you have any questions on completing the [NOI PRDs](#) please email stormwater@waterboards.ca.gov or call (916) 341-5537.

Attachment C, Section B.1.a, page 1

Conduct an inventory of the products used and/or expected to be used and the end products that are produced and/or expected to be produced. [This does not include materials and equipment that are designed to be outdoors and exposed to environmental conditions \(i.e. poles, equipment pads, cabinets, conductors, insulators, bricks, etc.\).](#)

Attachment C, Section B.1.c, page 1

Store chemicals in watertight containers [\(with appropriate secondary containment to prevent any spillage or leakage\)](#) or in a storage shed (completely enclosed); ~~with appropriate secondary containment to prevent any spillage or leakage.~~

Attachment C, Section B.1.d, page 2

Minimize exposure of construction materials ~~with~~ to precipitation. [This does not include materials and equipment that are designed to be outdoors and exposed to environmental conditions \(i.e. poles, equipment pads, cabinets, conductors, insulators, bricks, etc.\).](#)

Attachment C, Section C.3, page 4

Risk Level 1 dischargers shall clean streets in such a manner as to prevent [unauthorized](#) non-storm water discharges from reaching surface water or MS4 drainage systems.

Attachment C, Section D, page 5 – Footnote 1

¹ Inactive areas of construction are areas of construction activity that have been disturbed and are not scheduled to be re-disturbed for at least ~~14~~ [30](#) days.

Attachment C, Section E.2, page 5

On sites where sediment basins are to be used, Risk Level 1 dischargers shall, at minimum, design sediment basins according to the method provided in ~~Appendix 2~~ [CASQA's Construction BMP Guidance Handbook](#).

Attachment C, Section F, page 5

Risk Level 1 dischargers shall ~~evaluate the quantity and quality of run-on and runoff through observation and sampling. Risk Level 1 dischargers shall~~ effectively manage all run-on, all runoff within the site and all runoff that discharges off the site. Run-on from

off site shall be directed away from all disturbed areas or shall collectively be in compliance with the effluent limitations in this General Permit.

Attachment C, Section G.2, page 5

Risk Level 1 dischargers shall perform weekly inspections and observations, and at least once each 24-hour period during extended storm events, to identify and record BMPs that need maintenance to operate effectively, that have failed, or that could fail to operate as intended. Inspectors shall be the QSP or be trained by the QSP.

Attachment C, Section I Table 1, page 7

Risk Level	Visual Inspections				Sample Collection		
	<u>Monthly</u> <u>Quarterly</u> Non-storm Water Discharge	Pre-storm Event		Daily Storm <u>BMP</u>	Post Storm	Storm Water Discharge	Receiving Water
		Baseline	REAP				
1	X	X		<u>X</u>	X		

Attachment C, Section I.2.d, page 8

To determine whether BMPs ~~included in the SWPPP/Rain Event Action Plan (REAP)~~ are effective in preventing or reducing pollutants in storm water discharges and authorized non-storm water discharges.

Attachment C, Section I.3.e.ii, page 9

all BMPs to identify whether they have been properly implemented in accordance with the SWPPP/~~REAP~~. If needed, the discharger shall implement appropriate corrective actions

Attachment C, Section I.3.f, page 9

For the visual observations (inspections) described in ~~ee.i~~ and ~~ee.iii~~ above,

Attachment C, Section I.4, page 9

Risk Level 1 – Visual Observation ~~and Sample Collection~~ Exemptions

Attachment C, Section I.7.a, page 10

Risk Level 1 dischargers shall collect ~~a~~ one or more samples during any

Attachment C, Section I.8, page 11

Risk Level 1 dischargers ~~utilizing a sediment basin and/or~~ justifying an alternative project risk shall report a soil particle size analysis used to determine the RUSLE K-Factor. ~~using test method~~ ASTM D-422 (Standard Test Method for Particle-Size Analysis of Soils), as revised, shall be used to determine the percentages of sand, very fine sand, silt, and clay on the site. ~~The percentage of particles less than 0.02 mm in diameter shall also be determined.~~

Attachment D, Section B.1.a, page 1

Conduct an inventory of the products used and/or expected to be used and the end products that are produced and/or expected to be produced. This does not include materials and equipment that are designed to be outdoors and exposed to environmental conditions (i.e. poles, equipment pads, cabinets, conductors, insulators, bricks, etc.).

Attachment D, Section B.1.c, page 1

Store chemicals in watertight containers (with appropriate secondary containment to prevent any spillage or leakage) or in a storage shed (completely enclosed); ~~with appropriate secondary containment to prevent any spillage or leakage.~~

Attachment D, Section B.1.d, page 2

Minimize exposure of construction materials ~~with~~ to precipitation. This does not include materials and equipment that are designed to be outdoors and exposed to environmental conditions (i.e. poles, equipment pads, cabinets, conductors, insulators, bricks, etc.).

Attachment D, Section C.3, page 4

Risk Level 2 dischargers shall clean streets in such a manner as to prevent unauthorized non-storm water discharges from reaching surface water or MS4 drainage systems.

Attachment D, Section E.2, page 5

On sites where sediment basins are to be used, Risk Level 2 dischargers shall, at minimum, design sediment basins according to the method provided in ~~Appendix 2~~ CASQA's Construction BMP Guidance Handbook.

Attachment D, Section F, page 6

Risk Level 2 dischargers shall ~~evaluate the quantity and quality of run-on and runoff through observation and sampling. Risk Level 1 dischargers shall~~ effectively manage all run-on, all runoff within the site and all runoff that discharges off the site. Run-on from off site shall be directed away from all disturbed areas or shall collectively be in compliance with the effluent limitations in this General Permit.

Attachment D, Section G.2, page 6

Risk Level 2 dischargers shall perform weekly inspections and observations, and at least once each 24-hour period during extended storm events, to identify and record BMPs that need maintenance to operate effectively, that have failed, or that could fail to operate as intended. Inspectors shall be the QSP or be trained by the QSP.

Attachment D, Section H.1, page 7

Additional Risk Level 2 Requirement: ~~Risk Level 2 dischargers~~ The QSP shall develop a Rain Event Action Plan (REAP) 48 hours prior to any likely precipitation event. A likely precipitation event is any weather pattern that is forecast to have a 50% or greater ~~chance~~ probability of producing precipitation in the project area. ~~Risk Level 2 dischargers~~ The QSP shall

Attachment D, Section H.2, page 8

The ~~Risk Level 2 discharger~~ QSP shall develop the REAPs for all phases of construction (i.e., Grading and Land Development, Streets and Utilities, Vertical Construction, ~~Post-Construction~~ Final Landscaping and Site Stabilization). ~~Example REAP templates are included in Appendix 3.~~

Attachment D, Section H.3, page 8

The ~~Risk Level 2 Discharger~~ QSP shall ensure that the REAP include, at a minimum, the following site information:

Attachment D, Section H.4, page 8

The ~~Risk Level 2 Discharger~~ QSP shall include the REAP

Attachment D, Section H.5, page 8

The ~~Risk Level 2 Discharger~~ QSP shall develop additional REAPs for

Attachment D, Section H.6, page 9

The ~~Risk Level 2 Discharger~~ QSP shall begin implementation

Attachment D, Section H.7, page 9

~~Additional Risk Level 2 Requirement: Risk Level 2 dischargers shall ensure that all REAPs be prepared and certified by a QSP.~~

Attachment D, Section H.8, page 9

The ~~Risk Level 2 dischargers~~ QSP shall maintain onsite a paper copy

Attachment D, Section I, Table 2, page 10

Risk Level	Visual Inspections					Sample Collection	
	Monthly <u>Quarterly</u> Non-storm Water Discharge	Pre-storm Event		Daily Storm <u>BMP</u>	Post Storm	Storm Water Discharge	Receiving Water
		Baseline	REAP				
1	X	X		X	X		

Attachment D, Section I.4.b, page 12

~~Risk Level 2 dischargers shall take grab samples beginning the first hour of any new discharge and during the first and last hour of every day of normal operations for the duration of the discharge event.~~

Attachment D, Section I.9.b, page 15

Risk Level 2 dischargers shall perform pH analysis on-site with a calibrated pH meter or a pH test kit ~~or wide range pH indicator paper.~~

Attachment D, Section I.11.a, page 17

Risk Level 2 dischargers shall collect ~~a~~ one or more samples during any

Attachment D, Section I.13, page 18

Risk Level 2 dischargers ~~utilizing a sediment basin and/or~~ justifying an alternative project risk shall report a soil particle size analysis used to determine the RUSLE K-Factor, ~~using test method~~ ASTM D-422 (Standard Test Method for Particle-Size Analysis of Soils), as revised, shall be used to determine the percentages of sand, very fine sand, silt, and clay on the site. ~~The percentage of particles less than 0.02 mm in diameter shall also be determined.~~

Attachment D, Section I.14.e, page 18

A summary of all analytical results from the last three years, the method detection limits and reporting units, ~~and~~ the analytical techniques or methods used, and the chain of custody forms;

Attachment D, Table 3, page 20

Parameter	Test Method / Protocol	Discharge Type	Min. Detection Limit	Reporting Units	Numeric Action Level
pH	Field test with calibrated portable instrument	All <u>Risk Level 2 Discharges</u>	0.2	pH units	lower NAL = 6.5 upper NAL = 8.5
Turbidity	EPA 0180.1 and/or field test with <u>calibrated</u> portable instrument	<u>Risk Level 2 Discharges</u> For all other than ATS	<u>0</u> <u>1</u>	NTU	250 NTU
		For ATS discharges	<u>0</u> <u>1</u>	NTU	N/A
SSC	ASTM Method D-3977-97	Risk Level 3 (if NEL exceeded)	5	mg/L	N/A
Bioassessment	(STE) Level I of (SAFIT), fixed-count of 600 org/sample	Risk Level 3 projects > 30 acres	N/A	N/A	N/A

Attachment E, Section B.1.a, page 1

Conduct an inventory of the products used and/or expected to be used and the end products that are produced and/or expected to be produced. This does not include materials and equipment that are designed to be outdoors and exposed to environmental conditions (i.e. poles, equipment pads, cabinets, conductors, insulators, bricks, etc.).

Attachment E, Section B.1.c, page 1

Store chemicals in watertight containers (with appropriate secondary containment to prevent any spillage or leakage) or in a storage shed (completely enclosed); ~~with appropriate secondary containment to prevent any spillage or leakage.~~

Attachment E, Section B.1.d, page 2

Minimize exposure of construction materials ~~with~~ to precipitation. This does not include materials and equipment that are designed to be outdoors and exposed to environmental conditions (i.e. poles, equipment pads, cabinets, conductors, insulators, bricks, etc.).

Attachment E, Section C.3, page 4

Risk Level 3 dischargers shall clean streets in such a manner as to prevent unauthorized non-storm water discharges from reaching surface water or MS4 drainage systems.

Attachment E, Section E.2, page 5

On sites where sediment basins are to be used, Risk Level 3 dischargers shall, at minimum, design sediment basins according to the method provided in ~~Appendix 2~~ CASQA's Construction BMP Guidance Handbook.

Attachment E, Section F, page 6

Risk Level 3 dischargers shall ~~evaluate the quantity and quality of run-on and runoff through observation and sampling. Risk Level 1 dischargers shall~~ effectively manage all run-on, all runoff within the site and all runoff that discharges off the site. Run-on from off site shall be directed away from all disturbed areas or shall collectively be in compliance with the effluent limitations in this General Permit.

Attachment E, Section G.2, page 7

Risk Level 3 dischargers shall perform weekly inspections and observations, and at least once each 24-hour period during extended storm events, to identify and record BMPs that need maintenance to operate effectively, that have failed, or that could fail to operate as intended. Inspectors shall be the QSP or be trained by the QSP.

Attachment E, Section H.1, page 8

Additional Risk Level 3 Requirement: ~~Risk Level 3 dischargers~~ The QSP shall develop a Rain Event Action Plan (REAP) 48 hours prior to any likely precipitation event. A likely precipitation event is any weather pattern that is forecast to have a 50% or greater ~~chance~~ probability of producing precipitation in the project area. ~~Risk Level 3 dischargers~~ The QSP shall

Attachment E, Section H.2, page 8

The ~~Risk Level 2 discharger~~ QSP shall develop the REAPs for all phases of construction (i.e., Grading and Land Development, Streets and Utilities, Vertical Construction, ~~Post-Construction Final Landscaping and Site Stabilization~~). ~~Example REAP templates are included in Appendix 3.~~

Attachment E, Section H.3, page 8

The ~~Risk Level 2 Discharger~~ QSP shall ensure that the REAP include, at a minimum, the following site information:

Attachment E, Section H.4, page 9

The ~~Risk Level 2 Discharger~~ QSP shall include the REAP

Attachment E, Section H.5, page 9

The ~~Risk Level 2 Discharger~~ QSP shall develop additional REAPs for

Attachment E, Section H.6, page 9

The ~~Risk Level 2 Discharger~~ QSP shall begin implementation

Attachment E, Section H.7, page 9

~~Additional Risk Level 3 Requirement: Risk Level 3 dischargers shall ensure that all REAPs be prepared and certified by a QSP.~~

Attachment E, Section H.8, page 9

The ~~Risk Level 3 dischargers~~ QSP shall maintain onsite a paper copy

Attachment E, Section I Table 2, page 10

Risk Level	Visual Inspections					Sample Collection	
	Monthly <u>Quarterly</u> Non-storm Water Discharge	Pre-storm Event		<u>Daily Storm BMP</u>	Post Storm	Storm Water Discharge	Receiving Water
		Baseline	REAP				
1	X	X		X	X		

Attachment E, Section I.4, page 12

~~Risk Level 3 dischargers shall take grab samples beginning the first hour of any new discharge and during the first and last hour of every day of normal operations for the duration of the discharge event.~~

Attachment E, Section I.4.h, page 13

In the event that a Risk Level 3 discharger violates an NEL contained in this General Permit and has a direct discharge into receiving waters

Attachment E, Section I.4.i, page 13

Risk Level 3 dischargers disturbing 30 acres or more of the landscape and with direct discharges into receiving waters shall conduct or participate in benthic macroinvertebrate bioassessment of RWs prior to commencement of construction activity (See Appendix ~~5~~3).

Attachment E, Section I.8.b, page 16

Risk Level 3 dischargers shall ensure that all laboratory analyses are conducted according to test procedures under 40 CFR Part 136, unless other test procedures have been specified in this General Permit or by the Regional Water Board. With the exception of field analysis conducted by the discharger for turbidity and pH, all analyses should be sent to and conducted at a laboratory certified for such analyses by the State Department of Health Services (SSC exception).

Attachment E, Section I.9.a, page 16

Risk Level ~~2~~3 dischargers shall refer to Table 3 below for test methods, detection limits, and reporting units.

Attachment E, Section I.9.b, page 16

Risk Level 3 dischargers shall perform pH analysis on-site with a calibrated pH meter or a pH test kit ~~or wide-range pH indicator paper~~. Risk Level ~~2~~ 3 dischargers shall record pH monitoring results on paper and retain these records in accordance with Section I.14, below.

Attachment E, Section I.9.c, page 17

Risk Level ~~2~~3 dischargers shall perform turbidity analysis using a calibrated turbidity meter

Attachment E, Section I.9.e, page 17

Risk Level 3 dischargers shall perform bioassessment sampling and analysis according to Appendix ~~5~~3 of this General Permit.

Attachment E, Section I.11.a, page 18

Risk Level 3 dischargers shall collect ~~a~~ one or more samples during any

Attachment E, Section I.13, page 19

Risk Level 3 dischargers ~~utilizing a sediment basin and/or~~ justifying an alternative project risk shall report a soil particle size analysis used to determine the RUSLE K-Factor. ~~using test method~~ ASTM D-422 (Standard Test Method for Particle-Size Analysis of Soils), as revised, shall be used to determine the percentages of sand, very fine sand, silt, and clay on the site. ~~The percentage of particles less than 0.02 mm in diameter shall also be determined.~~

Attachment E, Section I.14.e, page 20

A summary of all analytical results from the last three years, the method detection limits and reporting units, ~~and~~ the analytical techniques or methods used, [and the chain of custody forms](#);

Attachment E, Section I.16.a, page 21

[Risk Level 3 dischargers shall electronically submit all storm event sampling results to the State Water Board no later than 5 days after the conclusion of the storm event.](#)

Attachment E, Section I.17.a, page 22

Conduct bioassessment monitoring, as described in Appendix ~~5~~3

Attachment E, Section I.17.b, page 22 –

:

Receive Regional Board approval for the sampling exception

[Conduct bioassessment monitoring, as described in Appendix 5](#)

[Include the collection and reporting of specified instream biological data and physical habitat](#)

[Use the bioassessment sample collection and Quality Assurance & Quality Control \(QA/QC\) protocols developed by the State of California's Surface Water Ambient Monitoring Program \(SWAMP\)](#)

OR

Make a check payable to: Cal State Chico Foundation (SWAMP Bank Account) or San Jose State Foundation (SWAMP Bank Account) and include the WDID# on the check for the amount calculated for the exempted project.

Send a copy of the check to the Regional Water Board office for the site's region

Invest **\$7,500.00 X The number of samples required** into the SWAMP program as compensation (upon regional board approval)

~~[Conduct bioassessment monitoring, as described in Appendix 5](#)~~

~~[Include the collection and reporting of specified instream biological data and physical habitat](#)~~

~~[Use the bioassessment sample collection and Quality Assurance & Quality Control \(QA/QC\) protocols developed by the State of California's Surface Water Ambient Monitoring Program \(SWAMP\)](#)~~

Attachment E, Table 3, page 23

Parameter	Test Method / Protocol	Discharge Type	Min. Detection Limit	Reporting Units	Numeric Action Level	Numeric Effluent Limitation
pH	Field test with calibrated portable instrument	AH Risk Level 3 Discharges	0.2	pH units	lower NAL = 6.5 upper NAL = 8.5	lower NEL = 6.0 upper NEL = 9.0
Turbidity	EPA 0180.1 and/or field test with calibrated portable instrument	For AH Risk Level 3 Discharges other than ATS	0	NTU	250 NTU	500 NTU
		For ATS discharges	0	NTU	N/A	10 NTU for Daily Weighted Average & 20 NTU for Any Single Sample
SSC	ASTM Method D 3977-97	Risk Level 3 (if NEL exceeded)	5	mg/L	N/A	N/A
Bioassessment	(STE) Level I of (SAFIT), fixed-count of 600 org/sample	Risk Level 3 projects > 30 acres	N/A	N/A	N/A	N/A

Attachment F, Table 1, Page 1

Parameter	Test Method	Discharge Type	Min. Detection Limit	Units	Numeric Action Level	Numeric Effluent Limitation
Turbidity	EPA 0180.1 and/or field test with a calibrated portable instrument	For ATS discharges	Not specified <u>1</u>	NTU	N/A	10 NTU for Daily Flow-Weighted Average & 20 NTU for Any Single Sample

Attachment F, Section C.2, Page 2

The discharger shall ~~ensure design that~~ the ATS [is designed](#) in a manner to preclude the accidental discharge of settled floc during floc pumping or related operations.

Attachment F, Section H.2, Page 4

[Influent Turbidity](#)

[Effluent Turbidity](#)

[Influent pH](#)

Effluent pH

Residual Chemical

[Effluent](#) Flow rate

[Effluent](#) Flow volume

Attachment F, Section I.3, Page 5

General Permit and shall electronically file the results in violation within ~~3 business days~~ [24-hours](#) of obtaining the results.

Attachment F, Section I.5, Page 6

<http://www.wrcc.dri.edu/pcpnfreq/nca10y24.gif>

<http://www.wrcc.dri.edu/pcpnfreq/sca10y24.gif>

APPENDICES

Appendix 1

Worksheet errors have been edited

Appendix 2

Eliminated

Appendix 3
Eliminated

Appendix 4
Appendix ~~4~~ 2

Appendix 5
Appendix ~~5~~ 3

Appendix 5, Page 1

2. The project ~~may~~ directly discharges ~~surface~~ runoff to a freshwater wadeable stream (or streams) that is either: (a) listed by the State Water Board or USEPA as impaired due to sediment, and/or (b) tributary to any downstream water body that is listed for sediment; and/or have the beneficial use SPAWN & COLD & MIGRATORY

Appendix 6 Note: A new Appendix 4 reflects additional TMDLs that dischargers subject to the CGP may be required to comply with (all pollutants). This new version of Appendix 4 is posted on our website

Appendix 7
Appendix ~~7~~ 5

Appendix 7, Page 1 (add new term)

Approved Signatory A person who has legal authority to sign, certify, and electronically submit Permit Registration Documents and Notices of Termination on behalf of the Legally Responsible Person.

Appendix 7, Page 2 (add new term)

Conventional Pollutants: Statutorily listed pollutants understood well by scientists. These may be in the form of organic waste, sediment, acid, bacteria, viruses, nutrients, oil and grease, or heat

Appendix 7, Page 2 (add new term)

Daily Average Discharge: The discharge of a pollutant measured during any 24-hour period that reasonably represents a calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged during the day. For pollutants with limitations expressed in other units of measurement (e.g., concentration) the daily discharge is calculated as the average measurement of the pollutant throughout the day (40 CFR 122.2). In the case of pH, the pH must first be converted from a log scale.

Appendix 7, Page 2 (add new term)

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

Appendix 7, Page 5

Legally Responsible Person: The person who possesses the title of the land or the leasehold interest of a mineral estate upon which the construction activities will occur for the regulated site. For linear underground/overhead projects, it is in the person in charge of the utility company, municipality, or other public or private company or agency that owns or operates the LUP.

Appendix 7, Page 5 (add new term)

Non-Conventional Pollutant: Any pollutant not statutorily listed or which is poorly understood by the scientific community.

Appendix 8, Page 2 (add new acronym)

NICET - National Institute for Certification in Engineering Technologies