State Water Resources Control Board

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Arnold Schwarzenegge
Governor

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

ORDER NO.
NPDES NO.

This Order was adopted by the State Water Resources Control Board on:	**<Adoption Date>**
This Order shall become effective on: (100 days after adoption if USEPA has no objection, or upon withdrawal of that objection.)	**<Effective Date>**
This Order shall expire on:	**<Expiration Date>**

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

I, Song Her, Clerk to the Board, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the State Water Resources Control Board, on **<Adoption Date>**.

AYE:

NO:

ABSENT:

ABSTAIN:

_____
Song Her
Clerk to the Board

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STATE WATER RESOURCES CONTROL BOARD
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NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
GENERAL PERMIT NO. CAR000002

WASTE DISCHARGE REQUIREMENTS
FOR
DISCHARGES OF STORM WATER RUNOFF ASSOCIATED WITH CONSTRUCTION ACTIVITY

I. Findings

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

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

2. This General Permit does not preempt or supersede the authority of local storm water management agencies to prohibit, restrict, or control storm water discharges to separate storm sewer systems or other watercourses within their jurisdictions.

3. This action to adopt a general NPDES permit is exempt from the provisions of Chapter 3 of the California Environmental Quality Act (CEQA) (Public Resources Code Section 21100, et seq.), pursuant to Section 13389 of the California Water Code.

4. Pursuant to 40 CFR Part 131.12 and State Water Board Resolution No. 68-16[1], which incorporates the requirements of part 131.2 where applicable, the State Water Board considered anti-degradation, and finds that discharges in compliance with this General Permit are consistent with those provisions. Compliance with this General Permit will result in improvements in water quality.

5. This General Permit serves as an NPDES permit in compliance with CWA §402 and shall take effect 100 days after adoption by the State Water Board 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.

6. Following adoption and upon the effective date of this General Permit, the Regional Water Quality Control Boards (Regional Water Boards) shall enforce the provisions herein.

7. Regional Water Boards establish water quality standards in Basin Plans. The State Water Board establishes water quality standards in various statewide plans, including the California Ocean Plan. USEPA establishes water quality standards in the National Toxic Rule and the California Toxic Rule.

8. 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.

9. The primary storm water pollutant at construction sites is excess sediment. Excess sediment can cloud the water, reducing the amount of sunlight reaching aquatic plants, clog fish gills, smother aquatic habitat and spawning areas, and impede navigation in our waterways. Sediment also transports other pollutants such as nutrients, metals, and oils and greases.

10. Modification of a site's runoff and sediment supply and transport characteristics is a significant cause of degradation of the beneficial uses established for water bodies in California. Construction activities can impact a site's runoff and sediment supply and transport characteristics, and its effects can occur both during the construction phase and after construction is completed. Dischargers can avoid these modifications through better site design and construction activity practices. This General Permit requires all dischargers to maintain pre-development hydrologic characteristics in order to minimize post-development impacts to offsite water bodies.

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

11. The State Water Board convened a panel of storm water experts that submitted a report entitled, "The Feasibility of Numeric Effluent Limits Applicable to Discharges of Storm Water Associated with Municipal, Industrial and Construction Activities," dated June 19, 2006. The panel concluded that numeric limits or action levels are technically feasible for construction storm water discharges provided certain conditions are considered. The panel also concluded that numeric effluent limitations (NELs) are feasible for discharges from construction sites that utilize an Active Treatment System (ATS)[2]. The State Water Board incorporated suggestions from the expert panel report into this General Permit, which includes numeric action levels (NALs) for pH and turbidity and includes NELs for pH and turbidity and special numeric limits for ATS discharges.

12. Discharges of storm water from construction activities may become contaminated from alkaline construction materials resulting in high pH (greater than pH 7). Alkaline construction materials include, but are not limited to, hydrated lime, concrete, mortar, cement kiln dust (CKD), Portland cement treated base (CTB), fly ash, recycled concrete, and masonry work. This General Permit includes a NEL for pH that applies only at projects that exhibit a "high risk of high pH discharge." A "high risk of high pH discharge" can occur during the complete utilities phase, the complete vertical build phase, and any portion of any phase where significant amounts of materials are placed directly on the land at the site in a manner that could result in significant alterations of the background pH of any discharges.

13. USEPA Phase II regulations authorize the State Water Board to waive NPDES permit requirements for small construction projects (between 1 and 5 acres in size) that also have a low risk of erosivity (determined by any site with a calculated Revised Universal Soil Loss Equation (RUSLE) "R Factor" less than 5). The State Water Board will not waive coverage for these projects because they do pose some risk to water quality, but Risk Level 1 projects may be subject to fewer requirements in the General Permit.

14. This General Permit establishes turbidity NALs based on the project's site-specific characteristics (rainfall amount and intensity, runoff peak flow and volume, soil erodibility, slope length and steepness, and erosion and sediment control measures). The purpose of the NAL and associated monitoring requirements are to provide operational information regarding the performance of the site's measures used to minimize the discharge of pollutants and to protect beneficial uses and receiving waters from construction-related storm water discharges. The NALs in this General Permit are not directly enforceable and do not constitute NELs. An NAL for turbidity shall not exceed 1000 NTU, as this is the level set for the turbidity NEL.

[2] An ATS is a treatment system which employs chemical coagulation, chemical flocculation, or electrocoagulation in order to aid in the reduction of turbidity caused by fine suspended sediment

15. This General Permit requires dischargers with NAL exceedances to immediately implement additional Best Management Practices[3] (BMPs) and revise their Storm Water Pollution Prevention Plan (SWPPP) as necessary to prevent pollutants in storm water or non-storm water discharges, or to substantially reduce pollutants to levels consistently below NALs.

16. This General Permit establishes a turbidity NEL of 1000 NTU for all storm water discharges. Exceedances of the turbidity NEL are a violation of this General Permit and dischargers shall electronically provide notification of the violation and comply with any Regional Water Board enforcement action.

17. Visual and effluent monitoring is required for all sites subject to this General Permit. Under specified circumstances (all Risk Level 3 and some for Risk Level 2 sites), this General Permit requires receiving water monitoring for pH and turbidity.

18. This General Permit contains sampling, analysis and monitoring requirements for non-visible pollutants.

19. Soil particles smaller than 0.02 millimeters (mm) (i.e., finer than medium silt) do not settle easily using conventional measures for sediment control (i.e., sediment basins). Given their long settling time, dislodging these soils results in a significant risk that fine particles will be released into surface waters and cause unacceptable downstream impacts. If operated correctly, an ATS can prevent or reduce the release of fine particles from construction sites. Use of an ATS can effectively reduce a project's risk of impacting receiving waters.

20. In many parts of California, rain events can occur at any time of the year. Therefore a Rain Event Action Plan (REAP) (Section X) is necessary 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 less-rainy season.

21. The risk of accelerated erosion and sedimentation from wind and water depends on a number of factors, including proximity to receiving water bodies, climate, topography, and soil type. The General Permit requires dischargers to identify site sediment risk and site receiving water risk, which together determine which specific actions are required (Levels 1 through 3 are covered by this General Permit).

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

22. Construction activity projects should be set back from streams and wetlands to reduce risks of water quality impacts both during and after construction whenever feasible. Although this General Permit does not prescribe setbacks, it recognizes the reduced risk to receiving waters where setbacks are used (e.g., natural stream stability and habitat function) and gives credit to setbacks in the risk determination and new and re-development storm water performance standards. The risk calculation and runoff reduction mechanisms in this General Permit are expected to facilitate compliance with any Regional Water Board and local agency setback requirements, and to encourage voluntary setbacks wherever practicable.

23. This General Permit regulates pollutants in discharges of storm water associated with construction activity (storm water discharges) to US jurisdictional surface waters from construction projects that disturb one or more acres of land surface or are part of a common plan of development or sale that disturbs more than one acre of land surface.

24. This General Permit recognizes five distinct stages of construction activities. Each stage has activities that can result in different water quality impacts from different water quality pollutants. The stages are Preliminary Stage (Pre-Construction Stage), Mass Grading Stage, Streets and Utilities Stage, Vertical Construction Stage, and Post-Construction Stage.

25. This General Permit requires dischargers to assess the risk level of a project based on both sediment transport and receiving water risk. This General Permit contains requirements for Risk Levels 1, 2 and 3 - Risk Level 4 is not covered by this General Permit and is subject to individual NPDES permitting from the appropriate Regional Water Board. The Risk Level is determined by completing the Construction Project Risk Worksheet (Attachment A).

26. This General Permit requires all dischargers to comply with applicable water quality standards for receiving waters. Dischargers are responsible for determining the receiving waters potentially impacted by their discharges, and for complying with all applicable water quality standards. Where a receiving water has a more stringent standard, an NEL stated in this permit may not be the most restrictive applicable requirement.

27. Dischargers located in a drainage area where a Total Maximum Daily Load (TMDL) has been adopted by the Regional Water Board or USEPA may be required by a separate Regional Water Board action to implement additional Best Management Practices (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 a Regional Water Board permit specific to the area.

28. This General Permit includes performance standards for new and redevelopment that are consistent with State Water Board Resolution No. 2005-0006, "Resolution Adopting the Concept of Sustainability as a Core Value for State Water Board Programs and Directing Its Incorporation." The requirement for all construction sites to match pre-project hydrology will help ensure that the physical and biological integrity of aquatic ecosystems are sustained.

29. This General Permit requires all dischargers to electronically file all Permit Registration Documents (PRDs), Notices of Termination (NOT), change of information, annual reporting, and other compliance documents required by this General Permit through the State Water Board's website.

30. This General Permit requires all dischargers to 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.

31. Following public notice in accordance with State and Federal laws and regulations, the State Water Board heard and considered all comments and testimony in a public hearing on mm/dd/yyyy. The State Water Board has prepared written responses to all significant comments.

32. The following discharges are not required to obtain coverage under this General Permit:

    - Dischargers from construction projects that qualify as a Risk Level 4 project.

    - Discharges from areas on tribal lands do not need to apply for this General Permit. Construction on Tribal Lands is regulated by an USEPA permit.

    - Discharges within the Lake Tahoe Hydrologic Unit do not need to apply for this General Permit. The Lahontan Regional Water Board has adopted its own permit to regulate storm water discharges from construction activity in the Lake Tahoe Hydrologic Unit (Regional Water Board 6SLT). Owners of construction projects in this hydrologic unit must apply for the Regional Board permit rather than the statewide Construction General Permit. Construction projects within the Lahontan region must comply with the Lahontan Region Project Guideline for Erosion Control (R6T-2005-0007 Section), which can be found at: http://www.waterboards.ca.gov/lahontan/water_issues/available_documents/misc/const_npdes_order_r6t_2005-0007_final.pdf

- Discharges from construction activity disturbing less than one acre of land surface, unless part of a larger common plan of development or sale, do not need to apply for this General Permit.

- Discharges from projects covered by an individual NPDES Permit for storm water discharges associated with construction activity do not need to apply for this General Permit.

- Discharges from landfill construction activity that is subject to the General Industrial Permit do not need to apply for this General Permit.

- Discharges from construction activities that discharge to Combined Sewer Systems do not need to apply for this General Permit. Discharges from construction activities to Combined Sewer Systems are not required to obtain storm water permits in accordance with the Federal Storm Water Regulations Section 122.26(a)(k).

- Conveyances that discharge storm water runoff combined with municipal sewage are point sources that must obtain NPDES permits in accordance with the procedures of Section 122.21 and are not subject to the provisions of this General Permit.

- Discharges from qualified oil and gas exploration projects do not need to apply for this General Permit. On June 12, 2006, USEPA published regulations that exempt construction activities at oil and gas sites from the requirement to obtain an NPDES permit for storm water discharges except in very limited instances. 40 CFR § 122.26(a)(2). The regulation encourages voluntary application of BMPs for construction activities associated with oil and gas field activities and operations to minimize erosion and control sediment to protect surface water quality. The final rule became effective June 12, 2006. This exemption includes disturbances to the ground from oil and gas exploration, production, processing, and treatment operations or transmission facilities including gathering lines, flow-lines, feeder lines, and transmission lines.

- Discharges from routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of the facility, do not need to apply for this General Permit. Dischargers should confirm with the local Regional Water Board whether or not a particular routine maintenance activity[4] is subject to this General Permit.

[4] See USEPA frequently asked questions (FAQ) document: http://www.epa.gov/npdes/pubs/owm0250.pdf and http://cfpub.epa.gov/npdes/home.cfm?program_id=6

- Discharges from emergency construction activities required to protect public health and safety do not need to apply for this General Permit. Dischargers should confirm with the local Regional Water Board whether or not a particular emergency construction activity[4] is subject to this General Permit.

- Discharges to non-jurisdictional waters (as determined by the US Army Corps of Engineers).

IT IS HEREBY ORDERED that all dischargers subject to this General Permit shall comply with the following:

II. Conditions for Permit Coverage

A. Obtaining Permit Coverage

1. All new dischargers identified as Risk Levels 1, 2 and 3 and requiring coverage under this General Permit shall electronically file their PRDs and submit payment of annual fees, according to the provisions in Section VI, below.

2. Dischargers who obtained permit coverage under the previous General Permit (State Water Board Order No. 99-08-DWQ) and require coverage under this General Permit shall electronically file their PRDs in accordance with the provisions of Section VI, below.

B. Revising Permit Coverage for Change of Acreage

1. The discharger may reduce or increase the total acreage covered under this General Permit when a portion of the project is complete and/or conditions for termination of coverage have been met (See Section XI, Conditions for Termination of Coverage), when ownership of a portion of the project is sold to a different entity, or new acreage, subject to this permit, is added to the project.

2. Within 30 days of a reduction or increase in total permittable acreage, the discharger shall electronically file revisions to the PRDs that include:

   a. The revised NOI indicating the new project size.

   b. A revised site map showing the acreage of the site completed, acreage currently under construction, acreage sold/transferred or added, and acreage currently stabilized in accordance with the definition of “Final Stabilization” in footnote 12 in Section XI.

   c. SWPPP revisions, as appropriate, and

d. Certification that any new landowners have been notified of applicable requirements to obtain General Permit coverage. The certification shall include the name, address, telephone number, and e-mail address (if known) of the new landowner.

3. The discharger shall continue coverage under the General Permit for any parcel that has not achieved "Final Stabilization" as defined in footnote 12 in Section XI. 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.

4. If the project acreage subject to the annual fee has increased, dischargers shall mail revised annual fees within seven days of receiving the revised annual fee notification.

III. Discharge Prohibitions

1. Dischargers shall not violate any discharge prohibitions contained in applicable Basin Plans or statewide water quality control plans. Waste discharges to Areas of Special Biological Significance (ASBS) are prohibited by the California Ocean Plan, unless granted an exception issued by the State Water Board.

2. All discharges are prohibited except for the storm water and non-storm water discharges specifically authorized by this General Permit or another NPDES permit.

IV. Effluent Limitations

A. Narrative Effluent Limitations

1. Storm water discharges and authorized non-storm water discharges regulated by this General Permit shall not contain a hazardous substance equal to or in excess of a reportable quantity listed in 40 CFR Part 117 and/or 40 CFR Part 302.

2. Dischargers shall reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges through the use of controls, structures, and management practices that achieve BAT for toxic and non-conventional pollutants and BCT for conventional pollutants.

B. Numeric Effluent Limitations (NELs)

Table 1 – Numeric Effluent Limitations, Numeric Action Levels, Test Methods, Detection Limits, and Reporting Units

Parameter	Test Method	Discharge Type	Min. Detection Limit	Units	Numeric Action Level	Numeric Effluent Limitation
pH	Field test with calibrated paper or calibrated portable instrument	All	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 portable instrument	For all other than ATS	Not specified	NTU	Use Attach. J	1000 NTU
		For ATS discharges	Not specified	NTU	N/A	10 NTU for Daily Flow-Weighted Average & 20 NTU for Any Single Sample

1. Numeric Effluent Limitations (NELs):

   a. **Single Sample pH Limits -** the pH of storm water and non-storm water discharges shall be within the ranges specified in Table 1 during any project phase where there is a "high risk of pH discharge".[5]

   b. **Single Sample Turbidity Maximum Limit -** the turbidity of storm water and non-storm water discharges shall not exceed 1000 NTU.

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

2. NELs for discharges from an ATS:

   a. Turbidity of all ATS discharges shall be less than 10 NTU for daily flow-weighted average of all samples and 20 NTU for any single sample.

   b. Residual Chemical shall be < 10% of MATC [6] for the most sensitive species of the chemical used.

3. If an analytical effluent sampling result is 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 results in violation within 48 hours of obtaining the results.

V. Receiving Water Limitations

1. Storm water discharges and authorized non-storm water discharges shall not contain pollutants in quantities that cause a public nuisance in groundwater or surface water.

2. Storm water discharges and authorized non-storm water discharges shall not contain pollutants that cause or contribute to an exceedance of any applicable water quality objectives or water quality standards (collectively, WQS) contained in a Statewide Water Quality Control Plan, the California Toxics Rule, the National Toxics Rule, or the applicable Regional Water Board's Water Quality Control Plan (Basin Plan).

3. Storm water discharges and authorized non-storm water discharges shall not cause foam at discharge locations.

4. Storm water discharges and authorized non-storm water discharges shall not disrupt the pre-project equilibrium flow and sediment supply regime. In cases where the pre-project flow and sediment supply regime is not in equilibrium, project related activities shall not impede the natural channel evolution process.

[6] The Maximum Allowable Threshold Concentration (MATC) is the allowable concentration of residual, or dissolved, coagulant/flocculant in effluent. The MATC shall be coagulant/flocculant-specific, and based on toxicity testing conducted by an independent, third-party laboratory. The MATC is equal to the geometric mean of the NOEC (No Observed Effect Concentration) and LOEC (Lowest Observed Effect Concentration) Acute and Chronic toxicity results for most sensitive species determined for the specific coagulant. The most sensitive species test shall be used to determine the MATC.

5. Storm water discharges and authorized non-storm water discharges to any surface or ground water shall not adversely affect human health or the environment.

VI. Provisions

1. Compliance with any specific limits or requirements contained in this permit does not constitute compliance with all other applicable requirements.

2. All dischargers requiring coverage under this General Permit shall electronically file their PRDs and submit payment of annual fees, according to the following schedule:

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

   b. Existing dischargers (those who were subject to State Water Board Order No. 99-08-DWQ) shall electronically file their PRDs no later than 100 days after the adoption date [insert adoption date of permit] of this General Permit. If the project acreage subject to the annual fee has changed, dischargers shall mail a revised annual fee no less than seven days after receiving the revised annual fee notification or lose permit coverage.

   c. New dischargers scheduled to begin construction activities on or after the adoption date of this General Permit [insert effective date of permit] but prior to [insert 14 days after effective date of permit] shall electronically file their PRDs prior to commencement of construction activities or change of ownership, and mail the appropriate permit fee no later than seven days after submitting their PRDs. Permit coverage is authorized on the date the PRDs are accepted by the State Water Board pending receipt of the annual fee.

3. During the period (100 days after the State Water Board's adoption) this permit is subject to review by the USEPA, the prior permit (State Water Board Order No. 99-08-DWQ) remains in effect. Existing dischargers under the prior permit will continue to have coverage until this General Permit takes effect. Dischargers who complete their projects and electronically file a

Notice of termination during this 100-day review period are not required to obtain coverage under this General Permit.

4. A site-specific SWPPP shall be developed for the construction activity covered by this General Permit. The SWPPP shall be designed and implemented to ensure that storm water discharges and authorized non-storm water discharges do not cause or contribute to an exceedance of any applicable water quality standards. A paper SWPPP shall be maintained at the construction site at all times and shall be presented upon request by State and Regional Water Board staff members or local municipal representative.

5. Pursuant to Water Code Sections 13383 and 13267, all dischargers shall develop and implement a Construction Site Monitoring Program (CSMP) in accordance with Attachment B: Monitoring Program and Reporting Requirements.

6. Existing dischargers shall make and implement necessary revisions to their SWPPP and Monitoring Program to reflect the changes in this General Permit in accordance with Section IX., Storm Water Pollution Prevention Plan, and Attachment B, Monitoring Program and Reporting Requirements, in a timely manner but no later than 100 days after [insert adoption date of permit]. Dischargers shall continue to implement their existing SWPPP and Monitoring Program in compliance with State Water Board Order No. 99-08-DWQ until the necessary revisions are completed according to the schedule above.

7. All dischargers shall comply with all 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 subject to municipal separate storm sewer system NPDES permits.

8. Authorized non-storm water discharges may include those from non-chlorinated potable water sources such as: fire hydrant flushing, irrigation of vegetative erosion control measures, pipe flushing and testing, water to control dust, and uncontaminated ground water dewatering. The discharge of non-storm water is authorized under the following conditions:

   a. The discharge does not cause or contribute to a violation of any water quality standard;

   b. The discharge does not violate any other provision of this General Permit;

   c. The discharge is not prohibited by the applicable Basin Plan;

d. The discharger has included and implemented specific BMPs in the SWPPP to prevent or reduce the contact of the non-storm water discharge with construction materials or equipment.

e. The discharge does not contain toxic constituents in toxic amounts or (other) significant quantities of pollutants;

f. The discharge is monitored and meets the applicable NALs and NELs; and

g. The discharger reports the sampling information in the Annual Report.

9. If each of the above conditions is not satisfied, the discharge is not authorized by this General Permit. The discharger shall notify the Regional Water Board of any anticipated non-storm water discharges not authorized by this General Permit to determine the need for a separate NPDES permit.

10. This General Permit expires five years from the date of adoption.

VII. Project Planning Requirements

A. Risk Level

The Discharger shall calculate the project's sediment risk and receiving water risk and use these to determine a Risk Level(s) using the methodology in Attachment A. For any project that spans two or more planning watersheds[7], the discharger shall calculate a separate Risk Level for each planning watershed. The discharger shall notify the State Water Board of the project's Risk Level determination(s) and shall include this as a part of the PRDs submittal. If a discharger ends up with more than one Risk Level determination, the Regional Water Board may choose to break the project in to separate levels of implementation. Projects or project elements that are determined to be Risk Level 4 are not eligible to be covered by this General Permit.

B. Particle Size Analysis

1. Dischargers shall complete a soil particle size analysis, using test method ASTM D-422 (Standard Test Method for Particle-Size Analysis of Soils), as revised, 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.

[7] Planning watershed: defined by the Calwater Watershed documents as a "planning watershed (PWS)," that ranges in size from approximately 3,000 to 10,000 acres http://gis.ca.gov/catalog/BrowseRecord.epl?id=22175 .

VIII. Project Implementation Requirements

A. Numeric Action Levels (NALs)

1. The lower NAL for pH is 6.5 pH units and the upper NAL for pH is 8.5 pH units. The discharger shall take actions as described below if the discharge is outside of this range of pH values.

2. The NAL for turbidity is site-specific and shall be calculated using the methodology outlined in Attachment C, or an equivalent or better (as determined by a qualified professional) method to estimate expected turbidity from a construction site. If the calculated NAL exceeds 1000 NTU, the NAL shall be 1000 NTU.

3. Whenever analytical effluent monitoring indicates that the discharge is below the lower NAL for pH, exceeds the upper NAL for pH, or exceeds the turbidity NAL (as listed in Table 1), the discharger shall conduct a construction site and run on evaluation to determine whether pollutant source(s) associated with the site's construction activity may have caused or contributed to the NAL exceedance and immediately implement corrective actions if they are needed.

4. The site evaluation shall be documented in the SWPPP and specifically address whether the source(s) of the pollutants causing the exceedance of the NAL:

    a. Are related to the construction activities and whether additional BMPs or SWPPP implementation measures are required to meet BAT/BCT requirements (Section IV, A, 2) and reduce or prevent pollutants in storm water discharges from causing exceedances of receiving water objectives and what corrective action(s) were taken or will be taken and schedule for completion.

    OR:

    b. Are related to the runon associated with the construction site location and whether additional BMPs or SWPPP implementation measures are required to meet BAT/BCT requirements (Section IV, A, 2) and reduce or prevent pollutants in storm water discharges from causing exceedances of receiving water objectives and what corrective action(s) were taken or will be taken and schedule for completion.

B. Erosion Control

1. All Risk Level dischargers shall implement effective wind erosion control.

2. All Risk Level dischargers shall provide effective soil cover for inactive[8] areas and all finished slopes, open space, utility backfill, and completed lots.

3. For Risk Level 3, the discharger shall provide cover for all disturbed, inactive areas of construction equivalent to RUSLE "C Factor" of 0.003.

C. Runon and Runoff Controls

1. For all Risk Levels, the discharger shall evaluate the quantity and quality of runon and runoff through observation and sampling. The discharger shall effectively manage all runon, all runoff within the site and all runoff that discharges off the site. Runon from off site shall be directed away from all disturbed areas.

2. Runon and runoff controls are not required for Risk Level 1 unless the quantity and quality evaluation deems them necessary.

D. Sediment Controls

1. For all Risk Levels, the discharger shall establish and maintain effective perimeter controls and stabilize all construction entrances/exits sufficient to control erosion and sediment discharges from the site.

2. For all Risk Levels, on sites where sediment basins are to be used, the discharger shall, at a minimum, design sediment basins according to the method provided in Attachment D.

3. For Risk Levels 2 and 3, the discharger shall implement appropriate erosion control BMPs (runoff control and soil stabilization) in conjunction with sediment control BMPs for areas under active[9] construction.

4. For Risk Levels 2 and 3, the discharger shall apply linear sediment controls along the toe, face, and at the grade breaks of exposed and erodible slopes to comply with sheet flow lengths[10] in accordance with Table 2 below.

[8] Inactive areas of construction are areas of construction activity that have been disturbed and are not scheduled to be re-disturbed for at least 14 days.

[9] Active areas of construction are areas undergoing land surface disturbance. This includes construction activity during the preliminary stage, mass grading stage, streets and utilities stage and the vertical construction stage

[10] Sheet flow length is the length that shallow, low velocity flow travels across a site.

Table 2 – Critical Slope/Sheet Flow Length Combinations

Slope Percentage	Sheet flow length not to exceed
0-25%	20 feet
25-50%	15 feet
Over 50%	10 feet

5. For Risk Levels 2 and 3, the discharger shall ensure that construction activity traffic to and from the project is limited to entrances and exits that employ effective controls to prevent offsite tracking of sediment.

6. For Risk Levels 2 and 3, the discharger shall ensure that all storm drain inlets and perimeter controls, runoff control BMPs, and pollutant controls at entrances/exits (e.g. tire washoff locations) are maintained and protected from activities that could reduce their effectiveness.

7. For Risk Levels 2 and 3, the discharger shall inspect all immediate access roads (i.e., public and private roads) daily and immediately remove by vacuuming or sweeping any sediment or other construction activity-related materials that are deposited on the roads. This does preclude the need to reduce sediment tracking in the first place.

8. For Risk Level 3, the Regional Water Board may require the discharger to implement additional site-specific sediment control requirements if the implementation of the other requirements in this section are not adequately protecting the receiving waters.

E. Active Treatment System (ATS)

1. Dischargers choosing to implement an ATS on their site shall comply with all of the requirements in Attachment E.

F. Good Site Management "Housekeeping" (All Risk Levels)

1. The discharger shall implement good site management (i.e., "housekeeping") measures for **construction materials** that pose a threat to water quality. At a minimum, the good housekeeping measures shall consist of the following:

a. Conducting 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.

b. Covering and berming loose stockpiled construction materials that are not actively being used (i.e. soil, spoils, aggregate, fly-ash, stucco, hydrated lime, etc.).

c. Storing chemicals in watertight containers or in a storage shed (completely enclosed), with appropriate secondary containment to prevent any spillage or leakage.

d. Minimizing contact of construction materials with precipitation, and

e. Implementing BMPs to reduce or prevent the offsite tracking of loose construction and landscape materials.

2. The discharger shall implement good housekeeping measures for **waste management**, which, at a minimum, shall consist of the following:

a. Preventing disposal of any rinse/wash waters or materials on impervious surfaces or into the storm drain system.

b. Berming sanitation facilities (e.g., Porta Potties) and avoiding a direct connection to the storm water drainage system or receiving water.

c. Cleaning or replacing sanitation facilities and inspecting them regularly for leaks and spills.

d. Covering waste disposal containers when they are not in use and avoiding a direct connection to the storm water drainage system or receiving water.

e. Berming and securely protecting stockpiled waste material from wind and rain at all times unless actively being used.

f. Maintaining procedures that effectively address hazardous and non-hazardous spills.

g. Developing a spill response and implementation plan prior to commencement of construction activities. The plan shall include:

i. Require that equipment and materials for cleanup of spills shall be available on site and that spills and leaks shall be cleaned up immediately and disposed of properly.

ii. Identify and train appropriate spill response personnel.

h. Lining and berming of concrete washout areas so there is no leakage or overflow into the underlying soil and onto the surrounding areas. Washout areas shall be positioned away from drain inlets or waterways and be clearly labeled.

3. The discharger shall implement good housekeeping for **vehicle storage and maintenance**, which, at a minimum, shall consist of the following:

   a. Preventing oil, grease, or fuel to leak in to the ground, storm drains or surface waters.

   b. Placing all equipment or vehicles, which are to be fueled, maintained and stored in a designated area fitted with appropriate BMPs.

   c. Cleaning leaks immediately and disposing of leaked materials properly.

4. The discharger shall implement good housekeeping for **landscape materials**, which, at a minimum, shall consist of the following:

   a. Covering and berming stockpiled materials such as mulches and topsoil when they are not actively being used.

   b. Discontinuing the application of any erodible landscape material within 2 days before a forecasted rain event or during periods of precipitation.

   c. Applying erodible landscape material at quantities and applications rates according to manufacture recommendations or based on written specifications by knowledgeable and experienced field personnel.

   d. Stacking erodible landscape material on pallets and covering, or storing such materials under cover when not being used or applied.

5. The discharger shall conduct an assessment and create a list of **potential pollutant sources** and identify any areas of the site where additional BMPs are necessary to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. This potential pollutant list shall be kept with the SWPPP and shall identify all non-visible pollutants which are known, or should be known, to occur on the construction site.

   a. At a minimum, when developing BMPs, the discharger shall:

i. Consider the quantity, physical characteristics (liquid, powder, solid, etc.), and locations of each potential pollutant source handled, produced, stored, recycled, or disposed of at the site.

ii. Consider the degree to which pollutants associated with those materials may be exposed to and mobilized by contact with storm water.

iii. Consider the direct and indirect pathways that pollutants may be exposed to storm water or authorized non-storm water discharges. This shall include an assessment of past spills or leaks, non-storm water discharges, and discharges from adjoining areas.

iv. Ensure retention of sampling, visual observation, and inspection records.

v. Ensure effectiveness of existing BMPs to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges.

6. The discharger shall implement appropriate controls throughout all stages of construction to address air deposition issues.

G. Non-Storm Water Management (All Risk Levels)

1. The discharger shall implement measures to control all non-storm water discharges during construction.

2. The discharger shall wash vehicles in such a manner as to prevent non-storm water discharges to surface waters or MS4 drainage systems.

3. The discharger shall wash streets in such a manner as to prevent non-storm water discharges from reaching surface water or MS4 drainage systems.

H. New Development and Re-development Storm Water Performance Standards

1. All dischargers subject to the new development and redevelopment standards of an active Phase I or II municipal separate storm sewer system (MS4) permit are not required to comply with the requirements of this section (Section H). This includes activities covered under the Caltrans Statewide General Permit.

2. The discharger shall demonstrate compliance with the requirements of this section by submitting with their NOT a map and worksheets in accordance with the instructions in Attachment F.

3. The discharger shall, through the use of non-structural and structural measures, replicate the pre-project water balance (for this permit, defined as the amount of rainfall that ends up as runoff) for the smallest storms up to the 85th percentile storm event (or the smallest storm event that generates runoff, whichever is larger). The discharger shall obtain Regional Water Board staff approval for the use of any structural control measures used to comply with this requirement.

4. For projects whose disturbed project area exceeds two acres, the discharger shall preserve the pre-construction drainage density (miles of stream length per square mile of drainage area) for all drainage areas serving a first order stream[11] or larger stream and ensure that post-project time of runoff concentration is equal or greater than pre-project time of concentration.

I. Inspection, Maintenance and Repair

1. A Qualified SWPPP Practitioner shall conduct inspections and perform sampling and analysis at the discharger's project location.

2. The discharger shall perform Inspections and observations weekly, and at least once each 24-hour period during extended storm events, to identify BMPs that need maintenance to operate effectively, that have failed or that could fail to operate as intended.

3. Upon identifying failures or other shortcomings, the discharger shall implement repairs or design changes to BMPs as soon as possible.

4. For each inspection required, the discharger shall complete an inspection checklist, using a form provided by the State Water Board or Regional Water Board or in an alternative format that includes the information described in Project Implementation Requirement J.

5. The checklist shall remain onsite with the SWPPP. At a minimum, an inspection checklist shall include:

    a. Inspection date and date the inspection report was written.

    b. Weather information, including presence or absence of precipitation, estimate of beginning of storm event, duration of event, time elapsed since last storm, and approximate amount of rainfall (inches).

[11] A first order stream is defined as a stream with no tributaries.

c. Site information, including stage of construction, activities completed, and approximate area of the site exposed.

d. A description of any BMPs evaluated and any deficiencies noted. If there are no deficiencies, the report shall indicate that the project is in compliance with the SWPPP. 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. Report the presence of noticeable odors or of any visible sheen on the surface of any discharges.

f. Corrective actions required, including any changes to SWPPP necessary and implementation dates.

g. Photographs taken during the inspection, if any.

h. Inspector's name, title, and signature.

J. Training and Qualifications

1. All persons responsible for implementing requirements of this General Permit shall be appropriately trained. This includes those personnel responsible for installation, inspection, maintenance, and repair of BMPs. Training should be both formal and informal, occur on an ongoing basis, and should include training offered by recognized governmental agencies or professional organizations. Those responsible for preparing, amending and certifying SWPPPs and REAPs shall comply with the requirements in Section IX and X.

IX. Storm Water Pollution Prevention Plan (SWPPP)

A. SWPPP Preparation, Implementation and Oversight

1. **Qualified SWPPP Developer:** All SWPPPs shall be written, amended and certified by a Qualified SWPPP Developer. A Qualified SWPPP Developer shall have one of the following registrations or certifications, and appropriate experience, as required for:

a. A California registered professional civil engineer,

b. A California registered professional geologist or engineering geologist,

c. A California registered landscape architect,

d. A professional hydrologist registered through the American Institute of Hydrology,

e. A certified professional in erosion and sediment control registered through Certified Professional in Erosion and Sediment Control, Inc.,

f. A certified professional in storm water quality registered through Certified Professional in Erosion and Sediment Control, Inc., or

g. A certified professional in erosion and sediment control registered through the National Institute for Certification in Engineering Technologies.

AND

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

2. The SWPPP shall be written and amended, as needed, to address the specific circumstances for each construction site covered by this General Permit prior to commencement of construction activity for any stage.

3. The SWPPP shall list the name and telephone number of the currently designated Qualified SWPPP Practitioner(s).

4. **Qualified SWPPP Practitioner:** A Qualified SWPPP Practitioner is a person assigned responsibility for non-storm water and storm water visual observations, sampling and analysis, and responsibility to ensure full compliance with the permit and implementation of all elements of the SWPPP. Effective two years from the date of adoption of this General Permit, a Qualified SWPPP Practitioner shall be either a Qualified SWPPP Developer or have one of the following certifications:

   a. A certified erosion, sediment and storm water inspector registered through Certified Professional in Erosion and Sediment Control, Inc., or

   b. A certified inspector of sediment and erosion control registered through Certified Inspector of Sediment and Erosion Control, Inc.

   AND

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

5. The SWPPP shall list the name of any "duly authorized representative" and the legal agreement or other mechanism that provides this authority from the owner.

6. The SWPPP shall include a list of names of all contractors, subcontractors, and individuals responsible for implementation of the SWPPP. This list shall include telephone numbers and work addresses. Specific areas of responsibility of each subcontractor and emergency contact numbers shall also be included.

7. The SWPPP and each amendment shall be signed by the discharger (landowner) or his/her duly authorized representative. The SWPPP shall include a listing of the date of initial preparation and the date of each amendment.

X. Rain Event Action Plan

1. Rain Event Action Plans are not required for projects in Risk Level 1.

2. For projects in Risk Levels 2 and 3, the discharger shall develop a REAP 48 hours prior to any likely precipitation event. A likely precipitation event is any weather pattern that is forecasted to have a 50% or greater chance of producing precipitation in the project area. The discharger shall obtain printed likely precipitation forecast information from the National Weather Service Forecast Office (e.g., by entering the zip code of the project's location at http://www.srh.noaa.gov/forecast).

3. The discharger shall begin implementation and make the REAP available onsite no later than 24 hours priors to the likely precipitation event.

4. The REAP shall include the site conditions, the characteristics of the predicted rain event, and the actions needed to comply with this General Permit. The discharger shall use the form in Attachment G.

5. All REAPs shall be prepared and certified by a Qualified SWPPP Practitioner.

6. The discharger shall maintain a paper copy of each REAP onsite in compliance with the record retention requirements of this General Permit, Standard Provision G.1. (Attachment G).

XI. Conditions for Termination of Coverage

1. When construction is complete or ownership has been transferred, the discharger shall electronically file a NOT, a final site map, and photos (as necessary) in accordance with Attachment B. Filing a NOT certifies that all requirements have been met in accordance with the General Permit. A construction project is considered complete only when all portions of the site have been transferred to a new owner, or all of the following conditions have been met:

    a. There is no potential for construction-related storm water pollutants to be discharged in site runoff;

    b. All elements of the SWPPP have been completed, including final stabilization;

    c. Construction materials and wastes have been disposed of properly;

    d. Compliance with the New and Re-development Standards in Section I of this General Permit has been demonstrated;

    e. Post-construction storm water management measures have been installed and a satisfactory long-term maintenance plan has been established; and

    f. All construction-related equipment, materials and any temporary BMPs no longer needed are removed from the site.

2. The discharger shall certify that final stabilization conditions are satisfied in their NOT. Failure to certify shall result in continuation of permit coverage and annual billing.

3. The discharger shall provide in their NOT information demonstrating (e.g., photos, results of testing/analysis, etc.) that final stabilization shall be attained by one of the following methods:

    a. "70% Vegetative Cover Method:" the vegetative cover is self-sustaining and at least 70% of the soil on each individual parcel is uniformly covered by live, actively growing plant matter in contact with the soil[12].

[12] Where background native vegetation covers less than 100% of the surface, such as in arid areas, the 70% coverage criteria shall be adjusted. If, on undisturbed sites, the native vegetation covers 50% of the ground surface, then 70% of 50% (.70 X .50 = .35) would require 35% total uniform vegetative surface coverage. This coverage shall be self-sustaining and at least 35% of the soil shall be uniformly covered by live actively growing plant matter in contact with the soil. The remaining exposed soil (65%) shall be partially covered by at least 2" of fallen plant litter or standing dead plant litter.

The remaining exposed soil (30%) shall be partially covered by at least 2 inches of fallen plant litter or standing dead plant litter. Perennial vegetation may include grasses, ground covers, shrubs, or a combination. Soil loss as predicted by RUSLE must be at or below pre-project levels.

OR:

b. "C Factor Method:" equivalent stabilization measures have been employed that provide a RUSLE "C Factor" of 0.003 or less on each individual parcel. These measures include erosion resistant soil coverings or treatments such as compost, rolled erosion control products, or mulch. Soil loss as predicted by RUSLE must be at or below pre-project levels.

OR:

c. "Effluent Quality Method:" storm water discharges from drainage areas representing the stabilized areas contain turbidity less than any applicable receiving water quality standard.

XII. Regional Water Board Authorities

1. Regional Water Board staff may review PRDs and reject or accept permit coverage of applications or may require dischargers to submit a Report of Waste Discharge / NPDES permit application for Regional Water Board consideration of individual requirements.

2. Regional Water Boards shall review comments provided from the public on new permit applications. Based upon the public comments and Regional Water Board review of the permit application submittal, Regional Water Boards may take actions that include, but are not limited to: rescinding permit coverage, requiring public hearings or formal Regional Water Board permit approvals, requesting dischargers to revise their SWPPP and/or Monitoring Program within a specified time period, or taking no action.

3. Regional Water Boards shall administer the provisions of this General Permit. Administration of this General Permit may include, but is not limited to, requesting the submittal of SWPPPs, reviewing SWPPPs, reviewing REAPs, reviewing monitoring and sampling and analysis reports, conducting compliance inspections, gathering site information by

any medium including sampling, photo and video documentation, and taking enforcement actions.

4. Regional Water Boards may issue separate permits for discharges of storm water associated with construction activity to individual dischargers, categories of dischargers, or dischargers in a geographic area. Upon issuance of such permits by a Regional Water Board, dischargers subject to those permits shall no longer be regulated by this General Permit.

5. Regional Water Boards may impose additional requirements on dischargers to satisfy TMDL implementation requirements or to satisfy provisions in their Basin Plans.

6. Regional Water Boards may require revisions to SWPPPs, REAPs, and Monitoring Programs.

7. Regional Water Boards may require dischargers to retain records for more than the three years required by this General Permit.

8. Regional Water Boards may require additional Monitoring and Reporting Program Requirements, including sampling and analysis of discharges to sediment-impaired water bodies.

9. Regional Water Boards may terminate coverage under this General Permit for dischargers who fail to comply with its requirements or where they determine that an individual NPDES permit is appropriate.

10. Regional Water Boards may direct the discharger to reevaluate the Risk Level(s) for their project (or elements/segments of the project) and impose the appropriate level of requirements.

11. Regional Water Boards may terminate coverage under this General Permit for dischargers who incorrectly determine or report their risk level (e.g., they determine themselves to be a Level 1 risk when they are actually a Level 2 risk project).