Common Stormwater Pollution Prevention Plan (SWPPP) for Caltrans Middle-Mile Broadband Network (MMBN) Programmatic Reporting

LUP Risk Types: 1, 2 and 3

Waste Discharge Identification Number (WDID): SWBPP000001

Prepared for:

California Department of Transportation, Caltrans

HQ-Division of Environmental Analysis

1120 N St

Sacramento CA, 95814

Project Site Address

Various locations

Districts 1-District 12

Submitted by:

Qualified SWPPP Developer (QSD)

Sayra Hurley, QSD, CPESC, CPMSM, Env SP

Brown and Caldwell

202 Cousteau Place, Ste 175

Davis, CA 95618

Contractor's Water Pollution Control Manager (WPCM)

TBD per individual LCAN

Contractor's Qualified SWPPP Practitioner (QSP)

TBD per individual LCAN

Common SWPPP Date

December 2022

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Section 100: Common SWPPP Applicability

This Common SWPPP is prepared and submitted for statewide programmatic permit coverage Caltrans for construction of Middle-Mile Broadband Network (MMBN) projects initiated by Governor's Executive Order N-73-20, per Section III.B.4 of the Construction General Permit (CAS000002, Order No. 2022-0057-DWQ) as adopted in September 2022 (herein referred to as adopted CGP). Each individual project will share one common WDID and will be assigned a unique LCAN ID.

This Common SWPPP addresses all anticipated linear underground/overhead project (LUP) activities and potential pollutant sources relevant to the project scope. Each individual MMBN project will comply with this Common SWPPP.

In addition, the Contractor for each MMBN project will prepare a project-specific Linear Construction Activity Notification (LCAN) application as described in Section III.B.4.c. of the adopted CGP. Each project's LCAN application requires the attachment of a Site-Specific Plan that provides supplemental information particular to the project (herein this package is referred to as LCAN).

Per the adopted CGP, this Common SWPPP is compliant with applicable requirements of the existing CGP (CAS000002, Order No. 2009-009- DWQ as amended by Order 2010-0014-DWQ and 2012-006-DWQ; herein referred to as the 2009 CGP). Construction of MMBN stand-alone projects may continue coverage under the 2009 CGP until September 1, 2025.This Common SWPPP is applicable to MMBN stand-alone projects only. When a MMBN project is to be installed as a part of a highway improvement project, the water pollution controls for the MMBN activities must be included in the highway improvement project's SWPPP.

Section 200: Common SWPPP Certifications and Approval

200.1 Legally Responsible Person Certification and Caltrans Approval

The California Department of Transportation (Caltrans) Director, as the Legally Responsible Person (LRP), has authorized the Caltrans Middle-Mile Broadband Network Director to be the Approved Signatory of Caltrans for reviewing, signing, and certifying the Common Stormwater Pollution Prevention Plan (SWPPP) in conformance with Section VI.H of the adopted CGP. The Contractor for each MMBN project is required to prepare a Linear Construction Activity Notification (LCAN) application, with the Site-Specific Plan attachment. In addition, the Contractor is responsible and liable at all times for compliance with applicable requirements of the 2009 CGP for which compliance is ultimately determined by the Regional Water Quality Control Board (RWQCB), the State Water Resources Control Board (SWRCB), and/or the U.S. Environmental Protection Agency (USEPA). Copies of the SWRCB-issued Waste Discharge Identification Number for this Common SWPPP and the Notice of Intent form are provided as Attachment B.

The LRP has SMARTS authorization on file to allow Approved Signatory to enter or certify adhoc and other reports as required by the 2009 CGP.

Middle-Mile Broadband Network Director's Acceptance of the Common SWPPP

I certify under penalty of law that this document and all attachments were reviewed under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

This Common SWPPP is accepted based on a review performed by myself or personnel acting under my direction that determined that the Common SWPPP meets the requirements set forth in the 2009 Construction General Permit.

Hardeep Takhar

Hardeep Thakkar, MMBN Director

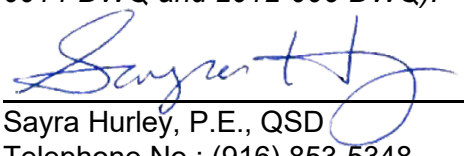
12/02/2022

Date of Common SWPPP Acceptance

200.2 QSD Common SWPPP Certification

QSD's Certification of the Common SWPPP

I certify under penalty of law that I relied upon available project and site information to develop this Common SWPPP so that Best Management Practices (BMPs) were identified in accordance with industry standards and best professional judgment to reduce pollutants from leaving the job site. All other sources relied upon to gain information for this project's Common SWPPP were appropriate and dependable, based on my best professional judgment. To the best of my knowledge and belief, the information submitted in this Common SWPPP is in compliance with all requirements of the 2009 Construction General Permit (CAS000002, Order No. 2009-009-DWQ as amended by Order 2010-0014-DWQ and 2012-006-DWQ).



Sayra Hurley, P.E., QSD
Telephone No.: (916) 853-5348

December 2, 2022
Date

200.3 Common SWPPP Revisions

This Common SWPPP is prepared and submitted for statewide programmatic permit coverage for construction of MMBN projects. Each MMBN project shall comply with this Common SWPPP. This Common SWPPP shall be revised when:

- There is a significant change to the project description (Section 400.1)
- On or before September 1, 2025, when programmatic permitting coverage (2009 CGP requirements) ends.

Approved and certified revisions shall be inserted into the appropriate section or attachment of the Common SWPPP. All Common SWPPP revisions prepared by the QSD and shall be accepted and certified by the LRP or Approved Signatory.

200.4 Common SWPPP Amendments

The Contractor for each MMBN project will prepare an LCAN to serve as an amendment to this Common SWPPP. The LCAN will include the following site specific information:

- Project name and/or reference number
- LCAN ID
- Site location
- Site specific map detailing pollutant sources and implemented BMPs
- Estimated start and end date
- Risk Type determination and supporting documentation
- Site contact information (name, phone number, address)

This Common SWPPP shall be amended when:

- There is a new MMBN project.

Approved and certified amendments shall be inserted as Attachment C of the Common SWPPP. All Common SWPPP amendments prepared by the QSD and approved by the Contractor shall be accepted and certified by the LRP or Approved Signatory.

Section 300: Objectives

This Common SWPPP has five (5) main objectives, which are listed below.

1. All pollutants and their sources, including sources of sediment associated with construction, construction site erosion, and all other activities associated with LUP activity, are controlled.
2. Where not otherwise required to be under a California Regional Water Quality Control Board (RWQCB) permit, all non-stormwater discharges are identified and either eliminated, controlled, or treated.
3. Site BMPs are effective and result in the reduction or elimination of pollutants in stormwater discharges and authorized non- stormwater discharges from LUP during construction.
4. Calculations and design details for site run-on and BMP controls are complete and correct.
5. Stabilization BMPs designed to eliminate or reduce pollutants after construction are complete and have been installed.

This Common SWPPP was developed to conform to the required elements of the 2009 CGP (CAS000002, Order No. 2009-0009-DWQ as amended by Order 2010-0014-DWQ and 2012-006-DWQ) issued by the SWRCB.

This Common SWPPP is a “living document” because updated and additional information is added to the Common SWPPP as the project progresses, via the LCAN amendments that include site-specific information such as:

- Contractor Personnel Training Documentation;
- Site Inspection Reports;
- Sampling and Analysis Results; and
- Notice of Discharge Reports.

The Common SWPPP and project specific LCAN shall be readily available on site for the duration of each of the MMBN projects.

Section 400: Project and Contractor Information

400.1 Project Description

This Common SWPPP is prepared for construction of Caltrans MMBN projects initiated by Governor's Executive Order N-73-20 which directs certain state agencies, including Caltrans, to help facilitate deployment and adoption of broadband services throughout the state. Caltrans plans to install approximately 10,000 miles of MMBN statewide by July 2026. The 10,000 miles of MMBN will be constructed by multiple non-contiguous linear underground and overhead broadband projects.

The MMBN installation work will commence by December 2022 and be completed by December 31, 2026. There will be approximately 250 acres of disturbed acreage annually. The following table shows the approximate lengths of MMBN to be installed for the 12 Caltrans Districts.

Table 400.1 Length of MMBN to be Installed per District

District	Length of MMBN (miles)
1	734
2	1,244
3	981
4	921
5	666
6	996
7	648
8	1,340
9	726
10	803
11	679
12	149
Statewide	**9,885**

The project scope of work provides for utility trenching to install communication conduit infrastructure including installation of new dry utility vaults. There will be up to 10,000 miles of utility trenching. The trench width will be approximately 6-12 inches wide and excavation depth varies with existing conditions, typically up to 42 inches in depth. The project site locations span over varying distances throughout the state and for this reason, the geologic and ground water conditions vary for this project. Groundwater is not anticipated.

The work is expected to generate approximately 2,085 acres of disturbed area statewide. Grading activities are not identified as included within the project scope. Trench spoils not utilized for trench backfill activities shall be stockpiled next to the trench and removed daily from the work zone. The project sites are primarily highways. Most trenching work for the MMBN will occur in either the paved

shoulders or open space next to the shoulders of the highways. Vegetation may exist in the open space.

Stormwater is conveyed through surface runoff and storm drain systems and discharges to receiving water bodies. Details of the receiving water bodies as well as percentage impervious areas before and after construction will be identified in the LCAN of each MMBN project.

400.2 LUP Project Risk Type

For the Common SWPPP, no specific LUP risk type is calculated. As mentioned earlier, each project will have an LCAN which will include the specific project's LUP risk type determination. This MMBN Common SWPPP includes requirements for LUP Risk Types 1, 2 or 3 as it is possible that there will be various projects that trigger LUP Risk Type 2 or 3 depending on their project footprint (sediment risk) and their receiving water risk. The LUP risk type is the basis for the minimum level of site-specific monitoring and reporting that will be required. The LUP risk type is based on project duration, proximity to impaired receiving waters, site conditions, and soil conditions.

The LUP Risk Type determination must be included as Appendix E in the LCAN.

If the project limits fall under more than one regional board; each regional board requires a LUP Risk Type determination, LCAN application and its corresponding Site-Specific Plan.

As part of the LCAN, the determination must be included. If the Project meets the two-criterion set for Risk Type 1 (same as Attachment A.1 Flowchart):

1. 70 percent or more of the construction activity occurs on a paved surface and where areas disturbed during construction will be returned to preconstruction conditions or equivalent protection established at the end of the construction activities for the day, or
2. greater than 30 percent of construction activities occur within the non-paved shoulders or land immediately adjacent to paved surfaces, or where construction occurs on unpaved improved roads, including their shoulders or land immediately adjacent to them where:

    Areas disturbed during construction will be returned to pre-construction conditions or equivalent protection established at the end of the construction activities for the day to minimize the potential for erosion and sediment deposition, and Areas where established vegetation was disturbed during construction will be stabilized and re-vegetated by the end of project. When required, adequate temporary stabilization Best Management Practices (BMPs) will be installed and maintained until vegetation is established to meet minimum cover requirements established in this General Permit for final stabilization.

If the MMBN project will not meet this criterion, then a Risk Type determination must be completed to determine if the project is a Risk Type 2 or 3 based on Attachment A of the CGP. Risk type 2 or 3 MMBN Projects must calculate the following:

1. Determine sediment risk
    a. GIS Map Method
    b. Individual method
2. Determine Receiving Water Risk
    a. GIS map
    b. Site specific analysis
3. Determine combined Risk

400.3 Construction Sites Estimates

The following construction site estimates will be developed in the LCAN for each specific project.

- Construction site area in acres
- Percentage impervious area before construction in percentage (%)
- Percentage impervious area after construction in percentage (%)
- Run-on from off-site areas anticipated
- Amount of anticipated stormwater run-on flow rate to the construction site, in cubic feet per second.

Anticipated drainage patterns following the completion of grading activities are to be shown on the Water Pollution Control Drawings (WPCDs) as part of the LCAN.

Locations of potential run-on with the estimated flow rates shall be noted on the WPCDs. The BMPs designed to handle the run-on flows are included in Section 600.3.1.

400.4 Vicinity and Site Map

The construction project vicinity map showing the project location, surface water boundaries, geographic features, construction site perimeter, and general topography, are included in the LCAN as Appendix B.

In addition, there are three maps required to be included:

- The first map will be a zoomed 1000-1500 ft vicinity map that shows the starting point of the project.
- The second will be a zoomed map of 1000-1500 ft showing the ending location of the project.
- The third will be a larger view vicinity map,1000 ft to 2000 ft, displaying the entire project location depending on the project size, and indicating the total project footprint.

400.5 Unique Site Features

Any unique site features will be included in each project's LCAN which will include the following information:

- Whether the project has Fill Material
- Whether the project has Native Material:
- Type of hydrologic Soil Group: (A (high infiltration rate), B, C, or D (low infiltration rate))
- Type of Soil Erodibility: (Slight, Moderate or Severe)
- Any unique Features onsite: (waterbodies, wetlands, ESAs):

400.6 Contact Information for Responsible Parties

The following parties are responsible for this Common SWPPP. Each LCAN will include the Contractors personnel who will be responsible for the specific BMNN project including the LCAN preparer which must be a QSD, the Water Pollution Control Manager, the QSP and any QSP delegates.

Qualified SWPPP Developer (QSD)

Name:	Sayra Hurley
Title:	Qualified SWPPP Developer
Company:	Brown and Caldwell
Address:	202 Cousteau Place, Ste 175, Davis, CA 95618
Phone Number:	(916) 853-5348
Email address:	shurley@brwncald.com

If the Common SWPPP is amended, the QSD preparing the revision must update this section to include his or hers' appropriate certifications.

400.7 Training

The Common SWPPP was prepared by a QSD. Sayra Hurley, the QSD for this MMBN project, meets the qualifications and certification requirements of Section VII, Training Qualifications and Certification Requirements, of the 2009 CGP based on:

- QSD certification #20477
- CPESC Certification #8427

The QSD has received the following training:

- QSD training
- Title 22 Hazardous Waste Training (HAZWOPER)
- Caltrans 8-hour WPCM Training

The QSD has the following SWPPP development experience:

- Prepared the Caltrans SWPPP/WPCP Preparation Guide
- Prepared the Caltrans Construction Site BMP Manual
- Oversaw preparation of SWPPP and WPCP Templates for Caltrans Projects
- Prepared SWPPP and WPCP for Caltrans projects
- Have reviewed SWPPP and WPCPs for Caltrans projects.

The LCAN will include ongoing, formal training sessions for individuals responsible for LCAN development and implementation shall be selected from one of the following organizations.

- State of California RWQCB
- USEPA-sponsored training
- Recognized municipal stakeholder organizations throughout California

Contractor and subcontractor employees responsible for water pollution control BMP installation, maintenance and repair will have their training listed in Appendix H of the LCAN.

Contractor and subcontractor employees shall be trained prior to working on the site in the following subjects:

- water pollution control rules and regulations
- implementation and maintenance for:
  - temporary soil stabilization,
  - temporary sediment control,
  - tracking control,
  - wind erosion control,
  - material pollution prevention control,
  - waste management, and
  - non-stormwater management
- identification and handling of hazardous substances
- potential dangers to humans and the environment from spills and leaks or exposure to toxic or hazardous substances

Informal employee training shall include tailgate site meetings to be conducted weekly; tailgate meetings should address the following topics:

- water pollution control BMP deficiencies and corrective actions;
- BMPs that are required for work activities during the week;
- spill prevention control and countermeasures;
- material delivery, storage, use, and disposal;
- waste management; and
- non-stormwater management procedures.

A summary of formal training certificate(s) (e.g., 2009 CGP Training, Caltrans 8-hour WPCM Training) for the Qualified SWPPP Developer are included in Attachment C.

Training records for project personnel shall be completed the CEM-2023 Stormwater Training Record form, available as an LCAN Appendix H. Records of training, with training certificates attached, when applicable, and the training log must be kept for at least three years from project commencement. Personnel training records, with required documentation attached and an updated training log, shall be submitted to the RE within five (5) days of completion of training.

Training information, consisting of the following items, shall be provided in the Stormwater Annual Report:

- documentation of all training for individuals responsible for all activities associated with compliance with 2009 CGP,
- documentation of all training for individuals responsible for BMP installation, inspection, maintenance, and repair, and
- documentation of all training for individuals responsible for overseeing, revising, and amending the LCAN.

Section 500: References, Other Plans, Permits and Agreements

The documents listed below are made a part of this Common SWPPP by reference.

- SWRCB-Order No. 2009-0009-DWQ, Order No. 2009-0009-DWQ as amended by Order 2010-0014-DWQ and 2012-006-DWQ NPDES General Permit No. CAS000002, National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated With Construction and Land Disturbance Activities (Construction General Permit), September 2009
- Order 2022-Xxxx-DWQ NPDES No. CAS000003 National Pollutant Discharge Elimination System Statewide Stormwater Permit And Waste Discharge Requirements For State Of California Department Of Transportation
- Caltrans Statewide Storm Water Management Plan (SWMP), dated July 2016
- Construction Site Best Management Practices (BMP) Manual, dated May 2017
- Construction Site *Monitoring Program Guidance Manual*, dated August 2013

Relevant sections of the Caltrans Statewide Permit and the 2009 CGP along with other environmental permits that are site specific will be included in each LCAN as Appendix F.

Section 600: Determination of Construction Site BMPs

600.1 Pollutant Sources

600.1.1 Inventory of Materials and Activities

The following table contains a list of construction activities that have the potential to contribute pollutants, including sediment, to stormwater discharges. All potential pollutants, and their locations shall be listed in this section, and, where possible, the locations shall be shown on LCAN's WPCDs Appendix C. Details for controlling these pollutants using soil stabilization and sediment control are discussed in section 600.3. Potential non-storm water and waste management-related discharges are further discussed in sections 600.4.

Table 600.1.1. Anticipated Construction Activities for Caltrans MMBN Projects

Facility - Conduits / vaults		**Facility - Network Hub Shelter (Hub) and facilities**	
Activity	**Pollutant**	**Activity**	**Pollutant**
Material Delivery/Equipment	Sediment (tracking), fluid/lubricants, trash	Sawcutting	Slurry, wash water, Sawcutting dust
Sawcutting	Slurry, wash water, Sawcutting dust	Clearing/Grubbing	Sediment
Trenching/Excavation	Sediment	Trenching/Excavation	Sediment
Horizontal Boring and Drilling	Sediment, drilling mud, bentonite, clay or additives, containment pits, drilling fluid/lubricants, working spoils	Stockpile	Sediment
Backfilling	Sediment	Concrete Pouring & Curing	Sediment, Gross Pollutants, PH
Asphalt Paving/ Resurfacing	Sediment, oil and grease, hot asphalt, concrete, emulsion, crumb rubber (if applicable), concrete, slurry, metals	Welding	Metal
Attachment to Bridge (Hanger System)	Gross Pollutants		
Vehicle and Equipment Use	Oil and grease		
Solid Waste (Litter, trash, debris)	Gross Pollutants		
Sanitary Waste (Portable toilets)	Nutrients and Bacteria		

The LCAN will have a list of updated potential pollutants in accordance with onsite conditions, documenting all materials or equipment that have been received, stored outdoors and are potential sources of stormwater contamination.

Materials Management Plan

A list of construction materials that will be onsite and have the potential to contribute pollutants to stormwater runoff are provided below:

- Asphalt products
- Asphalt or concrete rubble
- Concrete material
- Solid waste
- Stockpile materials
- Sanitary waste (port-a-potty)
- Liquid waste
- Chain link fencing

The following materials will be properly stored according to Safety Data Sheets:

- Hazardous materials: fuels, lubricants, oils, solvents, hydraulic fluids, etc.
- Hazardous waste
- Treated wood waste (if applicable)

The following dumpsters and receptacles shall be covered prior to likely precipitation events

- Trash
- Portable washout
- Hazardous waste (secondary containment)

The following areas will be inspected for leaks or spills prior to forecasted precipitation events

- Port-a-potties
- Motor
- Generator
- Vehicles
- Staging areas
- Liquid waste containment
- Secondary containment
- Concrete Washouts
- Stockpiles

600.1.2 Potential Pollutants from Site Features or Known Contaminates

Former site usage or known site contamination may contribute pollutants to stormwater discharges from the site. Based on information available for the project site, the LCAN will list any site usage and historical contamination:

600.1.3 LUP Risk Type Determination

This Common SWPPP includes minimum BMPs that must be evaluated and implemented as needed and LUP risk type required BMPs in accordance with 2009 CGP LUP requirements. Specific details are included in sections 600.3 to 600.4.

600.2 Pre-Construction Existing Stormwater Control Measures

Any existing (pre-construction) control measures encountered within the project site will be included in the LCAN for each individual MMBN project.

600.3 BMP Selection for Erosion and Sediment Control

The Contractor shall control construction site erosion through the implementation of effective erosion and sediment control measures in accordance with the 2009 CGP. The Contractor and the WPC Manager shall develop a schedule that includes the sequencing of LUP activities and the implementation of effective erosion control BMPs while taking local climate (rainfall, wind, etc.) into consideration, thereby reducing the amount and duration of soil exposed to erosion by wind, rain, runoff, and vehicle tracking.

The LCAN WPC schedule shall: describe when work activities will be performed that could cause the discharge of pollutants in stormwater; describe the water pollution control practices associated with the proposed work; and identify the soil stabilization and sediment control practices for all disturbed soil areas. Effective soil cover shall be provided for:

- Inactive disturbed areas
- Disturbed Soil Areas

Additional erosion and sediment control BMPs may be required in other locations on the project site as work progresses in order to prevent sediment from leaving the construction site. These measures shall be determined by the Contractor and the WPC Manager in the field. As long as the water pollution control measures consist of additions to the BMPs already selected in the approved Common SWPPP, then these additional measures do not require an LCAN amendment, and the WPC Manager shall simply show the additional measures on the WPCDs. If erosion control or sediment control BMPs must be changed because of field conditions or because they are determined to be ineffective, the LCAN must be amended. Once deemed necessary, corrective actions/design changes to the LCAN shall be reviewed and signed by the WPC Manager, implemented within 24 hours of identification unless a longer period is authorized (but cannot be authorized longer than required by the 2009 CGP: implemented within 72 hours of identification and completed as soon as possible thereafter). Immediate corrective action is required for numeric action level (NAL) exceedances. Routine BMP maintenance or the implementation of an additional quantity of a BMP included in the LCAN as recommended by the WPC Manager does not require an amendment to the LCAN.

An effective combination of erosion (soil stabilization) and sediment control BMPs shall be implemented and maintained during the MMBN project. The following principles shall be followed to the maximum extent practicable to control erosion and sedimentation in disturbed areas at the site.

- Retain existing vegetation whenever feasible
- Vegetate and mulch or otherwise stabilize disturbed areas
- Prepare drainage pathways, conveyances, and outlets to handle concentrated runoff

A more concise listing of the BMP control measures to be implemented and maintained at the project site are denoted in the BMP selection tables in the following sub-sections.

600.3.1 Temporary Run-on Control BMPs

The following run-on control BMPs shall be assessed for the LUP Risk Type identified in the project's LCAN. If the BMP will not be implemented for that LUP risk type determined, a reason for not implementing them will be included in the LCAN narrative.

LUP Risk Type 1, 2 and 3 projects are required to evaluate run-on and runoff (quantity and quality) and implement them based on visual inspections showing such controls are required.

The BMPs listed below are a minimum and the WPCM for each LCAN can augment based on project specific conditions.

Table 600.3.1. Temporary Run-on Control BMPs

Construction BMP ID No.	BMP Name	LUP Risk Type 1	LUP Risk Type 2	LUP Risk Type 3
SS-1	Scheduling	X	X	X
SS-9	Earth Dikes / Drainage Swales & Lined Swales		X	X
SS-10	Outlet Protection / Velocity Dissipation Devices		X	X
SS-11	Slope Drains		X	X
SC-4	Temporary Check Dam		X[1]	X[1]
SC-5	Fiber Rolls		X[1]	X[1]
SC-6	Temporary Gravel Bag Berm/Earthen Berm		X[1]	X[1]
SC-8	Temporary Sandbag Barrier		X[1]	X[1]

X[1] - one or a combination of these BMPs are required based on site conditions.

Each LCAN will detail any run-on onto the project site and will evaluate and show how temporary Run-on Controls BMPs will be deployed. All projects must direct run-on from off-site areas away from all disturbed project areas or material storage areas. BMPs will be deployed in a sequence to follow the progress of grading and construction. As the locations of soil disturbance change, temporary diversion controls will be adjusted accordingly to prevent run-on from impacting disturbed soil. Within the project limits, to enhance the effectiveness of other BMPs:

- Divert run-on and run-off away from disturbed areas
- Divert run-on and run-off from top of disturbed slopes (if applicable)
- Divert run-on and run-off around stockpiles, material storage or other sensitive areas, and
- Place appropriate BMPs to ensure stormwater is diverted to a conveyance or infiltrated into vegetated area.

600.3.2 Soil Stabilization (SS) (Erosion Control)

Soil stabilization, also referred to as erosion control, consists of source control measures that are designed to prevent soil particles from detaching and becoming transported in stormwater runoff. Soil stabilization BMPs protect the soil surface by covering and/or binding soil particles. The projects under this Common SWPPP will incorporate minimum temporary soil stabilization requirements and other measures selected by the Contractor.

Sufficient soil stabilization materials will be maintained on site to allow implementation in conformance with Caltrans requirements and as described in this Common SWPPP. This includes implementation requirements for active and non-active areas that require deployment before the onset of rain.

The following soil stabilization BMP selection table indicates the BMPs that shall be implemented to control erosion on the construction site. Temporary soil stabilization BMPs are to be shown on the WPCDs (Appendix C) of each project's LCAN.

The BMPs listed below are a minimum and the WPCM for each LCAN can augment based on project specific conditions.

Table 600.3.2. Temporary Soil Stabilization BMPs

Construction BMP ID No.	BMP Name	LUP Risk Type 1	LUP Risk Type 2	LUP Risk Type 3
SS-1	Scheduling	X	X	X
SS-2	Preservation of Property / Preservation of Existing Vegetation	X	X	X
SS-3	Temporary Hydraulic Mulch (Bonded Stabilized Fiber Matrix)	X[1]	X[1]	X[1]
SS-3	Temporary Hydraulic Mulch (Polymer Stabilized Fiber Matrix)	X[1]	X[1]	X[1]
SS-4	Temporary Erosion Control (With Temporary Seeding)			
SS-5	Temporary Soil Stabilizer	X[1]	X[1]	X[1]
SS-6	Temporary Erosion Control (Straw Mulch with Stabilizing Emulsion)	X[1]	X[1]	X[1]
SS-7	Temporary Erosion Control Blanket (On Slope)	X[a]	X[a]	X[a]
SS-7	Temporary Erosion Control Blanket (In swale or ditch)	X[a]	X[a]	X[a]
SS-7	Temporary Cover (Geotextiles and Mats)	X[a]	X[a]	X[a]
SS-8	Temporary Mulch (Wood)	X[1]	X[1]	X[1]
SS-9	Earth Dikes / Drainage Swales & Lined Swales		X	X
SS-10	Outlet Protection / Velocity Dissipation Devices		X	X
SS-11	Slope Drains	X[a]	X[a]	X[a]
SS-12	Streambank Stabilization	X[a]	X[a]	X[a]

X[1] - one or a combination of these BMPs are required based on site conditions

X[a] - implementation of this BMP is based on site conditions and should be implemented if conditions warrant its usage.

The Soil Stabilization BMPs selected for this Common SWPPP are listed below. Each LCAN will assess specific SS BMPs that will be deployed for the site. Each project is required to provide effective soil cover for inactive areas (areas of construction activity that have been disturbed and not scheduled to be re-disturbed for at least 14 days), all finished slopes and utility backfill.

- **SS-1 Scheduling** - The WPCM for each LCAN must develop a schedule that details the sequence of activities to be undertaken and the BMP implementation to protect stormwater discharges.
- **SS-2 Preservation of Existing Vegetation** - soil disturbance should be kept to a minimum by preserving the existing vegetation. Minimizing disturbance will ensure that BMP deployment occurs only in locations that have been disturbed or where materials or activities are taking place that need water pollution control.
- **SS-3 Temporary Hydraulic Mulch** - this BMP can be used to stabilize areas where vegetation has been removed and provide stabilization to prevent sediment transport from rain event or wind.
- **SS-7 Temporary Cover**. Each project must assess the use of plastic and limit the use of these materials when more sustainable environmentally friendly alternatives exist. Where plastic materials are deemed necessary, solar degradation resistant materials must be considered. When plastic is no longer needed, it must be disposed of in proper receptacles.

600.3.3 Sediment Control

Sediment controls are structural measures that are intended to complement and enhance the selected soil stabilization (erosion control) measures and reduce sediment discharges from construction areas. Sediment controls are designed to intercept and settle out soil particles that have been detached and transported by the force of water. This project will incorporate minimum temporary sediment control requirements, temporary sediment control measures selected by the Contractor.

Sediment control BMPs will be installed at all appropriate locations along the site perimeter and at all operational internal inlets to storm drain systems at all times once DSA or construction activities occur.

Throughout the duration of the project, temporary sediment control materials, equivalent to 10 percent of the materials installed on site, will be maintained on site for implementation in event of predicted rain, or the need for rapid response to failures or emergencies. This includes implementation requirements for active areas and non-active areas before the onset of rain.

The following sediment control BMP selection table indicates the BMPs that shall be implemented to control sediment on the construction site. Temporary sediment control BMPs will be listed by location in the LCAN. Any details for temporary sediment control BMPs are to be shown in the LCAN's WPCDs (Appendix C).

The BMPs listed below are a minimum and the WPCM for each LCAN can augment based on project specific conditions.

Table 600.3.3. Temporary Sediment Control BMPs

Construction BMP ID No.	BMP Name	LUP Risk Type 1	LUP Risk Type 2	LUP Risk Type 3
SC-1	Temporary Silt Fence	X[1]	X[1]	X[1]
SC-2	Temporary Sediment Basin			
SC-3	Temporary Sediment Trap/Curb Cutback			
SC-4	Temporary Check Dam	X[1]	X[1]	X[1]
SC-5	Fiber Rolls	X[a]	X[a]	X[a]
SC-6	Temporary Gravel Bag Berm/Earthen Berm	X[1]	X[1]	X[1]
SC-7	Street Sweeping	X	X	X
SC-8	Temporary Sandbag Barrier	X[1]	X[1]	X[1]
SC-9	Temporary Straw Bale Barrier			
SC-10	Temporary Drain Inlet Protection	X	X	X
SC-11	Compost Stock	X[a]	X[a]	X[a]
SC-12	Flexible Sediment Barrier	X[1]	X[1]	X[1]

X[1] - one or a combination of these BMPs are required based on site conditions

X[a] - implementation of this BMP is based on site conditions and should be implemented if conditions warrant its usage.

The following list of BMPs and associated narratives explain how the selected BMPs will be incorporated into the project.

- **SC-1 Temporary Silt Fence.** Temporary Silt Fence will be used for perimeter control along the disturbed areas to prevent sediment-laden runoff from leaving the project site or into conveyance or discharge points. Silt fence must be installed parallel with the slope contour.
- **SC-4 Temporary Check Dam.** Temporary check dams can be deployed in drainage channels or ditches at locations shown on WPCDs. Temporary check dams can slow down the velocity of sediment-laden runoff. Check dams shall be used for small drainage channels Check dams are to be installed along a level contour.
- **SC-5 Temporary Fiber Rolls.** Temporary fiber roll will be deployed along at locations shown on WPCDs. Fiber rolls shall be properly installed leveled along parallel contours as much as possible. Fiber roll shall be used as a means of perimeter control for inactive disturbed areas and active disturbed areas and slopes. Fiber roll shall also be used for run-on and runoff control where needed.
- **SC-6 Temporary Gravel Bag Berm.** Temporary gravel bag berms will be used as needed to control run-on and run-off. Gravel bag berms can be used to control run-on and run-off throughout the construction limits. Gravel bag berms can be used as a temporary dike if needed.

- **SC-7 Street Sweeping.** Road sweeping and vacuuming will be performed as necessary to keep streets clear of tracked material and debris. The use of water to clean sediment from roadways is prohibited. Washing of sediment tracked onto streets into storm drains will not occur. Swept material shall either be disposed of immediately or left in a covered stockpile and removed weekly. Sweeping will be done using either a vacuum sweeper or by hand; no kick brooms shall be allowed.
- **SC-10 Inlet Protection.** Inlet protection will be applied to all existing inlets that are within the areas where work is taking place. Inlet protection BMPs will be installed at all active inlets effected by constructed activities.
- **SC-11 Compost Sock.** Compost socks are a mesh sock containing compost that act as three dimensional, biodegradable structures that intercept and filter sheet flow. Compost socks can filter runoff, retain sediment, and reduce sheet flow velocities. Compost socks may be used as either a temporary or permanent sediment control measure. Before installing compost sock, remove obstructions from the ground including rocks, clods, and debris greater than 1 inch in diameter. For any 20-foot section of compost sock, prevent the compost sock from varying more than 5 percent from level.
- **SC-12 Flexible Barrier.** Flexible sediment barriers are synthetic alternatives to fiber rolls, compost socks, and straw bale barriers. Flexible sediment barriers consist of a geosynthetic fabric with a urethane foam-filled core and a fabric apron that helps to prevent undermining and scour. These synthetic linear sediment barriers are generally more robust sediment controls than standard fiber rolls and may be appropriate for continuous use in stormwater collection areas.

If slopes are disturbed, MMBN projects that are LUP Risk Type 2 and 3 projects must implement linear sediment controls along the toe of the slope, face of the slope, and at the grade breaks of exposed slopes to comply with sheet flow lengths as shown on table below:

Table 600.3.4 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

600.3.4 Tracking Control

Tracking control BMPs are be implemented to reduce sediment tracking from the construction site onto private or public roads.

The following tracking control BMP selection table indicates the BMPs that shall be implemented to reduce sediment tracking from the construction site onto private or public roads. Temporary tracking control BMPs are shown on the WPCDs (appendix C).

The BMPs listed below are a minimum and the WPCM for each LCAN can augment based on project specific conditions.

Table 600.3.5. Temporary Tracking Control BMPs

Construction BMP ID No.	BMP Name	LUP Risk Type 1	LUP Risk Type 2	LUP Risk Type 3
SC-7	Street Sweeping	X	X	X
TC-1	Temporary Construction Entrance	X	X	X
TC-2	Stabilized Construction Roadway	X[a]	X[a]	X[a]
TC-3	Temporary Entrance / Outlet Tire Wash			

X[a] - implementation of this BMP is based on site conditions and should be implemented if conditions warrant its usage.

The following list of BMPs and associated narratives explain how the selected BMPs will be incorporated into the project.

- **SC-7 Street Sweeping** - Sweeping shall be conducted over paved surfaces, roadways, and pathways where sediment has been tracked or transported by construction equipment. It is possible to use handheld brooms if areas are small enough. material generated from street sweeping activities will be managed daily and properly disposed of.
- **TC-1 Temporary Construction Entrance** - temporary construction entrances shall be placed at all ingress and egress points and any staging areas to reduce the potential for tracking mud and sediment onto public roads by construction vehicles. If all the work will occur over paved surfaces or the materials and vehicles will be on impervious surfaces; the potential for tracking is minimized and might not require the implementation of this BMP. The WPCM will evaluate the need for TC-1 based on project limits, the scope of work and any stage construction (if applicable).

600.3.5 Wind Erosion Control

Wind erosion control BMPs will be implemented to prevent sediment from leaving the construction site. This project will incorporate SWPPP/WPCP Preparation Manual minimum temporary wind erosion control requirements, temporary wind erosion control measures required by the contract documents, and other measures selected by the Contractor.

The following temporary wind erosion control BMP selection table indicates the BMPs that shall be implemented to reduce wind erosion at the construction site. Temporary wind erosion control BMPs are shown on the WPCDs.

The BMPs listed below are a minimum and the WPCM for each LCAN can augment based on project specific conditions.

Table 600.3.6. Temporary Wind Erosion Control BMPs

Construction BMP ID No.	BMP Name	LUP Risk Type 1	LUP Risk Type 2	LUP Risk Type 3
WE-1	Wind Erosion Control	X	X	X
TC-1	Temporary Construction Entrance			
TC-2	Stabilized Construction Roadway			

Every project under this Common SWPPP must implement wind erosion control throughout the duration of the project.

600.4 BMP Selection for Construction Management

Construction site management shall consist of controlling potential sources of water pollution before they come in contact with stormwater systems or watercourses. The Contractor shall control material pollution and manage waste and non-stormwater discharges at the construction site by implementing effective handling, storage, use, and disposal practices.

600.4.1 Non-Stormwater Site Management

Non-stormwater discharges into storm drainage systems or waterways, which are not authorized under the Caltrans Permit or authorized under a separate NPDES permit, shall be prohibited. The selection of non-stormwater BMPs is based on whether construction activities with a potential for non-stormwater discharges will be conducted, as discussed in the Materials Management Plan and other measures selected by the Contractor.

The following non-stormwater control BMP selection table indicates the BMPs that shall be implemented to prevent non- stormwater discharges from construction activities conducted at the project site. Non-stormwater pollution control BMPs will be shown on the LCAN's WPCDs (Appendix C).

The BMPs listed below are a minimum and the WPCM for each LCAN can augment based on project specific conditions.

Table 600.4.1. Temporary Non-Stormwater Pollution Control BMPs

Construction BMP ID No.	BMP Name	LUP Risk Type 1	LUP Risk Type 2	LUP Risk Type 3
NS-1	Water Control and Conservation	X	X	X
NS-2	Dewatering			
NS-3	Paving, Sealing, Sawcutting, and Grinding Operations	X	X	X
NS-4	Temporary Stream Crossing			
NS-5	Clear Water Diversion			
NS-6	Illegal Connection and Illegal Discharge Detection Reporting	X	X	X
NS-7	Potable Water / Irrigation	X	X	X
NS-8	Vehicle and Equipment Cleaning	X	X	X
NS-9	Vehicle and Equipment Fueling	X	X	X
NS-10	Vehicle and Equipment Maintenance	X	X	X
NS-11	Pipe Driving Operations			
NS-12	Concrete Curing	X	X	X
NS-13	Material and Equipment Used Over Water	X[a]	X[a]	X[a]
NS-14	Concrete Finishing	X	X	X
NS-15	Structure Demolition / Removal Over or Adjacent to Water			

X[a] - implementation of this BMP is based on site conditions and should be implemented if conditions warrant its usage.

600.4.2 Waste Management and Materials Pollution Control

An inventory of construction activities, materials, and wastes is provided in Section 600.1.1. The following BMP consideration checklist lists the BMPs that have been selected to control construction site wastes and materials. Locations and details of applicable materials handling and waste management BMPs are shown on the WPCDs. In the narrative description, a list of waste disposal facilities and the type of waste to be disposed at each facility is also provided.

The BMPs listed below are a minimum and the WPCM for each LCAN can augment based on project specific conditions.

Table 600.4.2. Temporary Waste Management and Materials Pollution Control BMPs

Construction BMP ID No.	BMP Name	LUP Risk Type 1	LUP Risk Type 2	LUP Risk Type 3
WM-1	Material Delivery and Storage	X	X	X
WM-2	Material Use	X	X	X
WM-3	Stockpile Management	X	X	X
WM-4	Spill Prevention and Control	X	X	X
WM-5	Solid Waste Management	X	X	X
WM-6	Hazardous Waste Management[3]	X	X	X
WM-7	Contaminated Soil Management[3]	X	X	X
WM-8	Concrete Waste Management	X	X	X
WM-8	Temporary Concrete Washout (Portable)	X	X	X
WM-8	Temporary Concrete Washout Facility	X	X	X
WM-9	Sanitary/Septic Waste Management	X	X	X
WM-10	Liquid Waste Management	X	X	X

600.5 Water Pollution Control Drawings (WPCDs)

The WPCDs are the component of the project LCAN that show the BMPs that are necessary for the project to be in compliance with the 2009 CGP.

The WPCDs provide field staff with the information on where to install BMPs so that they are effective. The WPCDs, and Water Pollution Control Schedule provide the necessary tools for a Contractor to plan and implement BMPs to meet the requirements of the Common SWPPP and project specific LCAN.

The WPCD cover sheet(s) shall include a listing of the BMPs that will be used along with the associated BMP symbols used on the WPCDs.

WPCDs are provided for all areas that are directly related to the construction activity, including but not limited to staging areas, storage yards, material borrow areas and storage areas, access roads, etc., whether or not they reside within the Caltrans rights-of-way

The WPCDs shall show the construction project site in detail, including:

- the construction site perimeter;
- geographic features within or immediately adjacent to the site; include surface waters such as lakes, streams, springs, wetlands, estuaries, or ponds;

- site topography before and after construction; include roads, paved areas, buildings, slopes, drainage facilities, and areas of known or suspected contamination; and
- permanent (post-construction) BMPs.

The WPCDs shall show the following site information:

- discharge points from the project to off-site storm drain systems or receiving waters;
- tributary areas and drainage patterns across the project area (show using flow arrows) into each on-site stormwater inlet or receiving water;
- tributary areas and drainage patterns to each on-site stormwater inlet, receiving water or discharge point;
- off-site tributary drainage areas that generate run-on to the project;
- temporary on-site drainage(s) to carry concentrated flows;
- drainage patterns and slopes anticipated after major grading activities are completed;
- outlines of all areas of existing vegetation, soil cover, or native vegetation that will remain undisturbed during the project;
- outlines of all areas of planned soil disturbance (disturbed soil areas, DSAs);
- known location(s) of contaminated or hazardous soils; and
- any potential non-stormwater discharges and activities, such as dewatering operations, concrete saw-cutting or coring, pressure washing, waterline flushing, diversions, cofferdams, and vehicle and equipment cleaning; if operations can't be located on the WPCDs, a narrative description should be provided.

The WPCDs show proposed locations of all construction site BMPs. Additional detail drawings are provided if necessary to convey site-specific BMP configurations. The WPCDs shall show construction site BMPs including the following:

- temporary soil stabilization and temporary sediment control BMPs that will be used during construction; any temporary on-site drainage(s) to carry concentrated flows, BMPs implemented to divert off-site drainage around or through the construction site, and BMPs that protect stormwater inlets;
- construction entrances used for site ingress and egress points and any proposed temporary construction roads;
- BMPs to mitigate or eliminate non-stormwater discharges;
- BMPs for waste management and materials pollution control, including, but not limited to storage of soil or waste; construction material loading, unloading, storage and access areas; and areas designated for waste handling and disposal; and
- BMPs for vehicle and equipment storage, fueling, maintenance, and cleaning.

The WPCDs can be found as part of each LCAN. In addition, the LCAN will have site maps as required under LUP Attachment A of the 2009 CGP to include:

1. The first map will be a zoomed 1000-1500 ft vicinity map that shows the starting point of the project.
2. The second will be a zoomed map of 1000-1500 ft showing the ending location of the project.
3. The third will be a larger view vicinity map, 1000 ft to 2000 ft, displaying the entire project location depending on the project size, and indicating the LUP type (1, 2 or 3) areas within the total project footprint.

600.6 Water Pollution Control Schedule

The Water Pollution Control Schedule (WPCS) is the component of the LCAN that shows the timeline for when BMPs will be installed for compliance with the 2009 CGP. The WPCS provides field staff with the information necessary to plan for adequate materials and crews to install BMPs at the right time so that they are effective. The WPCS and WPCDs provide the necessary tools for the Contractor to plan and implement BMPs to meet the requirements of the 2009 CGP.

The WPCS shall contain an adequate level of detail to show major activities sequenced with the implementation of construction site BMPs, including

- project start and finish dates, including each stage of the project
- mobilization dates
- excavation dates

The WPCS shall show by location the dates for the deployment of:

- temporary soil stabilization BMPs
- temporary sediment control BMPs
- wind erosion control BMPs
- tracking control BMPs
- non-stormwater BMPs
- waste management and materials pollution control BMPs

The WPCS shall include:

- paving, saw-cutting, and any other pavement-related operations;
- major planned stockpiling operations;
- dates for other significant long-term operations or activities that may cause non-stormwater discharges, such as dewatering, grinding, etc.; and
- final stabilization activities for each disturbed soil area of the project.

The Water Pollution Control Schedule will be included in each of the project's LCAN as Appendix D.

Section 700: Project Site Implementation Program

700.1 Water Pollution Control (WPC) Manager Responsibilities

Each LCAN will be implemented by a WPC Manager who shall have primary responsibility and authority to implement the LCAN and Common SWPPP and ensure the project is in compliance with the 2009 CGP. The WPC Manager is responsible for implementing the LCAN and Common SWPPP and amending the LCAN when warranted. The Contractor must assigned authority to the WPC Manager to mobilize crews and subcontractors, as necessary, for LCAN, Common SWPPP and 2009 CGP compliance. The WPC Manager will be available at all times throughout duration of the project.

Duties of the Contractor's WPC Manager include but are not limited to the following

- ensuring full compliance with the LCAN, Common SWPPP, and the 2009 CGP
- implementing all elements of the LCAN, including but not limited to implementing:
  - prompt and effective erosion and sediment control measures
  - all non-stormwater management, and materials and waste management activities such as: monitoring discharges (dewatering, diversion devices); performing general site cleanup; cleaning vehicles and equipment, performing fueling and maintenance activities; providing spill control; ensuring that no materials other than stormwater are discharged in quantities that will have an adverse effect on receiving waters or storm drain systems, etc.
- overseeing and ensuring that the following site inspections and visual site monitoring are conducted:
  - daily required BMP inspections
  - weekly routine stormwater site BMP inspections
  - quarterly non-stormwater site inspections
  - pre-storm inspections prior to forecasted storm events
  - daily inspections during extended forecasted storm events
  - post-storm inspections for qualifying rain events
- mobilizing crews to repair, replace, and/or implement additional BMPs due to deficiencies, failures or other shortcomings identified during inspections, to be completed within 24 hours of identification (the contractor's WPC Manager shall be assigned authority by the Contractor to mobilize crews), unless a longer period is authorized.
- coordinating with the RE to assure that if design changes to BMPs are required due to deficiencies, failures or other shortcomings identified during inspections, the changes are completed as soon as possible and the LCAN is revised accordingly
- monitoring NWS Forecast Office forecasts for both forecasted storm events and qualifying rain events; these events are defined as follows:
  - a forecasted storm event is defined as a 50% or greater likelihood that 0.10 inch or more of precipitation will fall within a 24-hour period

  - a qualifying rain event is defined as a rain event that may produce or has produced ½ inch or greater of precipitation at the time of discharge, with a 48-hour dry period between events
- monitoring weather at the project site
- preparing and implementing qualifying rain event sampling and analysis plans
- mobilizing crews immediately, in the event of NAL exceedances, to repair existing BMPs and/or implement additional BMPs (the Contractor's WPC Manager shall be assigned authority by the Contractor to mobilize crews),
- coordinating with the RE in the event of NAL exceedances to assure that any LCAN revisions (corrective actions) are made immediately, either to prevent pollutants and authorized non-stormwater discharges from contaminating stormwater, or to substantially reduce the pollutants to levels consistently below the NALs, so that the project complies with the LCAN, the 2009 CGP, and approved plans at all times,
- submitting NAL exceedances reports to the RE
- submitting test results for stormwater samples to the RE
- submitting NEL violation reports to the RE
- preparing amendments to the LCAN when required
- preparing the Stormwater Annual Report
- ensuring elimination of all unauthorized discharges
- preparing and submitting Notice of Discharge reports to the RE
- preparing and submitting reports of illegal connections or illicit discharges to the RE

700.2 Site Inspections

Stormwater site inspections and visual monitoring are necessary to ensure that the project is in compliance with the requirements of the 2009 CGP. Project site visual monitoring requirements are covered in Section 800 Construction Site Monitoring Program. Project site inspections of stormwater BMPs are conducted to identify and record:

- that BMPs are properly installed
- what BMPs need maintenance to operate effectively
- what BMPs have failed
- what BMPs could fail to operate as intended.

Routine stormwater site inspections shall be conducted by the contractor's WPC Manager or other 24-hour trained staff at the following minimum frequencies:

- daily inspections of:
  - storage areas for hazardous materials and waste
  - hazardous waste disposal and transporting activities
  - hazardous material delivery and storage activities
  - vehicle and equipment cleaning facilities if vehicle and equipment cleaning occurs daily
  - vehicle and equipment maintenance and fueling areas if vehicle and equipment maintenance and fueling occurs daily
  - vehicles and equipment at the job site to verify that operators are inspecting vehicles and equipment each day of use

  - secondary containment for oil-filled equipment stored outside
  - demolition sites within 50 feet of storm drain systems and receiving waters
  - pile driving areas for leaks and spills if pile driving occurs daily
  - temporary concrete washouts if concrete work occurs daily
  - paved roads at job site access points for street sweeping if earthwork and other sediment or debris generating activities occur daily
  - dewatering work if dewatering work occurs daily
  - temporary active treatment system if temporary active treatment system activities occur daily
  - work over water if work over water occurs daily
- daily inspections of access roadways
- weekly inspection of site BMPs

Stormwater site inspections shall be documented on CEM-2030 Stormwater Site Inspection Report. Completed stormwater inspection reports shall be submitted to the RE within 24 hours after completion of the inspection. Completed CEM-2030s will be included in the LCAN as Appendix I.

Deficiencies identified during site inspections and correction of deficiencies will be tracked on the CEM-2035 Stormwater Corrective Actions Summary. Corrective Action Summary forms shall be submitted to the RE when corrections are completed but must be submitted within five (5) days after completion of the site inspection. Completed Stormwater Site Inspection Report Corrective Actions Summary forms shall be as Appendix J. A copy of the completed Corrective Actions Summary form will also be attached to the corresponding Stormwater Site Inspection Report that generated the need for the CEM-2035 Stormwater Corrective Actions Summary.

700.3 Weather Forecast Monitoring

The WPC Manager shall have primary responsibility to monitor the National Weather Service Forecast Office for forecasted precipitation based on project site location. Precipitation forecast information shall be obtained from the National Weather Service Forecast Office accessible at https://www.weather.gov/.

The project site location to be used for obtaining forecast from the National Weather Forecast Office website will be listed in the LCAN.

The WPC Manager shall monitor the weather forecast on a daily basis for predicted precipitation within the following 96 hours. The WPC Manager shall monitor the forecast for the next 24, 48, 72 and 96 hours to determine if the forecast for precipitation is 50 percent or greater for any 6-hour period. If the forecast for precipitation is 50 percent or greater, the WPC Manager shall calculate the amount of precipitation forecasted for each 24-hour period and the total precipitation for the forecasted storm event and record the information.

When the forecast for precipitation is 50 percent or greater and the forecasted amount of precipitation is 0.10 inch or more for any 24-hour period within the next 48 hours, the WPC Manager shall perform a pre-storm site inspection and ensure that the site is prepared for the likely forecasted storm event.

700.4 Weather Monitoring

The WPC Manager shall have primary responsibility to monitor weather at the project site. The WPC Manager, on a daily basis, shall monitor the weather and record the weather conditions.

When there is precipitation, the WPC Manager shall ensure that storm precipitation data is obtained from the project site rain gauge. Precipitation monitoring will include recording the time, amount of precipitation measured in the project site rain gauge, amount of precipitation within a 24-hour period, and total cumulative amount of precipitation for the forecasted storm event.

If no pre-storm visual site monitoring was performed, and the amount of precipitation for any 24-hour period is 0.10 inch or greater, the WPC Manager will implement during storm visual site monitoring, as discussed in Section 700.1.

When a forecasted storm event was not forecasted to be a qualifying rain event, but the measured cumulative amount of precipitation for the storm event and the expected severity of the continuing storm event results in ½ inch or more of precipitation, the WPC Manager will prepare to sample.

The compliance storm (5-year, 24-hour) for the project site will be listed in the LCAN. When there is an exceedance of the compliance storm based on precipitation information recorded from the project site rain gauge, verification of the compliance storm exceedance will be based on the nearest NWS weather station to the project site. **For this project, the NWS weather station to be used for compliance storm verification will be listed in the LCAN.**

Weather monitoring will be conducted daily.

Section 800: Construction Site Monitoring Program

Each MMBN project will include specifics on the Monitoring Program requirements based on the specific LUP risk type calculation. This section shows the text and tables that the MMBN project will be subject to for each LCAN.

800.1 Site Visual Monitoring Inspection

This Construction Site Monitoring Program includes conducting site visual monitoring inspections of the project site to address the following objectives:

- determine whether non-visible pollutants are present at the construction site and are causing or contributing to exceedances of water quality objectives
- determine whether BMPs included in the LCAN are effective in preventing or reducing pollutants in stormwater discharges and authorized non-stormwater discharges
- demonstrate that the site is in compliance with the discharge prohibitions and applicable NALs and Receiving Water Monitor Triggers of the 2009 CGP for MMBN Projects.
- determine whether immediate corrective actions, additional BMP implementation, or LCAN amendments are necessary to reduce pollutants in stormwater and authorized non-stormwater discharges
- demonstrate that the site is in compliance with the discharge prohibitions
- document the presence or evidence of any non-stormwater discharge (authorized or unauthorized), pollutant characteristics (floating and suspended material, sheen, discoloration, turbidity, odor, etc.), and source, if applicable, and the response taken to eliminate unauthorized non-stormwater discharges and to reduce or prevent pollutants from contacting non-stormwater discharges

800.1.1 Visual Monitoring Locations

Locations of Visual Monitoring Prior To A Storm Event

Visual monitoring (a pre-storm inspection) of the project site is required when the forecast for precipitation is greater than 50 percent within the next 24, 48, 72, 96 hours, and the amount of precipitation forecasted for any 24-hour period is 0.10 inch or greater. Within 48 hours of a forecasted storm event, a stormwater visual monitoring site inspection shall be performed and shall include observations of:

- stormwater drainage areas to identify any spills, leaks, or uncontrolled pollutant sources
- BMPs to identify whether they have been properly implemented
- any stormwater storage and containment areas to detect leaks and ensure maintenance of adequate freeboard

Drainage area(s) on the project site and the Contractor's yard, staging areas, and storage areas will be identified as required forecasted storm event visual observation location(s). Drainage area(s) are to be shown on the WPCDs in the LCAN and are listed by drainage area location number and location description in Table 800.1.1.1: Drainage Areas.

Table 800.1.1.1 Drainage Areas

Drainage Area No.	Location

Stormwater storage or containment area(s) are located on the project site. These stormwater storage and containment area(s) have been identified as required forecasted storm event visual observation location(s). Stormwater storage or containment area(s) are to be shown on the WPCDs and are to be listed by storage or containment area location number and location description in Table 800.1.1.2: Stormwater Storage and Containment Areas.

Table 800.1.1.2 Stormwater Storage and Containment Areas

Location No.	Location

Locations of Visual Monitoring during Extended Forecasted Storm Events and within 48 Hours After a Qualifying Rain Event

During any extended forecasted storm events and within 48 hours after a qualifying rain event (a rain event that has produced 0.5 inches or more of precipitation), a stormwater visual monitoring site inspection is required to observe:

- stormwater discharges at all discharge locations
- BMPs to identify and record those that need maintenance to operate effectively, those that have failed, and those that could fail to operate as intended
- the discharge of stored or contained stormwater

Discharge location(s) are located on the project site. These stormwater discharge location(s) have been identified as requiring visual observation(s). Stormwater discharge location(s) are shown on the WPCDs and are to be listed in Table 800.1.1.3: Stormwater Discharge Locations of the LCAN.

Table 800.1.1.3 Stormwater Discharge Locations

Unique Sampling Location Identifier	Location

BMP locations shown on the WPCDs in the project's LCAN.

Locations of Visual Monitoring for Non-Stormwater Discharges

A visual monitoring site inspection for non-stormwater discharges requires that each drainage area be observed for the presence of or indications of prior unauthorized and authorized non-stormwater discharges.

Drainage area(s) are located on the project site and in the contractor's yard, staging areas, and storage areas that have been identified as observation location(s) for non-stormwater discharges. Drainage area(s) are shown on the WPCDs in in the project's LCAN and are listed in Table 800.1.1.1: Drainage Areas.

800.1.2 Visual Monitoring Schedule for LUP Risk Types 1, 2 or 3

On a daily basis contractor personnel will visually monitor BMPs during applicable activities:

- all immediate access roadways.
- storage areas for hazardous materials and waste
- hazardous waste disposal and transporting activities
- hazardous material delivery and storage activities
- vehicle and equipment cleaning facilities if vehicle and equipment cleaning occurs daily
- vehicle and equipment maintenance and fueling areas if vehicle and equipment maintenance and fueling occurs daily
- vehicles and equipment at the job site to verify that operators are inspecting vehicles and equipment each day of use.
- demolition sites within 50 feet of storm drain systems and receiving waters
- pile driving areas for leaks and spills if pile driving occurs daily
- temporary concrete washouts if concrete work occurs daily
- paved roads at job site access points for street sweeping if earthwork and other sediment or debris generating activities occur daily
- dewatering work if dewatering work occurs daily
- temporary active treatment system if temporary active treatment system activities occur daily
- work over water if work over water occurs daily

Stormwater site visual monitoring inspections for Type 2 and 3 MMBN Projects shall be conducted at a minimum:

- within 48 hours prior to a forecasted storm event (any weather pattern that is forecasted to have a 50 percent or greater probability of producing 0.1 inches or more of precipitation in the project area within a 24 period)
- at 24-hour intervals during any extended forecasted storm event
- within 48 hours after a qualifying rain event (a rain event that has produced ½ inch or more of precipitation)

If visual monitoring of the site for stormwater is unsafe because of dangerous weather conditions, such as flooding and electrical storms, then the site inspector shall document the conditions that prevented the inspection.

800.1.3 Visual Monitoring Procedures

Site visual monitoring inspections shall be overseen by the contractor's WPC Manager. Stie visual monitoring will be conducted by the WPC Manager, appointed QSP or stormwater inspector.

The name(s) and contact number(s) of the site visual monitoring inspection personnel are to be listed in the project's LCAN

Daily Access Road Monitoring

All immediate access roads must be inspected on a daily basis. Any sediment or other construction-related materials deposited on the roads must be removed daily (or more frequently when necessary) and prior to any rain event.

Daily BMP Monitoring During Applicable Activities

The contractor personnel on the site shall inspect the following activities on a daily basis:

- storage areas for hazardous materials and waste
- hazardous waste disposal and transporting activities
- hazardous material delivery and storage activities
- vehicle and equipment cleaning facilities if vehicle and equipment cleaning occurs daily
- vehicle and equipment maintenance and fueling areas if vehicle and equipment maintenance and fueling occurs daily
- vehicles and equipment at the job site to verify that operators are inspecting vehicles and equipment each day of use.
- demolition sites within 50 feet of storm drain systems and receiving waters
- pile driving areas for leaks and spills if pile driving occurs daily
- temporary concrete washouts if concrete work occurs daily
- paved roads at job site access points for street sweeping if earthwork and other sediment or debris generating activities occur daily
- dewatering work if dewatering work occurs daily
- temporary active treatment system if temporary active treatment system activities occur daily
- work over water if work over water occurs daily

Discharge Monitoring

During inspections, the contractor personnel shall be observant of any discharges or evidence of a prior discharge that could cause adverse conditions in the storm sewer system or the receiving water. If a discharge or evidence of a prior discharge is discovered by the contractor, the WPC Manager or contractor shall immediately notify the RE and shall file a written report on the CEM-2061 Notice of Discharge form with the RE within 24 hours of the discharge or discovery of evidence of a prior discharge. Corrective measures shall be implemented immediately following the discovery of the discharge.

Caltrans will notify the owner/operator of the MS4 and the RWQCB as soon as practicable, but no later than 24 hours after onset of or threat of discharge which can cause adverse conditions to the storm sewer system or the receiving water. This applies to any such discharge that is not covered by California Emergency Management Agency procedures for discharges from a highway to a storm sewer system subject to a MS4 permit.

Discharges requiring reporting include:

- stormwater from a DSA discharged to a waterway without treatment by an effective combination of temporary erosion and sediment control BMPs
- non-stormwater, except conditionally exempted discharges, discharged to a waterway or a storm drain system, without treatment by an approved control measure (BMP)
- stormwater discharged to a waterway or a storm drain system where the control measures (BMPs) have been overwhelmed or not properly maintained or installed
- discharge of hazardous substances above the reportable quantities, as provided in 40 CFR 110.3, 117.3 or 302.4
- stormwater runoff containing hazardous substances from spills discharged to a waterway or storm drain system

The initial notification to the RWQCB of a discharge or threat of discharge will be made immediately for any discharge that can cause adverse conditions to the storm sewer system or the receiving water, with a follow-up in writing within 24 hours. Adverse conditions include, but are not limited to, serious violations or serious threatened violations of Waste Discharge Requirements (WDRs), significant spills of petroleum products or toxic chemicals, or serious damage to control facilities that could affect compliance. Caltrans shall perform follow-up monitoring of major spills and/or perform confirmation sampling to ensure that threats to waters of the U.S. have been eliminated as determined by the local RWQCB.

Weekly BMP Monitoring

Weekly monitoring is required to identify and record BMPs that need maintenance to operate effectively, that have failed, or that could fail to operate as intended. The weekly BMP monitoring shall include observations of:

- all stormwater storage and containment areas identified in Table 800.1.1.2 to detect leaks and ensure maintenance of adequate freeboard
- all BMPs for proper installation and adequate maintenance.

Observations of the site and any recommended corrective actions will be documented in the CEM-2030 Stormwater Site Inspection Report. Any photographs used to document observations will be referenced in the stormwater site inspection report. Corrective actions documented in site inspection reports shall be immediately reviewed by the WCP Manager and, if deemed necessary, implemented within 24 hours.

Visual Monitoring Prior To A Forecasted Storm Event

Visual monitoring of the project site is required when the forecast for precipitation is greater than 50 percent within the next 24, 48, 72, or 96 hours and the amount of precipitation forecasted for any 24-hour period during the storm event is 0.10 inch or greater within a 24-hour period. Site visual monitoring shall be conducted within 48 hours prior to a forecasted storm event. The pre-storm site visual monitoring shall include observations of:

- all drainage areas identified in Table 800.1.1.1 to identify any spills, leaks, or uncontrolled pollutant sources
- all stormwater storage and containment areas identified in Table 800.1.1.2 to detect leaks and ensure maintenance of adequate freeboard
- all BMPs for proper installation and adequate maintenance

Observations of the site and any recommended corrective actions will be documented in the CEM-2030 Stormwater Site Inspection Report. Any photographs used to document observations will be referenced in the stormwater site inspection report. Corrective actions documented in site inspection reports shall be immediately reviewed by the WCP Manager and, if deemed necessary, implemented within 24 hours and prior to the forecasted storm event.

Visual Monitoring during Extended Forecasted Storm Events

Stormwater visual monitoring site inspections shall be conducted at least once each 24-hour period during any extended forecasted storm events. During any extended forecasted storm event, the site visual monitoring inspector shall visually observe:

- stormwater discharges at all discharge locations (Table 800.1.1.3)
- all stored or contained stormwater that is derived from and discharged subsequent to the qualifying rain event producing precipitation of ½ inch or more at the time of discharge; stored or

contained stormwater that will likely discharge after working hours, due to anticipated precipitation, shall be observed prior to the discharge during working hours

Stormwater discharges and stored or contained stormwater will be observed for the presence or absence of floating and suspended materials, sheens on the surface, discolorations, turbidity, odors, and source(s) of any observed pollutants.

During any forecasted storm event, stormwater visual monitoring site inspections will include the observation of all site BMPs for:

- proper installation
- achievement of maintenance requirements
- possible failure
- BMPs that could fail to operate as intended
- effectiveness, so that design changes can be implemented as soon as feasible if needed

Observations of the site and any recommended corrective actions will be documented in the CEM-2030 Stormwater Site Inspection Report. Any photographs used to document observations will be referenced on the stormwater site inspection report. Corrective actions documented in site inspection reports shall be immediately reviewed by the WCP Manager and, if deemed necessary, implemented within 24 hours of identification unless a longer period is authorized (but cannot be authorized longer than required by the 2009 CGP: implemented within 72 hours of identification and completed as soon as possible thereafter). If BMPs require design changes, the changes shall be implemented and the LCAN shall be amended to include the changes.

Visual Monitoring Within 48 Hours after a Qualifying Rain Event

Site visual monitoring post-qualifying rain events shall be conducted within 48 hours after the qualifying rain event. The post-storm site visual monitoring inspection shall include observations of:

- discharges of stormwater that have not been processed by a BMP or evidence of stormwater that has not been processed by a BMP at all discharge locations
- evidence of a breach at stored or contained stormwater that is derived from and discharged subsequent to the qualifying rain event producing precipitation of ½ inch or more at the time of discharge; stored or contained stormwater that will likely discharge after working hours, due to anticipated precipitation, shall be observed prior to the discharge during working hours

Stormwater discharges and stored or contained stormwater will be observed for the presence or absence of floating and suspended materials, sheens on the surface, discolorations, turbidity, odors, and source(s) of any observed pollutants.

Post-qualifying rain event stormwater visual monitoring site inspections will include observation of all site BMPs to determine if BMPs have failed to operate as intended because of:

- improper installation
- lack of maintenance
- lack of effectiveness

Observations of the site and any recommended corrective actions will be documented in the CEM-2030 Stormwater Site Inspection Report. Any photographs used to document observations will be referenced on the stormwater site inspection report. Corrective actions documented in site inspection reports shall be immediately reviewed by the WCP Manager and, if deemed necessary, necessary implemented within 24 hours of identification unless a longer period is authorized (but cannot be authorized longer than required by the 2009 CGP: implemented within 72 hours of identification and completed as soon

as possible thereafter). If BMPs require design changes, the changes shall be implemented and the LCAN shall be amended to include the changes.

800.1.4 Visual Monitoring Follow-up and Tracking Procedures

For deficiencies identified during visual monitoring (site inspections), the required repairs or maintenance of BMPs shall begin and be completed as soon as possible, while taking into consideration worker safety. For deficiencies identified during visual site inspections that require design changes, including additional BMPs, the implementation, as required by Standard Specification 13-1.03A, will begin within 24 hours of identification unless a longer period is authorized (but cannot be authorized longer than required by the 2009 CGP: implemented within 72 hours of identification and completed as soon as possible thereafter). When design changes to BMPs are required, the LCAN shall be amended, including the WCBMPL and WPCDs. If NALs are exceeded, corrective actions shall be approved by the WPC Manager and implemented immediately.

Deficiencies identified onsite inspection reports, as well as corrections of deficiencies, will be tracked on the CEM- 2035 Stormwater Corrective Actions Summary. Corrective action summaries shall be submitted to the RE when corrections are completed but must be submitted within five (5) days of a site inspection.

800.1.5 Data Management and Reporting

The results of site visual monitoring (pre-storm, during storm, post-storm) shall be recorded on the CEM-2030 Stormwater Site Inspection Report. All reports shall be provided to the RE within 24 hours of the site inspection.

Deficiencies identified during visual monitoring (site inspections) and correction of deficiencies will be tracked on the CEM-2035 Stormwater Corrective Actions Summary. Corrective Action Summary forms shall be submitted to the RE when corrections are completed but must be submitted within five (5) days of the site inspection. A copy of the completed Corrective Actions Summary form will also be attached to the corresponding inspection report.

If a discharge or evidence of a prior discharge that could cause adverse condition in the storm sewer or the receiving water is discovered by the Contractor, the WPC Manager or Contractor shall immediately notify the RE, and no more than 6 hours after discovery, and will file a written report to the RE within 24 hours of the discovery of evidence of a prior discharge. The written report to the RE will contain:

- the date, time, location, and type of unauthorized discharge;
- The nature of the operation that caused the discharge;
- An initial assessment of any impacts caused by the discharge;
- the BMPs deployed before the discharge;
- the date of deployment and type of BMPs deployed after the discharge, including additional measures installed or planned to reduce or prevent re-occurrence
- steps taken or planned to reduce, eliminate and/or prevent recurrence of the discharge

Reporting of discharges shall be documented on the CEM-2061 Notice of Discharge form. Completed Notice of Discharge reports shall be submitted to the RE within 24 hours of discovery of evidence of a discharge. Copies of the Notice of Discharge reports will be kept in SWPPP File Category 20.61: Notice of Discharge Reports.

800.2 Sampling and Analysis Plans

Sampling and Analysis Plans are required for all three LUP risk types for non-visible and non-stormwater discharges, and if applicable ATS.

Sampling and Analysis Plans are required for LUP Risk Types 2 and 3 for Stormwater pH and Turbidity.

Sampling and Analysis Plans are required for LUP Risk Type 3 for receiving water.

800.2.1 General SAP

A sampling and analysis plan (SAP) describes how samples will be collected, under what conditions, where and when the samples will be collected, what the sample will be tested for, what test methods and detection limits will be used, and what methods/procedures will be performed to ensure the integrity of the sample during collection, storage, shipping and testing (i.e., quality assurance/quality control protocols). Therefore, a SAP shall include the components listed below.

1. Scope of Monitoring Activities
2. Monitoring Preparation
3. Monitoring Strategy
4. Sample Collection and Handling
5. Sampling Analysis
6. Quality Control and Assurance
7. Data Management and Reporting
8. Data Evaluation
9. Change of Conditions

This Common SWPPP contains a non-visible pollutants SAP. The LCAN may also contain four additional specific SAPs based on the project LUP risk type, project dewatering requirements, RWQCB sampling and analysis requirements, and a SAP for monitoring an active treatment system.

800.2.1.1 Scope of Monitoring Activities

For specific details with regard to monitoring activities, refer to the specific SAP identified below.

- Non-visible Pollutants (Section 800.2.2)
- Non-Stormwater Discharges (Section 800.2.3)
- Stormwater pH and Turbidity (Section 800.2.4)
- Receiving Water Sampling (Section 800.2.5)

800.2.1.2 Monitoring Preparation

To ensure an effective construction site monitoring and reporting program, the following monitoring preparation activities are required:

- identifying qualified sampling personnel
- ensuring the availability of an adequate quantity of monitoring supplies
- ensuring the availability of field instruments; field instruments must be properly maintained and calibrated prior to sampling events
- identifying a qualified testing laboratory that is capable of performing stormwater and non-stormwater analysis for those constituents that must be tested in a laboratory

800.2.1.2.1 Qualified Sampling Personnel

Sampling personnel shall be trained to collect, maintain, and ship samples in accordance with the Surface Water Ambient Monitoring Program (SWAMP) 2022 Quality Assurance Program Plan (QAPrP).

The LCAN will provide the specific details on sampling contact information including:

Sample collection name, address, and contact information as well as their stormwater sampling training and stormwater sampling experience.

800.2.1.2.2 Monitoring Supplies

An adequate stock of monitoring supplies and equipment for sampling will be available on the project site prior to a sampling event. Monitoring supplies and equipment will be stored in a cool temperature environment that will prevent the supplies/equipment from coming into contact with rain or direct sunlight. Supplies maintained at the project site will include, but are not limited to, surgical gloves, sample collection equipment, coolers, appropriate number and volume of sample bottles, identification labels, re-sealable storage bags, paper towels, personal rain gear, and ice.

The contractor will obtain and maintain the field testing instruments, identified in Section 800.2.1.2.3, for analyzing samples in the field by contractor sampling and testing personnel.

800.2.1.2.3 Field Instruments

The field instrument(s) shown in Table 800.2.1.2.3: Field Instruments will be used to analyze the constituents shown:

Table 800.2.1.2.3 Field Instruments

Field Instrument	Constituent

The instrument(s) shall be maintained in accordance with manufacturer's instructions.

The instrument(s) shall be calibrated before each sampling and analysis event.

A Standard Operating Procedure (SOP) for calibration and maintenance of field instruments shall be implemented based on the meter manufacturer's instructions. A copy of the manufacturer's instructions shall be attached to the SOP so that they are readily available.

800.2.1.2.4 Testing Laboratory

Samples collected on the project site that require laboratory testing will be tested by a laboratory certified by the State Department of Health Services. Samples collected on the project site will be analyzed by:

Laboratory Name:

Address:

Contact Name:

Title:

Phone Number:

Emergency Phone Number (24/7):

Email Address:

800.2.1.3 Monitoring Strategy

The monitoring strategy includes identifying analytical constituents, potential sampling locations, identification of actual sampling locations, and sampling schedule,

800.2.1.3.1 Analytical Constituents

Stormwater and non-stormwater discharges shall be monitored for the analytical constituents specified in the specific SAP(s) in this Common SWPPP.

800.2.1.3.2 Potential Sampling Locations

Potential sampling locations must be representative of the stormwater and non-stormwater discharges from the construction site. Existing conditions and associated construction activities within each drainage area form the basis for determining representative stormwater sampling locations.

Project drainage areas and potential sampling locations have been determined by:

- reviewing project plans
- visiting project site
- reviewing topography maps

The WPCDs show the demarcation of all drainage areas that are either:

- within the project site
- cover part of the project site

The QSD must identify potential sampling locations where concentrated run-off:

- leaves the Caltrans right-of-way
- drains into an MS4
- discharges into a receiving water

Potential run-on sampling locations were determined where concentrated run-on:

- enters the right-of-way
- combines with the stormwater on site and then discharges into an MS4, including the location(s) of discharge into the MS4

The following locations were determined when runoff discharges directly into receiving water bodies:

- the discharge location(s) into the receiving water
- a potential sampling location upstream of all discharge locations
- a potential sampling location downstream from all discharge location(s) into the receiving water.

Necessary potential sampling locations were determined when:

- there are potential sources of non-visible pollutants, as discussed in Section 800.1, and discharge locations are downgradient
- run-on locations are present that may contribute non-visible pollutants
- there are potential non-stormwater discharges and corresponding discharge locations are downgradient
- there are proposed dewatering construction activities

Potential stormwater and non-stormwater sampling locations must be shown on the WPCDs. The QSD has identified each of the potential sampling locations with a unique sample location identification code, as shown below. The identification code must start with a number and must be different for each location. If the construction site lies in a west-to-east orientation, starting with one (01) from the east,

the potential sampling locations shall be numbered toward the west. If the construction site lies in a south-to-north orientation, the potential sampling locations shall be numbered toward the north.

To further distinguish among the locations, each potential sampling location has been identified with one of the following abbreviations based on the sampling location type:

- discharge locations leaving Caltrans right-of-way: DL
- discharge locations from areas with known non-visible pollutants: NVP
- discharge locations upgradient of areas with known non-visible pollutants: UNVP
- discharge locations to an MS4: MS
- run-on locations: RO
- discharge locations into a receiving water: RW
- downstream of all discharge locations: RWD
- upstream of all discharge locations: RWU
- dewatering discharge locations: DDL
- contained stormwater discharge locations: CSDL

The unique sample location identification code shall follow this format, SSSTTTTXX , where:

  - SSS = sampling location identifier number (e.g., 010)
  - TTTT = sampling location type (e.g. DL)
  - XX = identifier number for the type of sampling location

For example, the sampling location identification for the 15th sampling location based on starting from the south end of the project for a stormwater discharge location that has been identified to be the ninth discharge location would be **015DL09**.

Potential sampling locations shown on the WPCDs shall be identified with unique sampling location identifiers. The unique identification of each potential sampling location based on its number and abbreviation of type shall be used on all sampling documentation.

The WPC Manager may have to revise and/or add additional sampling locations during the course of construction as conditions dictate.

800.2.1.3.3 Identification of Actual Sampling Locations

For each forecasted storm event, actual sampling locations will be determined by the WPC Manager based on the strategy described in each specific SAP.

800.2.1.3.4 Sampling Schedule

For the sampling schedule, see the specific SAPs in the CSMP. If a scheduled sampling activity is unsafe because of dangerous weather conditions, such as flooding and electrical storms, then the stormwater sampler shall document why an exception to performing the sampling was necessary.

800.2.1.4 Sample Collection and Handling

Sample collection procedures shall be used to ensure that representative samples are collected and that the potential for contamination of samples is minimized. Sample handing procedures are followed to ensure that samples are identified accurately and that the required analysis is clearly documented. Chain-of-custody requirements for samples are necessary to trace the possession of the sample from collection through analysis.

800.2.1.4.1 Sample Collection Procedures

Samples shall be collected, maintained and shipped in accordance with the SWAMP's 2022 QAPrP.

Grab samples shall be collected and preserved in accordance with the methods identified in each specific SAP. Only personnel trained in proper water quality sampling shall collect samples.

Samples from areas of sheet flow can be collected using the collection procedures shown in the video at http://www.youtube.com/watch?v=AmEJUNp44aU. For pH and turbidity sampling, sheet flow sampling can be conducted as described below to concentrate the flow in order to collect a sample or follow other procedures approved by the RE.

- Place several rows of sandbags in a half circle directly in the path of the sheet flow to pond water and wait for enough water to spill over. Then place a cleaned or decontaminated flexible hose along the top, and cover with another sandbag so that ponded water will only pour through the flexible hose and into sample bottles. Do not reuse the same sandbags during future sampling events as they may cross-contaminate future samples.
- Place a cleaned or decontaminated dustpan with open handle in the path of the sheet flow so that water will pour through the handle and into sample bottles.

For receiving water sampling, upstream samples shall be collected to represent the water body upgradient of the construction site. Downstream samples shall be collected to represent the water body mixed with direct discharge from the construction site. Samples shall not be collected directly from ponded, sluggish, or stagnant water.

Receiving water upstream and downstream samples shall be collected using one of the following methods:

- placing a sample bottle directly into the stream flow in or near the main current upstream of sampling personnel and allowing the sample bottle to fill completely;

OR

- placing a decontaminated or sterile bailer or other sterile collection devise in or near the main current to collect the sample and then transferring the collected water to appropriate sample bottles allowing the sample bottle to fill completely.

To maintain sample integrity and prevent cross-contamination, sampling collection personnel shall follow the procedures listed below.

- Wear a clean pair of surgical gloves donned prior to the collection and handling of each sample at each location.
- Decontaminate sampling equipment prior to sample collection using a TSP-soapy water wash, distilled water rinse, and final rinse with distilled water. Dispose of decontamination water/soaps appropriately (i.e., do not discharge to the storm drain system or receiving water).
- Do not allow the inside of the sample bottle to come into contact with any material other than the run-off sample.
- Discard sample bottles or sample lids that have been dropped onto the ground prior to sample collection.
- Do not leave the cooler lid open for an extended period of time once samples are placed inside.
- Do not sample near a running vehicle where exhaust fumes may impact the sample.
- Do not touch the exposed end of a sampling tube, if applicable.
- Avoid allowing rainwater to drip from rain gear or other surfaces into sample bottles.
- Do not eat, smoke, or drink during sample collection/field measurement.

- Do not sneeze or cough in the direction of an open sample bottle.
- Minimize the exposure of the samples to direct sunlight, as sunlight may cause biochemical transformation of the sample.

800.2.1.4.2 Sample Handling Procedures

Immediately following collection, sample bottles to be forwarded for laboratory analytical testing shall be capped, labeled, documented on the Chain-of-Custody Record, sealed in a re-sealable storage bag, placed in an ice-chilled cooler, at 0 ±4 degrees Celsius, and delivered within 24 hours to the laboratory shown in sub-section 800.2.1.2.4.

Immediately following collection, samples used for field analysis shall be tested in accordance with the field instrument manufacturer's instructions and results recorded on the CEM-2052 Stormwater Sample Field Test Report form.

800.2.1.4.3 Sample Documentation Procedures

All original data documented on sample bottle identification labels, the Chain-of-Custody, and the CEM-2051 Stormwater Sampling and Testing Activity Log - Optional Form, shall be recorded using waterproof ink. These shall be considered accountable documents. If an error is made on an accountable document, the individual shall make corrections by lining through the error and entering the correct information. The erroneous information shall not be obliterated. All corrections shall be initialed and dated.

Duplicate samples shall be identified in a manner consistent with the numbering system for other samples to prevent the laboratory from identifying duplicate samples.

Sample Bottle Identification Labels: Sampling personnel shall attach an identification label to each sample bottle, which shall include, at a minimum, the following information:

- project name
- contract number and/or project identifier number
- unique sample identification code, which shall follow this format, SSSSSYYMMDDHHmmTT, where
  - SSSSS = sampling location identifier number (e.g., 01MS1)
  - YY = last two digits of the year (e.g. 11)
  - MM = month (01-12)
  - DD = day (01-31)
  - HH = hour sample collected (00-23)
  - mm = minute sample collected (00-59)
  - TT = Type or QA/QC Identifier (if applicable)
  - G = grab
  - FS = field duplicate

For example, the sample number for a grab sample collected at Station 01MS1, collected at 4:15PM on December 8, 2011 would be **01MS11112081615G**.

- constituent to be analyzed
- initials of person who collected the sample

Stormwater Sampling and Testing Activity Log: A log of sampling events and test results shall include:

- sampling date
- separate times for collected samples and QA/QC samples, recorded to the nearest minute
- unique sample identification number and location
- constituent analyzed
- names of sampling personnel
- weather conditions (including precipitation amount)
- test results
- other pertinent data

Sample Information, Identification, and Chain-of-Custody Record Forms: All samples to be analyzed by a laboratory will be accompanied by a Chain-of-Custody. The samplers will sign the Chain-of-Custody when samples are turned over to the testing laboratory. Chain-of-custody procedures will be strictly adhered to for QA/QC purposes.

800.2.1.5 Sample Analysis

For the analytical methods to be used to determine the presence of pollutant(s), see the specific SAPs in this CSMP.

800.2.1.6 Quality Assurance/Quality Control

For verification of laboratory or field analysis, duplicate samples shall be collected at a rate of 10 percent or 1 minimum duplicate per sampling event. The duplicate sample shall be collected, handled, and analyzed using the same protocols as primary samples. A duplicate sample shall be collected immediately after the primary sample has been collected.

Duplicate samples shall not influence any evaluations or conclusions; however, they shall be used as a check on laboratory or field analysis quality assurance.

800.2.1.7 Data Management and Reporting

All test results shall be documented on either the CEM-2052 Stormwater Sample Field Test Report form and/or may be entered on the CEM-2051 Stormwater Sampling and Testing Activity Log - Optional Form. These shall be considered accountable documents. If an error is made on an accountable document, the individual shall make corrections by lining through the error and entering the correct information. The erroneous information shall not be obliterated. All corrections shall be initialed and dated.

For field tests, the submitted information shall include a signed copy of the Chain-of-Custody and CEM-2052 Stormwater Sample Field Test Report form. Copies of completed forms should be included in the LCAN as Appendix K.

For laboratory testing, all laboratory analysis results shall be reviewed for consistency among laboratory methods, sample identifications, dates, and times for both primary samples and QA/QC samples.

All sampling and testing documentation, including the Chain-of-Custody, CEM-2052 Stormwater Sample Field Test Reports, and Laboratory Test Reports shall be filed in the appropriate LCAN Appendix K.

If corrective actions are taken as a result of the data evaluation, a copy of the completed CEM-2035 Stormwater Corrective Actions Summary shall be filed in File Category 20.35: Corrective Actions Summary.

All water quality analytical results, including QA/QC data, shall be submitted to the RE within 48 hours of sampling for field analyzed samples, and within 30 days for laboratory analyses.

In addition to a paper copy of the water quality test results, the test results shall be submitted electronically in Microsoft Excel (.xls) format, and shall include, at a minimum, the following information from the lab: Sample ID Number, Contract Number, Constituent, Reported Value, Laboratory Name, Method Reference, Method Number, Method Detection Limit, and Reported Detection Limit. Electronic copies of stormwater data shall be forwarded by email to for inclusion into a statewide database.

800.2.1.8 Data Evaluation

For data evaluation of stormwater sample test results, see specific SAPs.

800.2.1.9 Change of Conditions

Whenever stormwater visual monitoring site inspections indicate a change in site conditions that might affect the appropriateness of sampling locations, sampling and testing protocols shall be revised accordingly. All such revisions shall be implemented as soon as feasible, and the LCAN updated or amended.

800.2.2 Sampling and Analysis Plan for Non-Visible Pollutants for LUP Risk Type 1, 2 or 3 Projects

This SAP has been prepared for monitoring non-visible pollutants in stormwater and non-stormwater discharges from the project site and off-site activities directly related to the project, in accordance with the requirements of the 2009 CGP and applicable requirements of the Caltrans Construction Site Monitoring Program Guidance Manual. This SAP for monitoring non-visible pollutants includes all of the components listed in Section 800.2.1.

800.2.2.1 Scope of Monitoring Activities

The scope of monitoring for discharges of non-visible pollutants from the construction site is based on the construction materials and construction activities to be performed on the project site, potential for the presence of non-visible pollutants, based on the historical use of the site, and potential non-visible pollutants in run-off from areas where soil amendments have been used on the project site.

The construction materials, wastes or activities listed below, and identified in Section 600.1.1, are potential sources of non-visible pollutants to stormwater discharges from the project. Storage, use, and operational locations are shown on the WPCDs. (To be specified per each LCAN)

The existing site features listed below, and identified in Section 600.1.2, are potential sources of non-visible pollutants to stormwater discharges from the project. (To be specified per each LCAN)

800.2.2.2 Monitoring Preparation

Refer to the general requirements in General SAP Section 800.2.1.2 for monitoring preparation.

800.2.2.2.1 Qualified Sampling Personnel

Refer to the general requirements in General SAP Section 800.2.1.2.1 for Qualified Sampling Personnel.

800.2.2.2.2 Monitoring Supplies

Refer to the general information in General SAP Section 800.2.1.2.2 regarding monitoring supplies.

800.2.2.2.3 Field Instruments

Refer to the general information in General SAP Section 800.2.1.2.3 regarding field instruments.

800.2.2.2.4 Testing Laboratory

Refer to the contact information found in General SAP Section 800.2.1.2.4 for the Testing Laboratory.

800.2.2.3 Monitoring Strategy

The monitoring strategy for non-visible pollutants in stormwater discharges is to identify all potential non-visible pollutants that may be on the project site, non-visible pollutant sources, and water quality indicators that will indicate the presence of the non-visible pollutant in stormwater discharges. Locations will be identified where sources of non-visible pollutants will be used, stored or exist because of historical use of the project site so that these areas are monitored prior to and during forecasted storm events.

Non-visible pollutant monitoring is only required where a discharge can cause or contribute to an exceedance of a water quality standard based on one of the following triggers:

- construction materials are waste are exposed
- the site contains historical non-visible pollutants
- construction activity has occurred or material has been placed within the past 24 hours that may cause an exceedance of a water quality standard
- there is run-on to the site that may contains non-visible pollutants
- there is a breach, malfunction, leak or spill from a BMP

When one of the triggers that indicates a non-visible pollutant source may have come in contact with stormwater is discovered during a site inspection conducted prior to, during or after a forecasted storm event, the WPC Manager will require that sampling and analysis of the stormwater discharge be conducted for the applicable non-visible pollutant water quality indicator(s).

For the forecasted storm event in which a trigger for a non-visible pollutant sampling and analysis has occurred, the WPC Manager will also require the collection of an uncontaminated sample of runoff as a background sample for comparison with the samples being analyzed for non-visible pollutants. The WPC Manager will perform an evaluation of the analysis results from the non-visible pollutant stormwater discharge sampling location and the analysis results from the uncontaminated run-off sampling location to determine if there is an increased level of the tested non-visible pollutant analyte in the stormwater discharge.

800.2.2.3.1 Analytical Constituents

Identification of Potential Non-Visible Pollutants

The following table lists the specific sources and types of potential non-visible pollutants on the project site and the applicable water quality indicator constituent(s) for that pollutant.

800.2.2.3.2 Potential Sampling Locations

Using the criteria in Section 800.2.1.3.2, the potential sampling locations on the project site for monitoring non-visible pollutants were identified. Sampling locations are based on: proximity to planned non-visible pollutant storage; occurrence or use; accessibility for sampling and personnel safety; and other factors in accordance with the applicable requirements in the Caltrans Construction Site

Monitoring Program Guidance Manual, latest edition. Sampling locations shall be shown on the WPCDs.

Sampling location(s) on the project site and the contractor's support facilities have been identified as potential locations for the collection of samples of runoff from planned material and waste storage areas and areas where non-visible pollutant producing construction activities are planned. Potential non-visible pollutant sampling locations are listed in the Table 800.2.2.3.2.1: Potential Non-Visible Pollutant Sampling Locations.

Table 800.2.2.3.2.1 Potential Non-Visible Pollutant Sampling Locations

Sampling Location Identifier	Location Description

Potential non-visible pollutant sampling locations shall be shown on the WPCDs for each LCAN.

Sampling location(s) has been identified for the collection of an uncontaminated sample of runoff as a background sample for comparison with the samples being analyzed for non-visible pollutants. This location(s) was selected such that the sample will not have come in contact with (1) operational or storage areas associated with the materials, wastes, and activities identified in Section 600.1.1; (2) potential non-visible pollutants due to historical use of the site, as identified in Section 600.1.2; (3) areas in which soil amendments that have the potential to change the chemical properties, engineering properties, or erosion resistance of the soil have been applied; or (4) disturbed soils areas. Potential non-visible pollutant uncontaminated sampling locations are listed in Table 800.2.2.3.2.2: Potential Uncontaminated Non-visible Pollutant Sampling Locations.

Table 800.2.2.3.2.2 Potential Uncontaminated Non-Visible Pollutant Sampling Locations

Sampling Location Identifier	Location Description

Potential non-visible pollutant uncontaminated sampling locations shall be shown on the WPCDs.

800.2.2.3.3 Actual Sampling Locations

Sampling for non-visible pollutants at any potential non-visible pollutant sampling location will be based on any of the conditions listed below having been identified during the visual monitoring site inspections.

- Locations where materials or wastes containing potential non-visible pollutants are not stored under watertight conditions. Watertight conditions are defined as (1) storage in a watertight container, (2) storage under a watertight roof or within a building, or (3) protected by temporary cover and containment that prevents stormwater contact and runoff from the storage area.
- Locations where materials or wastes containing potential non-visible pollutants are stored under watertight conditions, but (1) a breach, malfunction, leakage, or spill is observed, (2) the leak or spill is not cleaned up prior to the forecasted storm event, and (3) the potential exists for discharge of non-visible pollutants to surface waters or a storm drain system.
- Locations where a construction activity (including but not limited to those identified in Section 600.1.1) with the potential to contribute non-visible pollutants (1) was occurring during or within 24 hours prior to the forecasted storm event, (2) involved the use of applicable BMPs that were

observed to be breached, malfunctioning, or improperly implemented, and (3) resulted in the potential for discharge of non-visible pollutants to surface waters or a storm drain system.

- Locations where soil amendments that have the potential to change the chemical properties, engineering properties, or erosion resistance of the soil have been applied, and the potential exists for discharge of non- visible pollutants to surface waters or a storm drain system.
- Locations where stormwater runoff from an area contaminated by historical usage of the site has been observed to combine with stormwater runoff from the site, and the potential exists for discharge of non-visible pollutants to surface waters or a storm drain system.

If the presence of a material storage, waste storage, or operations area where spills have been observed or the potential for the discharge of non-visible pollutants to surface waters or a storm drain system was noted during a site inspection conducted prior to or during a forecasted storm event and such an area has not been identified on the list of potential non- visible pollutant sampling locations, the WPC Manager must identify the corresponding discharge location and the corresponding upgradient sampling location as actual non-visible sampling locations. The additional sampling location for non-visible pollutant monitoring shall be shown on the WPCDs.

800.2.2.3.4 Sampling Schedule

In addition to the general scheduling requirements in General SAP Section 800.2.1.3.4, samples for non-visible pollutant monitoring, including both the non-visible pollutants samples and uncontaminated background samples, shall be collected during the first two hours of discharge from storm events that result in a sufficient discharge for sample collection. Samples shall be collected during daylight hours, 7 days a week.

800.2.2.4 Sample Collection and Handling

Refer to the general requirements for sample collection and handling in General SAP Section 800.2.1.4.

800.2.2.4.1 Sample Collection Procedures

Refer to the general procedures for sample collection in General SAP Section 800.2.1.4.1.

800.2.2.4.2 Sample Handling Procedures

Refer to the general procedures for sample handling in General SAP Section 800.2.1.4.2.

800.2.2.4.3 Sample Documentation Procedures

In addition to the general sample documentation procedures provided in General SAP Section 800.2.1.4.3, when applicable, the contractor's stormwater inspector will document in the CEM-2030 Stormwater Site Inspection Report, that samples for non-visible pollutants were taken during a storm event, based on the criteria for non-visible pollutant sampling described in Section 800.2.2.3.3.

800.2.2.5 Sample Analysis

For samples collected for field analysis, collection, analysis and equipment calibration shall be in accordance with the field instrument manufacturer's specifications.

Refer to General SAP Section 800.2.1.2.3 for general information regarding field instrument identification and requirements.

800.2.2.6 Quality Assurance/Quality Control

Refer to the general requirements regarding Quality Assurance/Quality Control (QA/QC) in General SAP Section 800.2.1.6.

800.2.2.7 Data Management and Reporting

Refer to general requirements for data management and reporting in Section General SAP 800.2.1.7.

800.2.2.8 Data Evaluation

Water quality sample analytical results for non-visible pollutants shall be compared to the uncontaminated background sample results. Should the discharge (downgradient) sample show an increased level of the tested non-visible pollutant analyte relative to the background sample, the BMPs, site conditions, and surrounding influences shall be assessed to determine the probable cause for the increase.

As determined by the site and data evaluation, appropriate BMPs shall be repaired or modified to mitigate discharges of non-visual pollutant concentrations. Once deemed necessary, corrective actions shall be implemented within 24 hours of identification unless a longer period is authorized (but cannot be authorized longer than required by the 2009 CGP: implemented within 72 hours of identification and completed as soon as possible thereafter) and documented on the CEM-2035 Stormwater Corrective Actions Summary.

800.2.2.9 Change of Conditions

Refer to the general requirements for change of conditions in General SAP Section 800.2.1.9.

800.2.3 Sampling and Analysis Plan for Non-Stormwater Discharges for LUP Risk Type 1, 2 or 3 Projects

This SAP has been prepared for monitoring non-stormwater discharges from the project site and off-site activities directly related to the project, in accordance with the requirements of the 2009 CGP and applicable requirements of the Caltrans Construction Site Monitoring Program Guidance Manual. This SAP for monitoring non-stormwater discharges includes all of the components listed in Section 800.2.1.

800.2.3.1 Scope of Monitoring Activities

Non-stormwater discharges can be authorized by a separate NPDES permit or conditional exemption. For non- stormwater discharges that are unauthorized where runoff is discharged off site, sampling and testing of the discharge must be conducted in compliance with the 2009 CGP.

Examples of unauthorized non-stormwater discharges common to construction activities include:

- vehicle and equipment wash water, including concrete washout water
- slurries from concrete cutting and coring operations, or grinding operations
- slurries from concrete or mortar mixing operations
- residue from high-pressure washing of structures or surfaces
- wash water from cleaning painting equipment
- runoff from dust control applications of water or dust palliatives
- sanitary and septic wastes
- chemical leaks and/or spills of any kind, including but not limited to, petroleum, paints, cure compounds, etc.

When an unauthorized non-stormwater discharge is discovered, the WPC Manager will require sampling and analysis of the effluent to detect whether non-visible pollutants are present in the discharge. Sampling and analysis of non- stormwater discharges shall be performed in accordance with Section 800.2.2, the SAP for non-visible pollutants.

Non-stormwater from dewatering operations or impounded stormwater may be discharged off site during this project. Stored stormwater is defined as rain collected in trenches, foundation excavations, and excavations for pavement structural sections. Non-stormwater dewatering discharges or discharges of impounded stormwater shall be monitored for turbidity, pH and potential non-visible pollutants.

Sampling and analysis for pH and turbidity of stored or impounded stormwater discharges subsequent to a qualifying rain event (a rain event that has produced ½ inch or more of precipitation at the time of discharge) shall be performed in accordance with Section 800.2.4, the SAP for stormwater pH and turbidity.

This project is covered by dewatering permit number issued by RWQCB. The scope of monitoring based on the permit requirements is described below.

The strategy for monitoring dewatering discharges requires monitoring of the following parameters: (To be specified per each LCAN)

Monitoring will be required at the following locations: (To be specified per each LCAN)

A copy of the dewatering permit is in Attachment F.

800.2.3.2 Monitoring Preparation

Refer to the general requirements for monitoring preparation in General SAP Section 800.2.1.2.

800.2.3.2.1 Qualified Sampling Personnel

Refer to the general requirements for Qualified Sampling Personnel in General SAP Section 800.2.1.2.1.

800.2.3.2.2 Monitoring Supplies

Refer to the general information regarding monitoring supplies in General SAP Section 800.2.1.2.2.

800.2.3.2.3 Field Instruments

Refer to the general information regarding field instruments in General SAP Section 800.2.1.2.3.

800.2.3.2.4 Testing Laboratory

Refer to the contact information for the testing laboratory found in General SAP Section 800.2.1.2.4.

800.2.3.3 Monitoring Strategy

Non-stormwater discharges from the construction site will be monitored for exceedances of water quality standards.

800.2.3.3.1 Analytical Constituents

For non-stormwater dewatering discharges and discharges of stored stormwater, samples shall be analyzed for the following constituents: (To be specified per each LCAN)

Non-stormwater dewatering discharge samples shall be analyzed for the following permit-required constituents: (To be specified per each LCAN)

800.2.3.3.2 Potential Sampling Locations

Using the criteria in Section 800.2.1.3.2, potential sampling locations on the project site for monitoring dewatering discharges, discharges of impounded stormwater, and other non-stormwater discharges were identified. Sampling locations were based on: proximity to planned non-stormwater dewatering; non-stormwater occurrence or use; accessibility for sampling and personnel safety; and other factors in

accordance with the applicable requirements in the *Caltrans Construction Site Monitoring Program Guidance Manual.* Sampling locations shall be shown on the WPCDs.

Sampling location(s) on the project site have been identified as potential locations for the collection of non-stormwater dewatering samples and the sampling location(s) are listed in Table 800.2.3.3.2.1: Potential Non-stormwater Dewatering Sampling Locations.

Table 800.2.3.3.2.1 Potential Non-Stormwater Dewatering Sampling Locations

Sampling Location Identifier	Location Description

Sampling location(s) on the project site been identified as potential locations for the collection of discharge samples of impounded stormwater and the sampling location(s) are listed in Table 800.2.3.3.2.2: Potential Impounded Stormwater Discharge Sampling Locations.

Table 800.2.3.3.2.2 Potential Impounded Stormwater Discharge Sampling Locations

Sampling Location Identifier	Location Description

This project may discharge non-stormwater from dewatering or discharge accumulated stormwater into:

All discharges shall have a designated monitoring location for sampling prior to discharging to the sediment-sensitive water body.

The project non-stormwater discharge locations will discharge to at the location(s) listed Table 800.2.3.3.2.3: Potential Dewatering / Impounded Stormwater Sampling Locations and Receiving Water Sampling Locations.

Table 800.2.3.3.2.3 Potential Dewatering/ Impounded Stormwater Sampling Locations and Receiving Water Sampling Location

Sampling Location Identifier	Location Description

Potential non-stormwater sampling locations with associated receiving water sampling locations shall be shown on the WPCDs.

800.2.3.3.3 Actual Sampling Locations

Actual sampling locations will be determined by the WPC Manager prior to dewatering activities based on the potential dewatering discharge sample locations initially selected.

Dewatering discharge sampling locations will be determined by the WPC Manager based on the criteria specified in the dewatering permit number issued by RWQCB.

When stormwater is impounded in excavations on the project site and the impounded stormwater has the potential to create runoff from the project site, the WPC Manager will determine the actual sampling location for collecting impounded stormwater discharge samples.

If new locations for dewatering discharges or impounded stormwater discharges that have not been identified on the list of potential stormwater and non-stormwater sampling locations are identified during

the course of construction, the WPC Manager must create sampling location identifiers for the dewatering discharge sampling location. The additional sampling location for dewatering discharge monitoring shall be shown on the WPCDs.

800.2.3.3.4 Sampling Schedule

Whenever there are dewatering discharges or impounded stormwater discharges, sampling will be performed daily during discharging. Sampling will be performed upon commencement of the dewatering discharge or impounded stormwater discharge, and then at least a minimum of three (3) samples per day will be collected for analysis, depending on visual monitoring.

Dewatering discharge sampling schedule will be determined by the WPC Manager based on the criteria specified in the dewatering permit number issued by RWQCB.

800.2.3.4 Sample Collection and Handling

Refer to the general requirements for sample collection and handling in General SAP Section 800.2.1.4.

800.2.3.4.1 Sample Collection Procedures

Refer to the general procedures for sample collection in General SAP Section 800.2.1.4.1.

800.2.3.4.2 Sample Handling Procedures

Refer to the general procedures for sample handling in General SAP Section 800.2.1.4.2.

800.2.3.4.3 Sample Documentation Procedures

In addition to the general procedures for sample documentation in General SAP Section 800.2.1.4.3, when applicable, the contractor's stormwater inspector will document on the CEM-2030 Stormwater Site Inspection Report that samples for non-stormwater discharge pollutants were taken based on a visual monitoring site inspection.

800.2.3.5 Sample Analysis

Samples from non-stormwater discharges shall be analyzed for pH and turbidity at a minimum. (If other constituents are warranted.)

The WPC Manager may determine that samples of non-stormwater discharges, need to be analyzed for non-visible pollutants. If the WPC Manager determines that non-visible pollutants may have contaminated the discharge, the samples shall be analyzed for the suspected pollutants. Sampling and analysis for non-visible pollutants in non- stormwater discharges shall be performed following the guidance in Section 800.2.2, the SAP for non-visible pollutants.

Samples shall be analyzed for based on the requirements specified in the dewatering permit number issued by RWQCB.

Samples shall be analyzed for the constituents indicated in Table 800.2.3.5: Sample Collection, Preservation and Analysis for Monitoring Water Extracted by Dewatering or Impounded Stormwater Discharges.

Table 800.2.3.5 Sample Collection, Preservation and Analysis for Monitoring Water Extracted by Dewatering or Impounded Stormwater Discharges

Parameter	Test Method	Sample Preservation	Minimum Sample Volume[1]	Sample Bottle	Maximum Holding Time	Detection Limit (min)
Turbidity	Field test with calibrated portable instrument	Store at 4˚ C (39.2˚ F)	100 mL	Polypropylene or Glass	48 hours	1 NTU
pH	Field test with calibrated portable instrument	Store at 4˚ C (39.2˚ F)	100 mL	Polypropylene	15 Minutes	0.2

1. *Minimum sample volume recommended. Specific volume requirements will vary by instrument; check instrument manufacturer instructions.*

°C = degrees Celsius; °F = degrees Fahrenheit;, L = liter; Ml = milliliter; NTU = Nephelometric Turbidity Unit

For samples collected for field analysis, collection, analysis and equipment calibration shall be in accordance with the field instrument manufacturer's specifications.

Refer to general information for field instrument identification and requirements in General SAP Section 800.2.1.2.3.

800.2.3.6 Quality Assurance/Quality Control

Refer to the general requirements regarding Quality Assurance/Quality Control (QA/QC) in Section General SAP. For samples analyzed for turbidity and pH the following replaces the requirements for QA/QC in Section 800.2.1.6:

The contractor shall coordinate with the Caltrans RE on sampling locations and timing for quality assurance verification of field sampling and analysis. The contractor shall notify the RE at least 24 hours prior to dewatering discharge or impounded stormwater discharge sampling events.

800.2.3.7 Data Management and Reporting

Refer to the general requirements for data management and reporting in General SAP Section 800.2.1.7.

800.2.3.8 Data Evaluation

An evaluation of the water quality sample analytical results, including sampling locations and the QA/QC data, shall be submitted to the RE for every day that the water from dewatering is discharged. Should the dewatering discharge concentrations exceed applicable water quality standards, discharging will be stopped immediately and the WPC Manager or other personnel shall evaluate the dewatering BMPs to determine the probable cause for the exceedance. For dewatering discharges, Caltrans requires that the turbidity of any sample must not exceed 200 NTU. The pH value of any sample must be within the range of 6.7 to 8.3 pH units.

Samples of non-stormwater collected during discharge shall be evaluated by determining if suspected contaminants are present. Unauthorized discharges will be stopped as soon as possible and the RE will be notified immediately and a written report of discharge shall be completed and submitted to the RE.

Authorized discharges shall be sampled for pH and turbidity and all suspected pollutants. For pH and turbidity, sample results shall be compared to the NAL.

As determined by the data evaluation and project site assessment, appropriate BMPs shall be repaired or modified to mitigate the exceedances. Corrective actions taken shall be documents on the CEM-2035 Stormwater Corrective Actions Summary. Any revisions/design changes to BMPs shall be implemented based on an amendment to the LCAN.

800.2.3.9 Changes of Conditions

Refer to the general requirements for changes of conditions in General SAP Section 800.2.1.9.

800.2.4 Sampling and Analysis Plan for Stormwater pH and Turbidity for Type 2 or 3 Projects

This SAP has been prepared for monitoring pH and turbidity in stormwater discharges from the project site and off-site activities directly related to the project in accordance with the requirements of the 2009 CGP and applicable requirements of the Caltrans Construction Site Monitoring Program Guidance Manual. This SAP for monitoring pH and turbidity includes all of the components listed in Section 800.2.1.

800.2.4.1 Scope of Monitoring Activities

The scope of monitoring for this SAP includes monitoring for pH and turbidity in stormwater discharges from the project site and, run-on to the project site.

This project discharges into, a water body that is sediment-sensitive. Monitoring of the receiving water will be required when direct discharges to the receiving water.

Monitoring activities for this project include:

- analyzing stormwater discharges for SSC when the Receiving Water Monitoring Trigger for turbidity daily average is exceeded.
- analyzing receiving water samples when the Receiving Water Monitoring Trigger for turbidity or pH is exceeded at any project site discharge location that discharges to a receiving water.

800.2.4.2 Monitoring Preparation

Refer to the general requirements for monitoring preparation in General SAP Section 800.2.1.2.

800.2.4.2.1 Qualified Sampling Personnel

Refer to the general requirements for Qualified Sampling Personnel in General SAP Section 800.2.1.2.1.

800.2.4.2.2 Monitoring Supplies

Refer to the general information regarding monitoring supplies in General SAP Section 800.2.1.2.2.

800.2.4.2.3 Field Instruments

Refer to the general information regarding field instruments in General SAP Section 800.2.1.2.3.

800.2.4.2.4 Testing Laboratory

Refer to the contact information for the testing laboratory found in General SAP Section 800.2.1.2.4.

800.2.4.3 Monitoring Strategy

Monitor representative stormwater discharges from the project site for pH and turbidity during qualifying rain events (a rain event that has produced precipitation in the form of rain and produced run-off at the time of discharge).

800.2.4.3.1 Analytical Constituents

Stormwater discharge samples are to be analyzed for pH and turbidity.

When a stormwater discharge exceeds the turbidity daily average Receiving Water Monitoring Trigger of 500 Nephelometric Turbidity Units (NTUs), then, for subsequent discharges, samples must be analyzed for SSC.

800.2.4.3.2 Potential Sampling Locations

Using the criteria in Section 800.2.1.3.2, the potential sampling locations on the project site for monitoring pH and turbidity were identified. Potential sampling locations for monitoring stormwater discharges for pH and turbidity are based on drainage areas; run-on and runoff locations; accessibility for sampling and personnel safety; and other factors in accordance with the applicable requirements in the Caltrans Construction Site Monitoring Program Guidance Manual. Stormwater discharge locations shall be shown on the WPCDs:

The stormwater discharge locations on the project site are listed in Table 800.2.4.3.2.1: Stormwater Discharge Locations.

Table 800.2.4.3.2.1 Stormwater Discharge Location

Sampling Location Identifier	Location Description

Runoff from the project has the potential to result in direct (concentrated) stormwater discharges to at the locations listed in Table 800.2.4.3.2.2: Direct Stormwater Discharge Locations to Receiving Waterbody.

Table 800.2.4.3.2.2 Direct Stormwater Discharge Locations to Receiving Waterbody

Sampling Location Identifier	Location Description

Direct stormwater discharge locations to receiving waters shall be shown on the WPCDs.

The monitoring of receiving waters is based on the locations of stormwater discharges. To monitor receiving waters for this project, both an upstream sampling location from the stormwater discharge location(s) and a sampling location immediately downstream from the last construction site stormwater discharge location should be selected. These locations are listed in Table 800.2.5: Receiving Water Sampling Locations.

Table 800.2.5 Receiving Water Sampling Locations

Sampling Location Identifier	Location Description

Receiving water sampling locations shall be shown on the WPCDs.

The project receives run-on with the potential to combine with stormwater discharges at the locations listed in Table 800.2.4.3.2.4: Run-on Locations With Potential to Combine With Stormwater Discharges.

Table 800.2.4.3.2.4 Run-on Locations With Potential to Combine With Stormwater Discharges

Sampling Location Identifier	Location Description

Potential run-on sampling locations shall be shown on the WPCDs.

If stormwater discharge location test results exceed the Receiving Water Monitoring Trigger and the stormwater discharges into receiving waters, then sampling of the receiving waters is required for the duration of the project. Upstream and downstream receiving water sampling locations are listed in Table 800.2.4.3.2.5: Receiving Water Sampling Locations.

Table 800.2.4.3.2.5 Receiving Water Sampling Locations

Sampling Location Identifier	Location Description

Potential receiving water sampling locations shall be shown on the WPCDs.

800.2.4.3.3 Actual Sampling Locations

The WPC Manager shall select sampling locations from the list of potential sampling locations for stormwater discharge sampling shown on the WPCDs. If the construction activity has not started within the drainage area at a sampling location, and there is no disturbed soil within a drainage area, sampling from the stormwater discharge location from that drainage area is not required.

Within 72 to 48 hours prior to each qualifying rain event, the WPC Manager must identify the drainage areas that must be sampled. To identify these drainage areas, the WPC Manager must refer to the WPCDs and consider the conditions described below and activities within each drainage area that could have an effect on the stormwater discharge pH or turbidity.

1. **Turbidity:** The area of the disturbed soil at the time of precipitation could have an impact on the stormwater run- off turbidity. The area of the disturbed soil at the time of predicted precipitation must be expressed as a percentage of the total drainage area. It is reasonable to assume that a larger percentage of disturbed soil area could result in a more turbid run-off.
2. **pH:** The type of construction activities that could have an impact on stormwater run-off pH (for example, concrete work and saw cutting, lime stabilization work, use of crushed concrete, etc).

This representative monitoring strategy for stormwater discharges requires collection of additional samples based upon the preceding sampling event stormwater discharge pH or turbidity analysis results when the:

- **turbidity analysis results** – even in one sampling location – in the previous sampling event have exceeded 200 NTU, the number of drainage areas with disturbed soil areas requiring sampling will be raised to 50 percent.
- **turbidity analysis results** – even in one sampling location – in the previous sampling event have exceeded 250 NTU, the number of drainage areas with disturbed soil areas requiring sampling will be raised to 100 percent.
- **pH analysis results** – even in one sampling location – in the previous sampling event have not fallen within 6.5 to 8.5 pH unit range, the number of drainage areas requiring sampling where

construction activities could have an impact on the discharge pH readings will be raised to 50 percent.

- **pH analysis results** – even in one sampling location – in the previous sampling event have not fallen within 6.0 to 9.0 pH unit range, the number of drainage areas requiring sampling where construction activities could have an impact on the discharge pH readings will be raised to 100 percent.

The selection of additional sampling locations, based on turbidity results, will involve drainage areas with the highest percentage of disturbed soil area. The selection of additional sampling locations, based on pH results, will be involve drainage areas with construction activities that are most likely to affect stormwater discharge pH.

This project has discharge locations that discharge directly into the sediment-sensitive receiving water. Receiving water sampling locations will be sampled and analyzed for every qualifying rain event (rain events producing ½ inch or more of precipitation at the time of discharge).

Sampling location (designated number) is upstream of all direct discharges from the construction site. Upstream samples shall be collected and analyzed for the prevailing condition of the receiving water without any influence from the construction site. The upstream samples will be used to determine the background levels of turbidity, suspended sediment concentration, and pH in the sediment-sensitive listed water body upstream of the project.

Sampling location (designated number) is immediately downstream from the last point of direct discharge from the construction site for the collection of a sample to be analyzed for potential increases in turbidity, or potential exceedance in pH level in the receiving water body caused by stormwater discharges from the project.

This project receives run-on from surrounding area that may contribute to exceedances of NALs or Receiving Water Monitoring Triggers. Potential sampling locations have been selected from locations where run-on enters the Caltrans right-of-way.

Potential sampling location(s) have been identified for the collection of samples of run-on with the potential to combine with runoff from the construction site, which discharge either to an MS4 or to a sediment-sensitive water body. Run-on samples taken from these locations will be analyzed to identify potential turbidity and pH that originates off the project site and contributes directly to stormwater discharges from the construction site to the MS4 or receiving water body.

The selection of run-on sampling locations will be made by the WPC Manager. Run-on sampling locations will be selected based on stormwater discharge locations. If there is an NAL or Receiving Water Monitoring Trigger exceedance at a stormwater discharge location, any stormwater run-on location that contributes to the stormwater discharges from the construction site shall be selected for sampling.

If test results from stormwater discharge locations exceed a Receiving Water Monitoring Trigger and the runoff discharges to the receiving water, then sampling of the receiving water is required for the duration of the project.

Sampling location (designated number) is upstream of all direct discharges from the construction site. Upstream samples shall be collected and analyzed for the prevailing condition of the receiving water without any influence from the construction site. The upstream samples will be used to determine the background levels of turbidity, suspended sediment concentration, and pH in the sediment-sensitive listed water body upstream of the project.

Sampling location (designated number) is immediately downstream from the last point of direct discharge from the construction site for the collection of a sample to be analyzed for potential increases

in turbidity, suspended sediment concentration, or potential exceedance in pH level in the sediment-sensitive listed water body caused by stormwater discharges from the project.

800.2.4.3.4 Sampling Schedule

Discharge samples shall be collected for turbidity and pH for qualifying rain events that result in a discharge from the project site. When applicable, upstream, downstream, and run-on samples shall be collected for analysis of turbidity and pH. Sampling and testing for turbidity and pH will be performed daily during all qualifying rain events. Samples shall be collected during working hours.

At least 48 hours prior to each qualifying rain event, the WPC Manager must prepare a list of sampling locations that must be sampled for the qualifying rain event.

The locations shall include all of the following sampling location types:

- discharge locations from the drainage areas with the largest percentage of disturbed soil areas,
- discharge locations from the drainage areas where construction activities that could have an impact on stormwater run-off pH are in progress, and

If stormwater sampling is unsafe because of dangerous weather conditions, such as flooding and electrical storms, then the stormwater sampler shall document the conditions resulting in the sampling not being performed as planned.

800.2.4.4 Sample Collection and Handling

Refer to the general requirements for sample collection and handling in General SAP Section 700.2.1.4.

800.2.4.4.1 Sample Collection Procedures

In addition to the general procedures for sample collection in General SAP Section 800.2.1.4.1, the procedures described below apply to sample collection for monitoring of pH and turbidity.

- Grab samples shall be collected and preserved in accordance with the methods identified in Table 800.2.4.5.1: Sample Collection, Preservation and Analysis for Monitoring Turbidity and pH, provided in Section 800.2.4.5.
- Only personnel trained in proper water quality sampling shall collect samples.

800.2.4.4.2 Sample Handling Procedures

Refer to the general procedures for sample handling in General SAP Section 800.2.1.4.2.

800.2.4.4.3 Sample Documentation Procedures

Refer to the general procedures for sample documentation in General SAP Section 800.2.1.4.3.

800.2.4.5 Sample Analysis

Samples shall be analyzed for the constituents indicated in Table 800.2.4.5.1: Sample Collection, Preservation and Analysis for Monitoring Turbidity and pH.

Table 800.2.4.5.1 Sample Collection, Preservation and Analysis for Monitoring Turbidity and pH

Parameter	Test Method	Sample Bottle	Minimum Sample Volume[1]	Sample Preservation	Maximum Holding Time	Detection Limit (min)
Turbidity	Field test with calibrated portable instrument	Polypropylene or Glass	100 mL	Store at 4˚ C (39.2˚ F)	48 hours	1 NTU
pH	Field test with calibrated portable instrument	Polypropylene	100 mL	Store at 4˚ C (39.2˚ F)	15 minutes	0.2

1. *Minimum sample volume recommended. Specific volume requirements will vary by instrument; check instrument manufacturer instructions.*

°C = degrees Celsius; °F = degrees; Fahrenheit; Min = minimum; mL = milliliter; NTU = Nephelometric Turbidity Units

If turbidity exceeds the Receiving Water Monitoring Trigger of 500 NTU, samples shall be analyzed for the constituents indicated in Table 800.2.4.5.2: Sample Collection, Preservation and Analysis for Monitoring Suspended Sediment Concentration (SSC).

Table 800.2.4.5.2 Sample Collection, Preservation and Analysis for Monitoring Suspended Sediment Concentration (SSC)

Parameter	Test Method	Sample Preservation	Minimum Sample Volume[1]	Sample Bottle	Maximum Holding Time	Detection Limit (min)
Suspended Sediment Concentration	ASTM D3977-97	Store at 4˚ C (39.2˚ F)	200 mL	Contact Laboratory	7 days	5 mg/L

1. *Minimum sample volume recommended. Specific volume requirements will vary by laboratory; check with laboratory when setting up bottle orders.*

ASTM = American Society for Testing and Materials; °C = Degrees Celsius; °F = Degrees Fahrenheit; min = Minimum; mg/L = Milligrams per liter; mL = Milliliters

800.2.4.6 Quality Assurance/Quality Control

Refer to the general requirements regarding Quality Assurance/Quality Control (QA/QC) in General SAP Section 800.2.1.6. The following replaces the requirements for QA/QC in Section 800.2.1.6 for turbidity and pH quality assurance testing. However, Section 800.2.1.6 requirements apply for SSC quality assurance testing: The contractor shall coordinate with Caltrans RE on sampling locations and timing for quality assurance verification of field sampling and analysis activities. The contractor shall notify the RE at least 24 hours prior to sampling events.

800.2.4.7 Data Management and Reporting

Refer to general requirements for data management and reporting in General SAP Section 800.2.1.7.

In addition to the general requirements for data management and reporting in Section 800.2.1.7, the additional reporting described below is required.

Numeric Action Limit Exceedance Reporting. This project is subject to NALs for pH and turbidity as shown in Table 800.2.4.7.1: NALs for Monitoring pH and Turbidity.

Table 800.2.4.7.1 NALs for Monitoring pH and Turbidity

Parameter	Test Method	Detection Limit (min)	Unit	Numeric Action Level
pH	Field test with calibrated portable instrument	0.2	pH units	Lower NAL = 6.5 Upper NAL = 8.5
Turbidity	Field test with calibrated portable instrument	1	NTU	250 NTU

Min = Minimum; NAL = numeric action level; NTU = Nephelometric Turbidity Units

If the NAL for pH or turbidity or both are exceeded, then form CEM-2062 NAL Exceedance Report will be completed and submitted to the RE within 48 hours after the sampling and analysis event. The NAL Exceedance Report will:

- test results, analytical methods, reporting units, and detection limits
- date, sampling location, time of sampling, and visual observations
- predicted quantity of precipitation of the forecasted storm event, and estimated quantity of precipitation at the time of sampling
- description of BMPs
- corrective actions taken to manage the NAL exceedance

Once deemed necessary, corrective actions shall be immediately implemented and documented. The LCAN will contain the CEM-2035 Stormwater Corrective Actions Summary form and the CEM-2062 NAL Exceedance Report form. NAL exceedance reports must be included in the LCAN as Appendix L.

800.2.5 Sampling and Analysis Plan for Receiving Water Monitoring for 3 Projects

LUP Risk Type 3 projects are subject to Receiving Water Monitoring Triggers for pH and turbidity, as shown in Table 800.2.4.7.2: Receiving Water Monitoring Triggers for Monitoring pH and Turbidity.

Table 800.2.4.7.2 Receiving Water Monitoring Triggers for Monitoring pH and Turbidity

Parameter	Test Method	Detection Limit (min)	Unit	Receiving Water Monitoring Trigger
pH	Field test with calibrated portable instrument	0.2	pH units	Lower Trigger = 6.0 Upper Trigger = 9.0
Turbidity	Field test with calibrated portable instrument	1	NTU	500 NTU

Min = Minimum; NTU = Nephelometric Turbidity Units

If a Receiving Water Monitoring Trigger is exceeded, then the RE must be notified within 6 hours after determining the exceedance.

Once deemed necessary, corrective actions shall be immediately implemented and documented. Appendix F contains the CEM-2035 Stormwater Corrective Actions Summary form.

800.2.5.1 Data Evaluation

An evaluation of the water quality sample analytical results, including sampling locations and the QA/QC data, shall be submitted to the RE for every day of stormwater sampling. If the stormwater discharge concentrations exceed applicable water quality standards, the WPC Manager or other personnel shall evaluate the project site BMPs to determine the probable cause for the exceedance.

As determined by the data evaluation and project site assessment, appropriate BMPs shall be repaired or modified to mitigate the exceedances. Corrective actions taken shall be documented on the CEM-2035 Stormwater Corrective Actions Summary. Any revisions/design changes to BMPs shall be implemented based on an amendment to the LCAN.

800.2.5.2 Change of Condition

Refer to the general requirements for changes of conditions in General SAP Section 800.2.1.9.

Section 900: Post Construction Control Practices

900.1 Post-Construction Control Practices

All activities within Caltrans right of way are regulated under its Statewide Caltrans Stormwater Permit and therefore any MMBN site is covered under the Caltrans Phase I NPDES Permit for runoff reduction requirements.

Per the Caltrans NPDES MS4 Permit (Order 2022-XXXX-DWQ, NPDES No. CAS000003), utility trenching and resurfacing is not considered as redevelopment and is exempted from the post-construction treatment requirement.

Utility trenching in paved area will be backfilled and resurfaced to pre-construction condition. Trenching in unpaved area will be backfilled and stabilized per Notice of Termination requirements.

Section 1000: Common SWPPP Reporting Requirements

1000.1 Recordkeeping

To manage the various documents required by the Common SWPPP and to provide easy access to the documents, the following records shall be retained for a minimum of three years for the following items:

- approved Common SWPPP document and amendments
- Stormwater Site Inspection Reports
- Site Inspection Report Corrections Summary
- Notice of Discharge Reports
- Numeric Action Limit (NAL) Exceedance Reports
- Numeric Effluent Limitation (NEL) Violation Reports
- sampling records and analysis reports
- Copies of all applicable permits

1000.2 Stormwater Annual Report

A Stormwater Annual Report will be prepared for each LCAN to document the stormwater monitoring information and training information.

The stormwater monitoring information listed below shall be included in the Stormwater Annual Report:

- A summary and evaluation of all sampling and analysis results, including copies of laboratory reports.
- The analytical method(s), method reporting unit(s), and method detection limit(s) of each analytical parameter.
- A summary of all corrective actions taken during the compliance year.
- Identification of any compliance activities or corrective actions that were not implemented.
- A summary of all violations of the 2009 CGP.
- The names of individual(s) who performed site inspections, sampling, site visual monitoring inspections and/or measurements.
- The date, place, and time of site inspections, sampling, site visual monitoring inspections, and/or measurements, including precipitation (rain gauge).
- Any site visual monitoring inspection and sample collection exception records.

The stormwater training information listed below shall be included in the Stormwater Annual Report:

- Documentation of all training for individuals responsible for all activities associated with compliance with the 2009 CGP.
- Documentation of all training for individuals responsible for BMP installation, inspection, maintenance, and repair.
- Documentation of all training for individuals responsible for overseeing, revising and amending the LCAN.

1000.3 Discharge Reporting

If an unauthorized discharge is discovered or evidence of a previously unseen discharge is discovered, the Contractor shall notify the RE within 6 hours of the discovery and file a written report with the RE within 24 hours after the discovery. The written report to the RE will contain the following items:

- date, time, location, and type of unauthorized discharge
- nature of operation that caused the discharge
- initial assessment of any impacts caused by the discharge
- BMPs deployed before the discharge event and date(s) of deployment
- BMPs deployed after the discharge event, including re-installation, maintenance or repair of initial BMPs
- steps taken or planned to reduce, eliminate and/or prevent recurrence of the discharge

Reporting of discharges shall be documented on the CEM-2061 Notice of Discharge form in the project's LCAN. Completed CEM-2061 Notice of Discharge forms shall be submitted to the RE within 24 hours after the discharge event or discovery of evidence of a prior discharge. Completed copies should be included in the LCAN as appendix K.

1000.4 Regulatory Agency Notice or Order Reporting

If a written notice or order is issued to the project by any regulatory agency, the Contractor will notify the RE within 6 hours of receiving the notice or order and will file a written report to the RE within 48 hours of receiving the notice or order. Corrective measures will be implemented immediately following receipt of the notice or order.

The report to the RE will contain the following items:

- the date, time, location, and cause or nature of the notice or order
- the BMPs deployed prior to receiving the notice or order
- the date of deployment and type of BMPs deployed after receiving the notice or order, including additional BMPs installed or planned to reduce or prevent recurrence
- an implementation and maintenance schedule for any affected BMPs

1000.5 Illegal Connection/Illicit Discharge Reporting

If the Contractor discovers an illegal connection to a storm drain system or any pipe discharging onto the project site, not shown on the project plans, the Contractor shall notify the RE within 6 hours of the discovery and shall file a written report to the RE within 48 hours of the discovery.

If the Contractor discovers any illicit discharge, including illegal disposing of material on the project site, the Contractor shall immediately notify the RE and shall file a written report to the RE within 3 days of discovery.

The report to the RE will contain the following items:

- the date, time, and location of the discovery
- the details for the illegal connection or illicit discharge, including any photographs taken
- any actions taken to contain the illicit discharge
- any sampling and testing performed on material that was illegally disposed of or discharged

1000.6 Notice Of Termination

Each LCAN will submit a Linear Construction Notice of Termination (LCNT) once the project is complete.

Attachment A: LRP Authorization of Approved Signatory

Attachment B: NOI

Attachment C: QSD Training Certification

CERTIFICATE OF TRAINING

CALIFORNIA CONSTRUCTION GENERAL PERMIT

QUALIFIED SWPPP DEVELOPER (QSD)
AND
QUALIFIED SWPPP PRACTITIONER (QSP)

Sayra Hurley

Jul 01, 2021 - Aug 31, 2023

Certificate # 20477

CASQA
CALIFORNIA STORMWATER QUALITY ASSOCIATION®

California Stormwater Quality Association and
California Construction General Permit Training Team

Attachment D: LCAN (Application and Site-Specific Plan)

MMBN LCAN APPLICATION
for Caltrans Common SWPPP
WDID: SWBPP000001

Section 1: Owner's Information/Caltrans District

Caltrans District: Select	
Contract No/ EA:	**Project ID:**
Name:	**Title:** Resident Engineer
Street Address:	**City:**
State: CA	**Zip:**
Phone:	**Email:**

Section 2: Contractor's Information

Company Name:	
Contact Name:	**Title:**
Address:	**City:**
State: CA	**Zip:**
Phone:	**Email:**

Section 3: QSD-LCAN and Site Specific Plan Preparer's Information

Name:	**QSD Title:**
Certificate No:	
Phone:	**Email:**

Section 4: Site Information

Project Name:	**County:**
Address:	**City:**
State: CA	**Zip:**
Beginning Post Mile:	**Ending Post Mile:**
Beginning Latitude:	**Ending Latitude:**
Beginning Longitude:	**Ending Longitude:**
Total disturbed acreage: acres	
Impervious area before: %	**Impervious area after:** %
Construction start date:	**Construction end date:**

Section 5: Additional Site Information

Regional Board 1: Select	**Regional Board 2:** Select
Any specific environmental permits (if yes, list):	
Name of receiving water:	**Direct or indirect discharge:** Select

Section 6: LUP Risk Type Information

Follow Attachment A.1 LUP Project Area or Project Section Area Type Determination Flowchart to determine if the LUP project is a Type 1

Will ≥ 70% of the construction activity occur on paved surfaces?	Select
Will the construction activity occur on unpaved improved roads, including their shoulders or land immediately adjacent to them?	Select
Will areas disturbed be returned to preconstruction conditions or equivalent conditions at the end of the day?	Select
Will areas of established vegetation disturbed by the construction be stabilize and revegetated by the end of the project?	Select
Based on the flowchart, does the project meet the LUP Type 1 requirements? If yes, select LUP Risk Type 1 below. If not, proceed with Appendix 1 Risk Factor Worksheet of 2009 CGP	Select

LUP Risk Type: Select	
R Factor:	**K Factor:**
LS Factor:	**Receiving water risk:** Select

Attachment

Site Specific Plan

SITE SPECIFIC PLAN

Attachment to the

Linear Construction Activity Notification (LCAN) for MMBN Common SWPPP: WDID SWBPP000001

LCAN ID (Site Specific WDID):

LCAN Date:

A Common SWPPP was prepared and submitted for statewide programmatic permit coverage for construction of Middle-Mile Broadband Network (MMBN) projects initiated by Governor's Executive Order N-73-20. The Common SWPPP addresses all anticipated linear underground/overhead project (LUP) activities and potential pollutant sources relevant to the project scope. The Common SWPPP, WDID SWBPP000001, was accepted on 12DD2022.

This project-specific Linear Construction Activity Notification (LCAN) application and Site Specific Plan (this package herein referred to as LCAN) has been developed to comply with the Caltrans Common SWPPP and it serves as an amendment to the approved Caltrans Common SWPPP.

QSD's Certification of the LCAN

"I certify under penalty of law that I relied upon available project and site information, current watershed and basin plan maps and available soil data to develop this LCAN so that Best Management Practices (BMPs) were identified in accordance with industry standards and best professional judgment to reduce pollutants from leaving the job site. All other sources relied upon to gain information for this project's LCAN were appropriate and dependable, based on my best professional judgment. To the best of my knowledge and belief, the information submitted in this LCAN is in compliance with all requirements of the Construction General Permit 2009-09- DWQ amended by 2010-0014-DWQ & 2012-006-DWQ (CAS000002).

LCAN's Preparers Signature (QSD)	Name	Phone

Resident Engineer's Acceptance of the LCAN

"I certify under penalty of law that this document and all attachments were reviewed under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations."

This LCAN is accepted based on a review performed by myself or personnel acting under my direction that determined that the LCAN meets the requirements set forth in the Common SWPPP for MMBN Projects.

Resident Engineer's Signature	Date of LCAN's Acceptance

LCAN Amendments

The Common SWPPP is a statewide programmatic permit coverage for construction of MMBN projects. Each project will require development of an LCAN by the project contractor. The LCAN includes both the application and the Site Specific Plan. The following information shall be included in each Site Specific Plan:

- Project name and/or reference number
- WDID extension
- Site location
- Site specific map detailing pollutant sources and implemented BMPs
- Total disturbed acreage
- Estimated start and end date
- LUP Risk Type determination and supporting documentation
- Site contact information (name, phone number, address)

The Site Specific Plan shall be amended when:

- There is a change in construction or operations that affects the discharge of pollutants to surface waters, groundwater(s), or a municipal separate storm sewer system (MS4).
- A contract change order includes additional water pollution control practices, not already specified in the approved Common SWPPP.
- A 2009 CGP violation has occurred. When the RWQCB determines that a 2009 CGP violation has occurred, the Common SWPPP shall be revised and corrective actions implemented within 14 calendar days after notification by the RWQCB.

Approved and certified amendments shall be inserted as new attachments to the Common SWPPP. All Common SWPPP amendments prepared by the WPC Manager and approved by the Contractor shall be accepted and certified by the LRP or Approved Signatory.

Project Information

Contract No./EA:	Project ID:
County:	Route:
Beginning PM:	Ending PM:
Project Description:	
LUP Risk Type: Select	

WPC Manager

Name:	Title:
Phone:	Email:

QSD

Name:	Title:
Phone:	Email:

QSP

Name:	Title:
Phone:	Email:

QSP's Delegate

Name:	Title:
Phone:	Email:

Project has Fill Material:	Select	Project has Native Material:	Select
Hydrologic Soil Group:	Select	Soil Erodibility:	Select
Unique Features onsite:	Select	If others, list:	Enter text
Run-on onto the project:	Select	Anticipated stormwater run-on flow rate to the construction site:	cfs

Project site location for forecast weather from National Weather Forecast Office website:

Specific site location:			
Latitude:		Longitude:	

Training and Certifications of Responsible Staff for LCAN's preparation and implementation:

The WPCM is a QSD who has the following certifications as required by Caltrans specifications:

- Click or tap here to enter text.
- Click or tap here to enter text.
- Click or tap here to enter text.
- Click or tap here to enter text.

The WPCM has the following experience related to Water Pollution Control:

- Click or tap here to enter text.
- Click or tap here to enter text.
- Click or tap here to enter text.
- Click or tap here to enter text.

The LCAN Preparer is a QSD who has the following certifications as required by the 2009 CGP:

- Click or tap here to enter text.
- Click or tap here to enter text.
- Click or tap here to enter text.
- Click or tap here to enter text.

The QSD has the following experience related to Water Pollution Control:

- Click or tap here to enter text.
- Click or tap here to enter text.
- Click or tap here to enter text.
- Click or tap here to enter text.

Stormwater sampling and field analysis will be performed by the following stormwater sampler:

- Click or tap here to enter text.

The primary stormwater sampler has received the following stormwater sampling training:

- Click or tap here to enter text.
- Click or tap here to enter text.
- Click or tap here to enter text.
- Click or tap here to enter text.

The primary stormwater sampler has the following stormwater sampling experience:

- Click or tap here to enter text.
- Click or tap here to enter text.
- Click or tap here to enter text.
- Click or tap here to enter text.

The QSP who will be assisting the WPCM has the following certifications as required by the 2009 CGP:

- Click or tap here to enter text.

- Click or tap here to enter text.
- Click or tap here to enter text.
- Click or tap here to enter text.

The QSP has the following experience related to Water Pollution Control:

- Click or tap here to enter text.
- Click or tap here to enter text.
- Click or tap here to enter text.
- Click or tap here to enter text.

The QSP has a delegate who has received the following training:

- Click or tap here to enter text.
- Click or tap here to enter text.
- Click or tap here to enter text.
- Click or tap here to enter text.

The QSP's delegate has the following experience related to Water Pollution Control:

- Click or tap here to enter text.
- Click or tap here to enter text.
- Click or tap here to enter text.
- Click or tap here to enter text.

Contractor or subcontractor employees responsible for water pollution control best management practices (BMPs) installation, maintenance and repair will submit the CEM-2023 Stormwater Training Record documenting their weekly tailgate site meetings and topics addressed. The completed CEM-2023s must be included in Attachment G.

Determination of Construction Site Best Management Practices (Section 600 of the Common Plan). (Selection of BMPs must be dependent on the calculated Project LUP Risk Type- included in Appendix E).

1. Any updated construction activities, materials, or equipment that have potential to pollute stormwater in addition to those listed in section 600.1.1 of the common SWPPP:

- Click or tap here to enter text.
- Click or tap here to enter text.
- Click or tap here to enter text.
- Click or tap here to enter text.

2. Any update to Section 600.1.2 of the Common SWPPP regarding potential pollutants attributed to site usage and historical contamination:

- Click or tap here to enter text.
- Click or tap here to enter text.
- Click or tap here to enter text.
- Click or tap here to enter text.

3. Any existing (pre-construction) control measures encountered within the project site from Common SWPPP Section 600.2:

- Click or tap here to enter text.
- Click or tap here to enter text.
- Click or tap here to enter text.
- Click or tap here to enter text.

4. Any modifications to Common SWPPP Section 600.3.1- Temporary Run-on Control BMPs

Construction BMP ID No.	BMP Name	Reason for Modification

5. Any modifications to Common SWPPP Section 600.3.2- Soil Stabilization

Construction BMP ID No.	BMP Name	Reason for Modification

6. Any modifications to Common SWPPP Section 600.3.3- Sediment control

Construction BMP ID No.	BMP Name	Reason for Modification

7. Any modifications to Common SWPPP Section 600.3.4- Tracking Controls

Construction BMP ID No.	BMP Name	Reason for Modification

8. Any modifications to Common SWPPP Section 600.3.5- Wind Erosion Controls

Construction BMP ID No.	BMP Name	Reason for Modification

9. Any modifications to Common SWPPP Section 600.4.1- Non-Stormwater Controls

Construction BMP ID No.	BMP Name	Reason for Modification

10. Any modifications to Common SWPPP Section 600.4.2- Waste Management and Materials Pollution Controls

Construction BMP ID No.	BMP Name	Reason for Modification

Construction Site Monitoring Program (Section 800 of the Common SWPPP)

The following are the drainage area(s) identified on the project site. These include the Contractor's yard, staging areas, and storage areas have been identified as required forecasted storm event visual observation location(s). Drainage area(s) are shown on Appendix C: WPCDs and showing below

Table 800.1.1.1 Drainage Areas from the Caltrans Common SWPPP

Drainage Area No.	Location

The QSD must identify the discharge location(s) on the project site. These stormwater discharge location(s) have been identified as required visual observation location(s). Stormwater discharge location(s) are shown on the WPCDs and included below:

Table 800.1.1.3 Stormwater Discharge Locations from the Caltrans Common SWPPP

Unique Sampling Location Identifier	Location

Non-visible samples on the project site will be collected by the following:

Company Name:	
Address:	
Contact Name:	
Title:	
Phone Number:	
Emergency Phone Number (24/7):	
Email Address:	

Non-visible Samples on the project site will be analyzed by the following laboratory certified by the State Department of Health Services:

Laboratory Name:	
Address:	
Contact Name:	

Title:	
Phone Number:	
Emergency Phone Number (24/7):	
Email Address:	

Monitoring Supplies

An adequate stock of monitoring supplies and equipment for sampling will be available on the project site prior to a sampling event. Monitoring supplies and equipment will be stored in a cool temperature environment that will prevent the supplies/equipment from coming into contact with rain or direct sunlight. Supplies maintained at the project site will include, but are not limited to, surgical gloves, sample collection equipment, coolers, appropriate number and volume of sample bottles, identification labels, re-sealable storage bags, paper towels, personal rain gear, and ice.

The contractor will obtain and maintain the field testing instruments, including current calibration standards, for analyzing samples in the field.

The field instrument(s) shown below will be used to analyze the constituents shown:

Table 800.2.1.2.3 Field Instruments

Field Instrument	Constituent
Click or tap here to enter text.	Click or tap here to enter text.
Click or tap here to enter text.	Click or tap here to enter text.
Click or tap here to enter text.	Click or tap here to enter text.
Click or tap here to enter text.	Click or tap here to enter text.
Click or tap here to enter text.	Click or tap here to enter text.

The instrument(s) shall be maintained in accordance with manufacturer's instructions and shall be calibrated before each sampling and analysis event.

Non-visible Sampling Locations

Sampling location(s) on the project site and the contractor's support facilities have been identified as potential locations for the collection of samples of runoff from planned material and waste storage areas and areas where non-visible pollutant producing construction activities are planned. Potential non-visible pollutant sampling locations are listed below, including uncontaminated locations:

Table 800.2.2.3.2.1 Potential Non-Visible Pollutant Sampling Locations

Sampling Location Identifier	Location Description

Potential non-visible pollutant sampling locations shall be shown on the WPCDs.

Table 800.2.2.3.2.2 Potential Uncontaminated Non-Visible Pollutant Sampling Locations

Sampling Location Identifier	Location Description

Non-stormwater and/or dewatering discharges

The following sampling location(s) on the project site been identified as potential locations for the collection of discharge samples of impounded stormwater and the sampling location(s) are listed below:

Table 800.2.2.3.2.2 Potential Non-Stormwater Dewatering Sampling Locations

Sampling Location Identifier	Location Description

This project is covered by dewatering permit number issued by RWQCB: .

The strategy for monitoring dewatering discharges requires monitoring of the following parameters:

- Click or tap here to enter text.
- Click or tap here to enter text.
- Click or tap here to enter text.
- Click or tap here to enter text.

Monitoring will be required at the following locations:

- Click or tap here to enter text.
- Click or tap here to enter text.
- Click or tap here to enter text.
- Click or tap here to enter text.

A copy of the dewatering permit is in Attachment F.

The project non-stormwater discharge locations will discharge to the location(s) listed below

Table 800.2.3.3.2.3 Potential Dewatering/ Impounded Stormwater Sampling Locations and Receiving Water Sampling Location

Sampling Location Identifier	Location Description

pH and Turbidity for Risk Type 2 and 3 MMBN Projects

The stormwater discharge locations on the project site are listed in Table 800.2.4.3.2.1: Stormwater Discharge Locations.

Table 800.2.4.3.2.1 Stormwater Discharge Locations

Sampling Location Identifier	Location Description

Runoff from the project has the potential to result in direct (concentrated) stormwater discharges to at the locations listed below:

Table 800.2.4.3.2.2 Direct Stormwater Discharge Locations to Receiving Waterbody

Sampling Location Identifier	Location Description

Table 800.2.4.3.2.3 Receiving Water Sampling Locations

Sampling Location Identifier	Location Description

The project receives run-on with the potential to combine with stormwater discharges at the locations listed below

Table 800.2.4.3.2.4 Run-on Locations With Potential to Combine With Stormwater Discharges

Sampling Location Identifier	Location Description

Potential run-on sampling locations shall be shown on the WPCDs.

For LUP Risk Type 3 Projects only:

If stormwater discharge location test results exceed the Receiving Water Monitoring Trigger and the stormwater discharges into receiving waters, then sampling of the receiving waters is required for the duration of the project. Upstream and downstream receiving water sampling locations are listed below:

Table 800.2.4.3.2.5 Receiving Water Sampling Locations

Sampling Location Identifier	Location Description

Potential receiving water sampling locations shall be shown on the WPCDs.

Notice of Discharge Report

If there are any discharges, the WPCM must prepare a CEM- 2061 Notice of Discharge Report and submit it to the Resident Engineer to upload to SMARTS. Completed CEM-2061s must be included in Attachment K.

NAL Exceedance

If there are any NAL exceedances, the WPCM must prepare a CEM- 2062 Notice of NAL Exceedance Report and submit it to the Resident Engineer to upload to SMARTS. Completed CEM-2062s must be included in Attachment L.

Annual Report

The WPCM must prepare an annual report as required by the 2009 CGP by completing CEM-2075 and submitting it to the Resident Engineer for review and approval. Completed CEM-2075 are to be included in Attachment M.

The following are to be included as LCAN Appendices

Appendix A: LCAN Application
Appendix B: Vicinity Map and Site Map
Appendix C: WPC Drawings
Appendix D: WPC Schedule
Appendix E: LUP Risk Type Documentation
Appendix F: Relevant Permits/Plans/Agreements
Appendix G: CEM-2023 Stormwater Training Record
Appendix H: CEM-2030 Stormwater Site Inspection Report
Appendix I: CEM-2035 Corrective Action Summary Report
Appendix J: CEM-2052 Stormwater Sample Field Test Report form
Appendix K: CEM- 2061 Notice of Discharge Report
Appendix L: CEM-2062 NAL Exceedance Report Form/Receiving Water Monitoring Trigger Report
Appendix M: CEM 2075- Project Stormwater Annual Report

Attachment E: References

ATTACHMENT A
Linear Underground/ Overhead Requirements

All Linear Underground/Overhead project dischargers who submit permit registration documents (PRDs) indicating their intention to be regulated under the provisions of this General Permit shall comply with the following:

A. DEFINITION OF LINEAR UNDERGROUND/OVERHEAD PROJECTS

1. Linear Underground/Overhead Projects (LUPs) include, but are not limited to, any conveyance, pipe, or pipeline for the transportation of any gaseous, liquid (including water and wastewater for domestic municipal services), liquiescent, or slurry substance; any cable line or wire for the transmission of electrical energy; any cable line or wire for communications (e.g., telephone, telegraph, radio, or television messages); and associated ancillary facilities. Construction activities associated with LUPs include, but are not limited to, (a) those activities necessary for the installation of underground and overhead linear facilities (e.g., conduits, substructures, pipelines, towers, poles, cables, wires, connectors, switching, regulating and transforming equipment, and associated ancillary facilities); and include, but are not limited to, (b) underground utility mark-out, potholing, concrete and asphalt cutting and removal, trenching, excavation, boring and drilling, access road and pole/tower pad and cable/wire pull station, substation construction, substructure installation, construction of tower footings and/or foundations, pole and tower installations, pipeline installations, welding, concrete and/ or pavement repair or replacement, and stockpile/borrow locations.

2. LUP evaluation shall consist of two tasks:

a. Confirm that the project or project section(s) qualifies as an LUP. The State Water Board website contains a project determination guidance flowchart. http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml

b. Identify which Type(s) (1, 2 or 3 described in Section I below) are applicable to the project or project sections based on project sediment and receiving water risk. (See Attachment A.1)

3. A Legally Responsible Person (LRP) for a Linear Underground/Overhead project is required to obtain CGP coverage under one or more permit registration document (PRD) electronic submittals to the State Water Board's Storm Water Multi-Application and Report Tracking (SMARTs) system. Attachment A.1 contains a flow chart to be used when determining if a linear project qualifies for coverage and to determine LUP Types. Since a LUP may be constructed within both developed and undeveloped locations and portions of LUPs may be constructed by different contractors, LUPs may be broken into logical permit sections. Sections may be determined based on portions of a project conducted by one contractor. Other situations may also occur, such as the time period in which the sections of a project will be constructed (e.g. project phases), for which separate permit coverage is possible. For projects that are broken into separate sections, a description of how each section relates to the overall project and the definition of the boundaries between sections shall be clearly stated.

4. Where construction activities transverse or enter into different Regional Water Board jurisdictions, LRPs shall obtain permit coverage for each Regional Water Board area involved prior to the commencement of construction activities.

5. Small Construction Rainfall Erosivity Waiver

EPA's Small Construction Erosivity Waiver applies to sites between one and five acres demonstrating that there are no adverse water quality impacts.

Dischargers eligible for a Rainfall Erosivity Waiver based on low erosivity potential shall complete the electronic Notice of Intent (NOI) and Sediment Risk form through the State Water Board's SMARTS system, certifying that the construction activity will take place during a period when the value of the rainfall erosivity factor is less than five. Where the LRP changes or another LRP is added during construction, the new LRP must also submit a waiver certification through the SMARTS system.

If a small linear construction site continues beyond the projected completion date given on the waiver certification, the LRP shall recalculate the rainfall erosivity factor for the new project duration and submit this information through the SMARTS system. 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 onsite. The LRP shall submit the new waiver certification 30 days prior to the projected completion date listed on the original waiver form to assure exemption from permitting requirements is uninterrupted. If the new R factor is five (5) or above, the LRP shall be required to apply for coverage under this Order.

B. LINEAR PROJECT PERMIT REGISTRATION DOCUMENTS (PRDs)

Any information provided to the Regional Water Board shall comply with the Homeland Security Act and any other federal law that concerns security in the United States; any information that does not comply should not be submitted. PRDs shall consist of the following:

1. Notice of Intent (NOI)

Prior to construction activities, the LRP of a proposed linear underground/overhead project shall utilize the processes and methods provided in Attachment A.2, Permit Registration Documents (PRDs) – General Instructions for Linear Underground/Overhead Projects to comply with the Construction General Permit.

2. Site Maps

LRPs submitting PRDs shall include at least 3 maps. The first map will be a zoomed[1] 1000-1500 ft vicinity map that shows the starting point of the project. The second will be a zoomed map of 1000-1500 ft showing the ending location of the project. The third will be a larger view vicinity map, 1000 ft to 2000 ft, displaying the entire project location depending on the project size, and indicating the LUP type (1, 2 or 3) areas within the total project footprint.

3. Drawings

LRPs submitting PRDs shall include a construction drawing(s) or other appropriate drawing(s) or map(s) that shows the locations of storm drain

[1] An image with a close-up/enhanced detailed view of site features that show minute details such as streets and neighboring structures.
Or: An image with a close-up/enhanced detailed view of the site's surrounding infrastructure.
Or: An image with a close up detailed view of the project and its surroundings.

inlets and waterbodies[2] that may receive discharges from the construction activities and that shows the locations of BMPs to be installed for all those BMPs that can be illustrated on the revisable drawing(s) or map(s). If storm drain inlets, waterbodies, and/or BMPs cannot be adequately shown on the drawing(s) or map(s) they should be described in detail within the SWPPP.

4. Storm Water Pollution Prevention Plan (SWPPP)

LUP dischargers shall comply with the SWPPP Preparation, Implementation, and Oversight requirements in Section K of this Attachment.

5. Contact information

LUP dischargers shall include contact information for all contractors (or subcontractors) responsible for each area of an LUP project. This should include the names, telephone numbers, and addresses of contact personnel. Specific areas of responsibility of each contact, and emergency contact numbers should also be included.

6. In the case of a public emergency that requires immediate construction activities, a discharger shall submit a brief description of the emergency construction activity within five days of the onset of construction, and then shall submit all PRDs within thirty days.

C. LINEAR PROJECT TERMINATION OF COVERAGE REQUIREMENTS

The LRP may terminate coverage of an LUP when construction activities are completed by submitting an electronic notice of termination (NOT) through the State Water Board's SMARTS system. Termination requirements are different depending on the complexity of the LUP. An LUP is considered complete when: (a) there is no potential for construction-related storm water pollution; (b) all elements of the SWPPP have been completed; (c) construction materials and waste have been disposed of properly; (d) the site is in compliance with all local storm water management requirements; and (e) the LRP submits a notice of termination (NOT) and has received approval for termination from the appropriate Regional Water Board office.

1. LUP Stabilization Requirements

The LUP discharger shall ensure that all disturbed areas of the construction site are stabilized prior to termination of coverage under this General Permit. Final stabilization for the purposes of submitting an NOT

[2] Includes basin(s) that the MS4 storm sewer systems may drain to for Hydromodification or Hydrological Conditional of Concerns under the MS4 permits.

is satisfied when all soil disturbing activities are completed and one of the following criteria is met:

a. In disturbed areas that were vegetated prior to construction activities of the LUP, the area disturbed must be re-established to a uniform vegetative cover equivalent to 70 percent coverage of the preconstruction vegetative conditions. Where preconstruction vegetation covers less than 100 percent of the surface, such as in arid areas, the 70 percent coverage criteria is adjusted as follows: if the preconstruction vegetation covers 50 percent of the ground surface, 70 percent of 50 percent (.70 X .50=.35) would require 35 percent total uniform surface coverage; or

b. Where no vegetation is present prior to construction, the site is returned to its original line and grade and/or compacted to achieve stabilization; or

c. Equivalent stabilization measures have been employed. These measures include, but are not limited to, the use of such BMPs as blankets, reinforced channel liners, soil cement, fiber matrices, geotextiles, or other erosion resistant soil coverings or treatments.

2. LUP Termination of Coverage Requirements

The LRP shall file an NOT through the State Water Board's SMARTS system. By submitting an NOT, the LRP is certifying that construction activities for an LUP are complete and that the project is in full compliance with requirements of this General Permit and that it is now compliant with soil stabilization requirements where appropriate. Upon approval by the appropriate Regional Water Board office, permit coverage will be terminated.

3. Revising Coverage for Change of Acreage

When the LRP of a portion of an LUP construction project changes, or when a phase within a multi-phase project is completed, the LRP may reduce the total acreage covered by this General Permit. In reducing the acreage covered by this General Permit, the LRP shall electronically file revisions to the PRDs that include:

a. a revised NOI indicating the new project size;

b. a revised site map showing the acreage of the project completed, acreage currently under construction, acreage sold, transferred or added, and acreage currently stabilized.

c. SWPPP revisions, as appropriate; and

d. certification that any new LRPs 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 LRP.

If the project acreage has increased, dischargers shall mail payment of revised annual fees within 14 days of receiving the revised annual fee notification.

D. DISCHARGE PROHIBITIONS

1. LUP 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. LUP dischargers are prohibited from discharging non-storm water that is not otherwise authorized by this General Permit. Non-storm water discharges authorized by this General Permit[3] may include, fire hydrant flushing, irrigation of vegetative erosion control measures, pipe flushing and testing, water to control dust, street cleaning, dewatering,[4] uncontaminated groundwater from dewatering, and other discharges not subject to a separate general NPDES permit adopted by a Regional Water Board. Such discharges are allowed by this General Permit provided they are not relied upon to clean up failed or inadequate construction or post-construction BMPs designed to keep materials on site. These authorized non-storm water discharges:

[3] Dischargers must identify all authorized non-storm water discharges in the LUP's SWPPP and identify BMPs that will be implemented to either eliminate or reduce pollutants in non-storm water discharges. Regional Water Boards may direct the discharger to discontinue discharging such non-storm water discharges if determined that such discharges discharge significant pollutants or threaten water quality.
[4] Dewatering activities may be prohibited or need coverage under a separate permit issued by the Regional Water Boards. Dischargers shall check with the appropriate Regional Water Boards for any required permit or basin plan conditions prior to initial dewatering activities to land, storm drains, or waterbodies.

a. Shall not cause or contribute to a violation of any water quality standard;

b. Shall not violate any other provision of this General Permit;

c. Shall not violate any applicable Basin Plan;

d. Shall comply with BMPs as described in the SWPPP;

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

f. Shall be monitored and meets the applicable NALs; and

g. Shall be reported by the discharger in the Annual Report.

If any of the above conditions are 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.

Additionally, some LUP dischargers may be required to obtain a separate permit if the applicable Regional Water Board has adopted a General Permit for dewatering discharges. Wherever feasible, alternatives, that do not result in the discharge of non-storm water, shall be implemented in accordance with this Attachment's Section K.2 - SWPPP Implementation Schedule.

3. LUP dischargers shall ensure that trench spoils or any other soils disturbed during construction activities that are contaminated[5] are not discharged with storm water or non-storm water discharges into any storm drain or water body except pursuant to an NPDES permit.

When soil contamination is found or suspected and a responsible party is not identified, or the responsible party fails to promptly take the appropriate action, the LUP discharger shall have those soils sampled and tested to ensure that proper handling and public safety measures are

[5] Contaminated soil contains pollutants in concentrations that exceed the appropriate thresholds that various regulatory agencies set for those substances. Preliminary testing of potentially contaminated soils will be based on odor, soil discoloration, or prior history of the site's chemical use and storage and other similar factors. When soil contamination is found or suspected and a responsible party is not identified, or the responsible party fails to promptly take the appropriate action, the discharger shall have those soils sampled and tested to ensure proper handling and public safety measures are implemented. The legally responsible person will notify the appropriate local, State, or federal agency(ies) when contaminated soil is found at a construction site, and will notify the Regional Water Board by submitting an NOT at the completion of the project.

implemented. The LUP discharger shall notify the appropriate local, State, and federal agency(ies) when contaminated soil is found at a construction site, and will notify the appropriate Regional Water Board.

4. Discharging any pollutant-laden water that will cause or contribute to an exceedance of the applicable Regional Water Board's Basin Plan from a dewatering site or sediment basin into any receiving water or storm drain is prohibited.

5. Debris[6] resulting from construction activities are prohibited from being discharged from construction project sites.

E. SPECIAL PROVISIONS

1. Duty to Comply

a. The LUP discharger must comply with all of the conditions of this General Permit. Any permit noncompliance constitutes a violation of the Clean Water Act (CWA) and the Porter-Cologne Water Quality Control Act and is grounds for enforcement action and/or removal from General Permit coverage.

b. The LUP discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if this General Permit has not yet been modified to incorporate the requirement.

2. General Permit Actions

a. This General Permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the discharger for a General Permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not annul any General Permit condition.

[6] Litter, rubble, discarded refuse, and remains of something destroyed.

b. If any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under Section 307(a) of the CWA for a toxic pollutant which is present in the discharge and that standard or prohibition is more stringent than any limitation on the pollutant in this General Permit, this General Permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition and the dischargers so notified.

3. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for an LUP discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this General Permit.

4. Duty to Mitigate

The LUP discharger shall take all responsible steps to minimize or prevent any discharge in violation of this General Permit, which has a reasonable likelihood of adversely affecting human health or the environment.

5. Proper Operation and Maintenance

The LUP discharger shall at all times properly operate and maintain any facilities and systems of treatment and control (and related appurtenances) which are installed or used by the discharger to achieve compliance with the conditions of this General Permit and with the requirements of the Storm Water Pollution Prevention Plan (SWPPP). Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance may require the operation of backup or auxiliary facilities or similar systems installed by a discharger when necessary to achieve compliance with the conditions of this General Permit.

6. Property Rights

This General Permit does not convey any property rights of any sort or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor does it authorize any infringement of Federal, State, or local laws or regulations.

7. Duty to Maintain Records and Provide Information

a. The LUP discharger shall maintain a paper or electronic copy of all required records, including a copy of this General Permit, for three years from the date generated or date submitted, whichever is last. These records shall be kept at the construction site or in a crew

member's vehicle until construction is completed, and shall be made available upon request.

b. The LUP discharger shall furnish the Regional Water Board, State Water Board, or USEPA, within a reasonable time, any requested information to determine compliance with this General Permit. The LUP discharger shall also furnish, upon request, copies of records that are required to be kept by this General Permit.

8. Inspection and Entry

The LUP discharger shall allow the Regional Water Board, State Water Board, USEPA, and/or, in the case of construction sites which discharge through a municipal separate storm sewer, an authorized representative of the municipal operator of the separate storm sewer system receiving the discharge, upon the presentation of credentials and other documents as may be required by law, to:

a. Enter upon the discharger's premises at reasonable times where a regulated construction activity is being conducted or where records must be kept under the conditions of this General Permit;

b. Access and copy at reasonable times any records that must be kept under the conditions of this General Permit;

c. Inspect at reasonable times the complete construction site, including any off-site staging areas or material storage areas, and the erosion/sediment controls; and

d. Sample or monitor at reasonable times for the purpose of ensuring General Permit compliance.

9. Electronic Signature and Certification Requirements

a. All Permit Registration Documents (PRDs) and Notices of Termination (NOTs) shall be electronically signed, certified, and submitted via SMARTS to the State Water Board. Either the Legally Responsible Person (LRP), as defined in Appendix 5 – Glossary, or a person legally authorized to sign and certify PRDs and NOTs on behalf of the LRP (the LRP's Approved Signatory, as defined in Appendix 5 - Glossary) must submit all information electronically via SMARTS.

b. Changes to Authorization. If an Approved Signatory's authorization is no longer accurate, a new authorization satisfying the requirements of paragraph (a) 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.

c. All SWPPP revisions, annual reports, or other information required by the General Permit (other than PRDs 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.

10. Certification

Any person signing documents under Section E.9 above, shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

11. Anticipated Noncompliance

The LUP discharger shall give advance notice to the Regional Water Board and local storm water management agency of any planned changes in the construction activity, which may result in noncompliance with General Permit requirements.

12. Penalties for Falsification of Reports

Section 309(c)(4) of the CWA provides that any person who knowingly makes any false material statement, representation, or certification in any record or other document submitted or required to be maintained under this General Permit, including reports of compliance or noncompliance shall upon conviction, be punished by a fine of not more than $10,000 or by imprisonment for not more than two years or by both.

13. Oil and Hazardous Substance Liability

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

14. Severability

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

15. Reopener Clause

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

16. Penalties for Violations of Permit Conditions

a. Section 309 of the CWA provides significant penalties for any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the CWA or any permit condition or limitation implementing any such section in a permit issued under Section 402. Any person who violates any permit condition of this General Permit is subject to a civil penalty not to exceed $37,500[7] per calendar day of such violation, as well as any other appropriate sanction provided by Section 309 of the CWA.

b. The Porter-Cologne Water Quality Control Act also provides for civil and criminal penalties, which in some cases are greater than those under the CWA.

17. Transfers

This General Permit is not transferable. A new LRP 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. An LRP who is a property owner with active General Permit coverage who sells a fraction or all the land shall inform the new property owner(s) of the requirements of this General Permit.

18. Continuation of Expired Permit

This General Permit continues in force and effect until a new General Permit is issued or the SWRCB rescinds this General Permit. Only those

[7] May be further adjusted in accordance with the Federal Civil Penalties Inflation Adjustment Act

dischargers authorized to discharge under the expiring General Permit are covered by the continued General Permit.

F. EFFLUENT STANDARDS & RECEIVING WATER MONITORING

1. Narrative Effluent Limitations

a. LUP dischargers shall ensure that storm water discharges and authorized non-storm water discharges regulated by this General Permit do not contain a hazardous substance equal to or in excess of reportable quantities established in 40 C.F.R. §§ 117.3 and 302.4, unless a separate NPDES Permit has been issued to regulate those discharges.

b. LUP dischargers shall minimize or prevent pollutants in storm water discharges and authorized non-storm water discharges through the use of structural or non-structural controls, structures, and management practices that achieve BAT for toxic and non-conventional pollutants and BCT for conventional pollutants.

Table 1. Numeric Action Levels, Test Methods, Detection Limits, and Reporting Units

Parameter	Test Method	Discharge Type	Min. Detection Limit	Units	Numeric Action Level
pH	Field test with calibrated portable instrument	LUP Type 2	0.2	pH units	lower NAL = 6.5 upper NAL = 8.5
		LUP Type 3			lower NAL = 6.5 upper NAL = 8.5
Turbidity	EPA 0180.1 and/or field test with calibrated portable instrument	LUP Type 2	1	NTU	250 NTU
		LUP Type 3			250 NTU

2. Numeric Action Levels (NALs)

a. For LUP Type 2 and 3 dischargers, the lower storm event daily average NAL for pH is 6.5 pH units and the upper storm event daily average NAL for pH is 8.5 pH units. The LUP discharger shall take actions as described below if the storm event daily average discharge is outside of this range of pH values.

b. For LUP Type 2 and 3 dischargers, the storm event daily average NAL for turbidity is 250 NTU. The discharger shall take actions as described below if the storm event daily average discharge is outside of this range of turbidity values.

c. Whenever daily average analytical effluent monitoring results 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), the LUP 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 shall immediately implement corrective actions if they are needed.

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

i Are related to the construction activities and whether additional BMPs or SWPPP implementation measures are required to (1) meet BAT/BCT requirements; (2) reduce or prevent pollutants in storm water discharges from causing exceedances of receiving water objectives; and (3) determine what corrective action(s) were taken or will be taken and with a description of the schedule for completion.

AND/OR:

ii Are related to the run-on associated with the construction site location and whether additional BMPs or SWPPP implementation measures are required to (1) meet BAT/BCT requirements; (2) reduce or prevent pollutants in storm water discharges from causing exceedances of receiving water objectives; and (3) decide what corrective action(s) were taken or will be taken, including a description of the schedule for completion.

3. Receiving Water Monitoring Triggers

a. The receiving water monitoring triggers for LUP Type 3 dischargers with direct discharges to surface waters are triggered when the daily average effluent pH values during any site phase when there is a high risk of pH discharge[8] fall outside of the range of 6.0 and 9.0 pH units, or when the daily average effluent turbidity exceeds 500 NTU.

b. LUP Type 3 dischargers with direct discharges to surface waters shall conduct receiving water monitoring whenever their effluent monitoring results exceed the receiving water monitoring triggers. If the pH trigger is exceeded, the receiving water shall be monitored for pH for the duration of coverage under this General Permit. If the turbidity trigger is exceeded, the receiving water shall be monitored for turbidity and SSC for the duration of coverage under this General Permit.

c. LUP Type 3 dischargers with direct discharges to surfaces waters shall initiate receiving water monitoring when the triggers are exceeded unless the storm event causing the exceedance is determined after the fact to equal to or greater than the 5-year 24-hour storm (expressed in inches of rainfall) as determined by using these maps:

   http://www.wrcc.dri.edu/pcpnfreq/nca5y24.gif
   http://www.wrcc.dri.edu/pcpnfreq/sca5y24.gif

   Verification of the 5-year 24-hour storm event shall be done by reporting on-site rain gauge readings as well as nearby governmental rain gauge readings.

d. If run-on is caused by a forest fire or any other natural disaster, then receiving water monitoring triggers do not apply.

G. RECEIVING WATER LIMITATIONS

1. LUP dischargers shall ensure that storm water discharges and authorized non-storm water discharges to any surface or ground water will not adversely affect human health or the environment.

2. LUP dischargers shall ensure that storm water discharges and authorized non-storm water discharges will not contain pollutants in quantities that threaten to cause pollution or a public nuisance.

3. LUP dischargers shall ensure that storm water discharges and authorized non-storm water discharges will not contain pollutants that cause or

[8] 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.

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).

H. TRAINING QUALIFICATIONS

1. General

All persons responsible for implementing requirements of this General Permit shall be appropriately trained. Training should be both formal and informal, occur on an ongoing basis, and should include training offered by recognized governmental agencies or professional organizations. Persons responsible for preparing, amending and certifying SWPPPs shall comply with the requirements in this Section H.

2. SWPPP Certification Requirements

a. **Qualified SWPPP Developer:** The LUP discharger shall ensure that all SWPPPs be written, amended and certified by a Qualified SWPPP Developer (QSD). A QSD shall have one of the following registrations or certifications, and appropriate experience, as required for:

i A California registered professional civil engineer;

ii A California registered professional geologist or engineering geologist;

iii A California registered landscape architect;

iv A professional hydrologist registered through the American Institute of Hydrology;

v A certified professional in erosion and sediment control (CPESC) ™ registered through Enviro Cert International, Inc;

vi A certified professional in storm water quality (CPSWQ)™ registered through Enviro Cert International, Inc.; or

vii A certified professional in erosion and sediment control registered through the National Institute for Certification in Engineering Technologies (NICET).

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

b. The LUP discharger shall ensure that the SWPPP is 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.

c. The LUP discharger shall list the name and telephone number of the currently designated Qualified SWPPP Developer(s) in the SWPPP.

d. **Qualified SWPPP Practitioner:** The LUP discharger shall ensure that all elements of any SWPPP for each project will be implemented by a Qualified SWPPP Practitioner (QSP). A QSP is a person responsible for non-storm water and storm water visual observations, sampling and analysis, and for ensuring 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 QSP shall be either a QSD or have one of the following certifications:

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

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

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

e. The LUP discharger shall ensure that the SWPPP include a list of names of all contractors, subcontractors, and individuals who will be directed by the Qualified SWPPP Practitioner, and who is ultimately 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.

f. The LUP discharger shall ensure that the SWPPP and each amendment be signed by the Qualified SWPPP Developer. The LUP discharger shall include a listing of the date of initial preparation and the dates of each amendment in the SWPPP.

I. TYPES OF LINEAR PROJECTS

This attachment establishes three types (Type 1, 2 & 3) of complexity for areas within an LUP or project section based on threat to water quality. Project area Types are determined through Attachment A.1.

The Type 1 requirements below establish the baseline requirements for all LUPs subject to this General Permit. Additional requirements for Type 2 and Type 3 LUPs are labeled.

1. Type 1 LUPs*:*

LUP dischargers with areas of a LUP designated as Type 1 shall comply with the requirements in this Attachment. Type 1 LUPs are:

a. Those construction areas where 70 percent or more of the construction activity occurs on a paved surface and where areas disturbed during construction will be returned to preconstruction conditions or equivalent protection established at the end of the construction activities for the day; or

b. Where greater than 30 percent of construction activities occur within the non-paved shoulders or land immediately adjacent to paved surfaces, or where construction occurs on unpaved improved roads, including their shoulders or land immediately adjacent to them where:

   i Areas disturbed during construction will be returned to preconstruction conditions or equivalent protection is established at the end of the construction activities for the day to minimize the potential for erosion and sediment deposition, and

   ii Areas where established vegetation was disturbed during construction will be stabilized and re-vegetated by the end of project. When required, adequate temporary stabilization BMPs will be installed and maintained until vegetation is established to meet minimum cover requirements established in this General Permit for final stabilization.

c. Where the risk determination is as follows:

   i Low sediment risk, low receiving water risk, or

   ii Low sediment risk, medium receiving water risk, or

   iii Medium sediment risk, low receiving water risk

2. **Type 2 LUPs**:

   Type 2 LUPs are determined by the Combined Risk Matrix in Attachment A.1. Type 2 LUPs have the specified combination of risk:

   d. High sediment risk, low receiving water risk, or

   e. Medium sediment risk, medium receiving water risk, or

   f. Low sediment risk, high receiving water risk

   Receiving water risk is either considered "Low" for those areas of the project that are not in close proximity to a sensitive receiving watershed, "Medium" for those areas of the project within a sensitive receiving watershed yet outside of the flood plain of a sensitive receiving water body, and "High" where the soil disturbance is within close proximity to a sensitive receiving water body. Project sediment risk is calculated based on the Risk Factor Worksheet in Attachment C of this General Permit.

3. **Type 3 LUPs:**

   Type 3 LUPs are determined by the Combined Risk Matrix in Attachment A.1. Type 3 LUPs have the specified combination of risk:

   a. High sediment risk, high receiving water risk, or

   b. High sediment risk, medium receiving water risk, or

   c. Medium sediment risk, high receiving water risk

   Receiving water risk is either considered "Medium" for those areas of the project within a sensitive receiving watershed yet outside of the flood plain of a sensitive receiving water body, or "High" where the soil disturbance is within close proximity to a sensitive receiving water body. Project sediment risk is calculated based on the Risk Factor Worksheet in Attachment C.

J. LUP TYPE-SPECIFIC REQUIREMENTS

1. Effluent Standards

a. Narrative – LUP dischargers shall comply with the narrative effluent standards below.

i 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 reportable quantities established in 40 C.F.R. §§ 117.3 and 302.4, unless a separate NPDES Permit has been issued to regulate those discharges.

ii LUP dischargers shall minimize 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 – LUP Type 1 dischargers are not subject to a numeric effluent standard

c. Numeric –LUP Type 2 dischargers are subject to a pH NAL of 6.5-8.5, and a turbidity NAL of 250 NTU.

d. Numeric – LUP Type 3 dischargers are subject to a pH NAL of 6.5-8.5, and a turbidity NAL of 250 NTU.

2. Good Site Management "Housekeeping"

a. LUP dischargers shall implement good site management (i.e., "housekeeping") measures for construction materials that could potentially be a threat to water quality if discharged. At a minimum, the good housekeeping measures shall consist of the following:

i Identify 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.).

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

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

iv Minimize exposure of construction materials to precipitation (not applicable to materials designed to be outdoors and exposed to the environment).

v Implement BMPs to control the off-site tracking of loose construction and landscape materials.

b. LUP dischargers shall implement good housekeeping measures for waste management, which, at a minimum, shall consist of the following:

i Prevent disposal of any rinse or wash waters or materials on impervious or pervious site surfaces or into the storm drain system.

ii Ensure the containment of sanitation facilities (e.g., portable toilets) to prevent discharges of pollutants to the storm water drainage system or receiving water.

iii Clean or replace sanitation facilities and inspecting them regularly for leaks and spills.

iv Cover waste disposal containers at the end of every business day and during a rain event.

v Prevent discharges from waste disposal containers to the storm water drainage system or receiving water.

vi Contain and securely protect stockpiled waste material from wind and rain at all times unless actively being used.

vii Implement procedures that effectively address hazardous and non-hazardous spills.

viii Develop a spill response and implementation element of the SWPPP prior to commencement of construction activities. The SWPPP shall require that:

(1) 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; and

(2) Appropriate spill response personnel are assigned and trained.

ix Ensure the containment of concrete washout areas and other washout areas that may contain additional pollutants so there is no discharge into the underlying soil and onto the surrounding areas.

c. LUP dischargers shall implement good housekeeping for vehicle storage and maintenance, which, at a minimum, shall consist of the following:

   i Prevent oil, grease, or fuel from leaking into the ground, storm drains or surface waters.

   ii Implement appropriate BMPs whenever equipment or vehicles are fueled, maintained or stored.

   iii Clean leaks immediately and disposing of leaked materials properly.

d. LUP dischargers shall implement good housekeeping for landscape materials, which, at a minimum, shall consist of the following:

   i Contain stockpiled materials such as mulches and topsoil when they are not actively being used.

   ii Contain fertilizers and other landscape materials when they are not actively being used.

   iii Discontinue the application of any erodible landscape material at least 2 days before a forecasted rain event[9] or during periods of precipitation.

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

   v Stacking erodible landscape material on pallets and covering or storing such materials when not being used or applied.

e. LUP dischargers 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. At a minimum, when developing BMPs, LUP dischargers shall do the following:

[9] 50% or greater chance of producing precipitation.

i Consider the quantity, physical characteristics (e.g., liquid, powder, solid), 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.

f. LUP dischargers shall implement good housekeeping measures on the construction site to control the air deposition of site materials and from site operations.

3. Non-Storm Water Management

a. LUP dischargers shall implement measures to control all non-storm water discharges during construction.

b. LUP dischargers shall wash vehicles in such a manner as to prevent non-storm water discharges to surface waters or MS4 drainage systems.

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

4. Erosion Control

a. LUP dischargers shall implement effective wind erosion control.

b. LUP dischargers shall provide effective soil cover for inactive[10] areas and all finished slopes, and utility backfill.

[10] Areas of construction activity that have been disturbed and are not scheduled to be re-disturbed for at least 14 days

c. LUP dischargers shall limit the use of plastic materials when more sustainable, environmentally friendly alternatives exist. Where plastic materials are deemed necessary, the discharger shall consider the use of plastic materials resistant to solar degradation.

5. Sediment Controls

a. LUP dischargers shall establish and maintain effective perimeter controls as needed, and implement effective BMPs for all construction entrances and exits to sufficiently control erosion and sediment discharges from the site.

b. On sites where sediment basins are to be used, LUP dischargers shall, at minimum, design sediment basins according to the guidance provided in CASQA's Construction BMP Handbook.

c. **Additional LUP Type 2 & 3 Requirement:** LUP Type 2 & 3 dischargers shall apply linear sediment controls along the toe of the slope, face of the slope, and at the grade breaks of exposed slopes to comply with sheet flow lengths[11] in accordance with Table 2 below.

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

d. **Additional LUP Type 2 & 3 Requirement:** LUP Type 2 & 3 dischargers shall ensure that construction activity traffic to and from the project is limited to entrances and exits that employ effective controls to prevent off-site tracking of sediment.

e. **Additional LUP Type 2 & 3 Requirement:** LUP Type 2 & 3 dischargers shall ensure that all storm drain inlets and perimeter controls, runoff control BMPs, and pollutant controls at entrances and exits (e.g. tire washoff locations) are maintained and protected from activities that reduce their effectiveness.

f. **Additional LUP Type 2 & 3 Requirement:** LUP Type 2 & 3 dischargers shall inspect all immediate access roads. At a minimum daily and prior to any rain event, the discharger shall remove any

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

sediment or other construction activity-related materials that are deposited on the roads (by vacuuming or sweeping).

g. **Additional LUP Type 3 Requirement:** The Regional Water Board may require LUP Type 3 dischargers 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.

6. Run-on and Run-off Controls

a. LUP 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 Attachment.

b. Run-on and runoff controls are not required for Type 1 LUPs unless the evaluation of quantity and quality of run-on and runoff deems them necessary or visual inspections show that the site requires such controls.

7. Inspection, Maintenance and Repair

a. All inspection, maintenance repair and sampling activities at the discharger's LUP location shall be performed or supervised by a QSP representing the discharger. The QSP may delegate any or all of these activities to an employee trained to do the task(s) appropriately, but shall ensure adequate deployment.

b. LUP dischargers shall conduct visual inspections and observations daily during working hours (not recorded). At least once each 24-hour period during extended storm events, **LUP Type 2 & 3 dischargers** shall conduct visual inspections 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.

c. Upon identifying failures or other shortcomings, as directed by the QSP, LUP dischargers shall begin implementing repairs or design changes to BMPs within 72 hours of identification and complete the changes as soon as possible.

d. For each pre- and post-rain event inspection required, LUP dischargers 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 below.

e. The LUP discharger shall ensure that the checklist remains on-site or with the SWPPP. At a minimum, an inspection checklist should include:

i Inspection date and date the inspection report was written.

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

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

iv A description of any BMPs evaluated and any deficiencies noted.

v If the construction site is safely accessible during inclement weather, list the observations of all BMPs: erosion controls, sediment controls, chemical and waste controls, and non-storm water controls. Otherwise, list the results of visual inspections at all relevant outfalls, discharge points, downstream locations and any projected maintenance activities.

vi Report the presence of noticeable odors or of any visible sheen on the surface of any discharges.

vii Any corrective actions required, including any necessary changes to the SWPPP and the associated implementation dates.

viii Photographs taken during the inspection, if any.

ix Inspector’s name, title, and signature.

K. STORM WATER POLLUTION PREVENTION PLAN (SWPPP) REQUIREMENTS

1. Objectives

SWPPPs for all LUPs shall be developed and amended or revised by a QSD. The SWPPP shall be designed to address the following objectives:

a. All pollutants and their sources, including sources of sediment, associated with construction activities associated with LUP activity are controlled;

b. All non-storm water discharges are identified and either eliminated, controlled, or treated;

c. BMPs are effective and result in the reduction or elimination of pollutants in storm water discharges and authorized non-storm water discharges from LUPs during construction; and

d. Stabilization BMPs installed to reduce or eliminate pollutants after construction is completed are effective and maintained.

2. SWPPP Implementation Schedule

a. LUPs for which PRDs have been submitted 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 implement the SWPPP concurrently with commencement of soil-disturbing activities.

b. For an ongoing LUP involving a change in the LRP, the new LRP shall review the existing SWPPP and amend it, if necessary, or develop a new SWPPP within 15 calendar days to conform to the requirements set forth in this General Permit.

3. Availability

The SWPPP shall be 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, 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/telephone.

L. REGIONAL WATER BOARD AUTHORITIES

1. 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 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.

2. 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.

3. 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.

4. Regional Water Boards may direct the discharger to reevaluate the LUP Type(s) for the project (or elements/areas of the project) and impose the appropriate level of requirements.

5. Regional Water Boards may terminate coverage under this General Permit for dischargers who negligently or with willful intent incorrectly determine or report their LUP Type (e.g., they determine themselves to be a LUP Type 1 when they are actually a Type 2).

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

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

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 require dischargers to retain records for more than the three years required by this General Permit.

10. Based on an LUP's threat to water quality and complexity, the Regional Water Board may determine on a case-by-case basis that an LUP, or a portion of an LUP, is not eligible for the linear project requirements contained in this Attachment, and require that the discharger comply with all standard requirements in this General Permit.

11. The Regional Water Board may require additional monitoring and reporting program requirements including sampling and analysis of discharges to CWA § 303(d)-listed water bodies. Additional requirements imposed by the Regional Water Board shall be consistent with the overall monitoring effort in the receiving waters.

M. MONITORING AND REPORTING REQUIREMENTS

Table 3. LUP Summary of Monitoring Requirements

LUP Type	Visual Inspections				Sample Collection		
	Daily Site BMP	Pre-storm Event: Baseline	Daily Storm BMP	Post Storm	Storm Water Discharge	Receiving Water	Non-Visible (when applicable)
1	X						X
2	X	X	X	X	X		X
3	X	X	X	X	X	X	X

1. Objectives

LUP dischargers shall prepare a monitoring and reporting program (M&RP) prior to the start of construction and immediately implement the program at the start of construction for LUPs. The monitoring program must be implemented at the appropriate level to protect water quality at all times throughout the life of the project. The M&RP must be a part of the SWPPP, included as an appendix or separate SWPPP chapter.

2. M&RP Implementation Schedule

a. LUP dischargers shall implement the requirements of this Section at the time of commencement of construction activity. LUP dischargers are responsible for implementing these requirements until construction activity is complete and the site is stabilized.

b. LUP dischargers shall revise the M&RP when:

i Site conditions or construction activities change such that a change in monitoring is required to comply with the requirements and intent of this General Permit.

ii The Regional Water Board requires the discharger to revise its M&RP based on its review of the document. Revisions may include, but not be limited to, conducting additional site inspections, submitting reports, and certifications. Revisions shall be submitted via postal mail or electronic e-mail.

iii The Regional Water Board may require additional monitoring and reporting program requirements including sampling and analysis of discharges to CWA § 303(d)-listed water bodies. Additional requirements imposed by the Regional Water Board shall be consistent with the overall monitoring effort in the receiving waters.

3. LUP Type 1 Monitoring and Reporting Requirements

a. LUP Type 1 Inspection Requirements

i LUP Type 1 dischargers shall ensure that all inspections are conducted by trained personnel. The name(s) and contact number(s) of the assigned inspection personnel should be listed in the SWPPP.

ii LUP Type 1 dischargers shall ensure that all visual inspections are conducted daily during working hours and in conjunction with other daily activities in areas where active construction is occurring.

iii LUP Type 1 dischargers shall ensure that photographs of the site taken before, during, and after storm events are taken during inspections, and submitted through the State Water Board's SMARTS website once every three rain events.

iv LUP Type 1 dischargers shall conduct daily visual inspections to verify that:

(1) Appropriate BMPs for storm water and non-storm water are being implemented in areas where active construction is occurring (including staging areas);

(2) Project excavations are closed, with properly protected spoils, and that road surfaces are cleaned of excavated material and construction materials such as chemicals by either removing or storing the material in protective storage containers at the end of every construction day;

(3) Land areas disturbed during construction are returned to pre-construction conditions or an equivalent protection is used at the end of each workday to eliminate or minimize erosion and the possible discharge of sediment or other pollutants during a rain event.

v Inspections may be discontinued in non-active construction areas where soil-disturbing activities are completed and final soil stabilization is achieved (e.g., paving is completed, substructures

are installed, vegetation meets minimum cover requirements for final stabilization, or other stabilization requirements are met).

vi Inspection programs are required for LUP Type 1 projects where temporary and permanent stabilization BMPs are installed and are to be monitored after active construction is completed. Inspection activities shall continue until adequate permanent stabilization is established and, in areas where re-vegetation is chosen, until minimum vegetative coverage is established in accordance with Section C.1 of this Attachment.

b. LUP Type 1 Monitoring Requirements for Non-Visible Pollutants

LUP Type 1 dischargers shall implement sampling and analysis requirements to monitor non-visible pollutants associated with (1) construction sites; (2) activities producing pollutants that are not visually detectable in storm water discharges; and (3) activities which could cause or contribute to an exceedance of water quality objectives in the receiving waters.

i Sampling and analysis for non-visible pollutants is only required where the LUP Type 1 discharger believes pollutants associated with construction activities have the potential to be discharged with storm water runoff due to a spill or in the event there was a breach, malfunction, failure and/or leak of any BMP. Also, failure to implement BMPs may require sample collection.

(1) Visual observations made during the monitoring program described above will help the LUP Type 1 discharger determine when to collect samples.

(2) The LUP Type 1 discharger is not required to sample if one of the conditions described above (e.g., breach or spill) occurs and the site is cleaned of material and pollutants and/or BMPs are implemented prior to the next storm event.

ii LUP Type 1 dischargers shall collect samples down-gradient from all discharge locations where the visual observations were made triggering the monitoring, and which can be safely accessed. For sites where sampling and analysis is required, personnel trained in water quality sampling procedures shall collect storm water samples.

iii If sampling for non-visible pollutant parameters is required, LUP Type 1 dischargers shall ensure that samples be analyzed for parameters indicating the presence of pollutants identified in the pollutant source assessment required in Section J.2.a.i.

iv LUP Type 1 dischargers shall collect samples during the first two hours of discharge from rain events that occur during business hours and which generate runoff.

v LUP Type 1 dischargers shall ensure that a sufficiently large sample of storm water that has not come into contact with the disturbed soil or the materials stored or used on-site (uncontaminated sample[12]) will be collected for comparison with the discharge sample. Samples shall be collected during the first two hours of discharge from rain events that occur during daylight hours and which generate runoff.

vi LUP Type 1 dischargers shall compare the uncontaminated sample to the samples of discharge using field analysis or through laboratory analysis. Analyses may include, but are not limited to, indicator parameters such as: pH, specific conductance, dissolved oxygen, conductivity, salinity, and Total Dissolved Solids (TDS).

vii For laboratory analyses, all sampling, sample preservation, and other analyses must be conducted according to test procedures pursuant to 40 C.F.R. Part 136. LUP Type 1 dischargers shall ensure that field samples are collected and analyzed according to manufacturer specifications of the sampling devices employed. Portable meters shall be calibrated according to manufacturer's specification.

viii LUP Type 1 dischargers shall ensure that all field and/or analytical data are kept in the SWPPP document.

c. LUP Type 1 Visual Observation Exceptions

i LUP Type 1 dischargers shall be prepared to collect samples and conduct visual observation (inspections) to meet the minimum visual observation requirements of this Attachment. The Type 1 LUP discharger is not required to physically collect samples or conduct visual observation (inspections) under the following conditions:

(1) During dangerous weather conditions such as flooding and electrical storms;

(2) Outside of scheduled site business hours.

(3) When access to the site is unsafe due to storm events.

[12] Sample collected at a location unaffected by contruction activities.

ii If the LUP Type 1 discharger does not collect the required samples or visual observation (inspections) due to these exceptions, an explanation why the sampling or visual observation (inspections) were not conducted shall be included in both the SWPPP and the Annual Report.

d. Particle Size Analysis for Risk Justification

LUP Type 1 dischargers utilizing justifying an alternative project risk shall report a soil particle size analysis used to determine the RUSLE K-Factor. 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.

4. LUP Type 2 & 3 Monitoring and Reporting Requirements

a. LUP Type 2 & 3 Inspection Requirements

i LUP Type 2 & 3 dischargers shall ensure that all inspections are conducted by trained personnel. The name(s) and contact number(s) of the assigned inspection personnel should be listed in the SWPPP.

ii LUP Type 2 & 3 dischargers shall ensure that all visual inspections are conducted daily during working hours and in conjunction with other daily activities in areas where active construction is occurring.

iii LUP Type 2 & 3 dischargers shall ensure that photographs of the site taken before, during, and after storm events are taken during inspections, and submitted through the State Water Board's SMARTS website once every three rain events.

iv LUP Type 2 & 3 dischargers shall conduct daily visual inspections to verify that appropriate BMPs for storm water and non-storm water are being implemented and in place in areas where active construction is occurring (including staging areas).

v LUP Type 2 & 3 dischargers shall conduct inspections of the construction site prior to anticipated storm events, during extended storm events, and after actual storm events to identify areas contributing to a discharge of storm water associated with construction activity. Pre-storm inspections are to ensure that BMPs are properly installed and maintained; post-storm inspections are to assure that BMPs have functioned adequately. During

extended storm events, inspections shall be required during normal working hours for each 24-hour period.

vi Inspections may be discontinued in non-active construction areas where soil-disturbing activities are completed and final soil stabilization is achieved (e.g., paving is completed, substructures are installed, vegetation meets minimum cover requirements for final stabilization, or other stabilization requirements are met).

vii LUP Type 2 & 3 dischargers shall implement a monitoring program for inspecting projects that require temporary and permanent stabilization BMPs after active construction is complete. Inspections shall ensure that the BMPs are adequate and maintained. Inspection activities shall continue until adequate permanent stabilization is established and, in vegetated areas, until minimum vegetative coverage is established in accordance with Section C.1 of this Attachment.

viii If possible, LUP Type 2 & 3 dischargers shall install a rain gauge on-site at an accessible and secure location with readings made during all storm event inspections. When readings are unavailable, data from the closest rain gauge with publically available data may be used.

ix LUP Type 2 & 3 dischargers shall Include and maintain a log of the inspections conducted in the SWPPP. The log will provide the date and time of the inspection and who conducted the inspection.

b. LUP Type 2 & 3 Storm Water Effluent Monitoring Requirements

Table 4. LUP Type 2 & 3 Effluent Monitoring Requirements

LUP Type	Frequency	Effluent Monitoring
2	Minimum of 3 samples per day characterizing discharges associated with construction activity from the project active areas of construction.	Turbidity, pH, and non-visible pollutant parameters (if applicable)
3	Minimum of 3 samples per day characterizing discharges associated with construction activity from the project active areas of construction.	turbidity, pH, and non-visible pollutant parameters (if applicable)

i LUP Type 2 & 3 dischargers shall collect storm water grab samples from sampling locations characterizing discharges associated with activity from the LUP active areas of construction. At a minimum, 3 samples shall be collected per day of discharge.

ii LUP Type 2 & 3 dischargers shall collect samples of stored or contained storm water that is discharged subsequent to a storm event producing precipitation of ½ inch or more at the time of discharge.

iii LUP Type 2 & 3 dischargers shall ensure that storm water grab sample(s) obtained be representative of the flow and characteristics of the discharge.

iv LUP Type 2 & 3 dischargers shall analyze their effluent samples for:

(1) pH and turbidity
(2) Any additional parameter for which monitoring is required by the Regional Water Board.

c. LUP Type 2 & 3 Storm Water Effluent Sampling Locations

i LUP Type 2 & 3 dischargers shall perform sampling and analysis of storm water discharges to characterize discharges associated with construction activity from the entire disturbed project or area.

ii LUP Type 2 & 3 dischargers may monitor and report run-on from surrounding areas if there is reason to believe run-on may contribute to exceedance of NALs.

iii LUP Type 2 & 3 dischargers shall select analytical test methods from the list provided in Table 5 below.

iv LUP Type 2 & 3 dischargers shall ensure that all storm water sample collection preservation and handling shall be conducted in accordance with the “Storm Water Sample Collection and Handling Instructions” below.

d. LUP Type 3 Receiving Water Monitoring Requirements

i In the event that an LUP Type 3 discharger’s effluent exceeds the receiving water monitoring triggers of 500 NTU turbidity or pH range of 6.0-9.0, contained in this General Permit and has a direct discharge to receiving waters, the LUP discharger shall subsequently sample Receiving Waters (RWs) for turbidity, pH (if applicable) and SSC for the duration of coverage under this General Permit. In the event that an LUP Tupe 3 discharger utilizing ATS with direct discharges into receiving waters discharges effluent that exceeds the NELs in this permit, the discharger shall

subsequently sample RWs for turbidity, pH (if applicable), and SSC for the duration of coverage under this General Permit.

ii LUP Type 3 dischargers that meet the project criteria in Appendix 3 of this General Permit and have more than 30 acres of soil disturbance in the project area or project section area designated as Type 3, shall comply with the Bioassessment requirements prior to commencement of construction activity.

iii LUP Type 3 dischargers shall obtain RW samples in accordance with the requirements of the Receiving Water Sampling Locations section (Section M.4.c. of this Attachment).

e. LUP Type 3 Receiving Water Sampling Locations

i **Upstream/up-gradient RW samples**: LUP Type 3 dischargers shall obtain any required upstream/up-gradient receiving water samples from a representative and accessible location as close as possible to and upstream from the effluent discharge point.

ii **Downstream/down-gradient RW samples**: LUP Type 3 dischargers shall obtain any required downstream/down-gradient receiving water samples from a representative and accessible location as close as possible to and downstream from the effluent discharge point.

iii If two or more discharge locations discharge to the same receiving water, LUP Type 3 dischargers may sample the receiving water at a single upstream and downstream location.

f. LUP Type 2 & 3 Monitoring Requirements for Non-Visible Pollutants

LUP Type 2 & 3 dischargers shall implement sampling and analysis requirements to monitor non-visible pollutants associated with (1) construction sites; (2) activities producing pollutants that are not visually detectable in storm water discharges; and (3) activities which could cause or contribute to an exceedance of water quality objectives in the receiving waters.

i Sampling and analysis for non-visible pollutants is only required where LUP Type 2 & 3 dischargers believe pollutants associated with construction activities have the potential to be discharged with storm water runoff due to a spill or in the event there was a breach, malfunction, failure and/or leak of any BMP. Also, failure to implement BMPs may require sample collection.

(1) Visual observations made during the monitoring program described above will help LUP Type 2 & 3 dischargers determine when to collect samples.

(2) LUP Type 2 & 3 dischargers are not required to sample if one of the conditions described above (e.g., breach or spill) occurs and the site is cleaned of material and pollutants and/or BMPs are implemented prior to the next storm event.

ii LUP Type 2 & 3 dischargers shall collect samples down-gradient from the discharge locations where the visual observations were made triggering the monitoring and which can be safely accessed. For sites where sampling and analysis is required, personnel trained in water quality sampling procedures shall collect storm water samples.

iii If sampling for non-visible pollutant parameters is required, LUP Type 2 & 3 dischargers shall ensure that samples be analyzed for parameters indicating the presence of pollutants identified in the pollutant source assessment required in Section J.2.a.i.

iv LUP Type 2 & 3 dischargers shall collect samples during the first two hours of discharge from rain events that occur during business hours and which generate runoff.

v LUP Type 2 & 3 dischargers shall ensure that a sufficiently large sample of storm water that has not come into contact with the disturbed soil or the materials stored or used on-site (uncontaminated sample[13]) will be collected for comparison with the discharge sample. Samples shall be collected during the first two hours of discharge from rain events that occur during daylight hours and which generate runoff.

vi LUP Type 2 & 3 dischargers shall compare the uncontaminated sample to the samples of discharge using field analysis or through laboratory analysis. Analyses may include, but are not limited to, indicator parameters such as: pH, specific conductance, dissolved oxygen, conductivity, salinity, and Total Dissolved Solids (TDS).

vii For laboratory analyses, all sampling, sample preservation, and other analyses must be conducted according to test procedures pursuant to 40 C.F.R. Part 136. LUP Type 2 & 3 dischargers shall ensure that field samples are collected and analyzed according to manufacturer specifications of the sampling devices employed.

[13] Sample collected at a location unaffected by construction activities

Portable meters shall be calibrated according to manufacturer's specification.

viii LUP Type 2 & 3 dischargers shall ensure that all field and/or analytical data are kept in the SWPPP document.

g. LUP Type 2 & 3 Visual Observation and Sample Collection Exceptions

i LUP Type 2 & 3 dischargers shall be prepared to collect samples and conduct visual observation (inspections) to meet the minimum visual observation requirements of this Attachment. Type 2 & 3 LUP dischargers are not required to physically collect samples or conduct visual observation (inspections) under the following conditions:

(1) During dangerous weather conditions such as flooding and electrical storms;

(2) Outside of scheduled site business hours.

(3) When access to the site is unsafe due to storm events.

ii If the LUP Type 2 or 3 discharger does not collect the required samples or visual observation (inspections) due to these exceptions, an explanation why the sampling or visual observation (inspections) were not conducted shall be included in both the SWPPP and the Annual Report.

h. LUP Type 2 & 3 Storm Water Sample Collection and Handling Instructions

LUP Type 2 & 3 dischargers shall refer to Table 5 below for test Methods, detection Limits, and reporting Units. During storm water sample collection and handling, the LUP Type 2 & 3 discharger shall:

i Identify the parameters required for testing and the number of storm water discharge points that will be sampled. Request the laboratory to provide the appropriate number of sample containers, types of containers, sample container labels, blank chain of custody forms, and sample preservation instructions.

ii Determine how to ship the samples to the laboratory. The testing laboratory should receive samples within 48 hours of the physical sampling (unless otherwise required by the laboratory). The options are to either deliver the samples to the laboratory, arrange to have the laboratory pick them up, or ship them overnight to the laboratory.

iii Use only the sample containers provided by the laboratory to collect and store samples. Use of any other type of containers could contaminate your samples.

iv Prevent sample contamination, by not touching, or putting anything into the sample containers before collecting storm water samples.

v Not overfilling sample containers. Overfilling can change the analytical results.

vi Tightly screw the cap of each sample container without stripping the threads of the cap.

vii Complete and attach a label to each sample container. The label shall identify the date and time of sample collection, the person taking the sample, and the sample collection location or discharge point. The label should also identify any sample containers that have been preserved.

viii Carefully pack sample containers into an ice chest or refrigerator to prevent breakage and maintain temperature during shipment. Remember to place frozen ice packs into the shipping container. Samples should be kept as close to 4° C (39° F) as possible until arriving at the laboratory. Do not freeze samples.

ix Complete a Chain of Custody form for each set of samples. The Chain of Custody form shall include the discharger's name, address, and phone number, identification of each sample container and sample collection point, person collecting the samples, the date and time each sample container was filled, and the analysis that is required for each sample container.

x Upon shipping/delivering the sample containers, obtain both the signatures of the persons relinquishing and receiving the sample containers.

xi Designate and train personnel to collect, maintain, and ship samples in accordance with the above sample protocols and good laboratory practices.

xii Refer to the Surface Water Ambient Monitoring Program's (SWAMP) 2008 Quality Assurance Program Plan (QAPrP) for more

information on sampling collection and analysis. See http://www.waterboards.ca.gov/water_issues/programs/swamp/[14]

Table 5. Test Methods, Detection Limits, Reporting Units and Applicable NALs

Parameter	Test Method	Discharge Type	Min. Detection Limit	Reporting Units	Numeric Action Levels	(LUP Type 3) Receiving Water Monitoring Trigger
pH	Field test with calibrated portable instrument	Type 2 & 3	0.2	pH units	Lower = 6.5 upper = 8.5	Lower = 6.0 upper = 9.0
Turbidity	EPA 0180.1 and/or field test with calibrated portable instrument	Type 2 & 3	1	NTU	250 NTU	500 NTU
SSC	ASTM Method D 3977-97[15]	Type 3 if Receiving Water Monitoring Trigger is exceeded	5	Mg/L	N/A	N/A
Bioassessment	(STE) Level I of (SAFIT),[16] fixed-count of 600 org/sample	Type 3 LUPs > 30 acres	N/A	N/A	N/A	N/A

i. LUP Type 2 & 3 Monitoring Methods

i The LUP Type 2 or 3 discharger's project M&RP shall include a description of the following items:

(1) Visual observation locations, visual observation procedures, and visual observation follow-up and tracking procedures.

[14] Additional information regarding SWAMP's QAPrP can be found at: http://www.waterboards.ca.gov/water_issues/programs/swamp/.

[15] ASTM, 1999, Standard Test Method for Determining Sediment Concentration in Water Samples: American Society of Testing and Materials, D 3977-97, Vol. 11.02, pp. 389-394

[16] The current SAFIT STEs (28 November 2006) list requirements for both the Level I and Level II taxonomic effort, and are located at: http://www.swrcb.ca.gov/swamp/docs/safit/ste_list.pdf. When new editions are published by SAFIT, they will supersede all previous editions. All editions will be posted at the State Water Board's SWAMP website.

(2) Sampling locations, and sample collection and handling procedures. This shall include detailed procedures for sample collection, storage, preservation, and shipping to the testing lab to assure that consistent quality control and quality assurance is maintained. Dischargers shall attach to the monitoring program a copy of the Chain of Custody form used when handling and shipping samples.

(3) Identification of the analytical methods and related method detection limits (if applicable) for each parameter required in Section M.4.f above.

ii LUP Type 2 & 3 dischargers shall ensure that all sampling and sample preservation be in accordance with the current edition of "Standard Methods for the Examination of Water and Wastewater" (American Public Health Association). All monitoring instruments and equipment (including a discharger's own field instruments for measuring pH and turbidity) shall be calibrated and maintained in accordance with manufacturers' specifications to ensure accurate measurements. All laboratory analyses shall be 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 shall be sent to and conducted at a laboratory certified for such analyses by the State Department of Health Services (SSC exception). The LUP discharger shall conduct its own field analysis of pH and may conduct its own field analysis of turbidity if the discharger has sufficient capability (qualified and trained employees, properly calibrated and maintained field instruments, etc.) to adequately perform the field analysis.

j. LUP Type 2 & 3 Analytical Methods

LUP Type 2 & 3 dischargers shall refer to Table 5 above for test Methods, detection Limits, and reporting Units.

i **pH**: LUP Type 2 & 3 dischargers shall perform pH analysis on-site with a calibrated pH meter or pH test kit. The LUP discharger shall record pH monitoring results on paper and retain these records in accordance with Section M.4.o, below.

ii **Turbidity**: LUP Type 2 & 3 dischargers shall perform turbidity analysis using a calibrated turbidity meter (turbidimeter), either on-site or at an accredited lab. Acceptable test methods include Standard Method 2130 or USEPA Method 180.1. The results shall

be recorded in the site log book in Nephelometric Turbidity Units (NTU).

iii **Suspended sediment concentration (SSC)**: LUP Type 3 dischargers exceeding the turbidity Receiving Water Monitoring Trigger, shall perform SSC analysis using ASTM Method D3977-97.

iv **Bioassessment**: LUP Type 3 dischargers shall perform bioassessment sampling and analysis according to Appendix 3 of this General Permit.

k. Watershed Monitoring Option

If an LUP Type 2 or 3 discharger is part of a qualified regional watershed-based monitoring program the LUP Type 2 or 3 discharger may be eligible for relief from the monitoring requirements in this Attachment. The Regional Water Board may approve proposals to substitute an acceptable watershed-based monitoring program if it determines that the watershed-based monitoring program will provide information to determine each discharger's compliance with the requirements of this General Permit.

l. Particle Size Analysis for Risk Justification

LUP Type 2 & 3 dischargers justifying an alternative project risk shall report a soil particle size analysis used to determine the RUSLE K-Factor. 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.

m. NAL Exceedance Report

i In the event that any effluent sample exceeds an applicable NAL, the Regional Water Boards may require LUP Type 2 & 3 dischargers to submit NAL Exceedance Reports.

ii LUP Type 2 & 3 dischargers shall certify each NAL Exceedance Report in accordance with the Special Provisions for Construction Activity.

iii LUP Type 2 & 3 dischargers shall retain an electronic or paper copy of each NAL Exceedance Report for a minimum of three years after the date the exceedance report is filed.

iv LUP Type 2 & 3 dischargers shall include in the NAL Exceedance Report:

(1) 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 shall be reported as "less than the method detection limit"); and
(2) the date, place, time of sampling, visual observation (inspections), and/or measurements, including precipitation.
(3) Description of the current BMPs associated with the effluent sample that exceeded the NAL and the proposed corrective actions taken.

n. Monitoring Records

LUP Type 2 & 3 dischargers shall ensure that records of all storm water monitoring information and copies of all reports (including Annual Reports) required by this General Permit be retained for a period of at least three years. LUP Type 2 & 3 dischargers may retain records off-site and make them available upon request. These records shall include:

i The date, place, time of facility inspections, sampling, visual observation (inspections), and/or measurements, including precipitation (rain gauge);

ii The individual(s) who performed the facility inspections, sampling, visual observation (inspections), and or measurements;

iii The date and approximate time of analyses;

iv The individual(s) who performed the analyses;

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

vi Quality assurance/quality control records and results;

vii Non-storm water discharge inspections and visual observation (inspections) and storm water discharge visual observation records (see Section M.4.a above);

viii Visual observation and sample collection exception records (see Section M.4.g above); and

ix The records of any corrective actions and follow-up activities that resulted from analytical results, visual observation (inspections), or inspections.