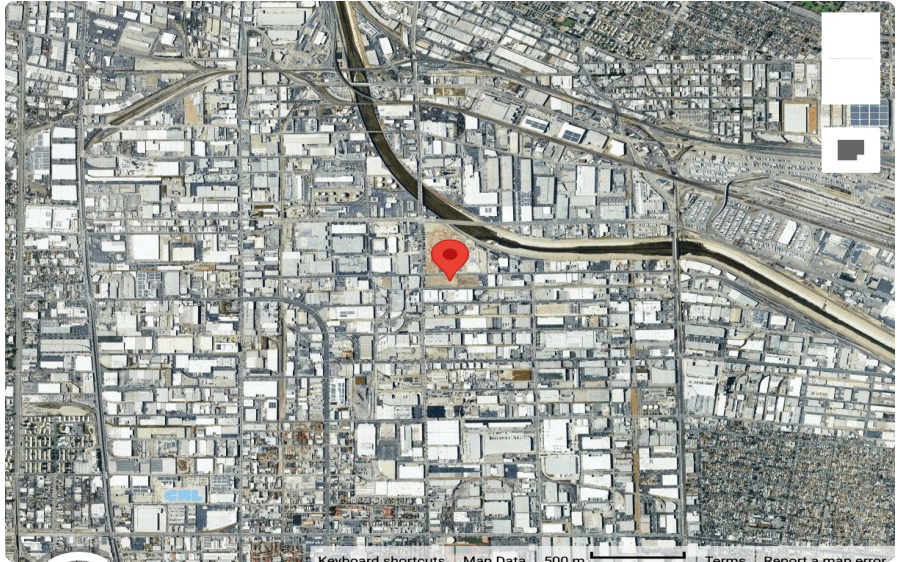



Construction Storm Water Pollution Prevention Plan

Project Name:	Storm Business Park	
Project Address:	3100 E. Vernon Avenue, Vernon, CA 90058	
Project Latitude / Longitude:	34.0050737,-118.2180057	
Vicinity Map:		
Project Type and Risk Level:	Traditional, Risk: Level 2	
Soil Disturbance Area:	5.75 acres	
Site Operating Days and Hours:	Mon - Fri.; 7 AM - 4 PM	
Anticipated Schedule of Construction Activities:	Notice of Intent Submitted:	March 3, 2026
	NOI Approval Date / WDID #:	March 17, 2026 WDID: 4Example12345
	Project Commencement:	March 17, 2026
	Demolition:	March, 2026
	Grading:	March, 2026
	Underground Work:	May, 2026
	Roadways / Paving:	October, 2026
	Vertical Construction:	November, 2026
	Temporary Soil Stabilization:	September, 2026
	Landscaping:	June, 2027
	Final Soil Stabilization:	December, 2027
	Project Completion:	December 31, 2027
SWPPP Developer:	John Teravskis, QSD/QSP #00022 	

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Appendices

Appendix 1: Pre-Earthwork Drawing

Appendix 2: Construction and Earthwork Drawings

Appendix 3: CGP Mandatory BMPs

Appendix 4: Inspection Forms and Instructions

Appendix 5: Laboratory Chain-of-Custody Form

Appendix 6: WDID Number Posting

Appendix 7: Spill Prevention, Control, and Response Procedures

Appendix 8: Risk Level Calculation Methodology

The SWPPP Roster

Legally Responsible Person (LRP) for the Discharger:

Name:	John Martz
Org:	RGW Development Corporation
Address:	10 Gene Autry Way Anaheim, CA 92802
Phone:	(562) 799-8510
Email:	Jmartz@rgwcorp.com

Duly Authorized Representatives (DAR) for the Discharger:

Name:	Graydon Ripley
Org:	RGW Development Corporation
Address:	10 Gene Autry Way Anaheim, CA 92082
Phone:	(562) 799-8510
Email:	Gripley@rgwcorp.com

Qualified SWPPP Developer (QSD):

Primary QSD

Name:	John M Teravskis
Organization Name:	WGR Southwest Inc
Address:	11780 N Hwy 99, Lodi, CA 95240
Phone Number:	(209) 649-0877
Email Address:	jteravskis@wgr-sw.com
QSP/QSD No.:	22
Pre-requisite Type And Number:	Connections Course QSD Track

Alternate QSDs

Name:	Dan Baumbach
QSP/QSD No.:	84047
Phone Number:	(562) 799-8510
Email Address:	dbaumbach@wgr-sw.com

Qualified SWPPP Practitioner (QSP):

Primary QSP

Name:	Matt Lewis
Organization Name:	WGR Southwest, Inc.
Address:	11021 Winners Circle, Ste. 101 Los Alamitos, CA 90720
Phone Number:	(562) 799-8510
Email Address:	mlewis@wgr-sw.com
QSP No.:	84218
Pre-requisite Type And Number:	Connections Course QSD Track

Alternate QSPs

Name:	Danny Aspiras
QSP No.:	283841
Phone Number:	(562) 799-8510
Email Address:	daspiras@wgr-sw.com

QSP Delegated Inspectors:

Name:	Matt Lowe
Date Of Foundational Training *:	November 14, 2025
Date Of Site Specific Training *:	March 18, 2026
Phone Number:	(562) 799-8510
Email Address:	mlowe@wgr-sw.com

* Training to be provided and documented at the project commencement.

Personnel Trained for Spill and Leak Prevention & Response:

Name:	Javier Lopes
Company Name:	Ace Contractors, Inc.
Date Of Spill Training *:	March 18, 2026
Phone Number:	(213) 345-6789
Email Address:	jlopes@aci.com

* Training to be provided and documented at the project commencement.

General Contractor:

Title:	Project Manager
Name:	Javier Lopes
Org:	Ace Contractors, Inc.
Address:	11780 N. Hwy. 99 Lodi, CA 95240
Phone:	(209) 334-5363
Email:	jlopes@aci.com

Erosion Control Contractor (if different from the General Contractor):

Street Sweeping Contractor (if different from the General Contractor):

Active Treatment System Contractor (if applicable):

Passive Treatment Provider (if applicable):

Analytical Testing Laboratory (for non-visible pollutant and/or TMDL analysis):

Name:	McC Campbell Analytical Inc.
Org:	
Address:	1534 Willow Pass Road Pittsburg, CA
Phone:	(925) 252-9262
Email:	main@mccampbell.com

State Water Resources Control Board:

Address:	PO Box 1977, Sacramento, CA 95812-1977
Phone Number:	(866) 563-3107
Email Address:	stormwater@waterboards.ca.gov
Website:	https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.html

Regional Water Quality Control Board:

Region:	Los Angeles Region (4)
---------	------------------------

Address:	320 W. 4th Street, Suite 200 Los Angeles, CA 90013
Phone Number:	(213) 576-6600
Email Address:	info4@waterboards.ca.gov


Municipal Storm Water Separate Sewer System (MS4):

Name:	City of Vernon
Org:	
Address:	4305 S. Santa Fe Ave. Vernon, CA 90058
Phone:	(323) 583-8811
Email:	dwall@cityofvernon.org
Contact Person:	Daniel Wall

SWPPP Amendments

Storm Water Pollution Prevention Plans (SWPPPs) are meant to change as conditions change. Not only should administrative items be updated such as project dates and persons associated with the project, but BMPs should be added or modified in response to inspections and monitoring results. If analytical Numeric Action Levels (NALs) are exceeded or corrective action items are noted on a QSP or QSD inspection report, if it is determined that the cause is due to inadequate BMPs specified in the SWPPP, the additional BMPs should be noted below, included in the SWPPP narrative, and on the drawings in **Appendices 1 and 2**. Please note that the Construction General Permit (CGP) requires corrective action to begin to be implemented within 72 hours of discovery and completed as soon as possible, prior to the next forecasted precipitation event. SWPPP amendments must be uploaded onto SMARTS within 30 calendar days.

Current SWPPP Revisions

Number	Description of Revisions and/or BMPs Added	Revision Due to a NAL Exceedance? (Yes/No)	Date	QSD Name, Number, and Signature
0	Original SWPPP	No	11/23/2025	John Teravskis, 00022 

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1. Permit Information

1.1. State of California Construction General Permit (CC

This project filed for coverage under the State of California National Pollutant Discharge Elimination System (NPDES) Construction General Permit (Order 2022-0057-DWQ) on March 3, 2026 by submitting a Notice of Intent (NOI) and uploading Permit Registration Documents (PRDs) including a copy of this SWPPP. Subsequently, permit coverage was approved by the State Water Resources Control Board (Water Board) on March 17, 2026 and the project was issued Waste Discharge Identification (WDID) number 4Example12345. The WDID number is required to be posted on the project in a location that is visible to the public. (Refer to [Appendix 6](#) for a template of the WDID Posting Sign.)

1.2. Changing Permit Coverage

The CGP coverage expires on December 31, 2027. To extend coverage past the expiration date, **at least 14 days prior to the expiration date**, a new risk determination must be performed using the new ending date and a Change-of-Information (COI) must be submitted on the [State Water Board's Stormwater Multiple Application and Report Tracking System \(SMARTS\)](#) website.

NPDES permits are non-transferable. If the project is sold prior to completion of construction, the seller must file a Notice of Termination (NOT) on SMARTS and the buyer must file a NOI and Permit Registration Documents (including a revised SWPPP) on SMARTS.

As portions of the project are completed and obtain final stabilization, they may be removed from the CGP coverage. In order to reduce the project's footprint, a COI will need to be submitted on SMARTS. **Within 30 days** of the reduction in acreage, supporting documentation is required to be uploaded with the COI including:

- Photos demonstrating final stabilization of the completed areas;
- Revised site maps showing acreage currently under construction, acres sold or transferred, and acres currently stabilized per the NOT requirements; and
- A revised SWPPP to match the changes in acreage.

For residential projects that wish to remove completed home lots, documentation of a contract or agreement requiring the individual new homeowner to stabilize the yard and landscaping within one year and to maintain temporary BMPs until the yard and landscaping areas are stabilized must be uploaded onto SMARTS.

If the project needs to add acreage, a COI must also be submitted on SMARTS with a SWPPP amendment and updated SWPPP map **within 14 days** of the acreage being added to the project. It is likely that the Water Board will charge an additional permit fee for added acreage.

1.3. Risk Determination

The risk determination for this project was calculated based on the project coordinates, the start and end date, and the ArcGIS data available at waterboards.ca.gov (Receiving Water Risk, LS factor, and K factor) and from lew.epa.gov (R factor). See Appendix 8 for risk level calculation

methodology.

Revised Universal Soil Loss Equation (RUSLE) Data			
3100 E. Vernon Avenue, Vernon, CA 90058			
34.0050737,-118.2180057			
Start Date: March 17, 2026			
End Date: December 31, 2027			
Receiving Water Risk	Erosivity (R) Factor	Erodibility (K) Factor	Length of Slope / Steepness of Slope (LS) Factor
High	65.44*	0.32	0.41
Source: ArcGIS data from waterboards.ca.gov	Source: lew.epa.gov	Source: ArcGIS data from waterboards.ca.gov	Source: ArcGIS data from waterboards.ca.gov

*A rainfall erosivity factor of 5.0 or greater has been calculated for the site and period of construction. **The project does not qualify for a waiver from NPDES permitting requirements.**

Risk Determination	
Average Annual Soil Loss	8.5857 tons/acre
A = (R) (K) (LS)	
Sediment Risk Factor	Low
Low Risk: A<15 tons/acre	
Medium Risk: A>=15 tons/acre and A<75 tons/acre	
High Risk: A>=75 tons/acre	
Overall Risk Determination:	
Level 2	

1.4. Periods of Inactivity

The project must comply with all CGP requirements year round, even during periods of inactivity.

However, if all construction activities will be suspended for 30 days or longer, a COI may be submitted on SMARTS along with a revised SWPPP that details the BMPs for the period of inactivity, a revised site map that depicts the current status of construction, and photographs showing the temporary stabilization BMPs that have been installed. Upon approval of the COI by the Regional Water Quality Control Board (Regional Board), all sampling may be suspended and the monitoring may be reduced to the following:

- A QSD must visit the inactive site within 14 days of the Regional Board approval of the COI to verify that all BMPs for the period of inactivity are in place and being implemented;
- A QSP or trained delegate must visit the site every calendar month and prior to any weather pattern that is forecasted to have a 50 percent or greater chance of 0.5 inches or more in a 24-hour period.

Prior to the project returning to active construction, another COI and SWPPP amendment will need to be prepared by the QSD, submitted on SMARTS, and approved by the Regional Board.

1.5. Permit Termination

The CGP coverage may be terminated for the following reasons:

- The project never began;
- The project was suspended;
- The project was sold to another owner before construction was completed; and
- The project was completed.

To terminate permit coverage a Notice of Termination (NOT) must be filed on SMARTS and certified by the LRP or DAR. Documentation needing to be uploaded onto SMARTS with the NOT includes the following:

- A final QSP inspection report demonstrating that all construction activities have ceased; construction-related equipment, materials, and waste have been removed; areas of soil disturbed during the construction have been permanently stabilized; and the post-construction and low impact development (LID) measures have been installed per the approved plans.
- A photo report with a final site map and/or calculations demonstrating final stabilization and the implementation of post-construction best management practices (BMPs).
- As applicable, a signed maintenance agreement between the LRP and the municipality for installed post-construction BMPs.
- A long-term maintenance plan for post-construction BMPs.

1.6. Permit Requirements and Prohibitions

In order to streamline this SWPPP, not all of the CGP requirements and prohibitions are contained in this document. The LRP, DARs, QSDs, QSPs, delegated inspectors, and contractors associated with this project are highly encouraged to familiarize themselves with the contents of the CGP [Order 2022-0057-DWQ](#).

Please be aware there are prohibitions concerning the discharge of non-storm water, hazardous materials and wastes, trash, debris, oils, soaps and detergents, wash waters, and sediment.

The purpose of this SWPPP is to:

- Identify all pollutants, their sources, and control mechanisms;

- Provide a Pollutant Source Assessment (PSA);
- Identify CGP-required and other site-specific BMPs to reduce or eliminate storm water pollution;
- Identify temporary soil stabilization BMPs;
- Identify potential non-storm water discharges and eliminate any unauthorized non-storm water discharges;
- Describe BMPs utilized to minimize and control pollutants from washing activities;
- Describe BMPs utilized to minimize exposure of construction materials and wastes to storm water;
- Describe the spill and leak prevention and response plan; and
- Provide details regarding the Construction Site Monitoring Plan.

1.7. Other Environmental Permits for this Project

The following is a list of applicable environmental permits for this project:

Table 1 - Applicable Environmental Permits

Permit	Applicable? (Yes/No)	Date Obtained	Permit Number / Comments
Dewatering NPDES Permit			
401 Water Quality Certification			
404 USACE Permit			
Dept. of Fish and Wildlife Section 1600 Permit			

2. Project Information

2.1. Description of the Pre-project Site Conditions

The project is located at the 3100 block of East Vernon Avenue in the City of Vernon in Los Angeles County, California. The project is situated within an industrial area of Vernon at the southeast corner of the intersection of East Vernon Avenue and South Soto Street. It is on a 5.5-acre previously disturbed parcel of land where a previous development was demolished by a separate land owner and under separate Construction General Permit coverage. At the time the property was acquired by the current owner from the previous owner, the previous development including buildings and pavement had been demolished and removed leaving a completely dirt exposed site. The site is relatively flat with less than a one percent slope from west to east. All existing utilities including storm drains had been previously removed. There are two existing concrete driveways from the vacant lot to Vernon Avenue. A drain inlet is located on Vernon Avenue approximately 70 feet from the east end of the project. Sidewalks, curbs, and gutters border the site along Soto Street and Vernon Avenue. The adjacent rail spur to the south is graveled covered and sits at a higher elevation than the site. The previous owner had applied an hydraulic mulch to the areas of soil disturbance. The site has no permanent stabilization or impervious surfaces in place. Neither are there trees or vegetation present on the site. There are no environmentally sensitive areas (ESAs) on or adjacent to the project that need to be protected. A Union Pacific railroad spur, which is outside of the project boundary, is located adjacent to the south of the project. Another active construction project is located to the north of the project across Vernon Avenue. Warehouse and trucking yards are located to the west, south, and east of the project. Reference the Pre-Earthwork Drawing in Appendix 1.

2.2. Description of the Planned Construction Activities

The project consists of a commercial development that includes a 125,000 square foot warehouse, office space, loading docks, a 1.5-acre parking area, and landscaping that incorporates low impact development design features. The project will be 85% impervious. The construction phases include grading, utility installation, paving, off-site work, vertical construction (tilt-up construction), and landscaping / final site stabilization. A total of 5.75 acres of soil disturbance will occur at this project which includes the entire 5.5-acre property and an additional 0.25 acres of off-site work involving driveways, sidewalks, and curb and gutter work. At the discretion of the QSP, areas of soil disturbance will be temporarily stabilized with the use of a soil binder (EarthGuard or equivalent), crushed rock, or geotextiles. Permanent stabilization will consist of impervious structures and pavement, and landscaping. Reference the Construction and Earthwork Drawing in Appendix 2.

2.3. Description of the Post-project Site Conditions

The completed site will have a 125,000 square foot warehouse / office complex, a 1.5-acre parking / truck staging area, and landscaped areas that operate as storm water bioretention / infiltration facilities. Permanent stabilization will consist of impervious structures and pavement, and landscaping. Roof drains and area drain inlets will route water to the landscaped area that is located along the facility's west and north perimeters. The landscaped areas are designed to operate as bioretention cells to meet the Los Angeles County Department of Public Works post-

construction design standards. The landscaped areas are designed to operate as bioretention cells to meet the Los Angeles County Department of Public Works (LADPW) post-construction design standards. High flow bypass drains in the bioretention areas discharge water to the LADPW municipal separate storm water sewer system (MS4). The project proponent has obtained approval by LADPW for the treatment system design and long-term maintenance.

2.4. Description of the Watershed and Applicable Total Maximum Daily Loads (TMDLs)

The project is located within the Lower Los Angeles River watershed (HUC-10: 1807010504). During grading water will predominately stay on site because surrounding features (i.e., sidewalks, buildings, and rail spur) are at higher elevations. There is no significant run-on from the surrounding areas. The project site is located in an area that has construction related total maximum daily load (TMDL) requirements for total metals including cadmium, copper, lead, and zinc; nutrients including nitrate and nitrite; and bacteria that specifically includes E. Coli.

2.5. Soil Type and Groundwater Information

The USGS Websoil Survey states that the soil is categorized as urban commercial and specifies a Hydrologic Soil Group (HSG) rating of D. The geotechnical report confirms that the soils are comprised of silts and clays. Groundwater may be encountered in the deeper utility excavations and a NPDES permit for dewatering has been obtained from the Los Angeles Regional Water Quality Control Board (RWQCB). The project will most likely be subject to Attachment J of the CGP.

3. Identification of Pollutant-Generating Activities

3.1. Overview

For this project, the trades shown in [Table 2](#) are anticipated to be present. For each trade, the activities involved with that trade and the pollutants associated with the activities are listed.

Control mechanisms for the planned activities and their associated pollutants will include the following:

- **For liquid materials:** volumes less than 5 gallons, store packaged liquid in a rain-proof structure such as a vehicle, shed, storage bin, or under plastic sheeting; volumes 5 gallons or greater, store within secondary containment and, where possible, within a rain-proof structure.
- **For packaged bulk materials:** unless its intended use is normally exposed to wet weather, store within a rain-proof structure such as a vehicle, shed, storage bin, plastic wrapped on a pallet, or under plastic sheeting where it cannot be mobilized by water or wind.
- **For unpackaged bulk materials:** when not actively being used, store in a stockpile that is contained and secured to prevent materials from being exposed to wind and precipitation.
- **For waste materials:** store in a bin that is covered at the end of each business day and during rain events. Liquid waste materials should be covered and maintained in a leak proof container. Inert waste materials may be managed similar to unpackaged bulk materials.

Other specific control measures are identified in Section 5 of this SWPPP which identifies CGP-required and site-specific BMPs.

3.2. Table 2 - Trades, Construction Activities, and Potential Pollutant Sources

Table 2 - Trades, Construction Activities, and Potential Pollutant Sources

Trades	Activities	Potential Pollutant Sources
Asphalt pavers	Deliver and install asphalt products, hot and cold mixes, for roadways, parking lots, and other paved surfaces.	Heavy petroleum oils used in asphalt Diesel for cleaning and fuel Lubricating oils for equipment Solvents and detergents for cleaning Sand and gravel Vehicle / equipment fuel, coolant, hydraulic, brake, and transmission fluids Solid waste / trash
Boiler makers	Assemble, install, maintain, and repair boilers, closed vats, and other large vessels or containers that hold liquids and gases	Metal dust and filings Welding slag Solvents and detergents Lubricating oils Sand or other media from sand blasting Solid waste / trash
Carpenters	Construct, repair, and install building frameworks and structures made from wood and other materials.	Wood dust and particles Semi-volatile compounds (SVOCs) from treated or manufactured wood or wood-replacement building materials Metal dust and filings from steel or aluminum posts and studs Solid waste / trash
Concrete Workers	Deliver and pump concrete; pour, finish, and cure concrete surfaces. They also stain, stamp, and perform other concrete treatments for specialty finishes and textures. This area also includes concrete tilt-up construction, stucco, shotcrete, gunite, and concrete slurry work.	pH altering concrete and cementitious substances Metals, SVOCs, and polymers from colorants Ammonia, calcium, metals, phosphates, salts, and acids from admixtures. Oils for forms and sealing concrete Solid waste / trash
Construction Equipment Operators, Mechanics, and Fuelers	Drive, maneuver, or control the heavy machinery used for grading and excavation and to construct roads, buildings, and other structures. Mechanics repair and maintain heavy equipment. Fuelers, typically mobile fuelers, deliver and dispense fuel and lubricants.	Lubricating oils for equipment Solvents and detergents for cleaning Sediment and solids from earthwork Vehicle / equipment fuel, coolant, hydraulic, brake, and transmission fluids Solid waste / trash
Coring, Drilling, Grinding, and Saw Cutting Workers	Cut, core, grind asphalt and concrete surfaces.	Water and slurry from cutting, coring and grinding Solids and pH altering substances from slurries and waste piles Lead and other hazardous wastes from grinding operations Fuel and lubricants

Trades	Activities	Potential Pollutant Sources
Demolition Workers	Deconstruction and removal of buildings, roadways, and other structures. Sorting, transport, and disposal / recycling of demolition waste.	Dust and particles from asphalt, concrete, wood, metal, and other building materials Hazardous waste Solid waste / trash Sediment and solids from disturbed soils
Drywall Installers, Ceiling Tile Installers, Tapers, and Plasterers	Hang wallboard and install ceiling tile inside buildings. Tapers prepare the wallboard for painting.	Dry wall, gypsum, or plaster dust and particles pH altering substances in mud and wallboard Solid waste / trash
Electricians and Telecommunications Installer	Install, maintain, and repair electrical power, communications, lighting, and control systems.	Metal dust, filings, and particles Solvents and glues for conduit Cable and wire pulling lubricants Sediment and solids from trenching Treated wood for poles Solid waste / trash
Fencer	Construction of wood, metal, and chain-link fences.	Wood dust and particles Semi-volatile compounds (SVOCs) from treated or manufactured wood or wood-replacement building materials Metal dust and filings from steel, galvanized, or aluminum posts and studs Solid waste / trash
Flooring Installers and Tile and Stone Setters	Lay and install carpet, wood, vinyl, tile, and other materials.	Dust and particulates from installation, removal, and/or resurfacing of flooring. Glues and adhesives Leveling compounds (pH altering) Solvents and detergents Solid waste / trash
Glaziers	Install glass in windows, skylights, and other fixtures in buildings.	Dust, filings, and particulates from window installation Glues and adhesives Cleaning compounds Solid waste / trash
Hazardous Materials Removal Workers	Identify and dispose of harmful substances such as asbestos, lead, mold, and radioactive waste.	Hazardous waste Solid waste / trash
HVAC Technicians	Install, maintain, and repair heating, ventilation, and air conditioning systems.	Metal dust, filings, and particles Solvents and glues for conduit Cable and wire pulling lubricants Solid waste / trash
Insulation Workers	Install and replace the materials used to insulate buildings or mechanical system.	Dust and particulate matter Solvents and glues Solid waste / trash
Ironworkers	Install structural and reinforcing iron and steel to form and support buildings, bridges, and roads.	Metal and wood dust, filings, and particles Welding slag Solvents, oils, and lubricants Surface coatings

Trades	Activities	Potential Pollutant Sources
Landscapers	Shape and install outdoor features including turf, plants, trees, compost, mulch, walkways, water features, and irrigation systems. Maintain vegetation including the application of fertilizers and pesticides.	Sediment and solids from earthwork, trenching, and stockpiles Organic material from compost, wood mulch, and soil amendments pH altering substances for soil treatment Fertilizers and pesticides Glues and solvents for PVC irrigation piping Dust and particles from treated wood Concrete and cement containing substances
Masonry Workers	Use bricks, concrete and concrete blocks, and natural and manmade stones to build structures, walls, and road and walkway pavers.	Sediment and solids from earthwork, trenching, and stockpiles pH altering cementitious substances Metals, SVOCs, and polymers from colorants Ammonia, calcium, metals, phosphates, salts, and acids from admixtures. Oils for sealing concrete Solid waste / trash
Painters	Apply paint, stain, and coatings to walls and ceilings, buildings, large machinery and equipment, and bridges and other structures.	Paint, primer, stains, and surface coatings Solvents Cleansers and detergents Sand or other media for sand blasting Solid waste / trash
Plumbers, Pipefitters, Steamfitters	Install and repair piping fixtures and systems.	Metal and PVC dust, filings, and particles Solvents, glues, and sealers for piping Pipe threading oils Pipe solder Sediment and solids from trenching Sanitary waste from sewer work Solid waste / trash
Roofers	Replace, repair, and install the roofs of buildings.	Metal, shingle, and wood dust, filings, and particles Sediment from composite and tile shingles Solvents and glues Asphalt and tar Solid waste / trash
Scaffolding, rigging, and cranes	Install scaffolding. Use and maintain cranes to support construction activities. Prepare loads to be hoisted by a crane.	Lubricating oils for equipment Solvents and detergents for cleaning Sediment and solids from soil disturbance by crane tracks and equipment Vehicle / equipment fuel, coolant, hydraulic, brake, and transmission fluids Solid waste / trash
Sheet Metal Workers	Fabricate or install products that are made from thin metal sheets.	Metal dust, filings, and particles Solvents and glues Surface coatings and galvanized materials Cleansers and detergents Solid waste / trash

Trades	Activities	Potential Pollutant Sources
Sign Installers	Install, maintain, and repair signs and related lighting / electronics.	Metal dust, filings, and particles Solvents and glues for conduit Cable and wire pulling lubricants Sediment and solids from trenching and post holes Concrete for post holes Treated wood for poles Solid waste / trash
Solar Photovoltaic Installers	Assemble, set up, and maintain rooftop or other systems that convert sunlight into energy.	Metal dust, filings, and particles Solvents and glues for conduit Cable and wire pulling lubricants Sediment and solids from trenching and post holes Concrete for post holes Solid waste / trash
Welder	Welding by various means of metal and pipe surfaces, joints, and connections. Involves grinding, cutting, and preparation work.	Metal dust, filings, and particles Welding pipe dope and solder Welding slag Lubricants and solvents Solid waste / trash

4. Pollutant Source Assessment (PSA)

4.1. Materials Present at the Project

Based on the trades and activities anticipated to be present at this project, [Table 3](#) provides a summary of the potential pollutants, including amounts stored onsite, where and when they are utilized, where they are stored, and the method of contact with storm water. ***The QSD will revise this list after the initial 30-day site visit.*** The QSP will periodically review Table 3 and compare it to actual materials stored on site. Table 3 will be revised periodically with information from site inspections.

Table 3 – Inventory and Assessment of Materials

These materials are only an initial estimate. An updated material list will be obtained by the QSD from the developer. The QSP and/or QSD will keep this list updated for the duration of the project.

Potential Material Name	Storage Location	Quantity Stored	Phase Of Construction Used	Interior Or Exterior Use	Physical Properties	Materials Of Concern	Method Of Contact With Storm Water
Fill dirt	Site wide	50,000 cubic yards will be trucked onto the site and incorporated into the grading as fill material.	Grading	Exterior	Solid	Sediment	Direct
Gravel	Staging area	60 cubic yards	All phases until surfaces are paved	Exterior	Solid	Sediment	Direct and indirect from wind and stock pile migration
Sand	Several stockpiles throughout the project for utility backfill	100 cubic yards	Utility	Exterior	Solid	Sediment	Direct and indirect from wind and stock pile migration

Potential Material Name	Storage Location	Quantity Stored	Phase Of Construction Used	Interior Or Exterior Use	Physical Properties	Materials Of Concern	Method Of Contact With Storm Water
Crushed base	Stabilized construction roadways and as road base	500 cubic yards	Grading and roadways	Exterior	Solid	Sediment	Direct and indirect from wind and stock pile migration
Dust control agents	Staging area	50 gallons	Grading, utility, and roadway	Exterior	Liquid	Anionic PAM	Direct from spills of the concentrated liquid
Spray paints and layout materials	Staging area connex box and on contractor vehicles	2 dozen cans	Grading, utility, and roadway	Exterior	Liquid	VOCs, SVOCs, metals	Indirect from discarded waste
Diesel	Minimal stored on site, approximately 20 gallons; bulk of the diesel is delivered by a mobile refueler	Four 5-gallon cans	Grading, utility, and roadway	Exterior	Liquid	VOCs, SVOCs	Direct by spills or leaks
Motor oil	Minimal stored on site, approximately 10 gallons; bulk of the diesel is delivered by a mobile refueler	2 5-gallon buckets	Grading, utility, and roadway	Exterior	Liquid	Oil & Grease, metals	Direct by spills or leaks
Hydraulic fluid	Minimal stored on site, approximately 10 gallons; bulk of the diesel is delivered by a mobile refueler	2 5-gallon buckets	Grading, utility, and roadway	Exterior	Liquid	Oil & Grease, VOC, SVOC, metals	Direct by spills or leaks

Potential Material Name	Storage Location	Quantity Stored	Phase Of Construction Used	Interior Or Exterior Use	Physical Properties	Materials Of Concern	Method Of Contact With Storm Water
Gasoline	Minimal stored on site, approximately 20 gallons; bulk of the diesel is delivered by a mobile refueler	Four 5-gallon cans	Grading, utility, and roadway	Exterior	Liquid	VOC, SVOC	Direct by spills or leaks
Lubricants	Minimal stored on site, approximately 20 gallons; bulk of the diesel is delivered by a mobile refueler	2 5-gallon buckets	Grading, utility, and roadway	Exterior	Liquid	Oil & Grease, metals	Direct by spills or leaks
DEF	In the connex box in the staging area	1 55-gallon drum	Grading, utility, and roadway	Exterior	Liquid	Nutrients, BOD/COD	Direct by spills or leaks
Coolant	In the connex box in the staging area	Approximately 20 gallons	Grading, utility, and roadway	Exterior	Liquid	BOD / COD, metals	Direct by spills or leaks
Solvents	In the connex box in the staging area	Less than 2 gallons	Grading, utility, and roadway	Exterior	Liquid	VOCs and SVOCs	Direct by spills or leaks
PVC glue and primer	In the connex box in the staging area and on the contractor vehicles	Varies, estimated at a dozen ½-quart cans at any one time.	Utility	Exterior	Liquid	VOCs	Direct by spills or leaks; indirect by discarded packaging

4.2. Potential Sources of Pollutants Associated with TMDLs

Table 4 provides a list of the applicable TMDLs for this project location and provides an assessment of construction activities, materials, and wastes that may contain pollutants associated with each TMDL.

Table 4 – Pollutants Associated with TMDLs

Are there TMDLs listed in Attachment H of the CGP for this location? **Yes**

TMDL Pollutant/Condition	Activity Or Material	Method Of Exposure
Metals	Cadmium, Copper, Lead, and Zinc: Existing soil, lubricants, galvanized materials, surface coatings, plumbing activities, painting activities.	Direct due to exposed surfaces containing the metals and from spills or leaks of materials containing the metals; indirect from discarded packaging that contained the materials and from wind blown / carried dust.
Nutrients	Nitrate + Nitrate: From DEF, fertilizers, concrete admixtures, cleaners, and sewage.	Direct due to exposed surfaces containing the metals and from spills or leaks of materials containing nitrates or nitrites; indirect from discarded packaging that contained the materials and from wind blown / carried dust.
Bacteria	E. Coli: From portable sanitary facilities and from connections to the sanitary sewer	Direct from spills or leaks

If on Table 4, any row has an entry in both Column 1 and Column 2, the project is considered by the Water Board to be a **“Responsible Discharger”** and will need to comply with the action items identified in [Attachment H](#) of the CGP.

4.3. Materials Spilled, Released, or Applied to Land at the Site in the Past

Table 5 provides a list of materials known to have been spilled, released, or applied to the surface at this project in the past. Sources of information for this list include LRP knowledge, Phase 1 or 2 Environmental Site Assessment Reports, and/or the States GeoTracker System (<https://geotracker.waterboards.ca.gov/>).

Table 5 – Materials Previously Spilled, Released, or Applied at the Project Site

Are there any known historic spills or material releases on this site that could impact storm water? **Yes**

4.4. Demolition-Related Pollutants

Table 6 provides a list of pollutants which could be exposed to storm water due to demolition at the project. If demolition involves structures built before 1979, then asbestos, polychlorinated biphenyls (PCBs), and lead paint should be presumed to be a potentially present unless a Phase 1 or 2 Environmental Site Assessment Report ruled out the possibility of their presence.

Table 6 – Demolition-Related Pollutants Potentially Present at the Project Site

Other than sediment and debris, are there any other known or suspected pollutants associated with the demolition activities planned for this project? **No**

Pollutant	Confirmed Present	Location On Site
	Yes	

4.5. Non-Storm Water Discharges

Table 7 provides a list of potential non-storm water discharges at the project. Authorized non-storm water discharges are allowed under the CGP. In the case of dewatering discharges, they may also need to be covered by a separate NPDES Permit (refer to [Section 1.7](#) of this SWPPP) and/or be in compliance with [Attachment J](#) of the CGP (refer to Section 5.3.4 of this SWPPP). Once identified, unauthorized non-storm water discharges need to be stopped and eliminated.

Table 7 – Non-Storm Water Discharges

Non Storm Water Discharge	Confirmed Present	Authorization	Location On Site
Dust Control Water	No	Authorized	Not anticipated to result in a discharge.
Irrigation Runoff	No	Authorized	Not anticipated to result in a discharge.
Wash Water	No	Unauthorized	Not anticipated to result in a discharge.
Atmospheric Condensates	No	Authorized	Not anticipated to result in a discharge.
Dewatering	Yes	Authorized	Groundwater is anticipated to need to be pumped from deep utility excavations.

Non Storm Water Discharge	Confirmed Present	Authorization	Location On Site
De-chlorinated potable water including water line flushing or hydrostatic pipe flushing	Yes	Authorized	Pressure testing of the new potable water system will be performed and may result in a discharge.
Fire hydrant flushing or fire-fighting activity	No	Authorized	Not anticipated to result in a discharge.

5. Best Management Practices (BMPs)

According to the CGP glossary, Best Management Practices are “*are management practices and structural controls used to prevent or reduce the discharge of pollutants from runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage to waters of the United States. BMPs include scheduling of activities, prohibitions of practices, operation and maintenance procedures, treatment, and vegetated infiltration basins amongst other practices.*” There are several factors in the CGP that require BMPs. First, the CGP contains mandatory minimum BMPs for all projects and few additional BMPs for projects at Risk Level 2 and 3. Second, Responsible Dischargers for certain TMDLs will have to implement additional BMPs to comply with that TMDL requirement. Third, it is the job of the QSD to specify Site-Specific BMPs for the control of sediment transport, erosion, and discharges of pollutants from the project site.

This SWPPP includes the implementation of BMPs that comply with BAT, BCT, and ensure compliance with water quality standards. From time to time, additional BMPs based on input from the QSP to address numeric action level and numeric effluent limitation exceedances may be added to the SWPPP, which may necessitate additional training needed for the QSP, Legally Responsible Person, or designated persons on-site.

Best Available Technology Economically Achievable (BAT)

As defined by U.S. EPA, BAT is a technology-based standard established by the Clean Water Act (CWA) § 304(b)(2) as the most appropriate means available on a national basis for controlling the direct discharge of toxic and nonconventional pollutants to navigable waters. The BAT effluent limitations guidelines, in general, represent the best existing performance of treatment technologies that are economically achievable within an industrial point source category or subcategory.

Best Conventional Pollutant Control Technology (BCT)

As defined by U.S. EPA, BCT is a technology-based standard established by the for the discharge from existing industrial point sources of conventional pollutants including biochemical oxygen demand (BOD), total suspended sediment (TSS), fecal coliform, pH, and oil and grease.

5.1. Risk Level Mandated BMPs

Since this project is a Traditional Low, it is subject by Construction General Permit to mandatory minimum BMPs that include the following categories of BMPs:

- Good Site Management Housekeeping Practices
- Non-Storm Water Management
- Preserve Existing Topsoil
- Erosion and Runoff Controls
- Sediment Controls

Appendix 3 contains the appropriate Risk Level Requirements of the CGP for this project. The LRP,

DARs, QSDs, QSPs, delegated inspectors, and contractors associated with this project are encouraged to familiarize themselves with the mandated requirement in Appendix 3.

5.2. TMDL Mandated BMPs

If the LRP for this project was determined to be a Responsible Discharger per Section 4.2 of this SWPPP, then the project may be responsible for additional action items (including BMPs) as identified in [Attachment H](#) of the CGP.

Is the LRP a Responsible Discharger? Yes

The following are the additional Attachment H requirements for the project:

For Bacteria (E. Coli) the following is required: I.A.2. Bacteria TMDL BMPs I.A.2.a. Minimum BMPs I.A.2.a.i. The Responsible Discharger that identifies on-site sources of indicator bacteria in their pollutant source assessment shall implement BMPs specific to preventing or controlling stormwater exposure to indicator bacteria in addition to complying with this General Permit's requirements. The minimum bacteria source control BMPs include the following: 1. Qualified SWPPP Practitioner-conducted training for construction site staff; and 2. Routine housekeeping and sanitary waste management of identified sources of bacteria (e.g., portable toilets, dumpsters, etc.). I.A.2.b. Structural BMPs The Responsible Discharger shall evaluate and implement any necessary structural BMPs designed for retention, infiltration, or diversion of stormwater when the implemented minimum BMPs are inadequate to reduce bacteria loading to receiving waters. I.A.2.c. The Responsible Discharger shall ensure all BMPs are implemented and address Bacteria TMDL requirements. The BMPs shall be visually inspected, maintained, repaired, and kept updated in the SWPPP in accordance with General Permit requirements specified in the Order and applicable requirements in Attachments D or Attachment E (per project Risk or Type. For nutrient TMDL (nitrates + nitrites): I.D.2. Erosion and Sediment Control and RUSLE2 Modeling I.D.2.a A Responsible Discharger that identifies on-site sources of nutrients in their pollutant source assessment and that were assigned a mass-based waste load allocation in an applicable Nutrient TMDL(s), shall address the TMDL through the following in addition to complying with this General Permit: i. Comply with the site-specific erosion and sediment control, post-construction, and all other requirements in this General Permit; ii. Install erosion and sediment controls that will result in predicted erosion rates that are equal to pre-construction conditions (e.g., undisturbed vegetation for the area) for each phase of the construction project; and iii. Use RUSLE2 modeling to calculate the predicted soil losses and sediment delivery rates when selecting temporary BMPs and controls to be applied during each phase of the project. The RUSLE2 modeling included in the SWPPP shall include: 1. Appropriate climatic variables, soil types, and slope topography for the area disturbed; and 2. Calculated soil loss and sediment delivery rates for the selected BMPs and controls equal to, or less than, the soil loss and sediment delivery rates for pre-construction conditions during each phase of the construction project. For metal TMDLs (cadmium, copper, lead, and zinc): No additional BMPs or compliance actions.

5.3. Site Specific BMPs

The following BMPs apply specifically to this project.

5.3.1. Site Management BMPs

SM-1 Scheduling:

Good site management allows for the storm season and forecast to dictate when activities occur that present a high risk of exposing pollutants to storm water. The grading phase and other construction activities that disturb a significant amount of soil should be scheduled to occur during a time when precipitation is unlikely to occur. Construction activities which have pollutants that can be mobilized by storm water and cannot be protected with a storm proof cover during storm events, should be discontinued until dry weather returns. Good site management also utilizes scheduling to phase activities, BMP installation, and project milestones so that the construction site will have maximum protection in place before the storm season begins.

At this project, scheduling will be addressed by:

- Installation of temporary or permanent effective soil covers (Rain Drop BMPs);
- Installing impervious surfaces (e.g., installing a first lift of asphalt in the parking lot or roadway to use as a stabilized work area or construction roadway during the wet season);
- Backfilling and covering utility trenches;
- Establishing settling basins and sediment traps; and
- Stabilizing storm water conveyances such as drainage swales, drain inlets, and concentrated flow discharge locations.

SM-2 Budgeting and Procurement:

Good site management includes budgeting adequately for BMPs and procuring them in time to be in place and effective when they are needed.

At this project, the following management practices will be implemented:

- Making sure the bidder or project cost estimator is aware of the BMPs specified in the SWPPP;
- Communicating bid line restrictions to the SWPPP developer;
- Understanding the project's duration and harshness of the climate to estimate the life-expectancy of the BMPs and how often they will need to be replaced;
- Identifying the number of mobilizations needed of erosion control providers and BMP installers;
- Ordering products and services early enough to have them in place when needed and/or required; and
- The following BMPs will be stockpiled:

Table 8 – Stockpiled BMPs

Bmp Product	Quantity	Storage Location
Silt fence	8 100-ft. long rolls	Connex box in the staging area
Geotextile	6 12-foot wide rolls.	Staging area
Visqueen 6 ml plastic sheeting	3 boxes	Connex box in the staging area
Earthguard soil binder	30 gallons	Connex box in the staging area
Compost socks	3 pallets	Staging area
Gravel bags	36	Staging area

SM-3 Pollution and spill prevention (cover, secure, and contain):

Good site management includes keeping materials and their pollutants that can be mobilized by rain or wind covered, secured, and contained. This includes properly managing powders, liquids, and solids.

At this project, the following practices will be implemented:

- Cover and berm stockpiles so that the stored materials are not dispersed by water or wind (instead of berming, stockpiles can be located in a depressed area where migration of materials will not occur);
- The mechanism for managing concrete washout will include the use of plastic lined boxes placed on plastic, or a rented washout bin placed on one or more of the unfinished lots. Wash water and concrete wastes must not be allowed to be deposited on paved or unpaved surfaces.
- Portable sanitary facilities are to be placed on one or more of the home lots behind the sidewalk. They are not to be placed within paved roadways. To the extent possible, they should be placed in a location that is depressed so that, if they leak or are overturned, the spilled contents will remain in that location. They should be secured to protect them from overturning in high winds. They should be regularly maintained and, if found leaking, immediately replaced.
- Store liquids within secondary containment and covered so that storm water does not accumulate in the containment.
- Implement procedures (Appendix 7) and systems to prevent and control spills of liquids;
- Clean up spills upon discovery and properly disposing of clean-up related wastes;
- Store and use powdered substances in a way to minimize dispersal and transport by water and wind;
- Cover and protect solid construction materials (that are not meant to remain outdoors) from contact with rain and wind; and
- Place solid waste in a bin or other weather-resistant container and cover the bins / containers during rain events and windy conditions.

SM-4 Wind and fugitive dust controls:

Good site management includes preventing wind erosion and fugitive dust from leaving the construction boundary.

At this project, wind erosion and fugitive dust will be controlled by implementing the following:

- Applying a dust palliative to the surface of the exposed soil.
- Covering stockpiles and haul truck loads.
- Scarifying the soil.
- Disturbing only as much soil as needed.
- Installing wind barriers or fences upgradient of the project on the prevailing wind side.
- Enforcing on site speed limits of 15 mph or less.
- Providing stabilized construction roadways (covered with rock or a dust palliative).
- Ceasing soil disturbing activities during windy conditions when other mitigation measures are not successfully controlling fugitive dust from leaving the project boundary.
- Re-establishing vegetation or other erosion-resistant coverings as soon as possible.

SM-5 Education and Training:

Without educating and training onsite personnel about the storm water permit and SWPPP requirements and implementation, it is not possible to effectively manage a site.

At this project, the following education and training elements will be utilized:

- Foundational training for delegated inspectors on the storm water permit and SWPPP requirements and prohibitions;

- Site-specific training for delegated inspectors on how to implement the SWPPP and monitoring program at a specific jobsite;
- Job / task kickoff storm water compliance training;
- Frequent tailgate training on storm water BMPs and control measures for the work currently being performed onsite;
- The use of Standard Operating Procedures (SOPs) for specific tasks that involve potential pollutants or for controlling erosion and sedimentation;
- Methods for quickly notifying onsite personnel of storm water related issues or instructions such as texting, emails, flyers, videos, etc.;
- Training new personnel or subcontractors who are starting work on the project; and
- The use of signage to provide direction and reminders to onsite personnel.

SM-6 Expectations and Enforcement:

Clear communication and enforcement of compliance expectations is the most important BMP to implement. Without communicating expectations, no one will know what is required of them. Without enforcing expectations, no one will think you are serious about it. If the manager is lackadaisical or ambivalent about the SWPPP and permit compliance, then that attitude will be observed and caught by onsite personnel, and the site conditions will reflect it. Not implementing this BMP will undue or undermine all of the rest of the BMPs.

At this project, the project management will clearly communicate and enforce expectations by:

- Developing and disseminating to all onsite personnel and subcontractors a SWPPP Compliance Policy and requiring all personnel and subcontractors to sign the policy.
- Developing and disseminating a progressive enforcement plan that identifies how policy infractions will be addressed.
- Posting signage at main project entrances that declare the project to be a SWPPP compliance zone and adherence to the SWPPP is mandatory.
- Holding a project or task kickoff meeting that covers the SWPPP requirements.
- Including storm water compliance information in tailgate meetings.
- Consistently reviewing weekly and storm event inspection reports and place items needing corrective action on a corrective action log; and assigning corrective actions to a specific person and set a due date for completion. Follow-up on pending corrective action items will be performed by project management.
- Being consistent and equitable in implementing the SWPPP program.

5.3.2. Rain Drop BMPs

Erosion begins when the rain drop impacts bare soil and, consequently, breaks loose soil particles that may then be mobilized off site with the storm water runoff. A key to erosion control is to prevent or minimize the impact these rain drops have on a construction site. Therefore, we call this suite of BMPs – Rain Drop BMPs. At this project, the following Rain Drop (temporary erosion control) BMPs will be implemented:

Table 9 – Selected Rain Drop BMPs

Rain Drop BMP	How And When It Will Be Implemented	Where It Will Be Implemented

Rain Drop BMP	How And When It Will Be Implemented	Where It Will Be Implemented
RD-1 Scheduling	Grading and underground work will be performed primarily during the 2026 dry season; first lift of asphalt will be installed prior to the 2026/2027 wet season.	Site wide
RD-3 Establish Temporary Effective Soil Cover	A first lift of asphalt will be installed on the parking area in October 2026; Geotextile fabric will be laid down on areas of soil disturbance surrounding the tilt-up building; wood mulch will be placed in the landscaping areas.	Parking area, around the tilt-up building, and landscaping areas
RD-4 Maximize Organic Content	Compost will be added to the planting and low impact development areas.	Landscaping and low impact development areas.
RD-5 Bind Soil Particles Together	Applied via water truck at 6 gallons/acre during site grading activities.	All areas of soil disturbance.

5.3.3. Slow-the-Flow BMPs

The faster water moves, the more erosion a construction site will experience. The slower water moves, the more sedimentation will occur. At this project, the following Slow-the-Flow BMPs will be implemented:

Table 10 – Selected Slow-the-Flow BMPs

Slow The Flow BMP	How And When It Will Be Implemented	Where It Will Be Implemented
SF-1 Linear Controls	Silt fence will be used along the north and west project perimeters. Silt fence will be installed with a vibratory disk so that the fabric is punched into the soil at least 8 inches. Stakes will be installed using a mechanical driver every six feet on the street side of the fabric. The fabric will be pulled taut and stapled to the wooden stakes. An existing property wall will act as the sediment control on the east side of the project. The elevated rail spur that runs the southern length of the project will provide an effective sediment control on the south side of the project.	The project perimeter.

Slow The Flow BMP	How And When It Will Be Implemented	Where It Will Be Implemented
SF-2 "Speed Bumps" (DI Protection, Gravel Bag Berms, Check Dams, Track Walking, Water Bars, etc	During the entirety of the project, the drain inlet on Vernon which is located toward the eastern end of the project will require protection. The City of Vernon only allows the use of flush mounted devices. Once the storm drainage utilities are installed on site, compost socks will be installed around them to provide drain inlet protection. The compost socks should be placed around the drain inlets in a 8-foot diameter circle with the ends of the socks overlapping each other by 1 foot.	At on-site and off-site drain inlets.
SF-3 "Fat Spots" (Basins and Ponds)	Excavated bioretention cells will act as sediment traps during the grading and utility phase. Once the storm drainage system and the first lift of asphalt has been installed, the bioretention cells can be constructed with the gravel and media layers and vegetation.	At the bioretention cells.
SF-4 Flow Spreaders and Energy Dissipators	Points of discharge into the bioretention cells will have geotextile and rip rap rock (as specified in the civil engineering drawings) to act as energy dissipators.	At points of discharge into the bioretention cells.

5.3.4. Treatment BMPs

Whether it is water, vehicles, or mud that is leaving the site, some treatment may be necessary to assure that the impact from the construction project to receiving waters or the municipal drainage system is minimized. At this project, the following Treatment BMPs will be implemented:

Table 11 – Treatment BMPs

Treatment BMP	How And When It Will Be Implemented	Where It Will Be Implemented

Treatment BMP	How And When It Will Be Implemented	Where It Will Be Implemented
T-1 Compost Socks – Treatment of Water	Compost socks will be installed around drain inlets to provide drain inlet protection. The compost socks should be placed around the drain inlets in a 8-foot diameter circle with the ends of the socks overlapping each other by 1 foot. Compost socks will also be used along the perimeters of off-site work.	Around on-site drain inlets and around off-site curb, gutter, and driveway work.
T-2 Track Out Control – Treatment of Tires	Two points of site ingress / egress will be equipped with seven 7'x12' FODS mats. The FODS mats will be placed horizontally with two side by side at the entrance to provide a turning radius for exiting traffic followed by the remaining five mats so that exiting traffic will transverse across 42 feet of the mats. Mats should be joined with the provided spacers and connecting hardware and secured with stakes at the corners.	At the Vernon Avenue entry/exit point and at the Soto Street entry/exit point.
T-3 Sweeping – Treatment of Impervious Surfaces	Proactive and scheduled street sweeping of the adjacent streets will occur during the grading and utility phases on a regular basis. Sweeping of streets and the paved parking area during the vertical phase will occur on an as needed basis as regular inspections dictate.	Along Vernon, Soto Street, and the on-site paved areas (once paving has been installed).
T-4 Filters – Treatment of Water	Not anticipated to be needed.	N/A
T-5 pH Adjustment – Treatment of Water	Not anticipated to be needed.	N/A
T-6 Active Treatment System – Treatment of Water	Not anticipated to be needed.	N/A
T-7 Passive Treatment – Treatment of Water	Not anticipated to be needed.	N/A

Treatment BMP	How And When It Will Be Implemented	Where It Will Be Implemented
T-8 Dewatering – Treatment of Water	Groundwater from deep utilities will be pumped into temporary portable tanks. The sediment in the water will be allowed to settle. Water will be skimmed from the tanks and discharged through a dewatering silt bag so that it passes through several layers of compost socks before discharging into the bioretention basins. A dewatering plan will be submitted to the Water Board. To the extent possible, the groundwater will be managed so that it infiltrates on site. If a discharge of groundwater to the MS4 is necessary, it will be discharged under NPDES Permit R4-2023-0429 from LARWQCB Groundwater from Construction and Project Dewatering	Trenches that have groundwater in them that need to be dewatered.

5.3.5. Special Site-Specific BMPs

Some sites and projects require special considerations. Such as projects that border a receiving water; have in-water or over-water work; involve contaminated soils or groundwater; have steep slopes or other challenging geological features.

At this project site, the following additional BMPs are required due to special site-specific conditions:

5.3.6. Final Site Stabilization BMPs

In order for the Regional Board to approve a NOT, it will be necessary to demonstrate that final site stabilization was achieved. This means that all erodible soil surfaces disturbed during the construction project (including dirt equipment and material staging areas) have been covered with a permanent erosion control cover. This may include buildings, pavement and other impervious surfaces, aggregate, wood mulch, pine duff, landscaping, or other established vegetation (such as germinated hydroseed).

At this project site, the following permanent stabilization methods will be utilized on construction-related areas of soil disturbance:

- Buildings
- Paved Roadways
- Concrete Sidewalks/Driveways
- Landscaping
- Wood Mulch

6. Construction Site Monitoring Program

6.1. Inspection and Sampling Locations

The following are the locations where inspections and sampling will be conducted:

Storm Water Run-on Locations

Is there storm water run-on?

Storm Water Pre-Grading Discharge Locations

Refer to Appendix 1

Identifier On Drawings	Latitude / Longitude	Description Of Run-off
Sample Point #1	34.00543, -118.21902	Sheet flow leaving the project towards Vernon Avenue (exact location to be field verified by the QSP).
Sample Point #2	34.00544, -118.21783	Sheet flow leaving the project towards Vernon Avenue (exact location to be field verified by the QSP).
Sample Point #3	34.00546, -118.21653	Sheet flow leaving the project towards Vernon Avenue (exact location to be field verified by the QSP).

Storm Water Discharge Locations During Construction

Refer to Appendix 2

Identifier On Drawings	Latitude / Longitude	Description Of Run-off
Sample Point #1	34.00543, -118.21649	Bioretention system overflow drain to the MS4. Discharge if water is entering the overflow drain.

6.2. CGP Required Monitoring

All visual inspection must be performed during scheduled site operating hours. Monitoring is not required under the following conditions:

- During dangerous weather conditions such as electrical storms, flooding, and high winds above 40 miles per hour;
- Outside of scheduled site operating hours (refer to the SWPPP title page); or
- When the site is not accessible to personnel.

Since this is a Risk Level 2 project, the following field monitoring activities are required:

Table 15 – Required Monitoring

Type of Monitoring	How and When it will be Implemented	Who will Perform It (see SWPPP Roster)
Weekly Inspections	Weekly visual inspections are to be conducted to ensure that BMPs are properly installed and maintained. Weekly inspections may be combined with any of the inspections listed below.	QSP or Trained Delegate Inspector; QSP must inspect the site at least once per calendar month.

Type of Monitoring	How and When it will be Implemented	Who will Perform It (see SWPPP Roster)
Pre-Storm Inspections	An inspection prior to a Qualifying Precipitation Event (QPE) must be performed within 72 hours of a National Weather Service forecast for the project location calling for a Probability of Precipitation (PoP) of 50% or greater and a Quantitative Precipitation Forecast (QPF) of 0.5" of precipitation or greater in a 24-hour period. (The pre-storm inspection may be performed up to 120 hours in advance if an extended forecast is available)	QSP
During Storm Inspections	Visual inspections are to be conducted at least once every 24-hour period during QPEs, which are extended for each subsequent 24-hour period forecast to have at least 0.25" of precipitation.	QSP or Trained Delegate Inspector
Post-Storm Inspections	Post-QPE visual inspections are to be conducted within 96 hours after each QPE if 0.5 inches or more precipitation is measured during the duration of the QPE using the onsite rain gauge. The inspection is to: <ol style="list-style-type: none"> 1. Identify if BMPs were adequately designed, implemented, and effective; 2. Identify BMPs that require repair or replacement due to damage; and 3. Identify additional BMPs that need to be implemented and revise the SWPPP accordingly. 	QSP or Trained Delegate Inspector
Discharge Sampling	<p>For Risk Level 2 & 3 Projects:</p> <p>Storm water grab samples are required to be collected from all discharge locations incorporating runoff from project construction sites, during discharge and within site operating hours. The grab samples shall be representative of the discharge flow and characteristics. One sample from each discharge location per 24-hour period must be collected and field tested for pH and turbidity during active discharge for QPE. Samples from discharges of stored or contained storm water must be performed in accordance with Attachment J of the CGP.</p>	QSP or Trained Delegate Inspector

Type of Monitoring	How and When it will be Implemented	Who will Perform It (see SWPPP Roster)
Non-visible Pollutant Sampling	<p>Sampling and analysis of storm water discharges is required to monitor non-visible pollutants when there is:</p> <ol style="list-style-type: none"> 1. Evidence of pollutant releases that are not visually detectable in stormwater discharges; and 2. Releases of substances which could cause or contribute to an exceedance of water quality objectives in the receiving waters. <p>Sampling and analysis for non-visible pollutants (those listed in Tables 2, 3, 5, or 6) is required only when the pollutants may be discharged due to failure to implement BMPs, a container spill or leak, or a BMP breach, failure, or malfunction.</p> <p>At least one sample, within 8 hours, must be collected from each discharge location hydraulically down-gradient from the observed triggering event or condition. The non-visible pollutant sampling must continue to be collected at least one sample per applicable discharge location for each 24-hour period that there is discharge, until the necessary corrective actions are completed to control further discharge of the pollutant. Sampling is not required if one of the conditions described above (e.g., breach or spill) occurs and, prior to discharge, the material containing the pollutant is fully remediated or removed; and BMPs to control the pollutant are implemented, maintained, or replaced, as necessary.</p> <p>If the spilled or released material contained one or more of the TMDLs listed in Section 4.2 of the SWPPP, then the sampling, analysis, and reporting of the data must be performed in accordance with Attachment H of the CGP.</p>	QSP or Trained Delegate Inspector
Run-on Sampling	At the discretion of the QSP or QSD, run-on from surrounding areas may be sampled if there is reason to believe run-on may contribute to exceedance of numeric action levels and/or numeric effluent limitations.	QSP or Trained Delegate Inspector

Type of Monitoring	How and When it will be Implemented	Who will Perform It (see SWPPP Roster)
Receiving Water Sampling	<p>For Risk Level 3 Projects that have a Direct Discharge:</p> <p>For Risk Level 3 projects that have a direct discharge into receiving waters, it is required to collect samples from the receiving water if sampling results from the discharge monitoring location meets either of the following conditions:</p> <ol style="list-style-type: none"> 1. pH value falls outside of the range of 6.0 and 9.0 pH units; or 2. Turbidity exceeds 500 NTU. <p>Receiving water monitoring does not apply if run-on from a forest fire or any other natural disaster caused the storm water results to fall outside the pH range or exceed the turbidity value.</p> <p>Collect one upstream and one downstream sample from the receiving water at an accessible and safe location that is representative of the receiving water and as close as possible to the project's discharge location (either upstream or downstream as appropriate).</p>	QSP or Trained Delegate Inspector
NAL Exceedance Inspection	Within 14 calendar days of the Numeric Action Level (NAL) exceedance.	Both the QSP and the QSD
Job Start Inspection	Within 30 days of the construction activities commencing at the project and within 30 days of the replacement of a QSD.	QSD
Twice Annual QSD Inspection	Twice annually, once August through October and once January through March	QSD
NOT Inspection	Prior to submittal of the Notice of Termination (NOT) or for a Change-of-Information (COI) for a change in acreage.	QSP

6.3. Numeric Action Levels and Corrective Action

When sampling and analysis is performed, the analytical results are compared to applicable Numeric Action Levels (NALs) or Numeric Effluent Limits (NELs). The following are the NALs and NELs applicable to this project:

Table 16 – Applicable NALs & NELs and Analytical Method Information

Analyte	Analytical Method	Detection Limit	NALs / NELs
pH	Field Analysis within 15 minutes of collection using a calibrated field meter EPA Method 150.1	0.2	NALs: Lower = 6.5 pH units Upper = 8.5 pH units For Active Treatment Systems: NEL: Lower = 6.0 pH units Upper = 9.0 pH units
Turbidity	Field analysis using a calibrated portable instrument EPA Method 180.1	1	250 NTU For Active Treatment Systems: NEL: 10 NTU daily flow-weighted average 20 NTU any single sample

Table 16.A – Applicable TMDL NALs & NELs and Analytical Method Information

Analyte	Analytical Method	Detection Limit	NALs/NELs
Cadmium	EPA 200.8	0.001 mg/L	0.0031 mg/L

Analyte	Analytical Method	Detection Limit	NALs/NELs
Copper	EPA 200.8	0.010 mg/L	0.06749 mg/L
Lead	EPA 200.8	0.005 mg/L	0.094 mg/L
Zinc	EPA 200.8	0.050 mg/L	0.159 mg/L
Nitrates + Nitrites	EPA 300.1	0.1 mg/L	8.0 mg/L
E. Coli			None

Exceedance of NELs is a permit violation and are subject to State Water Code mandatory minimum penalties. Exceedance of NALs is not considered as a permit violation as long as the discharger takes corrective action. ***The CGP requires corrective action to begin to be implemented within 72 hours of discovery*** and completed as soon as possible, prior to the next forecasted precipitation event. Corrective action necessitating revision to the SWPPP will be identified on the SWPPP Amendment log in this SWPPP.

6.4. Sample Collection and Handling Instructions

When collecting samples, the QSP or trained delegate sampler need to implement the following procedure:

- Identify applicable parameters that require laboratory analysis for each storm water discharge location (pH and turbidity are required to be analyzed with field meters).
- For non-visible pollutant or TMDL analysis, request the laboratory provide the appropriate number of sample containers, types of containers, sample container labels, and sample preservation instructions.
- Use the appropriate sample shipping method to the laboratory. The laboratory should receive samples within 48 hours of the physical sampling (unless otherwise required by the laboratory to meet all method hold times). 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. The laboratory name and location are provided in the SWPPP Roster.
- Use only the sample containers provided/specified by the laboratory to collect and store samples. Use of any other type of containers could cause sample contamination.
- Prevent sample contamination by not touching or putting anything into the sample containers before collecting stormwater samples.
- Do not overfill sample containers. Overfilling can change the analytical results.
- Secure each sample container cap without stripping the cap threads or breaking the cap. Volatile Organic Analysis (VOA) vials must not have any headspace or air bubbles.
- Label 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.
- Carefully pack the sample container into an ice chest or refrigerator to prevent breakage and maintain temperature during shipment; frozen ice packs or ice is placed into the shipping container to keep the sample close to 4° C (39° F) until arriving at the laboratory (do not freeze samples).

Complete the Chain of Custody form (included in Appendix 5 of this SWPPP) with 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, the analysis that is required for each sample container, and both the signatures of the persons relinquishing and receiving the sample

containers.

6.5. Field Instrumentation Use and Calibration Instructions

The QSP and delegated samplers should familiarize themselves with the manufacturer's information about the calibration and use of the meters being used on the project.

6.6. Inspection Forms and Chain-of-Custody Form

Instructions for and links to the inspection forms used on this project are included in Appendix 4. A copy of the laboratory chain-of-custody document for non-visible pollutant and/or TMDL analytical samples is located in Appendix 5.

Appendix 1: Pre-Earthwork Drawing

Appendix 2: Construction and Earthwork Drawings

Appendix 3: CGP Mandatory BMPs

ATTACHMENT D

TRADITIONAL CONSTRUCTION RISK LEVEL REQUIREMENTS

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
GENERAL PERMIT FOR STORMWATER DISCHARGES
ASSOCIATED WITH CONSTRUCTION AND LAND DISTURBANCE ACTIVITIES
(GENERAL PERMIT)**

I. GENERAL REQUIREMENTS

Risk Level 1, 2, and 3 dischargers shall implement the following minimum best management practices (BMPs) to reduce or prevent pollutants in construction stormwater discharges, monitoring requirements, and reporting requirements. If a requirement in this attachment does not specify a specific Risk Level, then the requirement applies to Risk Level 1, 2, and 3 dischargers.

II. MINIMUM BEST MANAGEMENT PRACTICES

II.A. Good Site Management "Housekeeping"

- II.A.1. Dischargers shall implement good site management (i.e., "housekeeping") measures for construction materials that could potentially be a threat to water quality if discharged or exposed to stormwater. At a minimum, dischargers shall implement the following good housekeeping measures:
- a. Identify and protect the products used and/or expected to be used and the end products that are produced and/or expected to be produced from exposure to stormwater. Products do not include materials and equipment that are designed to be outdoors and exposed to environmental conditions (e.g., poles, equipment pads, cabinets, conductors, insulators, bricks, roofing, and siding);
 - b. Apply BMPs to erodible stockpiled construction materials (e.g., soil, spoils, fly-ash, stucco, hydrated lime) to prevent erosion and pollutant transport;
 - c. Store chemicals in watertight containers with secondary containment to prevent any spillage or leakage or store in a completely enclosed storage area;
 - d. Minimize exposure of construction materials to precipitation. Construction materials do not include materials and equipment that are designed to be outdoors and exposed to environmental conditions (e.g., poles, equipment pads, cabinets, conductors, insulators, bricks);
 - e. Implement BMPs to control the off-site tracking of sediment and loose construction and landscape materials; and
 - f. Implement BMPs to control the discharge of plastic materials and limit the use of plastic materials when more sustainable, environmentally friendly alternatives exist. Dischargers shall consider the use of plastic materials resistant to solar degradation where plastic materials are deemed necessary.

- II.A.2. Dischargers shall implement good housekeeping measures for waste management, which, at a minimum, shall consist of the following:
- a. Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, masonry wash waters, and other wash waters. Wash waters shall be captured and treated prior to discharge, or disposed of at a permitted facility that can accept that waste, to mitigate impacts to water quality;
 - b. Provide containment (e.g., secondary containment) of sanitation facilities (e.g., portable toilets) to prevent discharges of pollutants to the stormwater drainage system or receiving water;
 - c. Clean or replace sanitation facilities and inspect them regularly for leaks and spills;
 - d. Keep debris or trash in waste containers if it is subject to transport from the site by wind or runoff;
 - e. Cover waste disposal containers at the end of every business day and during a precipitation event;
 - f. Prevent discharges from waste disposal containers to the stormwater drainage system or receiving water (e.g., containers with solid bottoms and regular maintenance);
 - g. Contain and securely protect stockpiled waste material from wind and precipitation unless actively being used; and
 - h. Secure and contain concrete washout areas and other washout areas that may contain additional pollutants to minimize discharge into the underlying soil and onto surrounding areas. Washout areas shall be covered prior to and during a precipitation event.
- II.A.3. Dischargers shall implement good housekeeping for vehicle/equipment storage and maintenance, which shall consist of the following:
- a. Contain fuel, grease, and oil to prevent them from leaking into ground, storm drains, or surface waters;
 - b. Place all equipment or vehicles, which are to be fueled, maintained, and/or stored in a designated area with BMPs installed; and
 - c. Clean leaks immediately and dispose of leaked materials properly in accordance with the law.
- II.A.4. Dischargers shall implement good housekeeping for landscape materials, which shall consist of the following:
- a. Contain and protect stockpiled materials such as mulches and topsoil, or other erodible landscape materials, from wind and precipitation unless being actively used;
 - b. Contain packaged landscape materials (e.g., fertilizers) when they are not being actively used;

- c. Discontinue the application of any erodible landscape material at least 2 days before a forecasted precipitation event as defined in Attachment B or during periods of precipitation; and
 - d. Apply erodible landscape material at quantities and rates in accordance with manufacturer recommendations or based on written specifications by knowledgeable and experienced field personnel;
- II.A.5. Dischargers shall implement good housekeeping measures on the construction site to control the aerial deposition of site materials and from site operations. Such particulates can include, but are not limited to, metals, nutrients, organics, sediment, other particulates, and trash.
- II.A.6. Dischargers shall document all housekeeping BMPs in the SWPPP that correspond to the nature and phase of the construction activities. Construction phases at traditional land development projects include demolition and pre-development site preparation phase, grading and land development phase, streets and utilities phase, vertical construction phase, and final landscaping and site stabilization phase.

II.B. Non-Stormwater Management

- II.B.1. Dischargers shall implement the following measures to control all non-stormwater discharges during construction:
- a. Wash vehicles in such a manner as to prevent non-stormwater discharges to surface waters or municipal separate sewer system drainage systems;
 - b. Clean streets in such a manner as to prevent unauthorized non-stormwater discharges from reaching surface water or municipal separate sewer system drainage systems; and
 - c. Eliminate any non-stormwater discharges not authorized in Section IV.A of this General Permit's Order.

II.C. Preserve Existing Topsoil

- II.C.1. Dischargers shall preserve existing topsoil, unless infeasible, through the following practices:
- a. Stockpiling existing topsoil, or transferring topsoil to other locations, to deploy and reestablish vegetation prior to termination of coverage; and
 - b. Stabilizing disturbed topsoil during construction.

Preserving existing topsoil is not required where the intended function of a specific area of the site dictates that the topsoil be disturbed or removed.¹

¹ Examples may include the removal of topsoil containing invasive seedbanks, lack of space to stockpile topsoil, and sites that are designed to be highly impervious after construction with little to no vegetation intended to remain.

II.D. Erosion Control

- II.D.1. Dischargers shall implement the following practices to eliminate or minimize site erosion. Erosion control BMPs (except for sprayed products) shall be available on-site or at a nearby location (e.g., common lay-down yard), year-round with trained persons able to deploy the product under the direction of the Qualified SWPPP Practitioner:
- a. Implement effective wind erosion control;
 - b. Preserve existing vegetation;
 - c. Minimize the amount of soil exposed during construction activity;
 - d. Minimize the disturbance of steep slopes;
 - e. Schedule earthwork to minimize the amount of disturbed area when feasible;
 - f. Immediately initiate stabilization for disturbed areas whenever earth disturbing activities have permanently ceased on any portion of the site, or temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days;²
 - g. Minimize soil compaction in areas other than where the intended function of a specific area dictates that it be compacted;
 - h. Reestablish vegetation or non-vegetative erosion controls as soon as practicable;
 - i. If feasible, divert up gradient run-on water from contacting areas of exposed soils disturbed by construction activities or convey run-on through the site in a manner that prevents erosion from areas of construction and does not compromise the effectiveness of erosion, sediment, and perimeter controls;
 - j. Run-on water flowing onto a site from off-site areas may be separated from a site's stormwater discharge to eliminate commingled contribution. Run-on diversion shall occur prior to entering an area affected by construction activity. Run-on flow diversion shall be conveyed through or around the construction activity in plastic pipe or an engineered conveyance channel in a manner that will not cause erosion due to flow diversion. Run-on combined with a site's stormwater discharge is considered a stormwater discharge.
 - k. Limit the use of plastic materials when more sustainable, environmentally friendly alternatives exist. Where plastic materials are deemed necessary, the

² In arid, semiarid, and drought-stricken areas where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures shall be employed as specified by the Regional Water Board. Stabilization shall be completed within a period of time determined by the Regional Water Board. In limited circumstances stabilization may not be required if the intended function of a specific area of the site necessitates that it remains disturbed.

discharger shall consider the use of plastic materials resistant to solar degradation;

- I. Control stormwater and non-stormwater discharges to minimize downstream channel and bank erosion; and
- m. Control peak flowrates and total volume of stormwater and authorized non-stormwater discharges to minimize channel and streambank erosion and scour in the immediate vicinity of discharge points.

II.D.2. Dischargers that stabilize soil using bonded-fiber matrices, hydromulches, spray tackifiers, or other land-applied products shall:

- a. Apply the product according to the manufacturer's instructions and guidance; and
- b. Apply the product according to the manufacturer's guidance to allow for ample cure time and to prevent treatment chemicals from being transported by runoff.

II.E. Sediment Controls

II.E.1. Dischargers shall implement the following site sediment controls:

- a. Establish and maintain effective perimeter controls;
- b. Stabilize all construction entrances and exits to sufficiently control erosion and sediment discharges from the site; and
- c. Design, install, and maintain effective sediment controls to minimize the discharge of pollutants utilizing site-specific BMPs.

At a minimum, design sediment basins and impoundments according to the method provided in the California Stormwater Quality Association Construction BMP Handbook³ and utilize outlet structures that withdraw water from the surface. Dischargers utilizing sediment basins shall complete installation prior to other land disturbance activities.

II.F. Additional Risk Level 2 and 3 Requirements:

II.F.1. Risk Level 2 and 3 dischargers shall implement the following additional erosion and sediment control BMPs for areas under active⁴ construction:

3 California Stormwater Quality Association (CASQA), [Construction BMP Handbook](https://www.casqa.org/sites/default/files/casqa-handbook-construction/master_hanbook_file_2015_sec.pdf) (January 2015), <https://www.casqa.org/sites/default/files/casqa-handbook-construction/master_hanbook_file_2015_sec.pdf> [as of May 20, 2021] (CASQA Construction BMP Handbook)

4 Active areas of construction are areas undergoing land surface disturbance and associated site areas. This includes construction activity during the preliminary phase, mass grading phase, streets and utilities phase, and the vertical construction phase.

- a. Design and construct cut and fill slopes in a manner to ensure slope stability and to minimize erosion including, but not limited to, these practices:
 - i. Reduce continuous slope length using terracing and diversions;
 - ii. Reduce slope steepness; and
 - iii. Roughen slope surfaces with large cobble or track walking.
- b. Install linear sediment controls along the toe of the slope, face of the slope, and at the grade breaks of exposed slopes according to sheet flow lengths as shown in Table 1 until the slope has reached Notice of Termination conditions for erosion protection. When infeasible to comply with Table 1 due to site-specific geology or topography, the QSD shall include in the SWPPP a justification for the use of an alternative method to protect slopes from erosion and sediment loss.

Table 1 - Critical Slope and Sheet Flow Length Combinations for Linear Sediment Reduction Barrier

Slope Ratio (Vertical to Horizontal)	Sheet flow length not to exceed
$\leq 1:20$	Per QSD's specification.
$> 1:20$ to $\leq 1:4$	35 feet
$> 1:4$ to $\leq 1:3$	20 feet
$> 1:3$ to $\leq 1:2$	15 feet
$> 1:2$	10 feet

- II.F.2. Limit construction activity traffic to and from the project to entrances and exits that employ effective controls to prevent off-site tracking of sediment.
- II.F.3. Maintain and protect all storm drain inlets, perimeter controls, and BMPs at entrances and exits (e.g., tire wash off locations).
- II.F.4. Remove any excess sediment or other construction activity-related materials that are deposited on the impervious roads by vacuuming or sweeping prior to any precipitation event.
- II.F.5. Implement additional site-specific sediment controls upon written request by the Regional Water Boards when the implementation of the other requirements in this Section are determined to inadequately protect the site's receiving water(s).

II.G. Surface Water Buffer⁵

- II.G.1. Dischargers shall provide and maintain natural buffers and/or equivalent erosion and sediment controls when a water of the U.S. is located within 50 feet of the site's earth disturbances, unless infeasible.
- II.G.2. Dischargers shall comply with one of the following alternatives for any discharges to waters of the U.S. located within 50 feet of a site's earth disturbances:
 - a. Provide and maintain a 50-foot undisturbed natural buffer from the edge of the disturbed area to the top of bank;
 - b. Provide and maintain an undisturbed natural buffer that is less than 50 feet and is supplemented by erosion and sediment controls that achieve, in combination, the sediment load reduction equivalent to a 50-foot undisturbed natural buffer. The equivalent sediment load may be calculated using RUSLE2 or another method approved by the Regional Water Board; or
 - c. Implement erosion and sediment controls to achieve the sediment load reduction equivalent to a 50-foot undisturbed natural buffer when infeasible to provide and maintain an undisturbed natural buffer of any size. The equivalent sediment load may be calculated using RUSLE2 or another method approved by the Regional Water Board.

II.H. Pesticide Application

Dischargers shall only apply pesticides that have been authorized for use through California Department of Pesticide Regulation. The application of pesticides shall follow manufacturer's guidance.

II.I. Demolition of Existing Structure

Dischargers shall prevent exposing demolition materials to precipitation. Demolition materials should be covered with an impermeable barrier such as, but not limited to, plastic sheeting prior to precipitation to prevent known contaminants from being mobilized. Dischargers unable to cover demolished material that were not previously investigated or found to be absent of applicable pollutants in reportable quantities shall sample for any non-visible pollutants that may be in stormwater

⁵ The surface water buffer requirements apply to work above the top-of-bank or high-water level of waters of the United States. Work within a channel or streambed (water body-dependent construction), Clean Water Act § 404 projects with a § 401 certification, and projects where no natural surface buffer exists (e.g., concrete channelization) are exempt from the requirements. All types of in-channel work may be regulated under § 401 (Clean Water Act - Regional Boards), § 404 (Clean Water Act - Army Corps of Engineers), or §1602 (California Fish and Game Code).

discharges such as, but not limited to, asbestos, leaded paint, or Poly Chlorinated Biphenyls (PCBs)⁶.

II.J. Maintenance and Repair

- II.J.1. Dischargers shall begin maintaining, repairing, and/or implementing design changes (reviewing alternatives that have not been used yet) to BMPs within 72 hours of identification of failures or other shortcomings and complete the changes as soon as possible, prior to the next forecasted precipitation event.
- II.J.2. Dischargers shall have a Qualified SWPPP Practitioner (QSP) verify all BMP maintenance and repairs were appropriately implemented during the next visual inspection following completion. The QSP may delegate BMP maintenance and repair verification to an appropriately trained delegate.

III. MONITORING REQUIREMENTS

III.A. General Requirements

The monitoring requirements of this Section are issued pursuant to Water Code § 13383 and specifies monitoring requirements for dischargers subject to this Order.

All dischargers shall implement the Construction Site Monitoring Program in compliance with this Section at the time of the commencement of construction activity and shall continue implementation until the project is complete and the project site is stabilized as defined in Section III.H in the Order.

III.B. Monitoring Exceptions

- III.B.1. Dischargers shall conduct visual inspections and collect samples to meet the requirements of this Attachment. Dischargers are not required to physically conduct visual inspections or collect samples under the following conditions:
 - a. During dangerous weather conditions such as electrical storms, flooding, and high winds above 40 miles per hour;
 - b. Outside of scheduled site operating hours; or
 - c. When the site is not accessible to personnel.
- III.B.2. For inactive projects, dischargers may reduce the visual inspection frequency and suspend sampling per Section III.G of the Order. Dischargers shall provide an explanation with supporting information for all missed visual inspections or sampling required by this Attachment, to be included in the Annual Report.

6 PCBs were used between January 1, 1950 and January 1, 1980 and should be considered to be potentially present in structures built during that timeframe. "Structure", in this instance, shall have been constructed with floor space (such as a building).

III.C. Visual Inspection Requirements

- III.C.1. Dischargers shall perform visual inspections, based on their Risk Level, in accordance with Table 2 below. The purpose of visual inspections is, to identify and record BMPs that need maintenance to operate effectively, that have failed, or that could fail to operate as intended. Except as specified in Section III.C.3 below, inspectors shall be the Qualified SWPPP Developer, Qualified SWPPP Practitioner, or be trained by the Qualified SWPPP Practitioner.

Table 2 – Visual Inspection Schedule⁷

Risk Level	Weekly	Pre-Qualifying Precipitation Event	During Qualifying Precipitation Event	Post-Qualifying Precipitation Event
1	X	X	X	X
2	X	X	X	X
3	X	X	X	X

- III.C.2. Dischargers shall conduct weekly visual inspections to ensure that BMPs are properly installed and maintained. A pre-, during, or post-qualifying precipitation event inspection also satisfies the weekly visual inspection requirement.
- III.C.3. Dischargers shall have a QSP conduct a pre-Qualifying Precipitation Event inspection within 72 hours prior to any weather pattern that is forecasted to have a 50 percent or greater chance of 0.5 inches or more in a 24-hour period. Precipitation forecast information shall be obtained from the [National Weather Service Forecast Office](https://www.weather.gov/) (e.g., by entering the zip code of the project's location at <https://www.weather.gov/>) and shall be included as part of the inspection checklist weather information. If extended forecast precipitation data (greater than three days) is available from the National Weather Service, the pre-precipitation event inspection may be done up to 120 hours in advance. The pre-Qualifying Precipitation Event inspection shall include an inspection of the following:
- All stormwater drainage areas to identify leaks, spills, or uncontrolled pollutant sources and when necessary, implement appropriate corrective actions to control pollutant sources.
 - All BMPs to identify whether they have been properly implemented in accordance with the SWPPP, and when necessary, implement appropriate corrective actions to control pollutant sources.
 - All stormwater storage and containment areas to detect leaks and check for available capacity to prevent overflow.
- III.C.4. Dischargers shall conduct visual inspections at least once every 24-hour period during Qualifying Precipitation Events. Qualifying Precipitation Events are

⁷ This table is limited to routine weekly inspections and Qualifying Precipitation Event related inspections. Other visual inspections may be required under this Permit and are described in the applicable sections.

extended for each subsequent 24-hour period forecast to have at least 0.25 inches of precipitation.

- III.C.5. Dischargers shall conduct post-Qualifying Precipitation Event visual inspections within 96 hours after each Qualifying Precipitation Event if 0.5 inches or more precipitation is measured during the duration of the Qualifying Precipitation Event using the onsite rain gauge. The inspection is to:
 - a. Identify if BMPs were adequately designed, implemented, and effective;
 - b. Identify BMPs that require repair or replacement due to damage; and
 - c. Identify additional BMPs that need to be implemented and revise the SWPPP accordingly.
- III.C.6. Dischargers shall conduct visual inspections during scheduled site operating hours.
- III.C.7. For each required inspection, dischargers shall develop and complete an inspection checklist that, at a minimum includes:
 - a. Inspection type (weekly, pre-precipitation, daily precipitation, or post-precipitation event);
 - b. Inspection date and time the inspection was conducted;
 - c. Weather information, including the presence or absence of precipitation, an estimate of the beginning of the Qualifying Precipitation Event, duration of the event, date of the end of the Qualifying Precipitation Event, and the amount of precipitation in inches;
 - d. Site information, including stage of construction, activities completed since last inspection, and approximate area of the site exposed;
 - e. A description of any BMPs evaluated and any deficiencies noted, including those that may have resulted in the release of non-visible pollutants;
 - f. A list of BMPs inspected, including erosion controls, sediment controls, chemical and waste controls, and non-stormwater controls;
 - g. Report of the presence of any floating and suspended materials, odors, discolorations, visible sheens, and any sources of pollutants in discharges and contained stormwater;
 - h. Any corrective actions required, including any necessary changes to the SWPPP and the associated implementation dates;
 - i. Photographs of areas of concern and the QSP's description of the problem, if any; and
 - j. Inspector's name, title, and certification, if any.

III.D. Water Quality Monitoring Requirements

Dischargers shall collect samples of discharges, based on their Risk Level in accordance with Table 3 and the requirements below, to monitor water quality and

assess compliance with the requirements of this General Permit. Samplers shall be the QSD, QSP, or be trained by the QSP.

Table 3 – Sample Collection Schedule

Risk Level	Stormwater Discharge Sample Collection (as applicable)	Receiving Water Sample Collection (as applicable)	Non-Visible Sample Collection (as applicable)
1	Not Applicable	Not Applicable	X
2	X	Not Applicable	X
3	X	X (Post-exceedance)	X

III.D.1. Risk Level 2 and 3 Stormwater Discharge Monitoring Requirements

- III.D.1.a. Risk Level 2 and 3 dischargers shall collect stormwater grab samples, from all discharge locations incorporating runoff from project construction sites⁸, during discharge and within site operating hours. The grab samples shall be representative of the discharge flow and characteristics.
- III.D.1.b. Risk Level 2 and 3 dischargers shall obtain one sample from each discharge location per 24-hour period of each Qualifying Precipitation Event, during active discharge.
- III.D.1.c. Risk Level 2 and 3 dischargers shall collect samples of stored or contained stormwater during discharge from the impoundment, in accordance with Attachment J.
- III.D.1.d. Risk Level 2 and 3 dischargers shall analyze all samples for:
 - i. pH and turbidity (refer to Order, Section IV.C.3.c and d); and
 - ii. Any additional parameter required by the Regional Water Board.
- III.D.1.e. Risk Level 2 and 3 dischargers may sample run-on from surrounding areas if there is reason to believe run-on may contribute to exceedance of numeric action levels and/or numeric effluent limitations.

III.D.2. Risk Level 3 Receiving Water Monitoring Requirements

- III.D.2.a. Risk Level 3 dischargers who discharge directly into receiving waters are also required to monitor that receiving water if sampling results from the discharge monitoring location meets either of the following conditions:
 - i. pH value falls outside of the range of 6.0 and 9.0 pH units; or
 - ii. Turbidity exceeds 500 NTU.

⁸ The Glossary definition of ‘site’ applies here, i.e., *The area where the construction activity is physically located or conducted, including staging, storage, and access areas.*

- III.D.2.b. Receiving water monitoring does not apply if run-on from a forest fire or any other natural disaster caused the stormwater results to fall outside the pH range or exceed the turbidity value.
- III.D.2.c. Risk Level 3 dischargers required to conduct receiving water monitoring shall collect samples as follows:
 - i. Collect, at minimum, one upstream receiving water sample from an accessible and safe location that is:
 - 1. Representative of the receiving water;
 - 2. As close as possible to the discharge location; and
 - 3. Upstream from the discharge location.
 - ii. Collect, at minimum, one downstream receiving water sample from an accessible and safe location that is:
 - 1. Representative of the receiving water;
 - 2. As close as possible to the discharge location; and
 - 3. Downstream from the discharge location.
- III.D.2.d. Risk Level 3 dischargers shall analyze the samples for the parameter that triggered this monitoring (either pH or turbidity, or both).
- III.D.2.e. Risk Level 3 dischargers shall collect the samples once every 24-hour period of the Qualifying Precipitation Event.
- III.D.2.f. Risk Level 3 dischargers shall specify the specific locations where samples were collected, date and time of sample collection, as well as constituents analyzed.
- III.D.2.g. The Regional Water Board delegate may require, in writing, that the Risk Level 3 discharger continue to sample the receiving water for the parameter that required this monitoring (pH and/or turbidity) after the Qualifying Precipitation Event ends.
- III.D.3. Non-Visible Pollutant Monitoring Requirements
 - III.D.3.a. Dischargers shall implement sampling and analysis requirements to monitor non-visible pollutants when there is:
 - i. Evidence of pollutant releases that are not visually detectable in stormwater discharges; and
 - ii. Releases of substances which could cause or contribute to an exceedance of water quality objectives in the receiving waters.
 - III.D.3.b. Dischargers are required to conduct sampling and analysis for non-visible pollutants identified in the SWPPP or otherwise known to be on site, only when the pollutants may be discharged due to failure to implement BMPs, a container spill or leak, or a BMP breach, failure, or malfunction.

- III.D.3.c. Dischargers shall collect at least one sample, within 8 hours, from each discharge location hydraulically down-gradient from the observed triggering event or condition.
- III.D.3.d. Dischargers shall continue to collect at least one sample per applicable discharge location for each 24-hour period that there is discharge, until the necessary corrective actions are completed to control further discharge of the pollutant.
- III.D.3.e. Dischargers are not required to sample if one of the conditions described in Section III.D.3.b above (e.g., breach or spill) occurs and, prior to discharge, the material containing the pollutant is fully remediated or removed; and BMPs to control the pollutant are implemented, maintained, or replaced as necessary.
- III.D.3.f. Dischargers shall analyze samples in the field or submit them to a laboratory as specified in Section III.F of this Attachment for analysis of all non-visible pollutants suspected to be present in the discharge, including applicable TMDL-specific pollutants listed in Table H-2 in Attachment H.

III.E. Sample Collection and Handling Instructions

III.E.1. Dischargers shall:

- a. Identify applicable parameters that require laboratory analysis for each stormwater discharge location (pH and turbidity are typically analyzed with field meters).
- b. Request the laboratory provide the appropriate number of sample containers, types of containers, sample container labels, blank Chain of Custody forms, and sample preservation instructions.
- c. Use the appropriate sample shipping method to the laboratory. The laboratory should receive samples within 48 hours of the physical sampling (unless otherwise required by the laboratory to meet all method hold times). 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.
- d. Use only the sample containers provided/specified by the laboratory to collect and store samples. Use of any other type of containers could cause sample contamination.
- e. Prevent sample contamination by not touching or putting anything into the sample containers before collecting stormwater samples.
- f. Not overfill sample containers. Overfilling can change the analytical results.
- g. Secure each sample container cap without stripping the cap threads.
- h. Label 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.

- i. Carefully pack the sample container into an ice chest or refrigerator to prevent breakage and maintain temperature during shipment; frozen ice packs or ice is placed into the shipping container to keep the sample close to 4° C (39° F) until arriving at the laboratory (do not freeze samples).
 - j. Complete a Chain of Custody form with 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, the analysis that is required for each sample container, and both the signatures of the persons relinquishing and receiving the sample containers.
- III.E.2. The Discharger shall designate and train personnel for the collection, maintenance, and shipment of samples in accordance with the above sample protocols and laboratory-specific practices.
- III.E.3. Dischargers shall perform all sampling and preservation protocols in accordance with the 40 Code of Federal Regulations Part 136 and the current edition of "Standard Methods for the Examination of Water and Wastewater" (American Public Health Association).⁹
- III.E.4. Dischargers may refer to the Surface Water Ambient Monitoring Program's (SWAMP) Quality Assurance Program Plan (QAPrP) for more information on sampling collection and analysis.¹⁰

III.F. Analytical Methods Requirements

- III.F.1. Dischargers shall refer to Table 4 for applicable test methods, detection limits, and reporting units.

⁹ Unless other test procedures have been specified in this General Permit or by the Water Boards.

¹⁰ Additional information regarding the [SWAMP QAPrP](https://www.waterboards.ca.gov/water_issues/programs/swamp/quality_assurance.html#qaprp) can be found at: https://www.waterboards.ca.gov/water_issues/programs/swamp/quality_assurance.html#qaprp. [as of October 20, 2020]

Table 4 - Test Methods, Detection Limits and Reporting Units

Parameter	Test Method	Discharger Type	Method Detection Limit	Reporting Units
pH	Field test with calibrated portable instrument using U.S. EPA approved procedures	Risk Level 2 and 3	0.2	pH units
Turbidity	U.S. EPA 0180.1 and/or field test with calibrated portable instrument	Risk Level 2 and 3	1	NTU
Non-Visible Pollutant Parameter(s)	U.S. EPA-approved test method for the specific pollutant parameter	All Risk Levels	Dependent on the test method	Dependent on the test method

- III.F.2. All monitoring instruments and equipment shall be calibrated and maintained in accordance with manufacturers' specifications to ensure accurate measurements. Additionally, records of calibration shall be retained for at least three years and made available upon request.
- III.F.3. Risk Level 2 and 3 dischargers shall perform pH analysis on-site with a calibrated pH meter using a U.S. EPA acceptable test method.
- III.F.4. Risk Level 2 and 3 dischargers shall perform turbidity analysis using a calibrated turbidity meter (turbidimeter), either on-site or at a State Water Board Environmental Laboratory Accreditation Program (ELAP)-accredited laboratory. Acceptable test methods include Standard Method 2130 B or U.S. EPA Method 180.1.
- III.F.5. All analyses of laboratory-analyzed parameters shall be sent to and conducted at a laboratory recognized by the State Water Board Environmental Laboratory Accreditation Program (ELAP), with the exception of field analysis conducted by the discharger for turbidity and pH.
- III.F.6. All dischargers shall assign a value of zero (0) for all non-visible pollutant analytical results less than the minimum level (reporting limit), as reported by the laboratory, used in calculations required by this permit (e.g., numeric action level and numeric effluent limitation exceedance determinations), so long as a sufficiently sensitive test method was used as evidenced by the reported method detection limit and minimum level.

III.G. Exceedance Response Requirements¹¹

- III.G.1. Dischargers are subject to the applicable numeric action levels and/or numeric effluent limitations based on their Risk Level as shown in Table 5 below.

¹¹ Terms including, but not limited to, numeric action level, numeric effluent limitation, and exceedances are defined in Attachment B of this General Permit.

Table 5 - Numeric Action Levels and Numeric Effluent Limitations

Parameter	Discharger Type	Numeric Action Level	Numeric Effluent Limitation
pH	Risk Level 2 and 3	Lower = 6.5 Upper = 8.5	Not Applicable
Turbidity	Risk Level 2 and 3	250 NTU	Not Applicable
TMDL-related Pollutant	Responsible Dischargers with a project of any Risk Level	Refer to Table H-2 in Attachment H	Refer to Table H-2 in Attachment H

- III.G.2. For pH and turbidity, the discharger shall use the field meter readings obtained from each discharge location per day of discharge to determine if there has been an exceedance of the numeric action levels.
- III.G.3. Whenever analytical results indicate that the discharge is below the lower pH value, above the upper pH value, exceeds the turbidity value, or exceeds an applicable TMDL-related numeric action level or numeric effluent limitation, dischargers shall determine the source(s) of the pollutant and immediately implement corrective actions to:
- Meet Best Available Technology Economically Achievable and Best Conventional Pollutant Control Technology requirements in 40 Code of Federal Regulations §§ 450.21 through 450.23¹²; and
 - Reduce or prevent pollutants in stormwater and authorized non-stormwater discharges from causing further exceedances.
- III.G.4. Dischargers shall iterate corrective actions until the discharge is in compliance with the applicable numeric action level(s).
- III.G.5. The source evaluation shall be kept with the SWPPP and specifically address what corrective actions were taken or will be taken and provide a schedule for their completion.

IV. REPORTING REQUIREMENTS

IV.A. Visual Inspections

Dischargers shall keep all completed inspection checklists and related documentation with the SWPPP on-site or electronically.

12 United States Environmental Protection Agency, [Construction and Development Effluent Limitation Guidelines §§ 450.21 through 450.23](https://www.ecfr.gov/current/title-40/chapter-I/subchapter-N/part-450/subpart-B?toc=1), <<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-N/part-450/subpart-B?toc=1>> [as of June 28, 2022].

IV.B. Water Quality Monitoring

IV.B.1. Risk Level 2 and 3 Stormwater Discharge Monitoring Reporting

- IV.B.1.a. Risk Level 2 and 3 dischargers shall electronically submit through SMARTS all field sampling results within 30 days of the completion of the precipitation event or within 10 days if the field sampling results demonstrate the exceedance of the pH, and/or turbidity numeric action levels.
- IV.B.1.b. Risk Level 2 and 3 dischargers that exceeded the pH and/or turbidity numeric action levels shall prepare a Numeric Action Level Exceedance Report when requested, in writing, from a Regional Water Board delegate and shall submit and certify each Numeric Action Level Exceedance Report through SMARTS within 30 days of receiving the written request, in accordance with Section IV of this General Permit's Order.
- IV.B.1.c. The Numeric Action Level Exceedance Report shall include:
 - i. The analytical method(s), method reporting unit(s), and method detection limit(s) for each parameter;
 - ii. The date, place, time of sampling, visual inspections, and/or measurements, including precipitation; and
 - iii. An assessment of the existing BMPs associated with the sample that exceeded the numeric action level, a description of each corrective action taken including photographs, and date of implementation.
- IV.B.1.d. Risk Level 2 and 3 dischargers that prepared a Numeric Action Level Exceedance Report shall retain a copy of the report for a minimum of three years after the date the exceedance report is certified and submitted.

IV.B.2. Risk Level 3 Receiving Water Monitoring Reporting

- IV.B.2.a. Risk Level 3 dischargers shall electronically submit all receiving water sample results through SMARTS within 10 days of a precipitation event.

IV.B.3. Non-Visible Pollutant Monitoring Reporting

- IV.B.3.a. All dischargers that conducted non-visible pollutant monitoring shall electronically submit through SMARTS all field and/or analytical sampling results within 30 days after obtaining the analytical result or within 10 days after if the analytical results demonstrate the exceedance of an applicable TMDL-related numeric action level or numeric effluent limitation or Basin Plan parameter.
- IV.B.3.b. All dischargers that exceeded an applicable TMDL-related numeric action level shall prepare a Numeric Action Level Exceedance Report when requested, in writing, from a Regional Water Board delegate and shall submit and certify each Numeric Action Level Exceedance Report through SMARTS within 30 days of receiving the written request, in accordance with Section IV of this General Permit's Order.

- IV.B.3.c. The Numeric Action Level Exceedance Report shall include:
- i. The analytical method(s), method reporting unit(s), and method detection limit(s) for each parameter;
 - ii. The date, place, time of sampling, visual inspections, and/or measurements, including precipitation; and
 - iii. An assessment of the existing BMPs associated with the sample that exceeded the numeric action level, a description of each corrective action taken including photographs, and date of implementation.
- IV.B.3.d. All dischargers that prepared a Numeric Action Level Exceedance Report shall retain a copy of the report for a minimum of three years after the date the exceedance report is certified and submitted.
- IV.B.3.e. All dischargers that exceed an applicable TMDL-related numeric effluent limitation shall comply with the water quality-based corrective action requirements in Section VI.Q of the Order.

Appendix 4: Inspection Forms and Instructions

Inspection Form Instructions:

Your subscription of Storm comes with a complimentary subscription to the Weekly.io inspection app. To access the weekly and storm event inspection forms, you will need to be provided a login from Storm for the Weekly.io inspection app. To set up an account, please send an email to andrew@getstorm.io. You will then need to create a “project” within the inspection app for this construction site, including the names and email addresses for all those who should receive an emailed copy of completed and submitted inspection forms. We recommend that the LRP or DAR receive a copy of the completed forms since the discharger is required to maintain all documentation for a period of three years after the NOT approval date.

1. Using a mobile phone (preferred) or a desktop computer, log into Weekly.io at <https://getweekly.io/>



Storm water inspections, simplified.

Sign in**Sign in**[Forgot password?](#)

2. Create or find the project and, for inspections, click on “New Inspection Report.”
3. Follow the instructions in the app to complete the inspection by taking and tagging photos and answering questions. When complete, sign the form entering your name, credentials, and drawing your signature.
4. Completed records can be viewed, downloaded, or emailed on the project dashboard. Records cannot be altered by the user once they have been submitted. To correct an inspection or other record, resubmit a separate inspection report and delete the previous version.

Appendix 5: Laboratory Chain-of-Custody Form

[illegible]

Sample Received Intact: Yes No										Temperature received: Ice No ice											
Relinq. by sampler (Sign & Print Name)										Date Time		Received by (Sign & Print Name)									
Relinquished by										Date Time		Received by									
Relinquished by										Date Time		Received by laboratory					Date Time				

Appendix 6: WDID Number Posting

Project Name: Storm Business Park

WDID: 4Example12345

Project Start Date: March 17, 2026

Project End Date: December 31, 2027

Appendix 7: Spill Prevention, Control, and Response Procedures

Spill Prevention, Control, and Response Procedures

1. Determine what was spilled and make a quick assessment of whether or not it is safe to take corrective action. Use Safety Data Sheets to help identify potential hazards and necessary personal protective equipment (PPE). If there is any threat to life, property, or the environment, immediately call 911.
2. If safe to proceed, stop the discharge of material by taking action such as closing a valve, up righting an overturned container, or creating a temporary plug or berm.
3. Create an exclusion zone to prevent persons, equipment, and vehicles from passing through the spilled material. Use other personnel to wave off in coming traffic or place traffic cones, delineators, or other barricades to redirect traffic around the spilled material.
4. Using assigned and trained personnel (as identified in the SWPPP Roster), immediately deploy the onsite spill kit and/or absorbent materials to contain and clean up the spilled material. The following is a list of materials present on-site or readily available to respond to the spilled material:

Item	Quantity	Location
55-gallon spill kit	2	Both near the designated fueling area
Granular absorbent	2 bags	Connex box in the staging area
Shovels, rakes, and other hand tools	Multiple options	Connex box in the staging area and on contractor vehicles

* QSD to field verify and amend this section after the initial 30-day site visit.

5. If the spill is larger than can be handled by onsite resources, contact one of the following spill cleanup contractors:

Organization	Telephone number
ACT Enviro (Spill clean-up & hazardous waste management)	(866) 348-2800 (for emergencies) (866) 333-9222 (for non-emergencies) (Establish credit prior to a spill)
Patriot Environmental Services (Small to large spill clean-up and hazardous waste management)	(800) 624-9136 (Establish credit prior to a spill)

6. Make both internal and external notifications as required by law and company policy. Note that a spill of any amount of hazardous waste or materials (including fuels and oils) that enters a municipal drainage system or Waters of the United States, or a spill of 42 gallons or more to the ground, must be reported to the Governor's Office of Emergency Services (OES). The Regional Water Quality Control Board and the local MS4 should also be notified of spills reported to OES. Refer to the SWPPP Roster for Regional Board and

MS4 contact information.

Organization	Telephone number
Local Fire Department	911
California Governor's Office of Emergency Services (OES)	(800) 852-7550 https://www.caloes.ca.gov/office-of-the-director/operations/response-operations/fire-rescue/hazardous-materials/spill-release-reporting

Legally Responsible Person:

Name	Org	Address	Phone	Email
John Martz	RGW Development Corporation	10 Gene Autry Way Anaheim, CA 92802	(562) 799-8510	Jmartz@rgwcorp.com

7. Immediately clean up and properly dispose of all used absorbents, PPE, and other materials contaminated with the spilled material. Do not discard in the trash, but follow State and Federal hazardous waste regulations for packaging, labeling, transport, and disposal.
8. As necessary, replace and refresh damaged BMPs and add BMPs to mitigate potential ongoing effects of the spilled material on storm water quality.
9. Document the spill incident and corrective actions so they can be included in the Annual Report documentation.

Appendix 8: Risk Level Calculation Methodology

Purpose

This appendix explains how Storm calculates project-specific Risk Levels for compliance with the Construction General Permit (Order WQ 2022-0057-DWQ). The process follows the State Water Board's *Risk Determination Worksheet* with modifications to streamline data retrieval through API calls.

Step 1 – Sediment Risk

Sediment risk is determined by calculating the watershed erosion estimate:

$$A = \text{Watershed Erosion (tons/acre)} = R \times K \times LS$$

Storm obtains each factor as follows:

- **Rainfall Erosivity (R Factor)**
 - **Source:** U.S. EPA Rainfall Erosivity Calculator (lew.epa.gov).
 - **Method:** The project's latitude/longitude and construction start/end dates are submitted via API. The returned R factor reflects cumulative erosivity over the actual construction period, not a fixed annualized value.
- **Soil Erodibility (K Factor)**
 - **Source:** NRCS soil survey data, processed per the State Water Board's *RUSLE K Factor Methodology*.
 - **Method:** Storm retrieves an areally weighted K factor through ArcGIS services, which reference NRCS soils data. This replaces the manual nomograph method described in the worksheet.
- **Length-Slope (LS Factor)**
 - **Source:** 30 m digital elevation model (DEM), processed per the State Water Board's *RUSLE LS Factor Methodology*.
 - **Method:** Storm queries ArcGIS services to obtain the weighted LS factor for the project footprint, in place of manual table lookups.
- **Sediment Risk Classification**
 - Storm multiplies the R, K, and LS factors to estimate watershed erosion. Results are classified using the Permit thresholds:
 - < 15 tons/acre = **Low** sediment risk
 - 15–74.9 tons/acre = **Medium** sediment risk
 - ≥ 75 tons/acre = **High** sediment risk

Step 2 – Receiving Water Risk

Receiving water risk is determined by whether the project drains to sensitive waterbodies.

- **Source:** State Water Board's *High Receiving Water Risk Watershed GIS dataset*.
- **Method:** Storm automatically queries ArcGIS to check if the project location falls within a watershed designated high-risk because it:
 1. Discharges to a 303(d)-listed sediment-impaired waterbody,
 2. Falls under a sediment-related TMDL, or
 3. Has beneficial uses of SPAWN, MIG, or COLD.

If any of these apply, the site is classified as **High Receiving Water Risk**; otherwise, **Low Receiving**

Water Risk.

Step 3 – Combined Risk Level

Storm combines sediment risk (Step 1) with receiving water risk (Step 2) using the Permit's matrix:

Sediment Risk	Receiving Water Risk	Risk Level
Low	Low	1
Low	High	2
Medium	Low	2
Medium	High	3
High	Low	3
High	High	3

The final Risk Level (1, 2, or 3) is automatically generated and included in this SWPPP.

Geocoding Methodology

Accurate spatial data underpins all calculations. Storm.io geocodes the project's address using the Google Maps API, ensuring reliable latitude/longitude coordinates. These coordinates are used to query all other data services.

Notes on Application Modifications

- **Automated Retrieval:** Instead of manual worksheets, nomographs, or tables, Storm queries ArcGIS and EPA APIs directly.
- **Time-Specific R Factor:** R factor is tailored to the project's construction schedule, not just regional annual averages.
- **Consistency:** Google Maps geocoding ensures uniform location inputs across projects.

References

- State Water Resources Control Board, *Attachment D.1: Risk Determination Worksheet*
- State Water Resources Control Board, *High Receiving Water Risk Watershed GIS Methodology* (2018)
- State Water Resources Control Board, *RUSLE K Factor Watershed Map Methodology*
- State Water Resources Control Board, *RUSLE LS Factor Watershed Map Methodology*
- U.S. EPA, *Rainfall Erosivity Factor (R) Calculator* (lew.epa.gov)