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LINEAR UNDERGROUND AND OVERHEAD PROJECT REQUIREMENTS

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

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Dischargers with linear underground and overhead projects shall submit Permit Registration Documents in accordance with application requirements in section II.B of the General Permit, the applicable General Permit requirements, and specific requirements in this Attachment.

I. CONDITIONS FOR GENERAL PERMIT COVERAGE

A. Linear Underground and Overhead Projects (LUPs)

1. Linear Underground and Overhead Projects (LUPs) include, but are not limited to, pipeline or any other conveyance system for the transportation of any gaseous or liquid including:

    a. Water, wastewater and recycled water,

    b. Liquescent and slurry substances;

    c. Electrical lines and wire for the transmission of energy or communications (e.g., telephone, telegraph, radio, or television messages); and

    d. Associated facilities such as substations, and ancillary facilities.

2. Construction activities associated with LUPs include, but are not limited to:

    a. Activities necessary for the installation of underground and overhead linear facilities (e.g., conduits, substructures, pipelines, towers, poles, cables, wires, connectors, switching, regulating and transforming equipment, vegetative management, and associated ancillary facilities); and;

    b. Activities including underground utility mark-out, potholing, concrete and asphalt cutting and removal, trenching, excavation, boring and drilling, access road and pole/tower pad and cable/wire pull station, substation construction that will disturb less than one acre, substructure installation, construction of tower footings and/or foundations, pole and tower installations, pipeline installations, welding, concrete and pavement repair or replacement, and stockpile/borrow locations.

3. The discharger shall evaluate each of its LUPs for its application of coverage under this General Permit by:

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a. Confirming the project or project section(s) qualifies as an LUP in Attachment A.1. Linear Underground and Overhead Project Area Type Determination.

b. Identifying applicable Project Type(s) per Section VII of this Attachment, and Attachment A.1 for each project or project sections.

c. Justifying an alternative project risk as applicable to Project Types 1, 2 and 3.

d. Determining the percentages of sand, very fine sand, silt, and clay on the LUP site through analysis of soil particle size using the Revised Universal Soil Loss Equation (RUSLE) K-Factor - ASTM D-422 (Standard Test Method for Particle-Size Analysis of Soils as revised);

4. The discharger shall obtain General Permit coverage per each project through one or more applications submitted through the State Water Board Stormwater Multiple Application and Report Tracking System (SMARTS), per requirements in Attachment A.1 and A.2 of this General Permit.

5. Regulatory Coverage for LUP Segments

   a. The discharger may separate a large LUP into separately-regulated segments if construction is non-continuously phased or constructed by different contractors.

   b. The discharger shall include a clear description in the Permit Registration Documents regarding how each LUP segments relates to the overall LUP by identifying one or more of the following descriptions:

      i. LUP segment boundaries managed by separate contractors;

      ii. LUP segment construction time periods (e.g. project phases) with distinct construction time periods; or

      iii. Corresponding LUP segments cross Regional Water Board(s) boundaries (e.g. different segments of same LUP located within different Regional Water Board jurisdictions).

6. The discharger shall obtain approval of its application for General Permit coverage prior to the commencement of construction activities for each LUP, or LUP segment as applicable.

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B. Permit Registration Documents for LUPs

1. The discharger shall assure that all information in its Permit Registration Documents:

    a. Comply with the Homeland Security Act and other federal law addressing security in the United States.

    b. Include required documentation, processes, and methods provided in Attachment A.2 of this General Permit.

2. In the case of a public emergency requiring immediate construction activities, the discharger shall email a brief description of the emergency construction activity to the applicable Regional Water Board within five days of the onset of construction, and certify and submit all Permit Registration Documents through SMARTS within thirty (30) days of initiation of construction.

C. Continued Regulatory Coverage from Previous Permit

1. A discharger with current regulatory coverage under the Previous shall comply with the application requirements of Section II.C of this General Permit.

D. Small Construction Rainfall Erosivity Waiver

1. The discharger shall comply with applicable Small Construction Rainfall Erosivity Waiver provisions in Section II.D of this General Permit for applicable provisions.

2. A discharger may qualify for a Small Construction Rainfall Erosivity Waiver for its LUP if:

    a. The total project site size is less than 5 acres, and;

    b. The R factor for each project or and/or individual project segment, determined using the U.S. EPA Rainfall Erosivity Calculator Website in accordance with requirements in Attachment B of this General Permit, is less than 5.

II. AUTHORIZED NON-STORMWATER DISCHARGES

1. The dischargers shall comply with Section II.E of the Order of this General Permit for applicable provisions.

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III. DEMOLITION

1. The dischargers shall comply with Section II.F of the Order of this General Permit for applicable provisions

IV. DEWATERING DISCHARGES

1. The dischargers shall comply with Section II.G of the Order of this General Permit for applicable provisions.

V. REVISING COVERAGE FOR CHANGE OF ACREAGE

1. The discharger may reduce the total acreage covered by this General Permit when a portion of an LUP changes, or when a phase within a multi-phase project is completed. The Legally Responsible Person shall electronically certify and submit a Change of Information through SMARTS to revise the following information in Permit Registration Document(s) or to reduce the acreage covered by this General Permit:

    a. Areas that have completed construction;

    b. New LUP size;

    c. LUP Conditions for Termination of Coverage;

    d. Certification that any new Legally Responsible Person has been notified of applicable requirements of their General Permit coverage. The certification shall include the name, address, telephone number, and e-mail address (if known) of the new Legally Responsible Person;

    e. Revised site map(s) showing the acreage of the completed project that meets the conditions for termination of coverage, acreage currently under construction, acreage sold, transferred or added, and acreage currently stabilized; or,

    f. SWPPP revisions.

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

VI. REVISING CONSTRUCTION DATES

1. The Legally Responsible Person shall recalculate the overall risk level of the project or segment for the duration of the LUP when the start or completion dates change. The discharger shall

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electronically certify and submit Permit Registration Document revisions through SMARTS including:

a. Change of Information indicating the revised construction dates;

b. SWPPP revisions as appropriate; and,

c. Recalculation of the Sediment Risk through SMARTS.

VII. LUP CONDITIONS FOR TERMINATION OF COVERAGE

1. Terminating General Permit coverage is accomplished through the Notice of Termination process submitted through SMARTS. The Legally Responsible Person shall electronically certify and submit the required documentation to demonstrate compliance with all General Permit requirements and thereby certify the construction activities are completed.

2. A Notice of Termination submittal certifies that all General Permit requirements have been met. The Legally Responsible Person shall electronically certify and submit the following through SMARTS to be considered for General Permit coverage and annual fee billing termination:

   a. Notice of Termination;

   b. QSD-prepared final Notice of Termination compliance observations with the QSD's name, and valid QSD certificate number or professional engineer/geologist license;

   c. Final LUP map;

   d. Photos demonstrating LUP final stabilization; and,

   e. Long-term maintenance plan including any Memorandum of Understanding (MOU) or contract for maintenance.

3. The new owner shall be notified by the previous owner or owner-agent of the existence of all conditions and agreements to assure compliance before the LUP title is transferred to another person during construction or post-construction.

4. The Regional Water Board will consider an LUP complete and the Notice of Termination approved only when all segments and portions of the LUP have been transferred to a new owner with General Permit coverage for the LUP, or the LUP complies with all the following conditions:

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a. The discharger has completed all construction activity and final stabilization requirements, construction-related equipment and temporary BMPs have been removed from the site, construction materials and wastes have been disposed of properly, soils disturbed by construction activities have been stabilized, and there is no greater potential for construction-related stormwater pollutants to be discharged into LUP runoff than prior to the construction activity.

b. Final stabilization materials shall:

    i. Have a product life that supports the full and continued stabilization of the site;

    ii. Achieve stabilization without becoming trash or debris; and,

    iii. Minimize the risk of wildlife entrapment.

c. The discharger has ensured a QSD developed and completed on-site visual observations, verified the LUP complies with Notice of Termination requirements, and has included this information in the Notice of Termination certified and submitted through SMARTS;

d. The discharger shall demonstrate that the LUP complies with all Notice of Termination conditions above and all final stabilization conditions by one of the following methods:

    i. 70 percent final cover method. No computational proof required. Requires permanent vegetative cover to be established over 70 percent of any areas of exposed disturbed soil (non-paved or non-built). In areas that naturally have low vegetation coverage (e.g., deserts), 70 percent of natural conditions is acceptable. Photos of all LUP areas are required to verify compliance with the 70 percent final cover requirement.

    OR:

    ii. RUSLE or RUSLE2 method. Computational proof required. LUP area conditions shall match values used in method computation. Photos of all LUP areas are required to verify pre-construction and post-construction conditions used in the computations.

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OR:

iii. Custom method. The discharger shall use an analytical model other than ii above to demonstrate that the LUP complies with the "final stabilization" requirements. Photos of all LUP areas are required to verify the custom method used.

e. The final LUP map shall, at minimum, include the following:

i. Elevation contours;

ii. Project boundaries and adjacent lands;

iii. Developed drainage basin boundaries and discharge location points;

iv. Site entrances and exits, lot boundaries, roads, structures, and features related to the project that may be used as a reference;

v. Specific permanent erosion control BMPs, post-construction BMPs, and post-construction low impact development features (if applicable);

vi. Individual erosion control BMPs (including final landscaping) identified using hatch patterns, symbols, or shading unique to each BMP;

vii. Location and orientation of all photos used to document final site conditions and demonstrate compliance with post-construction requirements of this General Permit; and,

viii. If applicable, areas of the site being transferred to new ownership, and the name and contact information of the new Legally Responsible Person.

5. The Notice of Termination photo documentation for General Permit compliance verification shall include photos of the site's final site conditions; any post-construction low impact development features (e.g., stormwater capture/treatment features); a description of the corresponding location and orientation of photos as indicated on the final site map; and,

a. The Notice of Termination shall include information on the specification used and where to find the specification when

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post-construction features are constructed in accordance with local municipal codes and/or ordinances.

6. The Notice of Termination is automatically approved 30 calendar days after the date of Notice of Termination submittal, unless, within the 30 calendar days the Regional Water Board notifies the discharger through SMARTS that the Notice of Termination has been denied, returned, or accepted for review.

7. All General Permit requirements remain in effect until the Notice of Termination is approved. The Legally Responsible Person will be notified through SMARTS communication when the discharger's permit coverage and corresponding WDID number are terminated.

VIII. DISCHARGE PROHIBITIONS

1. The discharger shall comply with the Section III of the Order of this General Permit, Discharge Prohibitions.

IX. SPECIAL PROVISIONS

1. The discharger shall comply with Section IV of this General Permit, Special Provisions, as applicable.

X. EFFLUENT LIMITATIONS[1]

A. Narrative Effluent Limitations

1. Dischargers shall ensure that stormwater discharges and authorized non-stormwater discharges regulated by this General Permit do not contain a hazardous substance equal to or in excess of reportable quantities established in 40 Code of Federal Regulations §§ 117.3 and 302.4, unless a separate NPDES Permit has been issued to regulate those discharges.

2. Dischargers shall minimize or prevent pollutants in stormwater discharges and authorized non-stormwater discharges using structural or non-structural controls, structures, and management practices that achieve Best Available Technology (BAT) for toxic and non-conventional pollutants and Best Control Technology (BCT) for conventional pollutants.

[1] Terms including, but not limited to, Responsible Discharger, numeric action levels and exceedances, and numeric effllluent limitations and exceedances are defined in Appendix 2 of this General Permit.

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B. Numeric Action Levels (NALs)

1. The lower precipitation event NAL for pH is 6.5 pH units and the upper precipitation event NAL for pH is 8.5 pH units. The precipitation event NAL for turbidity is 250 Nephelometric Turbidity Units (NTU). The discharger shall take actions as described below if the precipitation event discharge is outside of this pH range or exceeds the turbidity value.

2. LUP Type 1 dischargers are not subject to the above NALs.

3. LUP Type 2 dischargers are subject to a pH NAL of 6.5-8.5 and a turbidity NAL of 250 NTU. In addition, LUP Type 2 dischargers are potentially subject to NALs associated with an applicable TMDL, if they are Responsible Dischargers for any TMDLs listed in Table H-2 of Attachment H.

4. LUP Type 3 dischargers are subject to a pH NAL of 6.5-8.5 and a turbidity NAL of 250 NTU. In addition, LUP Type 3 dischargers are potentially subject to NALs associated with an applicable TMDL, if they are Responsible Dischargers for any TMDLs listed in Table H-2 of Attachment H.

5. Whenever analytical effluent monitoring results indicate that the discharge is below the lower NAL for pH, exceeds the NAL for pH, exceeds the turbidity NAL (as listed in Table 1), or exceeds a TMDL-related NAL, the discharger shall conduct an LUP and run-on evaluation to determine whether pollutant source(s) associated with the LUP's construction activity may have caused or contributed to the NAL exceedance and shall immediately implement any necessary corrective actions.

6. For all analytical results less than the minimum level (reporting limit), as reported by the laboratory, will be assigned a value of zero (0) for any 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.

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

    a. Are related to the construction activities and whether additional BMPs or SWPPP implementation measures are required to: (1) meet BAT and BCT requirements; (2) reduce or prevent pollutants in stormwater discharges from causing

exceedances of receiving water objectives; and (3) determine what corrective action(s) were taken or will be taken and with a description of the schedule for completion;

or

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

Table 1 - pH and Turbidity Numeric Action Levels, Test Methods, Detection Limits and Reporting Units

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

C. Numeric Effluent Limitations (NELs)

1. LUP Type 1 dischargers are subject to turbidity NELs for active treatment systems defined in Attachment F. LUP Type 1 dischargers are potentially subject to NELs associated with an applicable TMDL, if they are Responsible Dischargers for any TMDL listed in Table H-2 of Attachment H.

2. LUP Type 2 dischargers are subject to turbidity NELs for active treatment systems defined in Attachment F. LUP Type 2 dischargers are potentially subject to NELs associated with an applicable TMDL, if they are Responsible Dischargers for any TMDL listed in Table H-2 of Attachment H.

3. LUP Type 3 dischargers are subject to turbidity NELs for active treatment systems defined in Attachment F. LUP Type 3 dischargers are potentially subject to NELs associated with an applicable TMDL, if they are Responsible Dischargers for any TMDL listed in Table H-2 of Attachment H.

4. For all analytical results less than the minimum level (reporting limit), as reported by the laboratory, will be assigned a value of zero (0) for any 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.

XI. RECEIVING WATER LIMITATIONS

A. All dischargers shall comply with:

1. Section VI of this General Permit's Order, Receiving Water Limitations;

2. Applicable TMDLs identified in Attachment H; and,

3. Applicable provisions of Section VII of this General Permit's Order, Discharges Subject to the California Ocean Plan.

XII. SITE PERSONNEL TRAINING QUALIFICATIONS

A. General

1. All persons responsible for implementing requirements of this General Permit shall be appropriately trained. Training should be both formal and informal, occur on an ongoing basis, and should include training offered by recognized governmental agencies or professional organizations.

2. All dischargers shall comply with requirements in Section VIII of this General Permit's Order and with the requirements in this Section to ensure compliance for persons responsible for implementing this General Permit, preparing, amending, and/or certifying SWPPPs.

B. Storm Water Pollution Prevention Plan (SWPPP) Certification Requirements

1. Qualified SWPPP Developer (QSD)

    a. The discharger shall ensure that all SWPPPs be written, amended, and certified by a Qualified SWPPP Developer (QSD).

    b. The discharger shall ensure that the SWPPP is written and amended, as needed, to address the specific circumstances for each LUP covered by this General Permit prior to commencement of construction activity for any phase or stage.

    c. The discharger shall include a listing of the date of initial preparation and the dates of each amendment in the SWPPP.

    d. The discharger shall list the name and telephone number of the currently designated QSD in the SWPPP.

2. Qualified SWPPP Practitioner (QSP)

    a. The discharger shall ensure that all SWPPP elements for each LUP will be implemented by a Qualified SWPPP Practitioner (QSP). A QSP is a person responsible for non-stormwater and stormwater visual inspections, sampling and analysis, and for implementation of this General Permit and all SWPPP elements.

    b. The discharger shall ensure that the SWPPP includes a list of names of all contractors, subcontractors, and individuals who will be directed by the QSP, and who is responsible for implementation of the SWPPP. This list shall include telephone numbers, work addresses, specific areas of responsibility of each delegate or subcontractor, and emergency contact numbers.

XIII. LINEAR UNDERGROUND AND OVERHEAD PROJECT (LUP) TYPES

1. LUPs are identified as one of three types of complexity (Type 1, 2, and 3) based on the LUP area or segment's threat to water quality. Project area Types are determined through SMARTS and clarified with guidance in Attachment A.1. If a site-specific sediment risk is proposed other than the one calculated through SMARTS, the discharger shall report a soil particle size analysis used to determine the RUSLE K-Factor using ASTM D-422 (Standard Test

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Method for Particle-Size Analysis of Soils), to determine the percentages of sand, very fine sand, silt, and clay on the site.

2. The Type 1 requirements below establish the baseline requirements for all LUPs subject to this General Permit. All LUP projects must meet the baseline requirements of Type 1 LUP projects. Additional requirements for Type 2 and Type 3 LUPs are labeled.

A. Type 1 LUPs

1. The discharger must electronically submit a Type 1 LUP determination through SMARTS. A discharger with LUP areas designated as Type 1 shall comply with the following requirements Type 1 LUPs:

    a. Construction areas, where 70 percent or more of the construction activity occurs on a paved surface, shall be returned to preconstruction conditions or equivalent protection established at the end of the construction activities for the day;

    or

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

        i. Shall be returned to preconstruction conditions or equivalent protection established at the end of the construction activities for the day to minimize the potential for erosion and sediment deposition; and,

        ii. Shall stabilize and re-vegetate existing vegetated areas disturbed by construction activities by the end of project. When required, adequate temporary stabilization BMPs will be installed and maintained until vegetation is established to meet minimum cover requirements established in this General Permit for final stabilization.

B. Type 2 LUPs

1. The discharger must electronically submit a Type 2 LUP determination through SMARTS. Project Type 2 LUP determination

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

a. High sediment risk, low receiving water risk; or,

b. Medium sediment risk, medium receiving water risk; or,

c. Low sediment risk, high receiving water risk.

2. The discharger shall identify receiving water risk as “Low” for those areas of the project that are not within a high-risk receiving-water watershed, “Medium” for those areas of the project within a high-risk receiving-water watershed yet outside of the flood plain of the high-risk receiving water body, and “High” where the construction activity is within close proximity to a high-risk receiving water body.

C. Type 3 LUPs

1. The discharger must electronically submit a Type 3 LUP determination through SMARTS. Type 3 LUPs are determined by the Combined Risk Matrix in Attachment A.1. Type 3 LUPs have the specified combination of risk:

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

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

   c. Medium sediment risk, high receiving water risk.

2. The discharger shall identify receiving water risk as “Medium” for those areas of the project within a high-risk receiving-water watershed yet outside of the flood plain of the high-risk receiving water body, and “High” where the construction activity is within close proximity to a high-risk receiving water body.

XIV. LUP MINIMUM BEST MANAGEMENT PRACTICES

The discharger shall implement and maintain all of the following minimum BMPs, to the extent feasible, to reduce or prevent pollutants in construction stormwater discharges.

A. Good Site Management "Housekeeping"

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

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

b. Apply appropriate BMPs to erodible stockpiled construction materials (e.g., soil, spoils, aggregate, fly-ash, stucco, hydrated lime, etc.) to prevent erosion.

c. Store chemicals in watertight containers with appropriate secondary containment to prevent any spillage or leakage or in a complete enclosed storage shed.

d. Minimize exposure of construction materials to precipitation. This does 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, etc.).

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

f. Prevent the discharge of plastic materials and limit the use of plastic materials when more sustainable, environmentally friendly alternatives exist. Where plastic materials are deemed necessary, the discharger shall consider the use of plastic materials resistant to solar degradation.

2. Discharger 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, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge.

b. Ensure the 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 inspecting them regularly for leaks and spills.

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d. Trash must be placed 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 (e.g., containers with solid bottoms and regular maintenance) from waste disposal containers to the stormwater drainage system or receiving water.

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

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

i. Develop a spill response and implementation element of the SWPPP prior to commencement of construction activities, requiring:

    i. Spill and leak equipment and materials to be available on-site, cleaned up immediately, and disposed of properly; and,

    ii. Appropriate spill and leak response personnel are assigned and trained.

j. Ensure the containment of concrete washout areas and other washout areas that may contain additional pollutants so there is no discharge into the underlying soil and onto the surrounding areas. This includes covering the area at the end of every business day and during a precipitation event.

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

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

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

    c. Clean leaks immediately and dispose of leaked materials properly.

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

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

    b. Containment of fertilizers and other landscape materials when they are not actively being used.

    c. Discontinuation of the application of any erodible landscape material at least 2 days before a forecasted precipitation event[2] or during periods of precipitation.

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

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

5. The discharger's QSD shall conduct an assessment, create a list of potential pollutant sources (Pollutant Source Assessment), and identify any LUP areas where additional BMPs are necessary to reduce or prevent pollutants in stormwater discharges and authorized non-stormwater discharges. This potential pollutant list shall be kept with the SWPPP and shall identify all non-visible pollutants which are known, or should be known, to occur on the LUP. Dischargers shall do the following at a minimum when developing BMPs:

    a. Consider potential sources of pollutants associated with applicable TMDLs listed in Attachment H and state whether sources of those pollutants are present on site.

    b. Consider the quantity, physical characteristics (e.g., liquid, powder, solid), and locations of each potential pollutant source handled, produced, stored, recycled, or disposed of at the LUP.

    c. Consider the degree to which pollutants associated with those materials may be exposed to and mobilized by contact with stormwater.

[2] A forcasted precipitation event has a probability of precipitation of 50% or greater.

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

e. Ensure retention of sampling, visual inspection, and inspection records.

f. Ensure effectiveness of existing BMPs to reduce or prevent pollutants in stormwater discharges and authorized non-stormwater discharges.

g. Dischargers shall implement good housekeeping measures on the LUP to control the air deposition of site materials and from site operations. Such particulates can include, but are not limited to, sediment, nutrients, trash, metals, bacteria, oil and grease and organics.

B. Non-Stormwater Management

1. Dischargers shall implement the following measures to control all non-stormwater discharges during construction:

2. Wash vehicles in such a manner as to prevent non-stormwater discharges to surface waters or MS4 drainage systems;

3. Clean streets in such a manner as to prevent unauthorized non-stormwater discharges from reaching surface water or MS4 drainage systems; and,

4. Eliminate any non-stormwater discharges that are not specified in Section II.E of this General Permit's Order, Authorized Non-Stormwater Discharges.

C. Preservation of Existing Topsoil

1. Dischargers shall implement the following practices to preserve existing topsoil:

2. Stockpile existing topsoil during construction and deploy when feasible to reestablish native vegetation prior to termination of coverage; and;

3. Stabilize disturbed topsoil during construction and as part of final stabilization Notice of Termination requirements in Section VII above.

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D. Erosion Control

1. Dischargers shall implement the following practices to eliminate or minimize site erosion:

2. Implement effective wind erosion controls;

3. Preserve existing vegetation;

4. Schedule earthwork to minimize the amount of disturbed area during periods of high rainfall potential when feasible;

5. Stabilize exposed soils disturbed by construction activities by designing, installing, and maintaining BMPs that minimize erosion. Temporary or permanent BMPs shall be applied within 14 days of completing earthwork in a specific area or prior to a precipitation event forecasted with greater than 50% probability whichever is sooner;

6. Ensure erosion control BMPs are available on-site when not deployed with on-site staff able to deploy the product under the direction of the QSP;

7. Reestablish vegetation or non-vegetative erosion controls as soon as practicable;

8. 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;

9. Limit the use of plastic materials when more sustainable, environmentally friendly alternatives exist. Where plastic materials are deemed necessary, the discharger shall consider the use of plastic materials resistant to solar degradation;

10. Control stormwater and non-stormwater discharges to minimize downstream channel and bank erosion; and,

11. 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.

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E. Sediment Controls

1. Dischargers shall implement the following on-site sediment controls:

2. Establish and maintain effective perimeter controls;

3. Stabilize all construction entrances and exits to sufficiently control erosion and sediment discharges from the site;

4. Design, install, and maintain effective sediment controls to minimize the discharge of pollutants utilizing site-specific BMPs. Dischargers utilizing sediment ponds shall complete installation prior to other land disturbing activities, when feasible; and,

5. At a minimum, design sediment basins according to the CASQA's current Construction BMP Guidance Handbook.

F. Additional LUP Type 2 and 3 Requirements:

1. At LUP Type 2 and 3 sites, dischargers shall implement the following:

    a. Cut and fill slopes are designed and constructed 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. Linear sediment controls are used in conjunction with erosion control BMPs; and,

    c. Linear sediment controls are installed along the toe of the slope, face of the slope, and at the grade breaks of exposed slopes and comply with the Table 2 sheet flow lengths until slope has reached Notice of Termination conditions for erosion protection.

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Table 2 - Critical Slope and Sheet Flow Length Combinations for Linear Sediment Reduction Barrier

Slope Ratio Horizontal: Vertical	Sheet flow length not to exceed
0 to 20:1	Per QSDs specification.
> 20:1 to ≤ 4:1	35 feet
> 4:1 to ≤ 3:1	20 feet
> 3:1 to ≤ 2:1	15 feet
> 2:1	10 feet

2. The QSP reports any indications of erosion, channelization, or rills to the QSD after site inspections. Additional sediment and erosion control BMPs are installed based on the QSP inspections and QSD SWPPP amendments.

3. Construction activity traffic to and from the project is limited to entrances and exits that employ effective controls to prevent off-site tracking of sediment.

4. All storm drain inlets and perimeter controls, runoff control BMPs, and pollutant controls at entrances and exits (e.g. tire wash off locations) are maintained and protected from activities that reduce their effectiveness.

5. All immediate access roads are inspected, at a minimum, daily and prior to any precipitation event. The discharger shall ensure the removal of any excess sediment or other construction activity-related materials that are deposited on the impervious roads by vacuuming or sweeping.

6. Additional site-specific sediment controls are implemented when requested 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).

7. Perform RUSLE 2 calculations for temporary BMP applications during construction which must:

    a. Be included in the SWPPP;

    b. Include the steepest slope and soil types found on the specific site; and,

    c. Be used to determine site-specific BMPs resulting in a sediment loss from the disturbed construction area to be less

than or equal to natural (native vegetation for the area) conditions.

8. Dischargers implementing an equally protective alternate to RUSLE 2 shall include in the SWPPP a technical site-specific explanation developed by the QSD for the alternate method and the site-specific RUSLE 2 calculations.

G. Surface Water Buffer

1. Provide and maintain natural buffers and/or equivalent erosion and sediment controls when a water of the United States is located within 50 feet of the site's earth disturbances.

2. The discharger must comply with one of the following alternatives for any discharges to Waters of the United States located within 50 feet of a site's earth disturbances:

    a. Provide and maintain a 50-foot undisturbed natural buffer; or

    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; or,

    c. Implement erosion and sediment controls to achieve the sediment load reduction equivalent to a 50-foot undisturbed natural buffer when it is infeasible to provide and maintain an undisturbed natural buffer of any size.

H. Pesticide Application

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

2. LUP dischargers are prohibited from exposing pesticide treated soil to a precipitation event. All areas treated with pesticide including but not limited to pre-construction application of pesticide for termites must be covered with an impermeable barrier such as concrete or plastic sheeting within 24 hours of application or prior to a precipitation event whichever occurs first.

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I. Inspection, Maintenance, and Repair

1. The discharger shall ensure that all inspection, maintenance, repair, and sampling activities at the project location shall be performed or supervised by a Qualified SWPPP Practitioner (QSP) representing the discharger. The QSP may delegate inspection, maintenance, and repair activities to personnel under their supervision appropriately trained to do the task(s).

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

3. The discharger shall implement repairs or design changes (review options that have not been used yet) to BMPs within 72 hours of identification of failures or other short comings.

4. For each inspection required, the discharger shall complete an inspection checklist, using a form provided by the Water Boards or in an alternative format.

5. The discharger shall ensure that checklists remain on-site with the SWPPP and, at a minimum, shall include:

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

    b. Weather information, including the presence or absence of precipitation, an estimate of the beginning of the precipitation event, duration of the event, time elapsed since the last storm, and the approximate amount of precipitation in inches;

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

    d. Description of any BMPs evaluated and any deficiencies noted;

    e. If the construction site is safely accessible during inclement weather, a list of the inspections of all BMPs including erosion controls, sediment controls, chemical and waste controls, and non-stormwater controls. Otherwise, a list of the results of visual inspections at all relevant outfalls, discharge points, downstream locations, and any projected maintenance activities;

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

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

h. Photographs of areas of concern prior to rain event and the QSP's description of the problem, if any; and,

i. Inspector's name, title, and certification.

XV. STORMWATER POLLUTION PREVENTION PLAN (SWPPP) REQUIREMENTS

A. Objectives

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

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

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

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

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

   e. BAT and BCT is used on the LUP site to reduce erosion.

B. SWPPP Implementation Schedule

1. LUPs with Permit Registration Documents submitted to the State Water Board shall develop a site-specific SWPPP prior to the start of land-disturbing activity in accordance with this Section and shall implement the SWPPP concurrently with commencement of construction activities.

2. For an ongoing LUP involving a change in the Legally Responsible Person, the new Legally Responsible Person shall review the

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existing SWPPP and amend it, if necessary, or develop a new SWPPP within 15 calendar days to comply with this General Permit's requirements.

C. LUP Maps

1. The discharger shall ensure a QSD includes a site-specific LUP map in the SWPPP, including all project segments. The map(s) shall include the following:

    a. Title Sheet with:

        i. Project Name and LUP type (1, 2, or 3);

        ii. Project Location (Vicinity Map) showing the entire project location;

        iii. Preliminary Schedule of Activities;

        iv. Site Operating Hours (hours when construction activities are occurring);

        v. Index of Attachments;

        vi. Project QSD(s) and QSP(s) contact information (name, phone numbers, license or certification number);

        vii. Signature of QSD(s) who prepared the SWPPP; and,

        viii. Signature of the Legally Responsible Person(s) and the QSP(s).

    b. Pre-Earthwork Drawing with:

        i. Site layout (existing topography) scaled appropriately to see sufficient detail;

        ii. LUP site and segment boundaries;

        iii. Areas disturbed during geotechnical or other preconstruction investigation;

        iv. Existing roads and trails;

        v. Drainage areas;

        vi. Discharge locations;

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vii. Sampling locations;

viii. Locations of erosion control BMPs;

ix. Locations of sediment control BMPs;

x. Locations of associated BMPs for: sensitive habitats, all surface waters including wetlands, undisturbed features, contaminated areas, or other relevant features; and,

xi. Locations of storage areas for waste, vehicle parking, service, loading/unloading of materials, LUP access points (entrance/exits), fueling, water storage, and water transfer for dust control and compaction practices.

c. LUP Construction and Earthwork Drawing(s) with:

i. Site layout (grading plans) including roads;

ii. LUP and segment boundaries;

iii. Drainage areas;

iv. Discharge locations;

v. Sampling locations;

vi. Areas of soil disturbance (temporary or permanent);

vii. Areas of soil disturbance (cut or fill);

viii. Locations of runoff BMPs;

ix. Locations of erosion control BMPs;

x. Locations of sediment control BMPs;

xi. Location of active treatment systems (if applicable);

xii. Locations of sensitive habitats, all surface waters including wetlands, or other features which are not to be disturbed; and,

xiii. Locations of storage areas for waste, vehicle parking, service, loading/unloading of materials, access points (entrance/exits) to LUP, fueling, water storage, and water transfer for dust control and compaction

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practices, and other LUP-specific potential pollutant areas.

D. Availability

1. The SWPPP shall be available at the LUP during site operating hours and shall be made available upon request by a State or Municipal inspector. When the original SWPPP is retained by a crewmember in a construction vehicle and is not currently at the LUP, copies of the BMPs and maps and drawings will be left with the field crew and the original SWPPP shall be made available via a request by radio or telephone.

XVI. MONITORING AND REPORTING REQUIREMENTS

Table 3 - Summary of LUP Monitoring Requirements

LUP Type	Weekly Visual Inspections	Pre-Precipitation Event Visual Inspections	Daily Visual Inspections	Post-Precipitation Event Visual Inspections
1	X		X	
2	X	X	X	X
3	X	X	X	X

Table 4 - Summary of LUP Monitoring Requirements (continued)

LUP Type	Stormwater Discharge Sample Collection	Receiving Water Sample Collection	Non-Visible Sample Collection (when applicable)
1			X
2	X		X
3	X	X	X

A. Objectives

1. A Monitoring and Reporting Program (MRP) shall be developed and implemented to address the following objectives:

    a. The discharger shall prepare a monitoring and reporting program prior to the start of construction and immediately implement the program at the start of LUP construction.

    b. The MRP shall be implemented at the appropriate level to protect water quality at all times throughout the life of the LUP's General Permit coverage.

c. The MRP shall be a part of the SWPPP and included as an appendix or separate SWPPP chapter.

B. MRP Implementation Schedule

1. The discharger shall implement the requirements of this Section at the time of the commencement of construction activity and shall continue implementation until the LUP construction activity is complete and the LUP is stabilized as defined in Section I.J above.

2. The discharger shall revise the MRP when:

   a. LUP conditions or construction activities change such that a change in monitoring is required to comply with the requirements of this General Permit;

   b. The Regional Water Board requires the discharger to revise its MRP based on its review of the document and/or LUP. Revisions may include, but are not limited to, conducting additional site inspections, submitting reports, and certifications. Revisions shall be submitted as a Change of Information through SMARTS.

C. All LUP Type Visual Inspection Requirements

1. The discharger shall ensure that all visual inspections are conducted by a QSD, QSP, or personnel trained by the QSP.

2. The discharger shall include and maintain a log of the inspections conducted in the SWPPP. This log shall include the: inspector name(s) and contact number(s), inspection date and time.

3. The discharger shall ensure that all visual inspections are conducted daily during site operating hours in areas where construction has occurred, or active construction is occurring to verify:

   a. Appropriate BMPs for stormwater and non-stormwater are being implemented in areas where active construction has occurred (including staging areas);

   b. Project excavations are properly protected and road surfaces are cleaned of excavated material and construction materials, such as chemicals, by removing or storing the material in protective storage containers at the end of every construction day; and,

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c. Land areas disturbed during construction are returned to pre-construction conditions or an equivalent protection is used at the end of each workday to eliminate or minimize erosion and the possible discharge of sediment or other pollutants during a precipitation event.

4. The discharger shall ensure that photographs of the site are taken before, during, after precipitation events, and during inspections. Representative photos from every third precipitation event that produces stormwater discharge shall be submitted through SMARTS.

5. The discharger shall ensure the implementation of repairs or design changes to BMPs with failures or shortcomings by trained personnel within 72 hours of identification and complete the changes as soon as possible.

6. The discharger shall implement a visual inspection program for installed temporary and permanent stabilization BMPs to ensure the BMPs are adequately maintained. The discharger shall continue monitoring after active construction is completed; until adequate final stabilization is established; and, in areas where re-vegetation is chosen, vegetative coverage is established to meet the 70 percent final cover method.

7. Inspections may be discontinued in non-active construction areas where construction activities are completed, and final soil stabilization in compliance with the LUP termination of coverage standards in Section I.J.4 is achieved.

D. All LUP Type Monitoring Requirements for Non-Visible Pollutants

1. The discharger shall implement sampling and analysis requirements to monitor non-visible pollutants associated with:

   a. Activities producing pollutants that are not visually detectable in stormwater discharges; and,

   b. Activities which could cause or contribute to an exceedance of water quality objectives in the receiving waters.

2. The Regional Water Quality Control Board may assign additional non-visible pollutant monitoring requirements upon obtaining site-specific information about the potential presence of non-visible pollutants in the LUP stormwater or non-stormwater discharges.

3. The discharger shall conduct sampling and analysis for non-visible pollutants when it is believed pollutants associated with

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construction activities have the potential to be discharged with stormwater runoff due to a failure to implement BMPs, spill, breach, malfunction, failure, and/or any BMP leak. The discharger is not required to sample if one of the conditions described above (e.g., breach or spill) occurs and is immediately cleaned of the material and pollutants and/or BMPs are implemented prior to the next precipitation or snowmelt event.

4. The discharger shall collect samples down-gradient from all discharge locations where the visual inspections were made triggering the monitoring that can be safely accessed. Personnel collecting any LUP stormwater samples shall be trained in water quality sampling procedures.

5. The discharger shall ensure all sampling for non-visible pollutant parameters are analyzed for parameters indicating the presence of pollutants identified in the pollutant source assessment required in Section VIII.A.5 of this Attachment.

6. The discharger shall collect samples during the first two hours of stormwater discharge that occurs during site operating hours.

7. The discharger shall ensure representative discharge samples are collected and analyzed in the field or through a laboratory as specified in Section XVI.D.10 of this Attachment below:

    a. For all identified non-visible pollutant parameters; and/or

    b. For indicator parameters including, but not limited to pH, specific conductance, dissolved oxygen, conductivity, salinity, and Total Dissolved Solids (TDS).

8. The discharger may, or upon written direction by the Regional Water Board delegate(s), collect uncontaminated[3] samples during the first two hours of stormwater discharge that occur during site operating hours. The discharger shall then compare the discharge samples to uncontaminated discharge samples using field analysis or through laboratory analysis. The discharger shall ensure that a sufficiently large sample of stormwater that has not come into contact with the disturbed soil, construction activities, or the materials stored or used on-site (uncontaminated sample) is collected for this comparison.

9. The discharger shall ensure:

[3] Collected at a location unaffected by construction activities.

a. Compliance with Section XVI.H.3 and XVI.H.4 of this Attachment below;

b. Sampling results and records are kept in the SWPPP document in accordance with Section XVI.F of this Attachment;

c. Monitoring requirements in the Monitoring and Reporting Program are updated to address these additional parameters and associated updates are made to the SWPPP's pollutant source assessment; and,

d. All field and/or analytical sampling results are certified and submitted through SMARTS 30 days after obtaining the analytical result or 10 days if the analytical results demonstrate the exceedance of an applicable numeric action level (NAL) or numeric effluent limitation (NEL).

E. All LUP Type Visual Inspection and Sampling Exceptions

1. The discharger shall be prepared to collect samples and conduct visual inspections to meet the minimum visual inspection requirements of this Attachment. The discharger is not required to physically collect samples or conduct visual inspections under the following conditions:

   a. During dangerous weather conditions such as flooding and electrical storms;

   b. Outside of scheduled site operating hours (hours when construction activities are not occurring); or,

   c. When access to the LUP is unsafe.

2. The discharger shall include in the SWPPP and the Annual Report an explanation for any missed sampling or visual inspections required by this Attachment.

F. All LUP Type Monitoring and Reporting Records

1. The discharger shall ensure that all stormwater monitoring information, records, and copies of all reports (including Annual Reports) required by this General Permit be retained for a period of at least three years from the date generated or submitted whichever is later. The discharger may retain records off-site and make them available upon request. These records shall include:

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a. Date, place, time of facility inspections, sampling, visual inspections, and/or measurements, including precipitation;

b. Individual(s) who performed the facility inspections, sampling, visual inspections, and or measurements;

c. Date and approximate time of analyses;

d. Individual(s) who performed the analyses;

e. A summary of all analytical results from the last three years, the method detection limits and reporting units, the analytical techniques or methods used, and all Chain of Custody forms;

f. Quality assurance/quality control records and results;

g. Non-stormwater discharge visual inspections and stormwater discharge visual inspection records (see Section XVI.C above);

h. Visual inspection and sample collection exception records (see Section XVI.C. above); and,

i. Records of any corrective actions and follow-up activities that resulted from analytical results, or visual inspections.

G. LUP Type 1 Monitoring and Reporting Requirements

1. The discharger shall comply with all the Visual Inspection requirements in Section XVI.C of this Attachment.

H. LUP Type 2 and 3 Monitoring and Reporting Requirements

1. LUP Type 2 and 3 Visual Inspection Requirements

a. The discharger shall comply with all the Visual Inspection requirements in Section XVI.C of this Attachment and the additional requirements below.

b. The discharger shall complete an inspection checklist for each required precipitation event inspection, using a format provided by the Water Boards or in an alternative format that includes the information described below. Post-precipitation inspections shall be conducted within 48 hours of when precipitation stops.

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c. The discharger shall develop and maintain a log of the pre- and post-precipitation event inspections and ensure that the checklist remains with the SWPPP. At a minimum, the inspection checklist shall include:

   i. Inspection date and date the inspection report was written;

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

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

   iv. Description of all BMPs evaluated and any noted deficiencies;

   v. List of all the following BMPs inspected if the LUP is safely accessible during inclement weather: erosion controls, sediment controls, chemical and waste controls, and non-stormwater controls. Otherwise, list the results of visual inspections at all relevant outfalls, discharge points, downstream locations and any projected maintenance activities;

   vi. Presence of noticeable odors or of any visible sheen on the surface of any discharges;

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

   viii. Any photographs taken during the visual inspection; and,

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

d. The discharger shall conduct inspections of the LUP prior to precipitation events, during extended precipitation events, and after actual precipitation events to identify areas contributing to a discharge of stormwater associated with construction activity. Pre-precipitation inspections are to ensure that BMPs are properly installed and maintained;

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post-storm inspections are to assure that BMPs have functioned adequately.

e. The discharger shall ensure an LUP visual inspection is conducted at least once each 24-hour period during extended precipitation events to identify and record BMPs: requiring maintenance to operate effectively, with failed implementation, and/or which could fail to operate as intended.

Table 5 - LUP Type 2 and 3 Stormwater Effluent Monitoring Requirements

LUP Type	Frequency	Effluent Monitoring
2	Minimum of 3 samples per day characterizing discharges associated with construction activity from the project areas of construction.	Turbidity, pH, and non-visible pollutant parameters (if applicable)
3	Minimum of 3 samples per day characterizing discharges associated with construction activity from the project areas of construction.	Turbidity, pH, and non-visible pollutant parameters (if applicable)

f. The discharger shall collect stormwater grab samples from sampling locations characterizing discharges associated with activity from the LUP active construction areas.

g. The discharger shall obtain a minimum of 3 samples per day at a minimum interval of 2 hours between samples during discharge and within site operating hours. The discharger shall record time of end of discharge in the monitoring report if discharge does not continue long enough to collect 3 samples. The first sample must be taken within the first two hours of discharge during site operating hours.

h. The discharger shall collect samples of stored or contained stormwater that is discharged subsequent to a precipitation event.

i. The discharger shall ensure that stormwater grab sample(s) obtained are representative of the discharge flow and characteristics.

j. The discharger shall analyze their effluent samples for:

    i. pH and turbidity;

ii. Non-visible pollutant parameters (if applicable); and,

iii. Any additional parameter for which monitoring is required by the Regional Water Board.

2. LUP Type 2 and 3 Stormwater Effluent Sampling Locations

a. The discharger shall perform sampling and analysis of stormwater discharges to characterize discharges associated with construction activity from the entire disturbed project or area;

b. The discharger may monitor and report run-on from surrounding areas if there is reason to believe run-on may contribute to exceedance of numeric action levels and/or numeric action limits; and,

c. The discharger shall ensure that all stormwater sample collection preservation and handling shall be conducted in accordance with the "Stormwater Sample Collection and Handling Instructions" below.

I. LUP Type 2 and 3 Stormwater Sample Collection and Handling Instructions

1. The discharger shall ensure the following during sample collection and handling:

2. Identification of testing parameters and the number of stormwater discharge points that will be sampled.

3. Request the laboratory to provide the appropriate number of sample containers, types of containers, sample container labels, blank Chain of Custody forms, and sample preservation instructions.

4. 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). 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.

5. Only the sample containers provided/specified by the laboratory are used to collect and store samples. Use of any other type of containers could cause sample contamination.

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6. Sample contamination is prevented by not touching or putting anything into the sample containers before collecting stormwater samples.

7. Sample containers are not overfilled. Overfilling can change the analytical results.

8. Each sample container cap is tightly secured without stripping the cap threads.

9. Each sample container is labeled. 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.

10. Carefully pack 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 sample close to 4° C (39° F) until arriving at the laboratory (do not freeze samples).

11. A complete Chain of Custody form is 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, and the analysis that is required for each sample container.

12. Both the signatures of the persons relinquishing and receiving the sample containers is obtained upon shipping/delivering the sample containers.

13. Personnel are designated and trained for the collection, maintenance, and shipment of samples in accordance with the above sample protocols and laboratory-specific practices.

14. The Surface Water Ambient Monitoring Program's (SWAMP) Quality Assurance Program Plan (QAPrP) is referred to for more information on sampling collection and analysis.[4]

[4] Additional information regarding SWAMP's QAPrP can be found at: <https://www.waterboards.ca.gov/water_issues/programs/swamp/quality_assurance.html#qaprp>. [as of October 20, 2020]

Table 6 - pH and Turbidity Test Methods, Detection Limits, Reporting Units and Applicable Numeric Action Levels

Parameter	Test Method	Discharge Type	Method. Detection Limit	Reporting Units	Numeric Action Levels	(LUP Type 3) Receiving Water Monitoring Trigger
pH	Field test with calibrated portable instrument using EPA approved procedures	Type 2 & 3	0.2	pH units	Lower = 6.5 Upper = 8.5	Lower = 6.0 Upper = 9.0
Turbidity	EPA 0180.1 and/or field test with calibrated portable instrument	Type 2 & 3	1	NTU	250 NTU	500 NTU

J. LUP Type 2 and 3 Monitoring Methods

1. LUP Type 2 and 3 dischargers shall include a description of the following items in the Monitoring and Reporting Program:

    a. Visual inspection locations, inspection procedures, and follow-up tracking procedures.

    b. Sampling locations, collection, and handling procedures shall include detailed procedures for sample collection, storage, preservation, and shipping to the laboratory to ensure consistent quality assurance and control is maintained.

    c. A copy of the Chain of Custody form used when handling and shipping samples.

    d. Identification of the analytical methods and related method detection limits (if applicable) for each parameter required in Section XVI.H.2-3 above.

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2. LUP Type 2 and 3 dischargers shall ensure all sampling and sample preservation shall be 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).[5]

3. All monitoring instruments and equipment (including a discharger's own field instruments for measuring pH and turbidity) shall be calibrated and maintained in accordance with manufacturers' specifications to ensure accurate measurements.

4. All analyses shall be sent to and conducted at a laboratory certified for such analyses by the State Water Board Environmental Laboratory Accreditation Program (ELAP), with the exception of field analysis conducted by the discharger for turbidity and pH.

5. LUP Type 2 and 3 dischargers shall conduct their own field analysis of pH and may conduct their own field analysis of turbidity if the discharger has sufficient capability (qualified and trained employees, properly calibrated and maintained field instruments, etc.) to adequately perform the field analysis.

K. LUP Type 2 and 3 Analytical Methods

1. The discharger shall refer to Table 5 above for test methods, detection limits, and reporting units and as follows:

2. The discharger shall perform pH analysis on-site with a calibrated pH meter using a U.S. EPA acceptable test method. The discharger shall record pH monitoring results on paper and retain these records in accordance with Section I.N of this General Permit's Order.

3. The dischargers shall perform turbidity analysis using a calibrated turbidity meter (turbidimeter), either on-site or at an ELAP laboratory. Acceptable test methods include Standard Method 2130 or U.S. EPA Method 180.1. The results shall be recorded in the site logbook in Nephelometric Turbidity Units (NTU).

L. Watershed Monitoring Option

1. If an LUP Type 2 or 3 discharger is part of a qualified regional watershed-based monitoring program the discharger may be eligible for relief from the monitoring requirements in this Attachment. The Regional Water Board may approve proposals to

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

substitute a qualified watershed-based monitoring program if it determines the program will provide information to determine each discharger's compliance with the requirements of this General Permit.

M. LUP Type 3 Receiving Water Monitoring Requirements

1. Receiving Water Monitoring Triggers

    a. The receiving water monitoring triggers for LUP Type 3 dischargers with direct discharges to surface waters are triggered when the effluent pH values during any site phase when there is a high risk of pH discharge[6] fall outside of the range of 6.0 and 9.0 pH units, or when the effluent turbidity exceeds 500 NTU.

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

2. Receiving Water Monitoring Exceedances

    a. In the event that the discharger's effluent exceeds the receiving water monitoring triggers described in Section XVI.I.1 above, the discharger shall subsequently sample the receiving waters body to which the discharge was made.

    b. The discharger shall sample for turbidity and pH (if applicable) for the duration of coverage under this General Permit upon written request by the Regional Water Board delegate.

    c. This receiving water monitoring requirement is limited to the receiving water and only for the period of time that location is covered by this permit.

    d. In the event that an LUP Type 3 discharger's active treatment system effluent exceeds the active treatment system numeric effluent limitations in this General Permit and has a direct discharge to receiving waters, the discharger shall subsequently sample the receiving waters for turbidity, pH (if applicable), for the duration of coverage

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

under this General Permit upon written request by the Regional Water Board delegate.

e. The discharger shall obtain receiving water samples in accordance with the requirements of the Receiving Water Sampling Locations section below.

3. LUP Type 3 Receiving Water Sampling Locations

a. The discharger shall obtain any required upstream or up-gradient receiving water samples from an accessible and safe location that is:

b. Representative of the discharge to the receiving water;

c. As close as possible to the effluent discharge point; and,

d. Upstream from the effluent discharge point.

e. The discharger shall obtain any required downstream or down-gradient receiving water samples from an accessible and safe location that is:

f. Representative of the discharge to the receiving water;

g. As close as possible to the effluent discharge point; and,

h. Downstream from the effluent discharge point.

i. LUP Type 3 dischargers may sample the receiving water at a single upstream location and a single downstream location that encompasses all discharge locations when two or more discharge locations discharge to the same receiving water.

N. Numeric Action Level Exceedances and Reporting[7]

1. Types 2 and 3 LUPs shall electronically submit all field sampling results exceeding the pH and/or turbidity numeric action levels, through SMARTS, no later than 10 business days after the completion of the precipitation event.

2. Types 2 and 3 LUPs shall electronically submit all sampling results exceeding applicable TMDL-related numeric action levels, through

[7] Terms including, but not limited to, numeric action level and exceedances are defined in Appendix 2 of this General Permit.

SMARTS, no later than 10 business days after receiving the analytical laboratory report.

3. Types 2 and 3 LUPs shall prepare a Numeric Action Level Exceedance Report when requested, in writing, from a Regional Water Board delegate. Types 2 and 3 LUPs 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.

4. Types 2 and 3 LUPs shall retain an electronic or paper copy of each Numeric Action Level Exceedance Report for a minimum of three years after the date the exceedance report is certified and submitted.

5. Types 2 and 3 LUPs shall include in the Numeric Action Level Exceedance Report:

    a. The analytical method(s), method reporting unit(s), and method detection limit(s) of each analytical parameter (analytical results that are less than the method detection limit shall be reported as "less than the method detection limit").

    b. The date, place, time of sampling, visual inspections, and/or measurements, including precipitation.

    c. A description of the current BMPs associated with the effluent sample that exceeded the numeric action level, the proposed corrective actions taken, and date of implementation.

XVII. REGIONAL WATER BOARD AUTHORITIES

1. Regional Water Boards shall administer the provisions of this General Permit. Administration of this General Permit may include, but is not limited to, requesting the submittal of SWPPPs, reviewing SWPPPs, reviewing monitoring and sampling and analysis reports, conducting compliance inspections, gathering site information by any medium including sampling, photo and video documentation, and taking enforcement actions.

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

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

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

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

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

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

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

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

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

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

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XIX. ANNUAL REPORTING REQUIREMENTS

1. All LUP dischargers shall comply with Section XVII of this General Permit's Order, Annual Reporting Requirements, for applicable provisions.

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