

## ATTACHMENT A Linear Underground/ Overhead Requirements

All Linear Underground/Overhead project dischargers<sup>1</sup> or Legally Responsible Persons (LRPs) who submit permit registration documents (PRDs) indicating their intention to be regulated under the provisions of this General Permit shall comply with the following:

### A. DEFINITION OF LINEAR UNDERGROUND/OVERHEAD PROJECTS

1. Linear Underground/Overhead Projects (LUPs) include, but are not limited to, any conveyance, pipe, or pipeline for the transportation of any gaseous, liquid (including water and wastewater for domestic municipal services), liquescent, or slurry substance; any cable line or wire for the transmission of electrical energy; any cable line or wire for communications (e.g., telephone, telegraph, radio, or television messages); and associated ancillary facilities. Construction activities associated with LUPs include, but are not limited to, (a) those activities necessary for the installation of underground and overhead linear facilities (e.g., conduits, substructures, pipelines, towers, poles, cables, wires, connectors, switching, regulating and transforming equipment, and associated ancillary facilities); and include, but are not limited to, (b) underground utility mark-out, potholing, concrete and asphalt cutting and removal, trenching, excavation, boring and drilling, access road and pole/tower pad and cable/wire pull station, substation construction, substructure installation, construction of tower footings and/or foundations, pole and tower installations, pipeline installations, welding, concrete and/ or pavement repair or replacement, and stockpile/borrow locations.
2. LUP evaluation shall consist of two tasks:
  - a. Confirm that the project or project section(s) qualifies as an LUP. The State Water Board website contains a project determination guidance flowchart. [www.waterboards.ca.gov](http://www.waterboards.ca.gov)
  - b. Identify which Type(s) (1,2 or 3 described in Section I below) are applicable to the project or project sections based on project sediment and receiving water risk.
3. LUP dischargers that are required to obtain CGP coverage may obtain permit coverage under one or more permit registration document (PRD) submittals to the State Water Board's Storm Water Multi-Application and Report Tracking (SMARTs) system. Attachment A.1 contains a flow chart to be used when determining if a linear project qualifies for coverage. Since a LUP may be constructed within both developed and undeveloped locations and portions of LUPs may be constructed by different contractors, LUPs may be broken into

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<sup>1</sup> The term "discharger" means the utility company, municipality, or other public or private company or agency that owns or operates the LUP.

logical permit sections. Sections shall be determined based on portions of a project conducted by one contractor. Other situations may also occur, such as the time period in which the sections of a project will be constructed (e.g. project phases), for which separate permit coverage is possible. For projects that are broken into separate sections, a description of how each section relates to the overall project and the definition of the boundaries between sections shall be clearly stated.

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

## **B. LINEAR PROJECT PERMIT REGISTRATION DOCUMENTS (PRDs)**

### **1. Notice of Intent (NOI)**

Prior to construction activities, the LRP of a proposed linear underground/overhead project shall utilize the processes and methods provided in Attachment A.2, Permit Registration Documents (PRDs) – General Instructions of a proposed linear underground/overhead project to establish if the project is an LUP that may seek coverage.

### **2. Site Maps**

LUP dischargers submitting PRDs shall include at least 3 maps. The first map will be a zoomed<sup>2</sup> 500 ft vicinity map that shows the starting point of the project. The second will be a zoomed map of 500 ft showing the ending location of the project. The third will be a larger view vicinity map, 1000 ft to 2000 ft, displaying the entire project location, and indicating the LUP type (1, 2 or 3) segments within the total project footprint.

### **3. Drawings**

LUP dischargers submitting PRDs shall include a construction drawing(s) or other appropriate drawing(s) or map(s) that shows the locations of storm drain inlets and waterbodies<sup>3</sup> that may receive discharges from the construction activities and that shows the locations of BMPs to be installed for all those BMPs that can be illustrated on the revisable drawing(s) or map(s). If storm drain inlets,

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<sup>2</sup> An image with a close-up/enhanced detailed view of site features that show minute details such as streets and neighboring structures.

Or: An image with a close-up/enhanced detailed view of the site's surrounding infrastructure.

Or: An image with a close up detailed view of the project and its surroundings.

<sup>3</sup> Includes basin(s) that the MS4 storm sewer systems may drain to for Hydromodification or Hydrological Conditional of Concerns under the MS4 permits.

waterbodies, and/or BMPs cannot be adequately shown on the drawing(s) or map(s) they should be described in detail within the SWPPP.

#### **4. Storm Water Pollution Prevention Plan (SWPPP)**

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

#### **5. Contact information**

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

### **C. LINEAR PROJECT TERMINATION OF COVERAGE REQUIREMENTS**

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

#### **1. LUP Stabilization Requirements**

The LUP discharger shall ensure that all disturbed areas of the construction site are stabilized prior to termination of coverage under this General Permit. Final stabilization for the purposes of submitting an NOT is satisfied when all soil disturbing activities are completed and one of the following criteria is met:

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

- b. Where no vegetation is present prior to construction, the site is returned to its original line and grade and/or compacted to achieve stabilization; or
- c. Equivalent stabilization measures have been employed. These measures include, but are not limited to, the use of such BMPs as blankets, reinforced channel liners, soil cement, fiber matrices, geotextiles, or other erosion resistant soil coverings or treatments.

## **2. LUP Termination of Coverage Requirements**

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

## **3. Revising Coverage for Change of Acreage**

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

- a. a revised NOI indicating the new project size;
- b. a revised site map showing the acreage of the project completed, acreage currently under construction, acreage sold, transferred or added, and acreage currently stabilized.
- c. SWPPP revisions, as appropriate; and
- d. certification that any new landowners have been notified of applicable requirements to obtain General Permit coverage. The certification shall include the name, address, telephone number, and e-mail address (if known) of the new landowner.

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

- 4. The LRP may terminate coverage under this General Permit when all LUPs currently authorized pursuant to this General Permit have been permitted under an individual or another construction storm water general permit.

## D. DISCHARGE PROHIBITIONS

5. LUP dischargers shall not violate any discharge prohibitions contained in applicable Basin Plans or statewide water quality control plans. Waste discharges to Areas of Special Biological Significance (ASBS) are prohibited by the California Ocean Plan, unless granted an exception issued by the State Water Board.
6. LUP dischargers are prohibited from discharging non-storm water that is not otherwise authorized by this General Permit. Non-storm water discharges authorized by this General Permit<sup>4</sup> include, but are not limited to irrigation of vegetative erosion control measures, pipe flushing and testing, street cleaning, and dewatering.<sup>5</sup> Such discharges are allowed by this General Permit provided they are not relied upon to clean up failed or inadequate construction or post-construction BMPs designed to keep materials on site. These authorized non-storm water discharges:
  - a. Shall not cause or contribute to a violation of any water quality standard;
  - b. Shall not violate any other provision of this General Permit;
  - c. Shall not violate any applicable Basin Plan;
  - d. Shall comply with BMPs as described in the SWPPP;
  - e. Shall not contain toxic constituents in toxic amounts or (other) significant quantities of pollutants;
  - f. Shall be monitored and meets the applicable NALs and NELs; and
  - g. Shall be reported by the discharger in the Annual Report.

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

Additionally, some LUP dischargers may be required to obtain a separate permit if the applicable Regional Water Board has adopted a General Permit for dewatering discharges. Wherever feasible, alternatives, that do not result in the

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<sup>4</sup> Dischargers must identify all authorized non-storm water discharges in the LUP's SWPPP and identify BMPs that will be implemented to either eliminate or reduce pollutants in non-storm water discharges. Regional Water Boards may direct the discharger to discontinue discharging such non-storm water discharges if determined that such discharges discharge significant pollutants or threaten water quality.

<sup>5</sup> Dewatering activities may be prohibited or need coverage under a separate permit issued by the Regional Water Boards. Dischargers shall check with the appropriate Regional Water Boards for any required permit or basin plan conditions prior to initial dewatering activities to land, storm drains, or waterbodies.

discharge of non-storm water, shall be implemented in accordance with this Attachment's Section J.2 - SWPPP Implementation Schedule.

7. LUP dischargers shall ensure that trench spoils or any other soils disturbed during construction activities that are contaminated<sup>6</sup> are not discharged with storm water or non-storm water discharges into any storm drain or water body except pursuant to an NPDES permit.

When soil contamination is found or suspected and a responsible party is not identified, or the responsible party fails to promptly take the appropriate action, the LUP discharger shall have those soils sampled and tested to ensure that proper handling and public safety measures are implemented. The LUP discharger shall notify the appropriate local, State, and federal agency(ies) when contaminated soil is found at a construction site, and will notify the appropriate Regional Water Board.

8. Discharging any pollutant-laden water that will cause or contribute to an exceedance of the applicable Regional Water Board's Basin Plan from a dewatering site or sediment basin into any receiving water or storm drain is prohibited.
9. Debris<sup>7</sup> resulting from construction activities are prohibited from being discharged from construction project sites.

## **E. SPECIAL PROVISIONS**

### **1. Duty to Comply**

- a. The LUP discharger must comply with all of the conditions of this General Permit. Any permit noncompliance constitutes a violation of the Clean Water Act (CWA) and the Porter-Cologne Water Quality Control Act and is grounds for enforcement action and/or removal from General Permit coverage.
- b. The LUP discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions,

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<sup>6</sup> Contaminated soil contains pollutants in concentrations that exceed the appropriate thresholds that various regulatory agencies set for those substances. Preliminary testing of potentially contaminated soils will be based on odor, soil discoloration, or prior history of the site's chemical use and storage and other similar factors. When soil contamination is found or suspected and a responsible party is not identified, or the responsible party fails to promptly take the appropriate action, the discharger shall have those soils sampled and tested to ensure proper handling and public safety measures are implemented. The legally responsible person will notify the appropriate local, State, or federal agency(ies) when contaminated soil is found at a construction site, and will notify the Regional Water Board by submitting an NOT at the completion of the project.

<sup>7</sup> Litter, rubble, discarded refuse, and remains of something destroyed.

even if this General Permit has not yet been modified to incorporate the requirement.

## **2. General Permit Actions**

- a. This General Permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the discharger for a General Permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not annul any General Permit condition.
- b. If any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under Section 307(a) of the CWA for a toxic pollutant which is present in the discharge and that standard or prohibition is more stringent than any limitation on the pollutant in this General Permit, this General Permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition and the dischargers so notified.

## **3. Need to Halt or Reduce Activity Not a Defense**

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

## **4. Duty to Mitigate**

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

## **5. Proper Operation and Maintenance**

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

## **6. Property Rights**

This General Permit does not convey any property rights of any sort or any exclusive privileges, nor does it authorize any injury to private property or any

invasion of personal rights, nor does it authorize any infringement of Federal, State, or local laws or regulations.

## **7. Duty to Maintain Records and Provide Information**

- a. The LUP discharger shall maintain a paper or electronic copy of all required records, including a copy of this General Permit, for three years from the date generated or date submitted, whichever is last. These records shall be available at the construction site until construction is completed.
- b. The LUP discharger shall furnish the Regional Water Board, State Water Board, or USEPA, within a reasonable time, any requested information to determine compliance with this General Permit. The LUP discharger shall also furnish, upon request, copies of records that are required to be kept by this General Permit.

## **8. Inspection and Entry**

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

- a. Enter upon the discharger's premises at reasonable times where a regulated construction activity is being conducted or where records must be kept under the conditions of this General Permit;
- b. Access and copy at reasonable times any records that must be kept under the conditions of this General Permit;
- c. Inspect at reasonable times the complete construction site, including any off-site staging areas or material storage areas, and the erosion/sediment controls; and
- d. Sample or monitor at reasonable times for the purpose of ensuring General Permit compliance.

## **9. Electronic Signature and Certification Requirements**

- a. All Permit Registration Documents (PRDs) and Notice of Terminations (NOTs) shall be electronically certified and submitted to the State Water Board by the Legally Responsible Person (LRP). The LRP is the person possessing the title of the land on which the construction activities will occur for the regulated site. LRPs shall electronically submit PRDs and NOTs via the Storm water Multi Application and Report Tracking System (SMARTS).



- i For Mineral Estates (oil, gas, geothermal, aggregate, precious metals, and/or industrial minerals) the LRP shall be:
  - (1) For a corporation: a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (a) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or (b) the manager of the facility if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
  - (2) For a partnership or sole proprietorship: a general partner or the proprietor, respectively;
  - (3) For a municipality, State, Federal, or other public agency: either a principal executive officer or ranking elected official, or duly authorized representative. The principal executive officer of a Federal agency includes the chief executive officer of the agency or the senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of U.S. EPA); or
  - (4) An individual person who leases the property.
- ii For Linear Underground/Overhead Projects (LUPs) the LRP shall be:
  - (1) For a corporation: a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (a) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or (b) the manager of the facility if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
  - (2) For a partnership or sole proprietorship: a general partner or the proprietor, respectively;
  - (3) For a municipality, State, Federal, or other public agency: either a principal executive officer or ranking elected official, or duly authorized representative. The principal executive officer of a Federal agency includes the chief executive officer of the agency or the senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of U.S. EPA); or

- (4) The utility company, municipality, or other public or private company or agency that owns or operates a LUP.
- iii The LRP shall not be:
  - (1) A non-managerial employee
  - (2) A consultant or contractor hired by the Property Owner, or
  - (3) An agent for the Property Owner
- b. All SWPPP revisions, annual reports, or other information required by the General Permit (other than PDRs and NOTs) or requested by the Regional Water Board, State Water Board, USEPA, or local storm water management agency shall be certified and submitted by the LRP as described above or by the LRP's duly authorized representative. A person is a duly authorized representative only if the LRP electronically provides the authorization via SMARTS.

## **10. Certification**

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

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

## **11. Anticipated Noncompliance**

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

## **12. Penalties for Falsification of Reports**

Section 309(c)(4) of the CWA provides that any person who knowingly makes any false material statement, representation, or certification in any record or

other document submitted or required to be maintained under this General Permit, including reports of compliance or noncompliance shall upon conviction, be punished by a fine of not more than \$10,000 or by imprisonment for not more than two years or by both.

### **13. Oil and Hazardous Substance Liability**

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

### **14. Severability**

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

### **15. Reopener Clause**

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

### **16. Penalties for Violations of Permit Conditions**

- a. Section 309 of the CWA provides significant penalties for any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the CWA or any permit condition or limitation implementing any such section in a permit issued under Section 402. Any person who violates any permit condition of this General Permit is subject to a civil penalty not to exceed \$27,500 per calendar day of such violation, as well as any other appropriate sanction provided by Section 309 of the CWA.
- b. The Porter-Cologne Water Quality Control Act also provides for civil and criminal penalties, which in some cases are greater than those under the CWA.

### **17. Transfers**

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

land shall inform the new property owner(s) of the requirements of this General Permit.

### **18. Continuation of Expired Permit**

This General Permit continues in force and effect until a new General Permit is issued or the SWRCB rescinds this General Permit. Only those dischargers authorized to discharge under the expiring General Permit are covered by the continued General Permit.

## **F. EFFLUENT STANDARDS**

### **1. Narrative Effluent Limitations**

- a. LUP dischargers shall ensure that storm water discharges and authorized non-storm water discharges regulated by this General Permit not contain a hazardous substance equal to or in excess of reportable quantities established in 40 C.F.R. §§ 117.3 and 302.4, unless a separate NPDES Permit has been issued to regulate those discharges.
- b. LUP dischargers shall minimize or prevent pollutants in storm water discharges and authorized non-storm water discharges through the use of structural or non-structural controls, structures, and management practices that achieve BAT for toxic and non-conventional pollutants and BCT for conventional pollutants.

## 2. Numeric Effluent Limitations (NELs)

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

Parameter	Test Method	Discharge Type	Min. Detection Limit	Units	Numeric Action Level	Numeric Effluent Limitation
pH	Field test with calibrated portable instrument	LUP Type 2	0.2	pH units	lower NAL = 6.5 upper NAL = 8.5	N/A
		LUP Type 3			lower NAL = 6.5 upper NAL = 8.5	lower NEL = 6.0 upper NEL = 9.0
Turbidity	EPA 0180.1 and/or field test with portable instrument	LUP Type 2	Not specified	NTU	250 NTU	N/A
		LUP Type 3			250 NTU	500 NTU

a. Numeric Effluent Limitations (NELs):

- iv **Storm Event, Daily Average pH Limits** – For LUP Type 3 dischargers, the pH of storm water and non-storm water discharges shall be within the ranges specified in Table 1 during any project phase where there is a "high risk of pH discharge."<sup>8</sup>
- v **Storm Event Daily Average Turbidity Limit** – For LUP Type 3 dischargers, the turbidity of storm water and non-storm water discharges shall not exceed 500 NTU.

- b. If an analytical effluent sampling result is outside the range of pH NELs (i.e., is below the lower NEL for pH or exceeds the upper NEL for pH) or exceeds the turbidity NEL (as listed in Table 1), the discharger is in violation of this General Permit and shall electronically file the results in violation within 3 business days of obtaining the results.

<sup>8</sup> 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.

c. Compliance Storm Event:

Discharges of storm water from LUP Type 3 sites shall comply with applicable NELs (above) unless the storm event causing the discharges is determined after the fact to be equal to or larger than the Compliance Storm Event (expressed in inches of rainfall). The Compliance Storm Event for LUP Type 3 discharges is the 5-year, 24-hour storm (expressed in tenths of an inch of rainfall), as determined by using these maps:

<http://www.wrcc.dri.edu/pcpnfreq/nca5y24.gif>

<http://www.wrcc.dri.edu/pcpnfreq/sca5y24.gif>

Compliance storm event verification shall be done by reporting on-site rain gauge readings as well as nearby governmental rain gauge readings.

### 3. Numeric Action Levels (NALs)

- d. For LUP Type 2 and 3 dischargers, the lower NAL for pH is 6.5 pH units and the upper NAL for pH is 8.5 pH units. The LUP discharger shall take actions as described below if the discharge is outside of this range of pH values.
- e. For LUP Type 2 and 3 dischargers, the NAL for turbidity is 250 NTU. The discharger shall take actions as described below if the discharge is outside of this range of turbidity values.
- f. Whenever an analytical effluent monitoring result indicates that the discharge is below the lower NAL for pH, exceeds the upper NAL for pH, or exceeds the turbidity NAL (as listed in Table 1), the LUP discharger shall conduct a construction site and run-on evaluation to determine whether pollutant source(s) associated with the site's construction activity may have caused or contributed to the NAL exceedance and shall immediately implement corrective actions if they are needed.
- g. The site evaluation will be documented in the SWPPP and specifically address whether the source(s) of the pollutants causing the exceedance of the NAL:
  - vi Are related to the construction activities and whether additional BMPs or SWPPP implementation measures are required to (1) meet BAT/BCT requirements; (2) reduce or prevent pollutants in storm water discharges from causing exceedances of receiving water objectives; and (3) determine what corrective action(s) were taken or will be taken and with a description of the schedule for completion.

**AND/OR:**

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

## **G. RECEIVING WATER LIMITATIONS**

1. LUP dischargers shall ensure that storm water discharges and authorized non-storm water discharges to any surface or ground water will not adversely affect human health or the environment.
2. LUP dischargers shall ensure that storm water discharges and authorized non-storm water discharges will not contain pollutants in quantities that threaten to cause pollution or a public nuisance.
3. LUP dischargers shall ensure that storm water discharges and authorized non-storm water discharges will not contain pollutants that cause or contribute to an exceedance of any applicable water quality objectives or water quality standards (collectively, WQS) contained in a Statewide Water Quality Control Plan, the California Toxics Rule, the National Toxics Rule, or the applicable Regional Water Board's Water Quality Control Plan (Basin Plan).

## **H. TRAINING QUALIFICATIONS**

### **1. General**

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

### **2. SWPPP Certification Requirements**

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

- i A California registered professional civil engineer;

- ii A California registered professional geologist or engineering geologist;
- iii A California registered landscape architect;
- iv A professional hydrologist registered through the American Institute of Hydrology;
- v A certified professional in erosion and sediment control registered through Certified Professional in Erosion and Sediment Control, Inc.;
- vi A certified professional in storm water quality registered through Certified Professional in Erosion and Sediment Control, Inc.;
- vii A certified professional in erosion and sediment control registered through the National Institute for Certification in Engineering Technologies; or
- viii A minimum of five years experience in developing SWPPPs for construction sites to comply with NPDES permits.

**AND**

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

- b. The LUP discharger shall ensure that the SWPPP is written and amended, as needed, to address the specific circumstances for each construction site covered by this General Permit prior to commencement of construction activity for any stage.
- c. The LUP discharger shall list the name and telephone number of the currently designated Qualified SWPPP Developer(s) in the SWPPP.
- d. **Qualified SWPPP Practitioner:** The LUP discharger shall ensure that all elements of any SWPPP for each project will be implemented by a Qualified SWPPP Practitioner (QSP). A QSP is a person responsible for non-storm water and storm water visual observations, sampling and analysis, and for ensuring full compliance with the permit and implementation of all elements of the SWPPP. Effective two years from the date of adoption of this General Permit, a QSP shall be either a QSD or have one of the following certifications:
  - i A certified erosion, sediment and storm water inspector registered through Certified Professional in Erosion and Sediment Control, Inc.; or



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

**AND**

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

- e. The LUP discharger shall list the name of any “duly authorized representative” and the legal agreement or other mechanism that provides this authority from the owner.
- f. The LUP discharger shall ensure that the SWPPP include a list of names of all contractors, subcontractors, and individuals who will be directed by the Qualified SWPPP Practitioner, and who is ultimately responsible for implementation of the SWPPP. This list shall include telephone numbers and work addresses. Specific areas of responsibility of each subcontractor and emergency contact numbers shall also be included.
- g. The LUP discharger shall ensure that the SWPPP and each amendment be signed by the Qualified SWPPP Developer. The LUP discharger shall include a listing of the date of initial preparation and the dates of each amendment in the SWPPP.

**I. TYPES OF LINEAR PROJECTS**

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

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

**1. Type 1 LUPs:**

- a. LUP dischargers with segments of a LUP designated as Type 1 shall comply with the requirements in this Attachment. Type 1 LUPs are:
  - i Those construction segments where 70 percent or more of the construction activity occurs on a paved surface and where areas disturbed during construction will be returned to preconstruction conditions or equivalent protection established at the end of the construction activities for the day; or

- ii Where greater than 30 percent of construction activities occur within the non-paved shoulders or land immediately adjacent to paved surfaces, or where construction occurs on unpaved improved roads, including their shoulders or land immediately adjacent to them where:
  - (4) Areas disturbed during construction will be returned to preconstruction conditions or equivalent protection is established at the end of the construction activities for the day to minimize the potential for erosion and sediment deposition, and
  - (5) Areas where established vegetation was disturbed during construction will be stabilized and re-vegetated by the end of project. When required, adequate temporary stabilization BMPs will be installed and maintained until vegetation is established to meet minimum cover requirements established in this General Permit for final stabilization.
  
- b. Requirements subject to Type 1 LUP Projects:
  - i *Effluent Standards*
    - (1) Narrative- LUP Type 1 dischargers shall comply with the narrative effluent standards listed below:
      - (a) Storm water discharges and authorized non-storm water discharges regulated by this General Permit shall not contain a hazardous substance equal to or in excess of reportable quantities established in 40 C.F.R. §§ 117.3 and 302.4, unless a separate NPDES Permit has been issued to regulate those discharges.
      - (b) LUP dischargers shall minimize or prevent pollutants in storm water discharges and authorized non-storm water discharges through the use of controls, structures, and management practices that achieve BAT for toxic and non-conventional pollutants and BCT for conventional pollutants.
    - (2) Numeric – LUP Type 1 dischargers are not subject to a numeric effluent standard.
  - ii *Good Site Management "Housekeeping"*
    - (1) LUP Type 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. At a minimum, the good housekeeping measures shall consist of the following:

- (a) Conduct an inventory of the products used and/or expected to be used and the end products that are produced and/or expected to be produced.
  - (b) Cover and berm loose stockpiled construction materials that are not actively being used (i.e. soil, spoils, aggregate, fly-ash, stucco, hydrated lime, etc.).
  - (c) Store chemicals in watertight containers or in a storage shed (completely enclosed), with appropriate secondary containment to prevent any spillage or leakage.
  - (d) Minimize exposure of construction materials with precipitation.
  - (e) Implement BMPs to prevent the off-site tracking of loose construction and landscape materials.
- (2) LUP Type 1 dischargers shall implement good housekeeping measures for waste management, which, at a minimum, shall consist of the following:
- (a) Prevent disposal of any rinse or wash waters or materials on impervious or pervious site surfaces or into the storm drain system.
  - (b) Ensure the containment of sanitation facilities (e.g., portable toilets) to prevent discharges of pollutants to the storm water drainage system or receiving water.
  - (c) Clean or replace sanitation facilities and inspecting them regularly for leaks and spills.
  - (d) Cover waste disposal containers at the end of every business day and during a rain event.
  - (e) Prevent discharges from waste disposal containers to the storm water drainage system or receiving water.
  - (f) Contain and securely protect stockpiled waste material from wind and rain at all times unless actively being used.
  - (g) Implement procedures that effectively address hazardous and non-hazardous spills.
  - (h) Develop a spill response and implementation element of the SWPPP prior to commencement of construction activities. The SWPPP shall require that:

- (i) Equipment and materials for cleanup of spills shall be available on site and that spills and leaks shall be cleaned up immediately and disposed of properly; and
  - (ii) Appropriate spill response personnel are assigned and trained.
- (i) 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.
- (3) LUP Type 1 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 disposing of leaked materials properly.
- (4) LUP Type 1 dischargers shall implement good housekeeping for landscape materials, which, at a minimum, shall consist of the following:
  - (a) Contain stockpiled materials such as mulches and topsoil when they are not actively being used.
  - (b) Contain fertilizers and other landscape materials when they are not actively being used.
  - (c) Discontinue the application of any erodible landscape material within 2 days before a forecasted rain event or during periods of precipitation.
  - (d) Apply erodible landscape material at quantities and application rates according to manufacture recommendations or based on written specifications by knowledgeable and experienced field personnel.
  - (e) Stack erodible landscape material on pallets and covering or storing such materials when not being used or applied.

(5) LUP Type 1 dischargers shall conduct an assessment and create a list of potential pollutant sources and identify any areas of the site where additional BMPs are necessary to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. This potential pollutant list shall be kept with the SWPPP and shall identify all non-visible pollutants which are known, or should be known, to occur on the construction site. At a minimum, when developing BMPs, LUP Type 1 dischargers shall do the following:

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

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

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

(d) Ensure retention of sampling, visual observation, and inspection records.

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

(6) LUP Type 1 dischargers shall implement good housekeeping measures on the construction site 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.

iii *Non-Storm Water Management*

(7) LUP Type 1 dischargers shall implement measures to control all non-storm water discharges during construction.

(8) LUP Type 1 dischargers shall wash vehicles in such a manner as to prevent non-storm water discharges to surface waters or MS4 drainage systems.

- (9) LUP Type 1 dischargers shall clean streets in such a manner as to prevent non-storm water discharges from reaching surface water or MS4 drainage systems.

iv *Erosion Control*

- (1) LUP Type 1 dischargers shall implement effective wind erosion control.
- (2) LUP Type 1 dischargers shall provide effective soil cover for inactive<sup>9</sup> areas and all finished slopes, open space, utility backfill, and completed lots.
- (3) LUP Type 1 dischargers shall limit the use of plastic materials when more sustainable, environmentally friendly alternatives exist. Where plastic materials are deemed necessary, the discharger shall consider the use of plastic materials resistant to solar degradation.

v *Sediment Controls*

- (1) LUP Type 1 dischargers shall establish and maintain effective perimeter controls and stabilize all construction entrances and exits sufficiently to control erosion and sediment discharges from the site.
- (2) On sites where sediment basins are to be used, LUP Type 1 dischargers shall, at minimum, design sediment basins according to the method provided in Attachment I.

vi *Run-on and Runoff Controls*

- (1) LUP Type 1 dischargers shall evaluate the quantity and quality of run-on and runoff through observation and sampling. LUP Type 1 dischargers shall effectively manage all run-on, all runoff within the site and all runoff that discharges off the site. Run-on from off-site shall be directed away from all disturbed areas or shall collectively be in compliance with the effluent limitations in this Attachment.
- (2) Run-on and runoff controls are not required for Type 1 LUPs unless the evaluation of quantity and quality of run-on and runoff deems them necessary or visual inspections show that the site requires such controls.

vii *Inspection, Maintenance and Repair*

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<sup>9</sup> Inactive areas of construction are areas of construction activity that have been disturbed and are not scheduled to be re-disturbed for at least 30 days.

- (1) All inspection, maintenance repair and sampling activities at the discharger's Type 1 LUP location shall be performed or supervised by a Qualified SWPPP Practitioner (QSP) representing the discharger. The QSP may delegate any or all of these activities to an employee trained to do the task(s) appropriately, but shall ensure adequate deployment.
- (2) LUP Type 1 dischargers shall perform weekly inspections and observations, and at least once each 24-hour period during extended storm events, to identify BMPs that need maintenance to operate effectively, that have failed, or that could fail to operate as intended. Inspectors shall be the QSP or be trained by the QSP.
- (3) Upon identifying failures or other shortcomings, LUP Type 1 dischargers shall begin implementing repairs or design changes to BMPs within 72 hours of identification and complete the changes as soon as possible.
- (4) For each inspection required, LUP Type 1 dischargers shall complete an inspection checklist, using a form provided by the State Water Board or Regional Water Board or in an alternative format.
- (5) The LUP Type 1 discharger shall ensure that the checklist remains on-site with the SWPPP. At a minimum, an inspection checklist should include:
  - (a) Inspection date and date the inspection report was written.
  - (b) Weather information, including presence or absence of precipitation, estimate of beginning of qualifying storm event, duration of event, time elapsed since last storm, and approximate amount of rainfall in inches.
  - (c) Site information, including stage of construction, activities completed, and approximate area of the site exposed.
  - (d) A description of any BMPs evaluated and any deficiencies noted.
  - (e) If the construction site is safely accessible during inclement weather, list the observations of all BMPs: erosion controls, sediment controls, chemical and waste controls, and non-storm water controls. Otherwise, list the results of visual inspections at all relevant outfalls, discharge points, downstream locations and any projected maintenance activities.

- (f) Report 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 taken during the inspection, if any.
- (i) Inspector's name, title, and signature.

## 2. Type 2 LUPs:

- a. Type 2 LUPs are determined by the Combined Risk Matrix in Attachment A.1. Type 2 LUPs have the specified combination of High, Medium and Low project sediment risk along with High, Medium and Low receiving water risk. Receiving water risk is either considered "Low" for those segments of the project that are not in close proximity to a sensitive receiving watershed, "Medium" for those segments of the project not in close proximity to a sensitive receiving watershed yet within the flood plain of a sensitive receiving water body, and "High" where the soil disturbance is within close proximity to a sensitive receiving water body. Project sediment risk is calculated based on the Risk Factor Worksheet in Attachment C of this General Permit.
- b. Requirements Subject to Type 2 LUP Projects:
  - i. *Effluent Standards*
    - (1) Narrative – LUP Type 2 dischargers shall comply with the narrative effluent standards below.
      - (a) Storm water discharges and authorized non-storm water discharges regulated by this General Permit shall not contain a hazardous substance equal to or in excess of reportable quantities established in 40 C.F.R. §§ 117.3 and 302.4, unless a separate NPDES Permit has been issued to regulate those discharges.
      - (b) LUP dischargers shall minimize or prevent pollutants in storm water discharges and authorized non-storm water discharges through the use of controls, structures, and management practices that achieve BAT for toxic and non-conventional pollutants and BCT for conventional pollutants.
    - (2) Numeric –LUP Type 2 dischargers are subject to a pH NAL of 6.5-8.5, and a turbidity NAL of 250 NTU.



ii *Good Site Management "Housekeeping"*

- (1) LUP Type 2 dischargers shall implement good site management (i.e., "housekeeping") measures for construction materials that could potentially be a threat to water quality if discharged. At a minimum, the good housekeeping measures shall consist of the following:
  - (a) Conduct an inventory of the products used and/or expected to be used and the end products that are produced and/or expected to be produced.
  - (b) Cover and berm loose stockpiled construction materials that are not actively being used (i.e. soil, spoils, aggregate, fly-ash, stucco, hydrated lime, etc.).
  - (c) Store chemicals in watertight containers or in a storage shed (completely enclosed), with appropriate secondary containment to prevent any spillage or leakage.
  - (d) Minimize exposure of construction materials with precipitation.
  - (e) Implement BMPs to prevent the off-site tracking of loose construction and landscape materials.
- (2) LUP Type 2 dischargers shall implement good housekeeping measures for waste management, which, at a minimum, shall consist of the following:
  - (a) Prevent disposal of any rinse or wash waters or materials on impervious or pervious site surfaces or into the storm drain system.
  - (b) Ensure the containment of sanitation facilities (e.g., portable toilets) to prevent discharges of pollutants to the storm water drainage system or receiving water.
  - (c) Clean or replace sanitation facilities and inspecting them regularly for leaks and spills.
  - (d) Cover waste disposal containers at the end of every business day and during a rain event.
  - (e) Prevent discharges from waste disposal containers to the storm water drainage system or receiving water.

- (f) Contain and securely protect stockpiled waste material from wind and rain at all times unless actively being used.
  - (g) Implement procedures that effectively address hazardous and non-hazardous spills.
  - (h) Develop a spill response and implementation element of the SWPPP prior to commencement of construction activities. The SWPPP shall require that:
    - (i) Equipment and materials for cleanup of spills shall be available on site and that spills and leaks shall be cleaned up immediately and disposed of properly; and
    - (ii) Appropriate spill response personnel are assigned and trained.
  - (i) 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.
- (3) LUP Type 2 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 disposing of leaked materials properly.
- (4) LUP Type 2 dischargers shall implement good housekeeping for landscape materials, which, at a minimum, shall consist of the following:
- (d) Contain stockpiled materials such as mulches and topsoil when they are not actively being used.
  - (e) Contain all fertilizers and other landscape materials when they are not actively being used.
  - (f) Discontinuing the application of any erodible landscape material within 2 days before a forecasted rain event or during periods of precipitation.

- (g) Applying erodible landscape material at quantities and application rates according to manufacture recommendations or based on written specifications by knowledgeable and experienced field personnel.
  - (h) Stacking erodible landscape material on pallets and covering or storing such materials when not being used or applied.
- (5) LUP Type 2 dischargers shall conduct an assessment and create a list of potential pollutant sources and identify any areas of the site where additional BMPs are necessary to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. This potential pollutant list shall be kept with the SWPPP and shall identify all non-visible pollutants which are known, or should be known, to occur on the construction site. At a minimum, when developing BMPs, LUP Type 2 dischargers shall do the following:
- (a) Consider the quantity, physical characteristics (e.g., liquid, powder, solid), and locations of each potential pollutant source handled, produced, stored, recycled, or disposed of at the site.
  - (b) Consider the degree to which pollutants associated with those materials may be exposed to and mobilized by contact with storm water.
  - (c) Consider the direct and indirect pathways that pollutants may be exposed to storm water or authorized non-storm water discharges. This shall include an assessment of past spills or leaks, non-storm water discharges, and discharges from adjoining areas.
  - (d) Ensure retention of sampling, visual observation, and inspection records.
  - (e) Ensure effectiveness of existing BMPs to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges.
- (6) LUP Type 2 dischargers shall implement good housekeeping measures on the construction site 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.

iii *Non-Storm Water Management*

- (1) LUP Type 2 dischargers shall implement measures to control all non-storm water discharges during construction.
- (2) LUP Type 2 dischargers shall wash vehicles in such a manner as to prevent non-storm water discharges to surface waters or MS4 drainage systems.
- (3) LUP Type 2 dischargers shall clean streets in such a manner as to prevent non-storm water discharges from reaching surface water or MS4 drainage systems.

iv *Erosion Control*

- (1) LUP Type 2 dischargers shall implement effective wind erosion control.
- (2) LUP Type 2 dischargers shall provide effective soil cover for inactive areas and all finished slopes, open space, utility backfill, and completed lots.
- (3) LUP Type 2 dischargers shall limit the use of plastic materials when more sustainable, environmentally friendly alternatives exist. Where plastic materials are deemed necessary, the discharger shall consider the use of plastic materials resistant to solar degradation.

v *Sediment Controls*

- (1) LUP Type 2 dischargers shall establish and maintain effective perimeter controls and stabilize all construction entrances and exits sufficiently to control erosion and sediment discharges from the site.
- (2) On sites where sediment basins are to be used, LUP Type 2 dischargers shall, at minimum, design sediment basins according to the method provided in Attachment I.
- (3) **Additional LUP Type 2 Requirement:** LUP Type 2 dischargers shall implement appropriate erosion control BMPs (runoff control and soil stabilization) in conjunction with sediment control BMPs for areas under active<sup>10</sup> construction.
- (4) **Additional LUP Type 2 Requirement:** LUP Type 2 dischargers shall apply linear sediment controls along the toe of the slope, face of the

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<sup>10</sup> Active areas of construction are areas undergoing land surface disturbance. This includes construction activity during the preliminary stage, mass grading stage, streets and utilities stage and the vertical construction stage

slope, and at the grade breaks of exposed slopes to comply with sheet flow lengths<sup>11</sup> in accordance with Table 2 below.

**Table 2 – Critical Slope/Sheet Flow Length Combinations**

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

- (5) **Additional LUP Type 2 Requirement:** LUP Type 2 dischargers shall ensure that construction activity traffic to and from the project is limited to entrances and exits that employ effective controls to prevent off-site tracking of sediment.
- (6) **Additional LUP Type 2 Requirement:** LUP Type 2 dischargers shall ensure that all storm drain inlets and perimeter controls, runoff control BMPs, and pollutant controls at entrances and exits (e.g. tire washoff locations) are maintained and protected from activities that reduce their effectiveness.
- (7) **Additional LUP Type 2 Requirement:** LUP Type 2 dischargers shall inspect on a daily basis all immediate access roads daily. At a minimum daily (when necessary) and prior to any rain event, the discharger shall remove any sediment or other construction activity-related materials that are deposited on the roads (by vacuuming or sweeping).

vi *Run-on and Run-off Controls*

LUP Type 2 dischargers shall evaluate the quantity and quality of run-on and runoff through observation and sampling. LUP Type 2 dischargers shall effectively manage all run-on and runoff within the site and all runoff that discharges off the site. Run-on from off-site shall be directed away from all disturbed areas or shall be in compliance with the effluent limitations in this Attachment.

vii *Inspection, Maintenance and Repair*

- (1) All inspection, maintenance repair and sampling activities at the discharger's Type 2 LUP location shall be performed or supervised by a QSP representing the discharger. The QSP may delegate any or all of these activities to an employee trained to do the task(s) appropriately, but shall ensure adequate deployment.

<sup>11</sup> Sheet flow length is the length that shallow, low velocity flow travels across a site.

- (2) LUP Type 2 dischargers shall perform weekly inspections and observations, and at least once each 24-hour period during extended storm events, to identify BMPs that need maintenance to operate effectively, that have failed, or that could fail to operate as intended. Inspectors shall be the QSP or be trained by the QSP.
- (3) Upon identifying failures or other shortcomings, as directed by the QSP, LUP Type 2 dischargers shall begin implementing repairs or design changes to BMPs within 72 hours of identification and complete the changes as soon as possible.
- (4) For each inspection required, LUP Type 2 dischargers shall complete an inspection checklist, using a form provided by the State Water Board or Regional Water Board or in an alternative format that includes the information described below.
- (5) The LUP Type 2 discharger shall ensure that the checklist remains on-site with the SWPPP. At a minimum, an inspection checklist should include:
  - (a) Inspection date and date the inspection report was written.
  - (b) Weather information, including presence or absence of precipitation, estimate of beginning of qualifying storm event, duration of event, time elapsed since last storm, and approximate amount of rainfall in inches.
  - (c) Site information, including stage of construction, activities completed, and approximate area of the site exposed.
  - (d) A description of any BMPs evaluated and any deficiencies noted.
  - (e) If the construction site is safely accessible during inclement weather, list the observations of all BMPs: erosion controls, sediment controls, chemical and waste controls, and non-storm water controls. Otherwise, list the results of visual inspections at all relevant outfalls, discharge points, downstream locations and any projected maintenance activities.
  - (f) Report 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 taken during the inspection, if any.
- (i) Inspector's name, title, and signature.

### 3. Type 3 LUPs:

a. Type 3 LUPs are determined by the Combined Risk Matrix in Attachment A.1. Type 3 LUPs have the specified combination of High and Medium project sediment risk along with High and Medium receiving water risk. Receiving water risk is either considered "Medium" for those segments of the project not in close proximity to a sensitive receiving watershed yet within the flood plain of a sensitive receiving water body, or "High" where the soil disturbance is within close proximity to a sensitive receiving water body. Project sediment risk is calculated based on the Risk Factor Worksheet in Attachment C.

#### b. Requirements Subject to Type 3 LUP Requirements:

##### i *Effluent Standards*

(1) Narrative – LUP Type 3 dischargers shall comply with the narrative effluent standards below.

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

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

(2) Numeric – 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 subject to a pH NEL of 6.0-9.0 and a turbidity NEL of 500 NTU.

##### ii *Good Site Management "Housekeeping"*

(1) LUP Type 3 dischargers shall implement good site management (i.e., "housekeeping") measures for construction materials that could potentially be a threat to water quality if discharged. At a minimum, the good housekeeping measures shall consist of the following:

- (a) Conduct an inventory of the products used and/or expected to be used and the end products that are produced and/or expected to be produced.
  - (b) Cover and berm loose stockpiled construction materials that are not actively being used (i.e. soil, spoils, aggregate, fly-ash, stucco, hydrated lime, etc.).
  - (c) Store chemicals in watertight containers or in a storage shed (completely enclosed), with appropriate secondary containment to prevent any spillage or leakage.
  - (d) Minimize exposure of construction materials with precipitation.
  - (e) Implement BMPs to prevent the off-site tracking of loose construction and landscape materials.
- (2) LUP Type 3 dischargers shall implement good housekeeping measures for waste management, which, at a minimum, shall consist of the following:
- (a) Prevent disposal of any rinse or wash waters or materials on impervious or pervious site surfaces or into the storm drain system.
  - (b) Ensure the containment of sanitation facilities (e.g., portable toilets) to prevent discharges of pollutants to the storm water drainage system or receiving water.
  - (c) Clean or replace sanitation facilities and inspecting them regularly for leaks and spills.
  - (d) Cover waste disposal containers at the end of every business day and during a rain event.
  - (e) Prevent discharges from waste disposal containers to the storm water drainage system or receiving water.
  - (f) Contain and securely protect stockpiled waste material from wind and rain at all times unless actively being used.
  - (g) Implement procedures that effectively address hazardous and non-hazardous spills.
  - (h) Develop a spill response and implementation element of the SWPPP prior to commencement of construction activities. The SWPPP shall require that:



- (i) Equipment and materials for cleanup of spills shall be available on site and that spills and leaks shall be cleaned up immediately and disposed of properly; and
  - (ii) Appropriate spill response personnel are assigned and trained.
- (i) 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.
- (3) LUP Type 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 disposing of leaked materials properly.
- (4) LUP Type 3 dischargers shall implement good housekeeping for landscape materials, which, at a minimum, shall consist of the following:
  - (a) Contain stockpiled materials such as mulches and topsoil when they are not actively being used.
  - (b) Contain fertilizers and other landscape materials when they are not actively being used.
  - (c) Discontinuing the application of any erodible landscape material within 2 days before a forecasted rain event or during periods of precipitation.
  - (d) Applying 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 erodible landscape material on pallets and covering or storing such materials when not being used or applied.

(5) LUP Type 3 dischargers shall conduct an assessment and create a list of potential pollutant sources and identify any areas of the site where additional BMPs are necessary to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. This potential pollutant list shall be kept with the SWPPP and shall identify all non-visible pollutants which are known, or should be known, to occur on the construction site. At a minimum, when developing BMPs, LUP Type 3 dischargers shall do the following:

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

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

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

(d) Ensure retention of sampling, visual observation, and inspection records.

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

(6) LUP Type 3 dischargers shall implement good housekeeping measures on the construction site 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.

iii *Non-Storm Water Management*

(1) LUP Type 3 dischargers shall implement measures to control all non-storm water discharges during construction.

(2) LUP Type 3 dischargers shall wash vehicles in such a manner as to prevent non-storm water discharges to surface waters or MS4 drainage systems.

- (3) LUP Type 3 dischargers shall clean streets in such a manner as to prevent non-storm water discharges from reaching surface water or MS4 drainage systems.

iv *Erosion Control*

- (1) LUP Type 3 dischargers shall implement effective wind erosion control.
- (2) LUP Type 3 dischargers shall provide effective soil cover for inactive areas and all finished slopes, open space, utility backfill, and completed lots.
- (3) LUP Type 1 dischargers shall limit the use of plastic materials when more sustainable, environmentally friendly alternatives exist. Where plastic materials are deemed necessary, the discharger shall consider the use of plastic materials resistant to solar degradation.
- (4) **Additional LUP Type 3 Requirement:** LUP Type 3 dischargers shall ensure that the soil loss during each phase of construction is equivalent to or less than the pre-construction soil loss for the same time period.<sup>12</sup>

v *Sediment Controls*

- (1) LUP Type 3 dischargers shall establish and maintain effective perimeter controls and stabilize all construction entrances and exits sufficiently to control erosion and sediment discharges from the site.
- (2) On sites where sediment basins are to be used, LUP Type 3 dischargers shall, at minimum, design sediment basins according to the method provided in Attachment I.
- (3) **Additional LUP Type 2 & 3 Requirement:** LUP Type 3 dischargers shall implement appropriate erosion control BMPs (runoff control and soil stabilization) in conjunction with sediment control BMPs for areas under active construction.

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<sup>12</sup> Soil loss shall be predicted using the California Department of Transportation (CalTrans) Revised Universal Soil Loss Equation (RUSLE2). RUSLE2 is an advanced, user-friendly software model that predicts long-term sheet and rill erosion by water. It was originally developed in cooperation with the United States Department of Agriculture's Agriculture Research Service, the National Sedimentation Laboratory, the United States Department of Agriculture's Natural Resources Conservation Service, and the Bureau of Land Management. CalTrans has produced a California-specific version of the model (CalTrans RUSLE2) that can be used to demonstrate compliance with Section I.3.iv.(4). For example, if a site is to be graded from June 1 to August 31, CalTrans RUSLE2 can be used to predict the soil loss for this period compared to the predicted pre-project soil loss for the same June 1 to August 31 time period.

- (4) **Additional LUP Type 2 & 3 Requirement:** LUP Type 3 dischargers shall apply linear sediment controls along the toe of the slope, face of the slope, and at the grade breaks of exposed slopes to comply with sheet flow lengths in accordance with Table 2 above.
- (5) **Additional LUP Type 2 & 3 Requirement:** LUP Type 3 dischargers shall ensure that construction activity traffic to and from the project is limited to entrances and exits that employ effective controls to prevent off-site tracking of sediment.
- (6) **Additional LUP Type 2 & 3 Requirement:** LUP Type 3 dischargers shall ensure that all storm drain inlets and perimeter controls, runoff control BMPs, and pollutant controls at entrances and exits (e.g. tire washoff locations) are maintained and protected from activities that reduce their effectiveness.
- (7) **Additional LUP Type 2 & 3 Requirement:** LUP Type 3 dischargers shall inspect on a daily basis all immediate access roads daily. At a minimum daily (when necessary) and prior to any rain event, the discharger shall remove any sediment or other construction activity-related materials that are deposited on the roads (by vacuuming or sweeping).
- (8) **Additional LUP Type 3 Requirement:** The Regional Water Board may require LUP Type 3 dischargers to implement additional site-specific sediment control requirements if the implementation of the other requirements in this section are not adequately protecting the receiving waters.

vi *Run-on and Run-off Controls*

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

vii *Inspection, Maintenance and Repair*

- (1) All inspection, maintenance repair and sampling activities at the discharger's Type 3 LUP location shall be performed or supervised by a QSP representing the discharger. The QSP may delegate any or all of these activities to an employee trained to do the task(s) appropriately, but shall ensure adequate deployment.

- (2) LUP Type 3 dischargers shall perform weekly inspections and observations, and at least once each 24-hour period during extended storm events, to identify BMPs that need maintenance to operate effectively, that have failed, or that could fail to operate as intended. Inspectors shall be the QSP or be trained by the QSP.
- (3) Upon identifying failures or other shortcomings, as directed by the QSP, LUP Type 3 dischargers shall begin implementing repairs or design changes to BMPs within 72 hours of identification and complete the changes as soon as possible.
- (4) For each inspection required, LUP Type 3 dischargers shall complete an inspection checklist, using a form provided by the State Water Board or Regional Water Board or in an alternative format that includes the information described below.
- (5) The LUP Type 3 discharger shall ensure that the checklist remains on-site with the SWPPP. At a minimum, an inspection checklist should include:
  - (a) Inspection date and date the inspection report was written.
  - (b) Weather information, including presence or absence of precipitation, estimate of beginning of qualifying storm event, duration of event, time elapsed since last storm, and approximate amount of rainfall in inches.
  - (c) Site information, including stage of construction, activities completed, and approximate area of the site exposed.
  - (d) A description of any BMPs evaluated and any deficiencies noted.
  - (e) If the construction site is safely accessible during inclement weather, list the observations of all BMPs: erosion controls, sediment controls, chemical and waste controls, and non-storm water controls. Otherwise, list the results of visual inspections at all relevant outfalls, discharge points, downstream locations and any projected maintenance activities.
  - (f) Report 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 taken during the inspection, if any.

(i) Inspector's name, title, and signature.

## **J. STORM WATER POLLUTION PREVENTION PLAN (SWPPP) REQUIREMENTS**

### **1. Objectives**

SWPPPs for all LUPs shall be developed and amended or revised, when there is a significant change to the project to ensure that:

- a. All pollutants and their sources, including sources of sediment, associated with construction activities associated with LUP activity are controlled;
- b. All non-storm water discharges are identified and either eliminated, controlled, or treated;
- c. BMPs are effective and result in the reduction or elimination of pollutants in storm water discharges and authorized non-storm water discharges from LUPs during construction; and
- d. BMPs installed to reduce or eliminate pollutants after construction is completed are effective and maintained.

### **2. SWPPP Implementation Schedule**

- a. LUPs for which PRDs have been submitted to the State Water Board shall develop a site/project location SWPPP prior to the start of land-disturbing activity in accordance with this Section and shall implement the SWPPP concurrently with commencement of soil-disturbing activities.
- b. For an ongoing LUP involving a change of ownership, the new owner shall review the existing SWPPP and amend it, if necessary, or develop a new SWPPP within 15 calendar days to conform to the requirements set forth in this General Permit.

### **3. Availability**

The SWPPP shall be available at the construction site during working hours while construction is occurring and shall be made available upon request by a State or Municipal inspector. When the original SWPPP is retained by a crewmember in a construction vehicle and is not currently at the construction site, copies of the BMPs and map/drawing will be left with the field crew and the original SWPPP shall be made available via a request by radio/telephone.

## **K. REGIONAL WATER QUALITY CONTROL BOARD AUTHORITIES**

1. Regional Water Boards shall administer the provisions of this General Permit. Administration of this General Permit may include, but is not limited to, requesting the submittal of SWPPPs, reviewing SWPPPs, reviewing monitoring and sampling and analysis reports, conducting compliance inspections, gathering site information by any medium including sampling, photo and video documentation, and taking enforcement actions.
2. Regional Water Boards may terminate coverage under this General Permit for dischargers who fail to comply with its requirements or where they determine that an individual NPDES permit is appropriate.
3. Regional Water Boards may issue separate permits for discharges of storm water associated with construction activity to individual dischargers, categories of dischargers, or dischargers in a geographic area. Upon issuance of such permits by a Regional Water Board, dischargers subject to those permits shall no longer be regulated by this General Permit.
4. Regional Water Boards may direct the discharger to reevaluate the LUP Type(s) for the project (or elements/segments of the project) and impose the appropriate level of requirements.
5. Regional Water Boards may terminate coverage under this General Permit for dischargers who incorrectly determine or report their LUP Type (e.g., they determine themselves to be a LUP Type 1 when they are actually a Type 2).
6. Regional Water Boards may review PRDs and reject or accept applications for permit coverage or may require dischargers to submit a Report of Waste Discharge / NPDES permit application for Regional Water Board consideration of individual requirements.
7. The Regional Water Boards may extend the public comment period for review of any discharger's complete PRDs, on a case-by-case basis.
8. Regional Water Boards may impose additional requirements on dischargers to satisfy TMDL implementation requirements or to satisfy provisions in their Basin Plans.
9. Regional Water Boards may require additional Monitoring and Reporting Program Requirements, including sampling and analysis of discharges to sediment-impaired water bodies.



- 10.** Regional Water Boards may require dischargers to retain records for more than the three years required by this General Permit.
- 11.** 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.
- 12.** The Regional Water Board may require additional monitoring and reporting program requirements including sampling and analysis of discharges to CWA § 303(d)-listed water bodies. Additional requirements imposed by the Regional Water Board shall be consistent with the overall monitoring effort in the receiving waters.

## L. MONITORING AND REPORTING REQUIREMENTS

**Table 3. LUP Summary of Monitoring Requirements**

LUP Type	Visual Inspections				Sample Collection	
	Daily Site BMP	Pre-storm Event	Daily Storm	Post Storm	Storm Water Discharge	Receiving Water
		Baseline				
1	X					
2	X	X		X	X	
3	X	X	X	X	X	X

### 1. Objectives

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

### 2. M&RP Implementation Schedule

- a. LUP dischargers shall implement the requirements of this Section at the time of commencement of construction activity. LUP dischargers are responsible for implementing these requirements until construction activity is complete and the site is stabilized.
- b. LUP dischargers shall revise the M&RP when:
  - i. Site conditions or construction activities change such that a change in monitoring is required to comply with the requirements and intent of this General Permit.
  - ii. The Regional Water Board requires the discharger to revise its M&RP based on its review of the document. Revisions may include, but not be limited to, conducting additional site inspections, submitting reports, and certifications. Revisions shall be submitted via postal mail or electronic e-mail.
  - iii. The Regional Water Board may require additional monitoring and reporting program requirements including sampling and analysis of

discharges to CWA § 303(d)-listed water bodies. Additional requirements imposed by the Regional Water Board shall be consistent with the overall monitoring effort in the receiving waters.

### **3. LUP Type 1 Monitoring and Reporting Requirements**

#### **a. LUP Type 1 Inspection Requirements**

- i LUP Type 1 dischargers shall ensure that all inspections are conducted by qualified personnel. The name(s) and contact number(s) of the assigned inspection personnel should be listed in the SWPPP.
- ii LUP Type 1 dischargers shall ensure that all visual inspections are conducted daily during working hours and in conjunction with other daily activities in areas where active construction is occurring.
- iii LUP Type 1 dischargers shall ensure that photographs of the site taken before, during, and after storm events are taken during inspections, and submitted through the State Water Board's SMARTS website once every three rain events.
- iv LUP Type 1 dischargers shall conduct daily visual inspections to verify that:
  - (1) Appropriate BMPs for storm water and non-storm water are being implemented in areas where active construction is occurring (including staging areas);
  - (2) Project excavations are closed, with properly protected spoils, and that road surfaces are cleaned of excavated material and construction materials such as chemicals by either removing or storing the material in protective storage containers at the end of every construction day;
  - (3) Land areas disturbed during construction are returned to pre-construction conditions or an equivalent protection is used at the end of each workday to eliminate or minimize erosion and the possible discharge of sediment or other pollutants during a rain event.
- v Inspections may be discontinued in non-active construction areas where soil-disturbing activities are completed and final soil stabilization is achieved (e.g., paving is completed, substructures are installed, vegetation meets minimum cover requirements for final stabilization, or other stabilization requirements are met).
- vi Inspection programs are required for LUP Type 1 projects where temporary and permanent stabilization BMPs are installed and are to be monitored after active construction is completed. Inspection activities

shall continue until adequate permanent stabilization is established and, in areas where re-vegetation is chosen, until minimum vegetative coverage is established in accordance with Section C.1 of this Attachment.

b. LUP Type 1 Monitoring Requirements for Non-Visible Pollutants

LUP Type 1 dischargers shall implement sampling and analysis requirements to monitor non-visible pollutants associated with (1) construction sites; (2) activities producing pollutants that are not visually detectable in storm water discharges; and (3) activities which could cause or contribute to an exceedance of water quality objectives in the receiving waters.

- i Sampling and analysis for non-visible pollutants is only required where the LUP Type 1 discharger believes pollutants associated with construction activities have the potential to be discharged with storm water runoff due to a spill or in the event there was a breach, malfunction, failure and/or leak of any BMP. Also, failure to implement BMPs may require sample collection.
  - (1) Visual observations made during the monitoring program described above will help the LUP Type 1 discharger determine when to collect samples.
  - (2) The LUP Type 1 discharger is not required to sample if one of the conditions described above (e.g., breach or spill) occurs and the site is cleaned of material and pollutants and BMPs are implemented prior to the next storm event.
- ii LUP Type 1 dischargers shall collect samples at all discharge locations which drain to the areas identified by the visual observations and which can be safely accessed. For sites where sampling and analysis is required, personnel trained in water quality sampling procedures shall collect storm water samples.
- iii If sampling for non-visible pollutant parameters is required, LUP Type 1 dischargers shall ensure that samples be analyzed for parameters indicating the presence of pollutants identified in the pollutant source assessment required in Section I.1.b.ii.(5).
- iv LUP Type 1 dischargers shall collect samples during the first two hours of discharge from rain events that occur during business hours and which generate runoff.
- v LUP Type 1 dischargers shall ensure that a sufficiently large sample of storm water that has not come into contact with the disturbed soil or the materials stored or used on-site (uncontaminated sample) will be collected for comparison with the discharge sample. Samples shall be collected

during the first two hours of discharge from rain events that occur during daylight hours and which generate runoff.

- vi LUP Type 1 dischargers shall compare the uncontaminated sample to the samples of discharge using field analysis or through laboratory analysis. Analyses may include, but are not limited to, indicator parameters such as: pH, specific conductance, dissolved oxygen, conductivity, salinity, and Total Dissolved Solids (TDS).
  - vii For laboratory analyses, all sampling, sample preservation, and other analyses must be conducted according to test procedures pursuant to 40 C.F.R. Part 136. LUP Type 1 dischargers shall ensure that field samples are collected and analyzed according to manufacturer specifications of the sampling devices employed. Portable meters shall be calibrated according to manufacturer's specification.
  - viii LUP Type 1 dischargers shall ensure that all field and/or analytical data are kept in the SWPPP document.
- c. LUP Type 1 Visual Observation and Sample Collection Exceptions
- i LUP Type 1 dischargers shall be prepared to collect samples and conduct visual observation (inspections) to meet the minimum visual observation requirements of this Attachment. The Type 1 LUP discharger is not required to physically collect samples or conduct visual observation (inspections) under the following conditions:
    - (1) During dangerous weather conditions such as flooding and electrical storms;
    - (2) Outside of scheduled site business hours.
  - ii If the LUP Type 1 discharger does not collect the required samples or visual observation (inspections) due to these exceptions, an explanation why the sampling or visual observation (inspections) were not conducted shall be included in both the SWPPP and the Annual Report.

d. Particle Size Analysis Justification

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

#### 4. LUP Type 2 Monitoring and Reporting Requirements

##### a. LUP Type 2 Inspection Requirements

- i LUP Type 2 dischargers shall ensure that all inspections are conducted by qualified personnel. The name(s) and contact number(s) of the assigned inspection personnel should be listed in the SWPPP.
- ii LUP Type 2 dischargers shall ensure that all visual inspections are conducted daily during working hours and in conjunction with other daily activities in areas where active construction is occurring.
- iii LUP Type 2 dischargers shall ensure that photographs of the site taken before, during, and after storm events are taken during inspections, and submitted through the State Water Board's SMARTS website once every three rain events.
- iv LUP Type 2 dischargers shall conduct daily visual inspections to verify that appropriate BMPs for storm water and non-storm water are being implemented and in place in areas where active construction is occurring (including staging areas).
- v LUP Type 2 dischargers shall conduct inspections of the construction site prior to anticipated storm events, during extended storm events, and after actual storm events to identify areas contributing to a discharge of storm water associated with construction activity. Pre-storm inspections are to ensure that BMPs are properly installed and maintained; post-storm inspections are to assure that BMPs have functioned adequately. During extended storm events, inspections shall be required during normal working hours for each 24-hour period.
- vi LUP Type 2 dischargers shall implement a monitoring program for inspecting projects that require temporary and permanent stabilization BMPs after active construction is complete. Inspections shall ensure that the BMPs are adequate and maintained. Inspection activities shall continue until adequate permanent stabilization is established and, in vegetated areas, until minimum vegetative coverage is established in accordance with Section C.1 of this Attachment.
- vii LUP Type 2 dischargers shall install a rain gauge on-site with readings made during all storm event inspections.
- viii LUP Type 2 dischargers shall include and maintain a log of the inspections conducted in the SWPPP. The log will provide the date and time of the inspection and who conducted the inspection.

b. LUP Type 2 Storm Water Effluent Monitoring Requirements

**Table 4. LUP Type 2 Effluent Monitoring Requirements**

LUP Type	Frequency	Effluent Monitoring
2	samples beginning the first hour of any new discharge and samples during the first and last hour of every day of normal operations characterizing discharges associated with construction activity from the entire project disturbed area. (Minimum of 3 samples per day)	turbidity, pH, and non-visible pollutant parameters (if applicable)

- i LUP Type 2 dischargers shall collect storm water grab samples from sampling locations characterizing discharges associated with construction activity from the entire LUP disturbed area beginning the first hour of any new discharge<sup>13</sup> and during the first and last hour of every day of normal operations for the duration of the discharge event. At a minimum, 3 samples shall be collected per day of discharge.
- ii LUP Type 2 dischargers shall collect samples of stored or contained storm water that is discharged subsequent to a storm event producing precipitation of ½ inch or more at the time of discharge.
- iii LUP Type 2 dischargers shall ensure that storm water grab sample(s) obtained be representative of the flow and characteristics of the discharge.
- iv LUP Type 2 dischargers shall analyze their effluent samples for:
  - (1) pH and turbidity
  - (2) Any additional parameter for which monitoring is required by the Regional Water Board.

c. LUP Type 2 Storm Water Effluent Sampling Locations

- i LUP Type 2 dischargers shall perform sampling and analysis of storm water discharges to characterize discharges associated with construction activity from the entire disturbed project or segment area.
- ii LUP Type 2 dischargers may monitor and report run-on from surrounding areas if there is reason to believe run-on may contribute to exceedance of NALs or NELs.

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<sup>13</sup> A new discharge is defined here as any type of discharge of storm water that goes beyond the property boundary after at least a 48 hour period of no discharge.

- iii LUP Type 2 dischargers shall select analytical test methods from the list provided in Table 5 below.
- iv LUP Type 2 dischargers shall ensure that all storm water sample collection preservation and handling shall be conducted in accordance with the “Storm Water Sample Collection and Handling Instructions” below.

d. LUP Type 2 Monitoring Requirements for Non-Visible Pollutants

LUP Type 2 dischargers shall implement sampling and analysis requirements to monitor non-visible pollutants associated with (1) construction sites; (2) activities producing pollutants that are not visually detectable in storm water discharges; and (3) activities which could cause or contribute to an exceedance of water quality objectives in the receiving waters.

- i Sampling and analysis for non-visible pollutants is only required where the LUP Type 2 discharger believes pollutants associated with construction activities have the potential to be discharged with storm water runoff due to a spill or in the event there was a breach, malfunction, failure and/or leak of any BMP. Also, failure to implement BMPs may require sample collection.
  - (1) Visual observations made during the monitoring program described above will help the LUP Type 2 discharger determine when to collect samples.
  - (2) The LUP Type 2 discharger is not required to sample if one of the conditions described above (e.g., breach or spill) occurs and the site is cleaned of material and pollutants and BMPs are implemented prior to the next storm event.
- ii LUP Type 2 dischargers shall collect samples at all discharge locations which drain to the areas identified by the visual observations and which can be safely accessed. For sites where sampling and analysis is required, personnel trained in water quality sampling procedures shall collect storm water samples.
- iii If sampling for non-visible pollutant parameters is required, LUP Type 2 dischargers shall ensure that samples be analyzed for parameters indicating the presence of pollutants identified in the pollutant source assessment required in Section I.2.b.ii.(5).
- iv LUP Type 2 dischargers shall collect samples during the first two hours of discharge from rain events that occur during business hours and which generate runoff.



- v LUP Type 2 dischargers shall ensure that a sufficiently large sample of storm water that has not come into contact with the disturbed soil or the materials stored or used on-site (uncontaminated sample) will be collected for comparison with the discharge sample. Samples shall be collected during the first two hours of discharge from rain events that occur during daylight hours and which generate runoff.
  - vi LUP Type 2 dischargers shall compare the uncontaminated sample to the samples of discharge using field analysis or through laboratory analysis. Analyses may include, but are not limited to, indicator parameters such as: pH, specific conductance, dissolved oxygen, conductivity, salinity, and Total Dissolved Solids (TDS).
  - vii For laboratory analyses, all sampling, sample preservation, and other analyses must be conducted according to test procedures pursuant to 40 C.F.R. Part 136. LUP Type 2 dischargers shall ensure that field samples are collected and analyzed according to manufacturer specifications of the sampling devices employed. Portable meters shall be calibrated according to manufacturer's specification.
  - viii LUP Type 2 dischargers shall ensure that all field and/or analytical data are kept in the SWPPP document.
- e. LUP Type 2 Visual Observation and Sample Collection Exceptions
- i LUP Type 2 dischargers shall be prepared to collect samples and conduct visual observation (inspections) to meet the minimum visual observation requirements of this Attachment. The Type 2 LUP discharger is not required to physically collect samples or conduct visual observation (inspections) under the following conditions:
    - (1) During dangerous weather conditions such as flooding and electrical storms;
    - (2) Outside of scheduled site business hours.
  - ii If the LUP Type 2 discharger does not collect the required samples or visual observation (inspections) due to these exceptions, an explanation why the sampling or visual observation (inspections) were not conducted shall be included in both the SWPPP and the Annual Report.
- f. LUP Type 2 Storm Water Sample Collection and Handling Instructions
- LUP Type 2 dischargers shall refer to Table 5 below for test Methods, detection Limits, and reporting Units. During storm water sample collection and handling, the LUP Type 2 discharger shall:

- i Identify the parameters required for testing and the number of storm water discharge points that will be sampled. Request the laboratory to provide the appropriate number of sample containers, types of containers, sample container labels, blank chain of custody forms, and sample preservation instructions.
- ii Determine how to ship the samples to the laboratory. The testing laboratory should receive samples within 48 hours of the physical sampling (unless otherwise required by the laboratory). The options are to either deliver the samples to the laboratory, arrange to have the laboratory pick them up, or ship them overnight to the laboratory.
- iii Use only the sample containers provided by the laboratory to collect and store samples. Use of any other type of containers could contaminate your samples.
- iv Prevent sample contamination, by not touching, or putting anything into the sample containers before collecting storm water samples.
- v Not overfilling sample containers. Overfilling can change the analytical results.
- vi Tightly screw the cap of each sample container without stripping the threads of the cap.
- vii Complete and attach a label to each sample container. The label shall identify the date and time of sample collection, the person taking the sample, and the sample collection location or discharge point. The label should also identify any sample containers that have been preserved.
- viii Carefully pack sample containers into an ice chest or refrigerator to prevent breakage and maintain temperature during shipment. Remember to place frozen ice packs into the shipping container. Samples should be kept as close to 4° C (39° F) as possible until arriving at the laboratory. Do not freeze samples.
- ix Complete a Chain of Custody form for each set of samples. The Chain of Custody form shall include the discharger's name, address, and phone number, identification of each sample container and sample collection point, person collecting the samples, the date and time each sample container was filled, and the analysis that is required for each sample container.
- x Upon shipping/delivering the sample containers, obtain both the signatures of the persons relinquishing and receiving the sample containers.

- xi Designate and train personnel to collect, maintain, and ship samples in accordance with the above sample protocols and good laboratory practices.
- xii Refer to the Surface Water Ambient Monitoring Program's (SWAMP) Quality Assurance Management Plan (QAMP) for more information on sampling collection and analysis. See [http://www.waterboards.ca.gov/water\\_issues/programs/swamp/](http://www.waterboards.ca.gov/water_issues/programs/swamp/)<sup>14</sup>  
QAMP Link:  
[http://www.waterboards.ca.gov/water\\_issues/programs/swamp/qamp.shtml](http://www.waterboards.ca.gov/water_issues/programs/swamp/qamp.shtml)

**Table 5. Test Methods, Detection Limits, Reporting Units and Applicable NALs/NELs**

Parameter	Test Method	Discharge Type	Min. Detection Limit	Reporting Units	Numeric Action Levels	Numeric Effluent Limitation
<b>pH</b>	Field test with calibrated portable instrument	All	0.2	pH units	Lower = 6.5 upper = 8.5	Lower = 6.0 upper = 9.0
<b>Turbidity</b>	EPA 0180.1 and/or field test with portable instrument	Type 2	Not specified	NTU	250 NTU	500 NTU

g. LUP Type 2 Monitoring Methods

- i The LUP Type 2 discharger's project M&RP shall include a description of the following items:
  - (1) Visual observation locations, visual observation procedures, and visual observation follow-up and tracking procedures.
  - (2) Sampling locations, and sample collection and handling procedures. This shall include detailed procedures for sample collection, storage, preservation, and shipping to the testing lab to assure that consistent quality control and quality assurance is maintained. Dischargers shall attach to the monitoring program a copy of the Chain of Custody form used when handling and shipping samples.
  - (3) Identification of the analytical methods and related method detection limits (if applicable) for each parameter required in Section L.4.b above.

<sup>14</sup> Additional information regarding QAMP can be found at <http://mpsl.mlml.calstate.edu/swgacompare.htm>.

- ii LUP Type 2 dischargers shall ensure that all sampling and sample preservation be in accordance with the current edition of "Standard Methods for the Examination of Water and Wastewater" (American Public Health Association). All monitoring instruments and equipment (including a discharger's own field instruments for measuring pH and turbidity) shall be calibrated and maintained in accordance with manufacturers' specifications to ensure accurate measurements. All laboratory analyses shall be conducted according to test procedures under 40 CFR Part 136, unless other test procedures have been specified in this General Permit or by the Regional Water Board. With the exception of field analysis conducted by the discharger for turbidity and pH, all analyses shall be sent to and conducted at a laboratory certified for such analyses by the State Department of Health Services. The LUP discharger shall conduct its own field analysis of pH and may conduct its own field analysis of turbidity if the discharger has sufficient capability (qualified and trained employees, properly calibrated and maintained field instruments, etc.) to adequately perform the field analysis.

h. LUP Type 2 Analytical Methods

LUP Type 2 dischargers shall refer to Table 5 above for test Methods, detection Limits, and reporting Units.

- i **pH:** the LUP Type 2 discharger shall perform pH analysis on-site with a calibrated pH meter, pH test kit, or wide range pH indicator paper. The LUP Type 2 discharger shall record pH monitoring results on paper and retain these records in accordance with Section L.4.I, below.
- ii **Turbidity:** the LUP Type 2 discharger shall perform turbidity analysis using a calibrated turbidity meter (turbidimeter), either on-site or at an accredited lab. Acceptable test methods include Standard Method 2130 or USEPA Method 180.1. The results shall be recorded in the site log book in Nephelometric Turbidity Units (NTU).

i. Watershed Monitoring Option

If an LUP Type 2 discharger is part of a qualified regional watershed-based monitoring program the LUP Type 2 discharger may be eligible for relief from the monitoring requirements in this Attachment. The Regional Water Board may approve proposals to substitute an acceptable watershed-based monitoring program if it determines that the watershed-based monitoring program will provide information to determine each discharger's compliance with the requirements of this General Permit.

j. Particle Size Analysis Justification

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

k. NAL Exceedance Report

- i In the event that any effluent sample exceeds an applicable NAL, LUP Type 2 dischargers shall electronically submit all storm event sampling results to the State Water Board no later than 10 days after the conclusion of the storm event. The Regional Water Boards may require dischargers to submit NAL Exceedance Reports.
- ii LUP Type 2 dischargers shall certify each NAL Exceedance Report in accordance with the Special Provisions for Construction Activity.
- iii LUP Type 2 dischargers shall retain an electronic or paper copy of each NAL Exceedance Report for a minimum of three years after the date the exceedance report is filed.
- iv LUP Type 2 dischargers shall include in the NAL Exceedance Report:
  - (1) the analytical method(s), method reporting unit(s), and method detection limit(s) of each analytical parameter (analytical results that are less than the method detection limit shall be reported as “less than the method detection limit”); and
  - (2) the date, place, time of sampling, visual observation (inspections), and/or measurements, including precipitation.
  - (3) Description of the current BMPs associated with the effluent sample that exceeded the NAL and the proposed corrective actions taken.

l. Monitoring Records

LUP Type 2 dischargers shall ensure that records of all storm water monitoring information and copies of all reports (including Annual Reports) required by this General Permit be retained for a period of at least three years. LUP Type 2 dischargers shall retain all records on-site while construction is ongoing. These records shall include:

- i The date, place, time of facility inspections, sampling, visual observation (inspections), and/or measurements, including precipitation (rain gauge);
- ii The individual(s) who performed the facility inspections, sampling, visual observation (inspections), and or measurements;

- iii The date and approximate time of analyses;
- iv The individual(s) who performed the analyses;
- v A summary of all analytical results from the last three years, the method detection limits and reporting units, and the analytical techniques or methods used;
- vi Quality assurance/quality control records and results;
- vii Non-storm water discharge inspections and visual observation (inspections) and storm water discharge visual observation records (see Section L.4.a above);
- viii Visual observation and sample collection exception records (see Section L.4.e above); and
- ix The records of any corrective actions and follow-up activities that resulted from analytical results, visual observation (inspections), or inspections.

## **5. LUP Type 3 Monitoring and Reporting Requirements**

### **a. LUP Type 3 Inspection Requirements**

- i LUP Type 3 dischargers shall ensure that all inspections are conducted by qualified personnel. The name(s) and contact number(s) of the assigned inspection personnel should be listed in the SWPPP.
- ii LUP Type 3 dischargers shall ensure that all visual inspections are conducted daily during working hours and in conjunction with other daily activities in areas where active construction is occurring.
- iii LUP Type 3 dischargers shall ensure that photographs of the site taken before, during, and after storm events are taken during inspections, and submitted through the State Water Board's SMARTS website once every three rain events.
- iv LUP Type 3 dischargers shall conduct daily visual inspections to verify that appropriate BMPs for storm water and non-storm water are being implemented and in place in areas where active construction is occurring (including staging areas).
- v LUP Type 3 dischargers shall conduct inspections of the construction site prior to anticipated storm events, during extended storm events, and after actual storm events to identify areas contributing to a discharge of storm water associated with construction activity. Pre-storm inspections are to

ensure that BMPs are properly installed and maintained; post-storm inspections are to assure that BMPs have functioned adequately. During extended storm events, inspections shall be required during normal working hours for each 24-hour period.

- vi LUP Type 3 dischargers shall implement a monitoring program for inspecting projects that require temporary and permanent stabilization BMPs after active construction is complete. Inspections shall ensure that the BMPs are adequate and maintained. Inspection activities shall continue until adequate permanent stabilization is established and, in vegetated areas, until minimum vegetative coverage is established in accordance with Section C.1 of this Attachment.
- vii LUP Type 3 dischargers shall install a rain gauge on-site with readings made during all storm event inspections.
- viii LUP Type 3 dischargers shall include and maintain a log of the inspections conducted in the SWPPP. The log will provide the date and time of the inspection and who conducted the inspection.

b. LUP Type 3 Storm Water Effluent Monitoring Requirements

**Table 6. LUP Type 3 Effluent Monitoring Requirements**

LUP Type	Frequency	Effluent Monitoring
3	samples beginning the first hour of any new discharge and samples during the first and last hour of every day of normal operations characterizing discharges associated with construction activity from the entire project disturbed area. (Minimum of 3 samples per day)	turbidity, pH, suspended sediment concentrations (SSC) <sup>15</sup> (only if turbidity NEL exceeded), plus non-visible pollutant parameters (if applicable)

- i LUP Type 3 dischargers shall collect storm water grab samples from sampling locations characterizing discharges associated with construction activity from the entire LUP disturbed area beginning the first hour of any new discharge<sup>16</sup> and during the first and last hour of every day of normal operations for the duration of the discharge event. At a minimum, 3 samples shall be collected per day of discharge.
- ii LUP Type 3 dischargers shall collect samples of stored or contained storm water that is discharged subsequent to a storm event producing precipitation of ½ inch or more at the time of discharge.

<sup>15</sup> Suspended Sediment Concentration monitoring is required for any Type 3 segment that exceeds its turbidity NEL.

<sup>16</sup> A new discharge is defined here as any type of discharge of storm water that goes beyond the property boundary after at least a 48 hour period of no discharge.

- iii LUP Type 3 dischargers shall ensure that storm water grab sample(s) obtained be representative of the flow and characteristics of the discharge.
- iv LUP Type 3 dischargers shall analyze their effluent samples for:
  - (1) pH and turbidity
  - (2) Any additional parameter for which monitoring is required by the Regional Water Board.
- v LUP Type 3 dischargers that have violated the turbidity daily average NEL shall analyze subsequent effluent samples for all of the parameters specified in Section L.5.b of this Attachment.

c. LUP Type 3 Storm Water Effluent Sampling Locations

- i LUP Type 3 dischargers shall perform sampling and analysis of storm water discharges to characterize discharges associated with construction activity from the entire disturbed project or segment area.
- ii LUP Type 3 dischargers may monitor and report run-on from surrounding areas if there is reason to believe run-on may contribute to exceedance of NALs or NELs.
- iii LUP Type 3 dischargers shall select analytical test methods from the list provided in Table 7 below.
- iv LUP Type 3 dischargers shall ensure that all storm water sample collection preservation and handling shall be conducted in accordance with the “Storm Water Sample Collection and Handling Instructions” below.

d. LUP Type 3 Receiving Water Monitoring Requirements

**Table 7. LUP Type 3 Receiving Water Monitoring Requirements**

<b>LUP Type</b>	<b>Trigger</b>	<b>Receiving Water Monitoring Parameters</b>
<b>3</b>	none – all sampling events shall include effluent and receiving water monitoring	Turbidity & pH SSC (when NEL violated) Bioassessment (limited sites)

- i In the event that an LUP Type 3 discharger violates an applicable NEL contained in this General Permit, the LUP discharger shall subsequently sample Receiving Waters (RWs) for all parameter(s) required in Section L.5.c above for the duration of coverage under this General Permit.



- ii LUP Type 3 dischargers that meet the project criteria in **Attachment K** of this General Permit shall comply with the Bioassessment requirements prior to commencement of construction activity.
  - iii LUP Type 3 dischargers shall obtain RW samples in accordance with the requirements of the Receiving Water Sampling Locations section (Section L.5.e of this Attachment).
- e. LUP Type 3 Receiving Water Sampling Locations
- i **Upstream/up-gradient RW samples:** LUP Type 3 dischargers shall obtain any required upstream/up-gradient receiving water samples from a representative and accessible location as close as possible to and upstream from the effluent discharge point.
  - ii **Downstream/down-gradient RW samples:** LUP Type 3 dischargers shall obtain any required downstream/down-gradient receiving water samples from a representative and accessible location as close as possible to and downstream from the effluent discharge point.
  - iii If two or more discharge locations discharge to the same receiving water, LUP Type 3 dischargers may sample the receiving water at a single upstream and downstream location.
- f. LUP Type 3 Monitoring Requirements for Non-Visible Pollutants

LUP Type 3 dischargers shall implement sampling and analysis requirements to monitor non-visible pollutants associated with (1) construction sites; (2) activities producing pollutants that are not visually detectable in storm water discharges; and (3) activities which could cause or contribute to an exceedance of water quality objectives in the receiving waters.

- i Sampling and analysis for non-visible pollutants is only required where the LUP Type 3 discharger believes pollutants associated with construction activities have the potential to be discharged with storm water runoff due to a spill or in the event there was a breach, malfunction, failure and/or leak of any BMP. Also, failure to implement BMPs may require sample collection.
  - (1) Visual observations made during the monitoring program described above will help the LUP Type 3 discharger determine when to collect samples.
  - (2) The LUP Type 3 discharger is not required to sample if one of the conditions described above (e.g., breach or spill) occurs and the site is cleaned of material and pollutants and BMPs are implemented prior to the next storm event.

- ii LUP Type 3 dischargers shall collect samples at all discharge locations which drain to the areas identified by the visual observations and which can be safely accessed. For sites where sampling and analysis is required, personnel trained in water quality sampling procedures shall collect storm water samples.
  - iii If sampling for non-visible pollutant parameters is required, LUP Type 3 dischargers shall ensure that samples be analyzed for parameters indicating the presence of pollutants identified in the pollutant source assessment required in Section I.3.b.ii.(5).
  - iv LUP Type 3 dischargers shall collect samples during the first two hours of discharge from rain events that occur during business hours and which generate runoff.
  - v LUP Type 3 dischargers shall ensure that a sufficiently large sample of storm water that has not come into contact with the disturbed soil or the materials stored or used on-site (uncontaminated sample) will be collected for comparison with the discharge sample. Samples shall be collected during the first two hours of discharge from rain events that occur during daylight hours and which generate runoff.
  - vi LUP Type 3 dischargers shall compare the uncontaminated sample to the samples of discharge using field analysis or through laboratory analysis. Analyses may include, but are not limited to, indicator parameters such as: pH, specific conductance, dissolved oxygen, conductivity, salinity, and Total Dissolved Solids (TDS).
  - vii For laboratory analyses, all sampling, sample preservation, and other analyses must be conducted according to test procedures pursuant to 40 C.F.R. Part 136. LUP Type 3 dischargers shall ensure that field samples are collected and analyzed according to manufacturer specifications of the sampling devices employed. Portable meters shall be calibrated according to manufacturer's specification.
  - viii LUP Type 3 dischargers shall ensure that all field and/or analytical data are kept in the SWPPP document.
- g. LUP Type 3 Visual Observation and Sample Collection Exceptions
- i LUP Type 3 dischargers shall be prepared to collect samples and conduct visual observation (inspections) to meet the minimum visual observation requirements of this Attachment. The Type 3 LUP discharger is not required to physically collect samples or conduct visual observation (inspections) under the following conditions:

(1) During dangerous weather conditions such as flooding and electrical storms;

(2) Outside of scheduled site business hours.

- ii If the LUP Type 3 discharger does not collect the required samples or visual observation (inspections) due to these exceptions, an explanation why the sampling or visual observation (inspections) were not conducted shall be included in both the SWPPP and the Annual Report.

h. LUP Type 3 Storm Water Sample Collection and Handling Instructions

LUP Type 3 dischargers shall refer to Table 8 below for test Methods, detection Limits, and reporting Units. During storm water sample collection and handling, the LUP Type 3 discharger shall:

- i Identify the parameters required for testing and the number of storm water discharge points that will be sampled. Request the laboratory to provide the appropriate number of sample containers, types of containers, sample container labels, blank chain of custody forms, and sample preservation instructions.
- ii Determine how to ship the samples to the laboratory. The testing laboratory should receive samples within 48 hours of the physical sampling (unless otherwise required by the laboratory). The options are to either deliver the samples to the laboratory, arrange to have the laboratory pick them up, or ship them overnight to the laboratory.
- iii Use only the sample containers provided by the laboratory to collect and store samples. Use of any other type of containers could contaminate your samples.
- iv Prevent sample contamination, by not touching, or putting anything into the sample containers before collecting storm water samples.
- v Not overfilling sample containers. Overfilling can change the analytical results.
- vi Tightly screw the cap of each sample container without stripping the threads of the cap.
- vii Complete and attach a label to each sample container. The label shall identify the date and time of sample collection, the person taking the sample, and the sample collection location or discharge point. The label should also identify any sample containers that have been preserved.

- viii Carefully pack sample containers into an ice chest or refrigerator to prevent breakage and maintain temperature during shipment. Remember to place frozen ice packs into the shipping container. Samples should be kept as close to 4° C (39° F) as possible until arriving at the laboratory. Do not freeze samples.
- ix Complete a Chain of Custody form for each set of samples. The Chain of Custody form shall include the discharger's name, address, and phone number, identification of each sample container and sample collection point, person collecting the samples, the date and time each sample container was filled, and the analysis that is required for each sample container.
- x Upon shipping/delivering the sample containers, obtain both the signatures of the persons relinquishing and receiving the sample containers.
- xi Designate and train personnel to collect, maintain, and ship samples in accordance with the above sample protocols and good laboratory practices.
- xii Refer to the Surface Water Ambient Monitoring Program's (SWAMP) Quality Assurance Management Plan (QAMP) for more information on sampling collection and analysis. See [http://www.waterboards.ca.gov/water\\_issues/programs/swamp/](http://www.waterboards.ca.gov/water_issues/programs/swamp/)<sup>17</sup>

QAMP Link:

[http://www.waterboards.ca.gov/water\\_issues/programs/swamp/qamp.shtml](http://www.waterboards.ca.gov/water_issues/programs/swamp/qamp.shtml)

**Table 8. Test Methods, Detection Limits, Reporting Units and Applicable NALs/NELs**

Parameter	Test Method	Discharge Type	Min. Detection Limit	Reporting Units	Numeric Action Levels	Numeric Effluent Limitation
<b>pH</b>	Field test with calibrated portable instrument	All	0.2	pH units	Lower = 6.5 upper = 8.5	Lower = 6.0 upper = 9.0
<b>Turbidity</b>	EPA 0180.1 and/or field test with portable instrument	Type 2 & 3	Not specified	NTU	250 NTU	500 NTU
<b>SSC</b>	ASTM Method D 3977-97 <sup>18</sup>	Type 3 if NEL is exceeded	5	Mg/L	N/A	N/A

<sup>17</sup> Additional information regarding QAMP can be found at <http://mpsl.mlml.calstate.edu/swgacompare.htm>.

<sup>18</sup> ASTM, 1999, Standard Test Method for Determining Sediment Concentration in Water Samples: American Society of Testing and Materials, D 3977-97, Vol. 11.02, pp. 389-394

<b>Bioassessment</b>	(STE) Level I of (SAFIT), <sup>19</sup> fixed-count of 600 org/sample	Type 3 LUPs > 30 acres	N/A	N/A	N/A	N/A
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i. LUP Type 3 Monitoring Methods

- i The LUP Type 3 discharger's project M&RP shall include a description of the following items:
- (1) Visual observation locations, visual observation procedures, and visual observation follow-up and tracking procedures.
  - (2) Sampling locations, and sample collection and handling procedures. This shall include detailed procedures for sample collection, storage, preservation, and shipping to the testing lab to assure that consistent quality control and quality assurance is maintained. Dischargers shall attach to the monitoring program a copy of the Chain of Custody form used when handling and shipping samples.
  - (3) Identification of the analytical methods and related method detection limits (if applicable) for each parameter required in Section L.5.b above.
- ii LUP Type 3 dischargers shall ensure that all sampling and sample preservation be in accordance with the current edition of "Standard Methods for the Examination of Water and Wastewater" (American Public Health Association). All monitoring instruments and equipment (including a discharger's own field instruments for measuring pH and turbidity) shall be calibrated and maintained in accordance with manufacturers' specifications to ensure accurate measurements. All laboratory analyses shall be conducted according to test procedures under 40 CFR Part 136, unless other test procedures have been specified in this General Permit or by the Regional Water Board. With the exception of field analysis conducted by the discharger for turbidity and pH, all analyses shall be sent to and conducted at a laboratory certified for such analyses by the State Department of Health Services. The LUP discharger shall conduct its own field analysis of pH and may conduct its own field analysis of turbidity if the discharger has sufficient capability (qualified and trained employees,

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<sup>19</sup> The current SAFIT STEs (28 November 2006) list requirements for both the Level I and Level II taxonomic effort, and are located at: [http://www.swrcb.ca.gov/swamp/docs/safit/ste\\_list.pdf](http://www.swrcb.ca.gov/swamp/docs/safit/ste_list.pdf). When new editions are published by SAFIT, they will supersede all previous editions. All editions will be posted at the State Water Board's SWAMP website.

properly calibrated and maintained field instruments, etc.) to adequately perform the field analysis.

j. LUP Type 3 Analytical Methods

LUP Type 3 dischargers shall refer to Table 8 above for test Methods, detection Limits, and reporting Units.

- i. **pH:** LUP Type 3 dischargers shall perform pH analysis on-site with a calibrated pH meter, pH test kit, or wide range pH indicator paper. The LUP discharger shall record pH monitoring results on paper and retain these records in accordance with Section L.5.o, below.
- ii. **Turbidity:** LUP Type 3 dischargers shall perform turbidity analysis using a calibrated turbidity meter (turbidimeter), either on-site or at an accredited lab. Acceptable test methods include Standard Method 2130 or USEPA Method 180.1. The results shall be recorded in the site log book in Nephelometric Turbidity Units (NTU).
- iii. **Suspended sediment concentration (SSC):** LUP Type 3 dischargers exceeding their NEL, shall perform SSC analysis using ASTM Method D3977-97.
- iv. **Bioassessment:** LUP Type 3 dischargers shall perform bioassessment sampling and analysis according to Attachment **K** of this General Permit.

k. Watershed Monitoring Option

If an LUP Type 3 discharger is part of a qualified regional watershed-based monitoring program the LUP Type 3 discharger may be eligible for relief from the monitoring requirements in this Attachment. The Regional Water Board may approve proposals to substitute an acceptable watershed-based monitoring program if it determines that the watershed-based monitoring program will provide information to determine each discharger's compliance with the requirements of this General Permit.

l. Particle Size Analysis Justification

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

m. NAL Exceedance Report

- i In the event that any effluent sample exceeds an applicable NAL, the Regional Water Boards may require LUP Type 3 dischargers to submit NAL Exceedance Reports.
  - ii LUP Type 3 dischargers shall certify each NAL Exceedance Report in accordance with the Special Provisions for Construction Activity.
  - iii LUP Type 3 dischargers shall retain an electronic or paper copy of each NAL Exceedance Report for a minimum of three years after the date the exceedance report is filed.
  - iv LUP Type 3 dischargers shall include in the NAL Exceedance Report:
    - (1) the analytical method(s), method reporting unit(s), and method detection limit(s) of each analytical parameter (analytical results that are less than the method detection limit shall be reported as “less than the method detection limit”); and
    - (2) the date, place, time of sampling, visual observation (inspections), and/or measurements, including precipitation.
    - (3) Description of the current BMPs associated with the effluent sample that exceeded the NAL and the proposed corrective actions taken.
- n. NEL Violation Report
- i All LUP Type 3 dischargers shall electronically submit all storm event sampling results to the State Water Board no later than 5 days after the conclusion of the storm event.
  - ii In the event that a LUP Type 3 discharger has violated an applicable NEL, the discharger shall submit an NEL Violation Report to the State Water Board no later than 5 days after the NEL exceedance has been identified.
  - iii The LUP Type 3 discharger shall certify each NEL Violation Report in accordance with the Special Provisions for Construction Activity.
  - iv The LUP Type 3 discharger shall retain an electronic or paper copy of each NEL Violation Report for a minimum of three years after the date the violation report is filed.
  - v The LUP Type 3 discharger shall include in the NEL Violation Report:
    - (1) the analytical method(s), method reporting unit(s), and method detection limit(s) of each analytical parameter (analytical results that are less than the method detection limit shall be reported as “less than the method detection limit”); and

- (2) the date, place, time of sampling, visual observation (inspections), and/or measurements, including precipitation.
- (3) Description of the current on-site BMPs, and the proposed corrective actions taken to manage the NEL exceedance.

vi Compliance Storm Exemption:

In the event that an applicable NEL has been exceeded during a storm event equal to or larger than the Compliance Storm Event (see Section F.2.c of this Attachment), the LUP Type 3 discharger shall report the on-site rain gauge and nearby governmental rain gauge readings for verification.

o. Monitoring Records

LUP Type 3 dischargers shall ensure that records of all storm water monitoring information and copies of all reports (including Annual Reports) required by this General Permit be retained for a period of at least three years. LUP Type 3 dischargers shall retain all records on-site while construction is ongoing. These records shall include:

- i The date, place, time of facility inspections, sampling, visual observation (inspections), and/or measurements, including precipitation (rain gauge);
- ii The individual(s) who performed the facility inspections, sampling, visual observation (inspections), and or measurements;
- iii The date and approximate time of analyses;
- iv The individual(s) who performed the analyses;
- v A summary of all analytical results from the last three years, the method detection limits and reporting units, and the analytical techniques or methods used;
- vi Quality assurance/quality control records and results;
- vii Non-storm water discharge inspections and visual observation (inspections) and storm water discharge visual observation records (see Section L.5.a above);
- viii Visual observation and sample collection exception records (see Section L.5.e above); and
- ix The records of any corrective actions and follow-up activities that resulted from analytical results, visual observation (inspections), or inspections.