

REPORT

Stormwater Pollution Prevention Plan

Lehigh Southwest Cement Company, Permanente Plant and Quarry

Submitted to:

Lehigh Southwest Cement Company

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Submitted by:

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Stormwater Pollution Prevention Plan (SWPPP) **Project Information and Certification**

July 17, 2019 Regional Water Quality Control Board Order No. R2-2019-0024 NPDES Permit No. CA0030210

Project Information

Project Information	n
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Reviewing Agency

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Plan 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 ensure 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, the information submitted is to the best of my knowledge and belief, 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.

Stacy Baird Site Manager Date

1.0 INTRODUCTION

Golder Associates Inc. (Golder) has prepared this Stormwater Pollution Prevention Plan (SWPPP) for the Lehigh Southwest Cement Company's Permanente Plant (Facility) located at 24001 Stevens Creek Blvd., Cupertino, Santa Clara County, California. The Facility is a limestone quarry and cement production facility that also has the capability for construction aggregate production. Hanson Permanente Cement, Inc. owns the Quarry and Lehigh Southwest Cement Company is the operator (collectively, Lehigh).

The Facility's surface water discharges, including stormwater, are regulated by individual waste discharge requirements (WDRs) in Order Number R2-2019-0024, National Pollutant Discharge Elimination System (NPDES) Permit Number CA0030210 (NPDES Permit). The NPDES permit prohibits any process water-related discharges except through two, treated, discharge points (Discharge Points 001 and 007), such that all remaining discharge points are comprised of industrial stormwater and/or authorized non-stormwater. Much of the facility's industrial stormwater is comingled with process water in the Quarry, treated, and discharged via Discharge Points 001 and 007. This SWPPP primarily addresses those areas of the facility where industrial stormwater and/or authorized non-stormwater may be discharged through other locations (*e.g.*, Discharge Points 002, 004-006 (Ponds 13B, 17, 20, and 30) and disturbed or reclaiming areas on the west (creek-facing) side of the Western Materials Storage Area (WMSA), including the area known as the "Yeager Yard" (YY)). At this time, industrial stormwater and/or authorized non-stormwater flows from Pond 30 (Discharge Point 006) are routed to the Cement Plant Reclaim System, treated, and discharged via Discharge Point 007; however, in the future, stormwater from reclaimed areas of the Eastern Materials Storage Area (EMSA) may be discharged to Permanente Creek via Discharge Point 006.

Golder has prepared this SWPPP on behalf of Lehigh consistent with Provisions A.2 and A.3 of the NPDES Permit. This SWPPP complies with the applicable provisions in Attachments G and S of the NPDES permit.

The NPDES prohibitions limit discharges from Discharge Point Nos. 002 and 004 – 006, except as a result of precipitation, or to discharge retained industrial stormwater and/or authorized non-stormwater. Applicable effluent limitations set forth in the NPDES permit for these discharge locations include numerical limits applied to total suspended solids (TSS), oil and grease (O&G), pH, and settleable matter. The NPDES Permit also includes stormwater action levels for antimony, chromium (VI), selenium, visible oil and visible color that are considered in this SWPPP.

1.1 January 2020 Update

This SWPPP is being revised based on facility developments, and to ensure consistency with correspondence by and between Lehigh and the San Francisco Regional Water Quality Control Board.¹ Revisions include:

a. Enhanced description of the drainage of the WMSA and Quarry Catchment areas and associated BMPs (see Figure 9);

b. Description of the YY area and other slopes facing Permanente Creek (*e.g.,* further west in the WMSA) as potential pollutant sources for industrial stormwater and authorized non-stormwater runoff, along with associated BMPs (see Section 3.3.5, 5, and 6);

¹11/25/19, RWQCB Letter, 1/10/2020 Lehigh letter.

c. Updated monitoring for the YY area and other disturbed slopes facing Permanente Creek that have the potential for increased seasonal erosion or other land disturbance, especially during above average wet seasons.

1.2 Purpose and Objective

Industrial stormwater and/or authorized non-stormwater in several drainage areas, or catchment areas, of the Facility are comingled with process waters, and, therefore, the NPDES Permit requires that these catchment areas be discharged through two treated discharge points (Discharge Point Nos. 001 and 007). Discharge Point Nos. 001 and 007 are covered under different facility plans.

The purpose of the SWPPP is to protect surface water quality by reducing the amount of pollutants in industrial stormwater and/or authorized non-stormwater runoff for Discharge Point Nos. 002 and 004 through 006 and disturbed or reclaiming areas on the west (creek-facing) side of the WMSA, including the YY area. The industrial activities at the Facility generally include mining, processing of minerals, production of Portland cement, and storage of construction aggregates.

The SWPPP has two major objectives:

- To identify and evaluate sources of pollutants associated with industrial activities that may affect the quality of industrial stormwater and/or authorized non-stormwater discharges from the Facility; and
- To identify and implement site-specific Best Management Practices (BMPs) to reduce or prevent pollutants associated with industrial activities in stormwater and/or authorized non-stormwater discharges.

Preparation of this SWPPP does not guarantee compliance with the NPDES Permit. It is the responsibility of Lehigh to implement the necessary BMPs and recommendations set forth in this document. This SWPPP has been prepared by Golder for the exclusive use of Lehigh. Golder prepared this SWPPP based upon information provided by Lehigh and a site visit conducted by Michelle Kampen of Golder on October 7, 2019. This SWPPP is revised, as needed.

2.0 STORMWATER PLANNING AND ORGANIZATION

This section of the SWPPP identifies specific individuals that comprise the Lehigh Pollution Prevention Team (PPT) that are responsible for developing, implementing, and revising the SWPPP. The PPT will review the SWPPP annually and update the SWPPP as necessary. This SWPPP is a public domain document.

2.1 **Position Responsibilities**

The Plant Manager provides overall management of the implementation of this SWPPP. The Stormwater Team Leader/ Environmental Manager provides coordination of the implementation of this SWPPP.

2.2 Pollution Prevention Team

The PPT will help the Plant Manager implement the SWPPP, identify necessary SWPPP revisions, and conduct required monitoring activities. The Lehigh PPT is further described in the following sections.

Table 1: Pollution Prevention Team

Position	Name	Contact	Duties and Activities
Site Manager	Stacy Baird	408-996-4228, 408-483-8086	Responsible Person, provides overall management of the Permanente Quarry Stormwater Pollution Prevention Program
Area Environmental Manager	Tressa Jackson	408-996-4233, 530-351-4043	Provides coordination and technical support of the Stormwater Pollution Prevention Program
Environmental Professional IV	Antonio DelRio	408-996-4230, 408-309-4149	Provides maintenance personnel and resources to perform inspection and repair of stormwater pollution prevention facilities and equipment.

2.2.1 Team Responsibilities

The PPT is comprised of several key individuals as shown in Table 1. Each member is listed in the table along with his/her job title and responsibilities. The PPT is responsible for:

- Implementing the SWPPP
- Assisting in SWPPP maintenance and modification
- Holding regular meetings to review the overall operation of BMPs
- Establishing responsibilities for sampling, inspections, operations and maintenance, and availability for emergency situations
- Arranging for training of all team members in the operation, maintenance and inspections of BMPs
- Conducting good housekeeping inspections of the Facility. Any spills, leaks or other potential sources of pollutants will be identified and removed

2.2.2 Responsible Persons

Stacy Baird, Site Manager, is the Responsible Person (RP) for stormwater pollution prevention at the Facility, and is responsible for oversight of:

- SWPPP development
- Implementation and revision of the SWPPP
- Implementation of monitoring program activities required in the NPDES Permit

The designated Alternate RP, Area Environmental Manger Tressa Jackson, will perform these duties in the absence of the RP.

2.3 Other Requirements and Existing Facility Plans

The Facility's air emissions are regulated by a Title V - Major Facility Review Permit issued by the Bay Area Air Quality Management District (BAAQMD). According to BAAQMD Condition 24621, Lehigh maintains and implements a Fugitive Dust Control Plan (Lehigh 2019) consistent with the Title V permit. Control measures identified in this plan will reduce the generation of particulates that could be exposed to stormwater at the Facility.

Other plans that describe the management of materials and practices at this facility, which may affect the management of industrial stormwater and/or authorized non-stormwater include the following (these plans are NOT a part of the SWPPP).

- Spill Prevention Control and Countermeasure Plan (SPCC)
- Hazardous Materials Business Plan (HMBP)
- Emergency Contingency Plan
- Operations, Maintenance, and Contingency Plan
- Reclamation Plan Amendments and Conditions of Approval

3.0 FACILITY DESCRIPTION

The following sections describe the Facility layout and activities.

3.1 Facility Location and Layout

The Facility is located at 24001 Stevens Creek Blvd. in the southern San Francisco Bay Area, in the foothills of unincorporated western Santa Clara County, just west of the City of Cupertino, California, as shown on Figures 1 and 2. The climate of the southern San Francisco Bay Area is Mediterranean, characterized by mild, wet winters, and warm, dry summers.

Lehigh mines and processes minerals at the Facility and produces Portland cement from limestone and stone quarried onsite. As shown on Figure 2, the Facility consists mainly of an active mining area (Quarry), primary crusher, a cement plant, rock plant, material storage areas, roads, and a conveyor system for transporting the processed materials.

3.2 Surrounding Activities and Structures

Land to the north and west of the Facility is open space and recreational areas. Stevens Creek Quarry is located to the south of the Facility (Figure 2) along with rural residential areas and small agricultural operations including some vineyards. Land uses to the east of the Facility include open space and recreational areas along with residential subdivisions. The areas surrounding the Facility that might produce run-on include vegetated slopes.

3.3 Site Drainage

The Facility lies within the Permanente Creek watershed. Permanente Creek discharges into southern San Francisco Bay. Precipitation that falls within the Facility is managed within six catchment areas. These catchment areas are shown on Figure 3. The catchment areas are identified by the retention basins or ponds where stormwater runoff within the catchment areas is captured. The ponds discharge via standpipe and culverts to Permanente Creek.

The stormwater discharges are identified in the NPDES permit as Discharge Point Nos. 002 and 004 through 006. The stormwater related catchment areas and associated discharge locations are listed below:

- Pond 13B (Discharge Point No. 002)
- Pond 17 (Discharge Point No. 004)
- Pond 20 (Discharge Point No. 005)
- Pond 30 (Discharge Point No. 006)

Additionally, the newly installed sedimentation basin at the base of the YY area is now identified in the SWPPP as a potential discharge location. While operations are intended to be implemented to avoid any discharge from that basin to Permanente Creek, in the event of unexpected conditions, it is at least possible for this basin to discharge to Permanente Creek given its proximity to the Creek. Each of the stormwater drainage areas is described in the following sections.

The area previously identified as discharging from Pond 9 (former Discharge Point No. 003) is now considered a non-industrial area and is no longer included in the NPDES permit. As noted previously, stormwater in several catchment areas (Reclaim Water System including the Quarry, Cement Plant, and Truck Wash) of the Facility are comingled with process waters, treated, and discharged under Discharge Point Nos. 001 and 007. Since 2014, Lehigh has made numerous Facility improvements to divert more stormwater to the Reclaim Water System from the stormwater discharge catchments (*e.g.*, Discharge Point No 006).

The WMSA and Quarry catchment area is shown on Figure 3. The area shaded in green reports to the Quarry and is discharged under Discharge Point Nos. 001 and 007 after the water is treated. Additional areas of interest outside of the catchment area are noted on Figure 9 and discussed in Section 3.3.5.

3.3.1 Pond 13B (Discharge Point No. 002)

Pond 13B is located upgradient of the north bank of Permanente Creek. Stormwater runoff runs down the slope to Pond 13B. The location of Pond 13B and the associated catchment are provided in Figure 4.

Water in Pond 13B is typically retained, evaporated, and/or infiltrated. Pond 13B also has an overflow pipe to allow direct discharge to Permanente Creek if the water level in the pond reaches the elevation of the overflow pipe. The inlet to the overflow pipe is at the top of the pond side slope at the downgradient end of the pond. The overflow pipe is a 24-inch corrugated metal pipe (CMP) that conveys the overflow waters down the slope, approximately fifty feet, in a controlled fashion, into Permanente Creek. Since at least May 2007, no discharge from Pond 13B through this overflow pipe has been observed.

3.3.2 Pond 17 (Discharge Point No. 004)

Pond 17 was designed to discharge stormwater flows from the Rock Plant area into Permanente Creek. The Rock Plant stormwater is diverted through Pond 20 (Discharge Point No. 005) and/or Pond 17 (Discharge Point No 004) (Figure 5).

In the southern part of the Rock Plant a haul road heads south upslope towards Stevens Creek Quarry to the south. The road is graded to drain along a ditch on the west side of the road. About halfway down the road there is a catch basin that collects water in the ditch and discharges to a drain pipe that conveys runoff down the slope and discharges at the bottom of the slope. Runoff from the road then flows overland to Pond 20 or could be diverted to Pond 17.

The stormwater in this area includes rain falling directly on the Rock Plant and the haul road; stormwater from portions of the adjacent hillsides is diverted by pipeline B as to prevent run-on from entering the Rock Plant area.

3.3.3 Pond 20 (Discharge Point No. 005)

Pond 20 is located at the base of a slope south of the historical, non-operational, former Aluminum Plant and general plant entry road. The location of Pond 20 and the associated catchment is provided on Figure 6. Pond 20 is a shallow depression that receives stormwater runoff from the slope, a small section of the road opposite the former Aluminum Plant, and the entry road directly. Pond 20 also receives some water from the Rock Plant road. The discharge from Pond 20 continues to flow easterly through vegetation, including Pond 21, and enters Permanente Creek near the entry road overpass. The Pond 20 area contains many BMPs, including a lined inlet with multiple gabion basket check dams, flocculent logs, and sodium bisulfite for pH correction, as needed.

3.3.4 Pond 30 (Discharge Point No. 006)

Pond 30 receives stormwater from the East Materials Storage Area (EMSA) and access roads. The location of Pond 30 and the associated catchment is provided on Figure 7. Stormwater runoff from the access road starting near the cement plant is conveyed downslope alongside the access road and is collected in a detention basin (Pond 31B) near the top of the slope and is conveyed via pipeline and drainage swales down to Pond 30. The operational areas around the eastern portion of the EMSA have been redirected to route flow into Pond 30. There is an outlet standpipe in Pond 30 that overflows through an underground pipe to a vault equipped with pumps to convey the stormwater to Pond 11 (Reclaim Water System). The stormwater is then treated and discharged via Discharge Points No. 001 or 007.

A French drain has been constructed adjacent to Pond 30 and the inlet ditch to intercept underground water flows. This water is also collected in the vault and pumped to Pond 11 for treatment before discharge.

3.3.5 West Quarry Slopes

As noted on Figure 9, runoff from the majority of the western portion of the Facility, including the WMSA, reports to the Quarry, where it is managed with the quarry water system and treated prior to discharge. Lehigh maintains BMPs in this area to ensure runoff remains within the catchment area. BMPs employed include check dams, drainage swales, and berms. The areas of interest outside of the catchment area are discussed below.

YY Area:

The YY area is located between the WMSA and the Quarry. As described herein, Lehigh has undertaken several actions to avoid seeps from occurring (*e.g.*, reducing upslope flows onto the area that can lead to saturated conditions, and instead ensuring conveyance of excess flows to the Quarry), and has also taken steps to capture water that may emerge from the hillside during the wet season and move material downhill. By better controlling upslope industrial stormwater, and limiting it from draining down the hillside, which could exacerbate conditions during wet weather, Lehigh believes seeps will be effectively controlled. However, Lehigh notes that seeps are usually due to extreme weather that can be unpredictable. Actions completed by Lehigh include re-grading in the area, installing an upslope diversion channel to prevent the water from the WMSA from entering the YY area and reporting to the Quarry instead. Lehigh also constructed a sediment basin between the YY area slope and Permanente Creek to intercept water flows and any related sediment. Collected water within the basin is pumped to the Quarry via a HDPE pipeline for treatment before discharge via either Discharge Point No. 001 or 007. Lehigh also prepared and implemented with GEI Consultants (GEI) an Erosion Control Plan for the YY area

(Appendix A). The Erosion Control Plan is comprised of erosion and sediment control measures intended to reduce the surface flow velocity and control surface water flows to the sediment basin.

An abandoned corrugated metal pipe protrudes from the upper portion of the slope of the YY area. This pipe is not in use and is not hydraulically connected to any active infrastructure. It was historically used to convey water under the haul road from the WMSA. The upper portion of the pipe was removed several years ago. However, the lower portion has not been removed due to its location and concerns that disturbing the area would generate more harm than benefit. No water has been observed emanating from the pipe, including during the 2018-2019 extremely wet year. As noted in Section 7.3.3, the pipe will be visually inspected regularly, along with the YY area inspections.

North WMSA Area:

The North WMSA Area consists of the north side of the WMSA. The area is moderately vegetated and slopes to the north to the original ridgeline (shown in yellow on Figure 9). Lehigh maintains BMPs along the northern portion of the WMSA to prevent industrial stormwater runoff from going onto the North WMSA Area from the WMSA. The BMPs consist of berms placed as necessary along the haul road and grading the haul road so it slopes to the south toward the center of the WMSA. Direct precipitation that falls on the North WMSA Area may percolate or flow downhill as diffuse run-off.

South WMSA Area:

The South WMSA Area consists of the south slope of the WMSA south of the main haul road and above Area 1. Lehigh maintains BMPs along the southern portion of the WMSA to prevent industrial stormwater runoff to the South WMSA Area. The BMPs consist of placement of berms as necessary and sloping the haul road to the north instead of the south to direct runoff to the north side of the road in this area. Direct precipitation that falls on the South WMSA Area may percolate or flow downhill as diffuse run-off into Area 1.

Area 1:

Area 1 consists of the south slope below the South WMSA Area and above Permanente Creek. Portions of this slope are very steep, where access is difficult. Exposed material is evident at several locations. The material appears to include a thin layer of mine-related material that was deposited from upper portions of the WMSA. BMPs are in place in the WMSA to prevent industrial stormwater from the WMSA from running onto this area. BMPs in Area 1 include silt fences, hay bales, and straw wattles. Direct precipitation that falls on Area 1 has the potential to flow as diffuse run-off to Permanente Creek. No evidence of seepage or mass movement of material was observed during the previous wet season. Additionally, any potential effects from Area 1 will be monitored as part of the routine monitoring conducted at Receiving Water RSW-001 as part of the NPDES permit.

Area 1 is routinely inspected as part of Lehigh's Operations, Maintenance, and Contingency Plan and by GEI Consultants as part of the Erosion and Sediment Control BMPs in support of Reclamation Plan condition No. 78 items j and I under the "Hydrology and Water Quality" section of the June 2012 Final Conditions of Approval from June 7, 2012.

FTS Area:

The FTS Area is the pad located adjacent to Pond 4a where the lower portion of the Upper Final Treatment System is located. The FTS Area is bermed and designed for stormwater in the area to be contained on the pad to either infiltrate or evaporate and not discharge to Permanente Creek.

4.0 POTENTIAL POLLUTANT SOURCES

The potential sources of pollutants at the Facility include industrial materials handled through industrial processes, leaks or drips from equipment operating onsite, and industrial materials stored or used onsite. Additional potential sources include:

- Dust and particulate generating activities
- Significant spills and leaks
- Non-stormwater discharges
- Erodible surfaces

The locations of industrial materials (*i.e.*, storage or parking areas) that could potentially be exposed to stormwater at the Facility are shown on Figure 3. Significant industrial activities and materials that could be exposed to stormwater in catchment areas for Discharge Points Nos. 002, 004, 005, and 006 include:

- Settled dust and particulate matter from mining of limestone and overburden in the Quarry
- Settled dust and particulate matter from rock crushing at the Primary Crusher
- Onsite material transport by trucks along facility roads
- Fueling and servicing of equipment and vehicles
- Settled dust and particulate matter from cement processing

The following sections of the SWPPP further describe the Facility specific industrial materials and industrial processes conducted onsite.

4.1 Material Handling and Storage Areas

Industrial materials at the Facility that are potential sources of industrial stormwater pollutants include: materials the Facility mines, crushes, transports, and processes; fuel and maintenance fluids; settled dust and particulate matter resulting from facility operations; and wastewater treatment materials.

Lehigh mines and processes limestone at the Facility and produces Portland cement. Overburden that is not suitable for cement manufacturing or aggregate is deposited in materials storage areas. Finished Portland cement is shipped by bulk truck or trucked in bags to offsite commercial markets. Additionally, regulated hazardous materials are stored at the Facility for use in all aspects of facility operations. An HMBP for the Facility has been prepared and a copy is kept onsite and provided to local regulatory agencies.

Table 2 lists materials used outside of the Reclaim Water System and Discharge Points Nos. 001 and 007 that could be potential stormwater pollutants. Table 3 provides a summary of industrial activities where stormwater run-off could originate along with potential sources of pollutants, potential pollutants, and the BMPs to prevent pollutants from entering the stormwater discharges. The most likely sources of stormwater pollutants are industrial processes that result in the release of dust and particles, oil and grease, metals, and high pH liquids. Potential pollutant sources are discussed further by area and process in the following sections.

Table 2: Materials Inventory

Product or Material	Maximum Quantity	Handling Frequency	Storage Method	Storage Location ¹	Shipping Location	Likelihood of Contact with Stormwater ²
Materials Testing Chemicals and Wastes (Liquids)	<100 gallons	Daily	Inside Building	QC Lab	NA	Unlikely
Materials Testing Chemicals (Solids)	<50 kg	Daily	Inside Building	QC Lab	NA	Unlikely
Material Storage	Variable	Daily	Stockpile	East Material Storage Area and Rock Plant	NA	Likely
Limestone	Variable	Daily	Stockpile	Surge Pile	Rock Plant	Likely
Chemsearch High Core- Petroleum	275 gallons	Daily	Inside Building	Electrical, Vehicle and Equipment Storage	NA	Unlikely
D-Limonene	165 gallons	Daily	Inside Building	Electrical, Vehicle and Equipment Storage	NA	Unlikely
Lubricating Oil	5,500 gallons	Daily	Inside Building	Electrical, Vehicle and Equipment Storage	NA	Unlikely
Grease	2,475 gallons	Daily	Inside Building	Electrical, Vehicle and Equipment Storage	NA	Unlikely

 ¹ Receiving location is the same as storage location for all materials
 ² Likelihood determined based on storage method: unlikely- stored indoors or under permanent cover, possibly- temporary cover, likely- uncovered



Product or Material	Maximum Quantity	Handling Frequency	Storage Method	Storage Location ¹	Shipping Location	Likelihood of Contact with Stormwater ²
Petroleum Contaminated (Oil and Grease) Debris	2,000 pounds	Daily	Waste dumpster	Electrical, Vehicle and Equipment Storage, Oily Debris Waste Dumpsters	N/A	Possible
Sodium Hypochlorite Solution	360 gallons	Daily	AST	Sewage Treatment Plant, Water Treatment Area	N/A	Unlikely
Transformer Oil	3 x 279 gallons	N/A	Transformer	Rock Plant	N/A	Unlikely
Used Oil	250 gallons	Daily	AST	Garage Oil Storage Area	Same as Storage	Unlikely
50W Motor Oil	125 gallons	Daily	AST	Garage Oil Storage Area	N/A	Unlikely
30W Motor Oil	125 gallons	Daily	AST	Garage Oil Storage Area	N/A	Unlikely
10W Motor Oil	125 gallons	Daily	AST	Garage Oil Storage Area	N/A	Unlikely
Various Oils- type and quantity varies	55-gallons each	Daily	Drums	Garage Oil Storage Area	N/A	Unlikely
Transmission Oil	500 gallons	Daily	AST	Garage Oil Shed	N/A	Unlikely
Drive Train Fluid	500 gallons	Daily	AST	Garage Oil Shed	N/A	Unlikely
Waste Oil	350 gallons	Daily	AST	Garage Oil Shed	Same as storage	Unlikely
Antifreeze	2 x 300 gallons	Daily	Container	Garage Oil Shed	N/A	Unlikely

Product or Material	Maximum Quantity	Handling Frequency	Storage Method	Storage Location ¹	Shipping Location	Likelihood of Contact with Stormwater ²
Various Oils- type and quantity varies	55-gallons each	Daily	Drums	Garage Oil Shed	N/A	Unlikely
Used Oil	100 gallons	Daily	Rectangular Tank	Garage Oil Shed	N/A	Unlikely
Antifreeze	350 gallons	Daily	AST	Garage Oil Shed	N/A	Unlikely
Grease	240 pounds	Daily	Drum	Garage Oil Shed	N/A	Unlikely
Motor Oil	350 gallons	Daily	AST	Garage Oil Shed	N/A	Unlikely
Used Antifreeze	300 gallons	Daily	AST	Garage Oil Shed	N/A	Unlikely
Grease	1,600 Pounds	Daily	Drum	Garage Oil Shed	N/A	Unlikely
Used Batteries	Varies	As Needed	Battery Racks	Garage Oil Shed	Same as storage	Unlikely
New Batteries	Varies	As Needed	Battery Racks	Garage Oil Shed	N/A	Unlikely
Antifreeze	100 gallons	Daily	Container	Fuel Truck 044	N/A	Possible
Waste Antifreeze	100 gallons	Daily	Container	Fuel Truck 044	Garage	Possible
Grease	55 gallons	Daily	Container	Fuel Truck 044	N/A	Possible
Motor Oil	300 gallons	Daily	AST	Fuel Truck 044	N/A	Possible
Used Oil	1,200 gallons	Daily	AST	Fuel Truck 044	Garage	Possible
Motor Oil	600 gallons	Daily	AST	Fuel Truck 044	N/A	Possible



Product or Material	Maximum Quantity	Handling Frequency	Storage Method	Storage Location ¹	Shipping Location	Likelihood of Contact with Stormwater ²
Motor Oil	400 gallons	Daily	AST	Fuel Truck 044	N/A	Possible
Diesel	2,500 gallons	Daily	AST	Fuel Truck 046	N/A	Possible
Antifreeze	100 gallons	Daily	Container	Fuel Truck 049	N/A	Possible
Waste Antifreeze	100 gallons	Daily	Container	Fuel Truck 049	Garage	Possible
Diesel	2,000 gallons	Daily	AST	Fuel Truck 049	N/A	Possible
Grease	55 gallons	Daily	Container	Fuel Truck 049	N/A	Possible
Motor Oil	600 gallons	Daily	AST	Fuel Truck 049	N/A	Possible
Motor Oil	400 gallons	Daily	AST	Fuel Truck 049	N/A	Possible
Motor Oil	300 gallons	Daily	AST	Fuel Truck 049	N/A	Possible
Motor Oil	125 gallons	Daily	AST	Garage Service Pit	N/A	Unlikely
Used Oil	125 gallons	Daily	AST	Garage Service Pit	N/A	Unlikely
Grease	400 pounds	Daily	Drum	Garage Service Pit	N/A	Unlikely
Motor Oil	2x 4,000 gallons	Daily	ASTs	Oil Tank Farm	N/A	Unlikely
Waste Oil	2x 1,000 gallons	Daily	ASTs	Oil Tank Farm	Same as storage	Unlikely
Hydraulic Oil	2,000 gallons	Daily	ASTs	Oil Tank Farm	Same as storage	Unlikely

Product or Material	Maximum Quantity	Handling Frequency	Storage Method	Storage Location ¹	Shipping Location	Likelihood of Contact with Stormwater ²
Waste Oil	300 gallons	Daily	AST	Near Truck Washing Station	Same as storage	Possible



4.1.1 Petroleum Products and Maintenance Fluids Storage

The Facility stores petroleum products and related maintenance fluids in several locations in the Pond 17 drainage area. The products are stored in a mix of aboveground storage tanks (ASTs), containers, and drums. Details regarding the secondary containment measures for the products listed below can be found in the Facility's SPCC Plan.

4.1.1.1 Garage and Nearby Areas

The following materials are stored within the garage oil shed with secondary containment.

- 500-gallon transmission oil AST
- 500-gallon drive train fluid AST
- 350-gallon used oil AST
- 100-gallon used oil AST
- 350-gallon motor oil AST
- 350-gallon and 2x 300-gallon Antifreeze AST
- 300-gallon Waste Antifreeze AST
- 4x 400 pounds grease drums
- 55-gallon drums of motor oil (quantity varies)
- 55-gallon drums of diesel engine oil (quantity varies)

The following materials are stored in the oil tank containment area to the northwest of the garage. These materials are stored under a covered area within secondary containment.

- 2x 4,000-gallon motor oil ASTs
- 2x 1,000-gallon waste oil ASTs
- 2,000-gallon Hydraulic Oil ASTs

The following materials are stored within the garage oil storage area:

- 250-gallon portable waste oil container
- 3x 125-gallon portable motor oil containers
- 55-gallon drums of motor oil (quantity varies)

Additionally, a 300-gallon waste oil tank is stored adjacent to the truck washing station located south of the garage.

4.1.1.2 Rock Plant

A transformer comprised of three units each containing 279 gallons of transformer oil is located in the rock plant area, as identified on Figure 5.

4.2 Industrial Processes

The areas of industrial activity are described below.

4.2.1 Quarry, Primary Crusher, and Cement Plant

Industrial stormwater and authorized non-stormwater from the Quarry and Cement Plant are not addressed in this SWPPP because of the final treatment controls in place for these flows; however, dust generated from activities in these areas can migrate to other catchment areas, settle on exposed surfaces and potentially pollute stormwater. Fugitive dust emissions are controlled by implementing the Fugitive Dust Control Plan (Lehigh 2019). Also, as identified in Table 3, the Facility frequently sweeps paved areas to remove settled dust.

4.2.2 Surge Pile

Rock sourced from the quarry operation is stockpiled in the Surge Pile. Stormwater contacting the Surge Pile can be exposed to pollutants including TSS, high pH, settleable matter, conductivity, and metals. Stormwater runoff is conveyed through a drainage ditch along an access road to Pond 20. Several rock check dams within the ditch slow the runoff flows to reduce the particulate loading in this runoff water.

4.2.3 Rock Plant Equipment and Material Storage

The Facility stores inactive vehicles, tires, and equipment including process equipment in this area, which is located along the northwestern portion of the Rock Plant. The Facility also stores aggregate material mainly at the western and southern portions of the Rock Plant. The Rock Plant area is crisscrossed with conveyor belts. The equipment and material are stored outdoors and exposed to stormwater. Stormwater in this area may be exposed to TSS, O&G, settleable matter, turbidity, conductivity, metals, visible oil, and visible color. Stormwater from this area flows to either Pond 17, Dinky Shed or Pond 20. The Facility maintains BMPs to reduce the flow velocity to reduce the amount of particles in the stormwater. As part of good housekeeping procedures outlined in Section 5.0, these materials will be removed or covered.

4.2.4 Rock Plant Haul Road

The haul road is located south of the Rock Plant and heads south, upslope, towards Stevens Creek Quarry. (Figure 8). The road is graded to drain along a ditch containing check dams, on the west side of the road. About halfway down the road there is a catch basin that collects water in the ditch and discharges to a drainpipe that conveys runoff down the slope and discharges at the bottom of the slope. Stormwater in this area may be exposed to TSS, settleable matter, turbidity, conductivity, metals, and visible color. Stormwater from this area flows to either Pond 17 or Pond 20. Conveying runoff in a pipe reduces erosion of the ditch. Exposed slopes created during construction of the road have been hydroseeded and straw wattles have been placed perpendicular to the slopes to reduce erosion and sediment migration.

4.2.5 EMSA

Soils and rock types not used in the cement process that are also mined are collectively described as overburden. Overburden and any unsuitable limestone have been deposited in the EMSA according to a design described in the Quarry Reclamation Plan. Stormwater contacting the EMSA may be exposed to pollutants including TSS, high pH, settleable matter, conductivity, and metals. Stormwater runoff from the EMSA flows through a retention pond (Pond 31B), drainage ditches, and culverts to Pond 30 to settle particles and reduce potential pollutants before discharge. The entire EMSA was covered with non-limestone materials and hydroseeded in 2015. EMSA has multiple rock check boxes and water bars along the roads.

As noted previously, the Pond 30 discharge is diverted to the Reclaim Water System where no industrial stormwater is discharged through Discharge Point No. 006

4.2.6 Truck and Equipment Maintenance

Heavy equipment and trucks are used, repaired, and maintained at the Facility. Routine fueling and maintenance are performed in specific maintenance and fueling areas that are in catchment areas not included in this SWPPP; however, repairs and maintenance can occur at any location of the Facility due to equipment malfunction or due to operational constraints. Materials stored in the covered fuel and maintenance area or on the quarry service trucks that may pollute stormwater include diesel fuel, new and used motor oil, miscellaneous lubricants, hydraulic fluids, and anti-freeze. These materials are delivered to the site on an as-needed basis. The site maintains an SPCC plan in regard to spill prevention of petroleum materials, including providing SPCC procedures to third party suppliers.

Leaks and spills of oil from containers and filters during transfer operations can expose stormwater to pollutants. Leaks and spills of oil from the tanks or drums could expose these materials to stormwater. Oil and fluid leaks from equipment during Facility operations could expose these materials to stormwater. The potential sources of stormwater pollutants from truck and equipment maintenance include:

- Leaks and spills of petroleum products during transfer operations
- Leaks and spills of used oil from the tank and drums
- Leaking of oil and fluids from trucks

4.2.7 Truck Washing Area

The Facility maintains wheel and vehicle washers near the Facility entrance. The wash water is collected and pumped to the Reclaim Water System. Customer vehicles and/ or equipment pass through the washers to prevent track-out onto public roads. Facility vehicles also pass through the washer before exiting the Facility. This area is routinely inspected to ensure wash water is contained and properly conveyed to the Reclaim Water System.

4.2.8 Former Aluminum Plant Equipment Storage

In an area directly northwest of the former Aluminum Plant, the Facility stores process equipment. The equipment is stored outdoors and is exposed to stormwater. Stormwater in this area appears to pond adjacent to the Former Aluminum Plant and may be exposed to TSS, O&G, settleable matter, conductivity, metals, visible oil, and visible color.

4.2.9 West of the Quarry

The areas outside of the Quarry catchment west of the Quarry typically do not contain any equipment or active industrial activities. Flows in these areas, if present, may be exposed to TSS, settleable matter, turbidity, conductivity, metals, and visible color.

4.2.10 Wastewater Treatment Plant

The Facility operates a small wastewater treatment plant to treat domestic wastewater (sewage). This plant is permitted, and discharges effluent to a thickener tank to be used as part of the Reclaim Water System. Sodium Hypochlorite and Chlorine tablets are stored within this plant under cover and in secondary containment. While not anticipated to be significant in amount, any stormwater runoff from the Wastewater Treatment Plant will be directed to the western access road and discharged through Pond 20.

4.3 **Dust and Particulate Generating Activities**

Vehicles delivering industrial materials to the site may track-in dust and particulates. Heavy equipment operating onsite also has the potential to generate dust and particulates. The compacted gravel or dirt areas of the site are maintained with compacted gravel or soil and may be wetted (*e.g.*, sprayed with water) as needed to control dust.

4.4 Significant Spills and Leaks

According to Facility records and personnel, no significant spills have occurred in the past five years. There is a potential risk for spills or leaks to occur within the various storage and process areas of the Facility. Spills or leaks are addressed promptly in the manner discussed in Section 5.3. A description of spills and the response taken is documented in the Annual Report. As part of routine inspections, the PPT inspects the Facility for leaks and spills.

4.5 Authorized Non-Stormwater Discharges

Authorized non-stormwater discharges (NSWD) are authorized if they meet any of the following conditions:

- Fire-hydrant and fire prevention or response system flushing
- Potable water sources, including potable water related to the operation, maintenance, or testing of potable water systems
- Drinking fountain water and atmospheric condensate, including refrigeration, air conditioning, and compressor condensate
- Irrigation drainage and landscape watering, provided that all pesticides, herbicides, and fertilizers have been applied in accordance with manufacturer's labels
- Uncontaminated natural springs, groundwater, foundation drainage, footing drainage
- Seawater infiltration where the seawater is discharged back into the source
- Incidental windblown mist from cooling towers that collects on rooftops or adjacent potions of the Facility, but not intentional discharges from cooling towers (*e.g.,* "piped" cooling tower blowdown or drains).

Dust control water from non-potable sources (*e.g.*, the quarry pond) is a non-authorized non-stormwater if discharged. The Facility must not utilize water that could be non-authorized non-stormwater for dust control in the stormwater catchment areas.

4.6 Erodible Surfaces

The Facility is primarily unpaved within the stormwater catchment areas. Erosion of non-vegetated areas can cause sediment mobilization and increased sediment loading in stormwater discharges. Additional sources of disturbed sediments include erosion from haul roads. Most of the drainage pathways at the Facility flow toward retention ponds or are pumped from low lying areas into the respective retention ponds. Potential erodible surfaces outside of catchment areas will be monitored as noted in Section 7.

4.7 Materials Inventory

A list of industrial materials handled and stored at the Facility is presented in Table 2. Table 2 lists locations where industrial materials are received, stored, shipped, and handled. Also included are the storage method, typical handling frequency, and the likelihood of exposure to stormwater.

4.8 Pollutant Source Assessment

A potential pollutant source assessment was performed to identify industrial activities with the potential to contribute pollutants to stormwater discharge, evaluate BMPs implemented or to be implemented, and to reduce the overall potential for pollution.

Industrial activities and potential pollutant sources are identified in Section 4.2 and BMPs are identified in Sections 5 and 6. The following information is summarized in Tables 2 and 3.

- Areas of Facility with likely sources of pollutants
- Pollutants likely to be present in industrial stormwater discharges and authorized NSWDs
- Approximate quantity, physical characteristics, and locations of each industrial material handled, produced, stored, recycled, or disposed
- Degree to which the pollutants associated with those materials may be exposed to and mobilized by contact with stormwater
- Direct and indirect pathways by which pollutants may be exposed to stormwater or authorized NSWDs

Sampling, visual observation, and inspection records were reviewed as part of the annual SWPPP assessment; however, historical records are not included as part of this SWPPP. The effectiveness of existing BMPs and implementing, to the extent possible, minimum BMPs to reduce or prevent pollutants in industrial stormwater discharges and authorized NSWDs was examined during a review of historical data.

Activity	Source	Potential Pollutant	Recommended BMPs
			Minimize equipment service outside of maintenance area during wet weather.
Equipment repair and maintenance.	Potential equipment	O&G Visible Oil	Use dry cleanup methods, sweep paved areas of the Facility daily during the storm season (October 1 through May 30) and weekly during the remainder of the year and conduct focused and comprehensive sweeping before forecasted rain events.
Parking and spills and leaks Visible Oil rucks.	spills and leaks		Implement proper spill prevention control measures.
		Train employees on proper cleanup and spill response.	
			Prohibit hosing off driveways, parking lots, and other paved areas unless contained and disposed to sanitary sewer.
	Apply absorbent pads to leaks or spills, then properly dispose. Properly maintain all vehicles to prevent leakage.		

Table 3. Activities	Sources	Potential Pollutants	and Recommende	ad BMPs
Table 5. Activities,	Sources,	Fotential Follutants	, and Recommende	a DIVIES

Activity	Source	Potential Pollutant	Recommended BMPs
			In the event that vehicle or movable equipment maintenance or repairs are performed in uncovered areas, Inspect the area where the maintenance or repair occurred and cleanup waste products, including pollutant-containing fluids deposited or spilled on the ground.
Waste Material Storage	Erosion and sediment migration,	TSS, pH, settleable matter, metals,	Implement control measures in the Fugitive Dust Control Plan.
	track out of materials, dust migration and	conductivity, visible color	Maintain all drainage and erosion control systems and all- weather working surfaces at the Facility.
	settlement		Temporarily stabilize active, disturbed reclamation areas undergoing reclamation fill placement before and during rain events expected to produce runoff. Stabilization methods include combined BMPs that protect materials from rain, manage runoff, and reduce erosion. Do not perform reclamation activities involving grading, hauling, and placement of backfill materials during wet weather.
			Cover active haul roads with non-limestone materials where exposed limestone surfaces are present when safe and necessary.
			Stabilize inactive areas, such as temporary stockpiles or inactive excavations using an appropriate combination of BMPs to cover the exposed rock material, intercept runoff, reduce its flow velocity, and provide a sediment control mechanism (such as silt fencing, fiber rolls, or hydroseeded vegetation). Standard soil stabilization BMPs include sedimentation basins, geotextiles, mats, erosion control blankets, vegetation, silt fence surrounding the stockpile perimeter, and fiber rolls at the base and on side slopes.
			Divert runoff generated from disturbed active and inactive reclamation areas to temporary basins or temporary vegetated infiltration basins. Divert drainage from non- limestone materials directly to sediment control facilities.
			Install up-gradient berms where fines or stockpiles are placed, to protect against stormwater run-on, and install ditches and down-gradient berms as needed.

Activity	Source	Potential Pollutant	Recommended BMPs
			Use non-limestone material (<i>e.g.,</i> greenstone, breccias, greywacke, metabasalt) in stormwater conveyances and check dam structures.
			Cover large limestone surfaces that would remain exposed during the rainy season with interim covers composed of non-limestone rock types, to extent feasible.
			Implement control measures in the Fugitive Dust Control Plan.
Truck Traffic	Potential spills and leaks, track out of materials, dust	O&G, TSS, Conductivity, pH, Settleable Matter,	Use dry cleanup methods, sweep paved areas of the Facility daily during the storm season (October 1 through May 30) and weekly during the remainder of the year and conduct focused and comprehensive sweeping before forecasted rain events.
	generation	Metals, Visible Oil	Remove tire debris and residue routinely and dispose of residue appropriately.
			Speed limit is a maximum of 15 mph at any and all Facility locations.
			Implement control measures in the Fugitive Dust Control Plan.
Cement Plant Stockpile Storage	Stored materials	TSS, Conductivity, pH, Settleable Matter, Metals	Maintain berms to divert runon around material storage areas and convey runoff through pipes and non-erodible features (rock-line drainages).
			Install energy dissipating devices to slow the velocity of stormwater drainage and prevent erosion.
			Route runoff to sedimentation basins.
Truck Washing	Wash water	TSS, Conductivity, pH,	All wash water to report to Reclaim Water System.
		Settleable Matter, visible oil	Clean area of wash water residue that might contact stormwater before anticipated rain events.
Rock Crushing	Settled dust, materials tracking		Implement control measures in the Fugitive Dust Control Plan.

Activity	Source	Potential Pollutant	Recommended BMPs
		TSS, Conductivity, pH, Settleable Matter, Metals	Use dry cleanup methods, sweep paved areas of the Facility daily during the storm season (October 1 through May 30) and weekly during the remainder of the year and conduct focused and comprehensive sweeping before forecasted rain events.
			Implement control measures in the Fugitive Dust Control Plan.
Cement Processing	Settled dust, materials tracking	TSS, Conductivity, pH, Settleable Matter, Metals	Use dry cleanup methods, sweep paved areas of the Facility daily during the storm season (October 1 through May 30) and weekly during the remainder of the year and conduct focused and comprehensive sweeping before forecasted rain events.
Wastewater treatment	Potential spills and leaks of wastewater and treatment chemicals	TSS, Conductivity, pH, Settleable Matter	Conduct inspections and maintenance consistent with HMBP and Water Reclamation Requirements adopted by the RWQCB (Order No. 94-038).

5.0 MINIMUM BEST MANAGEMENT PRACTICES

Minimum Best Management Practices (BMPs) generally consist of processes, prohibitions, procedures, schedule of activities, etc., that reduce potential for exposure of stormwater to industrial materials. The minimum BMPs as described in the NPDES Permit are italicized, with the specific implementation following.

5.1 Good Housekeeping

The Facility implements the good housekeeping BMPs described below in order to reduce the impact of potential pollutants.

i. Observe all outdoor areas associated with industrial activities including stormwater discharge locations, drainage areas, conveyance systems, waste handling/disposal areas, and perimeter areas impacted by off-Facility materials or stormwater run-on to determine housekeeping needs. Any identified debris, waste, spills, tracked materials, or leaked materials shall be cleaned and disposed of properly.

The Facility observes parking lots, driveways, and storage areas and removes debris on a regular basis. The Facility monitors the Facility entrance/ exit for tracked material.

ii. Minimize or prevent material tracking.

The Facility maintains wheel and vehicle washers near the Facility entrance to mitigate material tracking offsite. In addition, paved areas of the Facility are swept on an as-needed basis.

iii. Minimize dust generated from industrial materials or activities.

The Facility sweeps paved areas to reduce dust accumulation. In addition, the Facility adheres to a Fugitive Dust Control Plan.

iv. Ensure that all Facility areas impacted by rinse/wash waters are cleaned as soon as possible.

Rinse/ wash waters are contained and do not contact industrial stormwater conveyances or discharges.

v. Cover all stored industrial materials that can be readily mobilized by contact with stormwater.

Petroleum products and related maintenance fluids are stored under cover as described in Section 4.1.1. Exceptions for other industrial materials are described in Section 5.8.

vi. Contain all stored non-solid industrial materials (e.g., particulates, powders, shredded paper, etc.) that can be transported or dispersed by the wind or contact with stormwater.

The Facility implements a Fugitive Dust Control Plan.

vii. Prevent disposal of any rinse/wash waters or industrial materials into the stormwater conveyance system.

Rinse/wash water is not discharged to the stormwater conveyance system.

viii. Minimize stormwater discharges from non-industrial areas (e.g., stormwater flows from employee parking area) that contact industrial areas of the Facility.

Pond 9 receives non-industrial area run-off from the adjacent hillside. Stormwater runoff from the parking lot outside of the Facility entrance does not comingle with industrial stormwater flows.

ix. Minimize authorized NSWDs from non-industrials areas (e.g., potable water, irrigation water, fire hydrant testing, etc.) that contact areas of the sanitary or industrial facility.

There are no authorized NSWDs from non-industrial areas of the Facility.

5.2 **Preventative Maintenance**

The Facility implements preventative maintenance BMPs described below.

i. Identify equipment and systems used outdoors that may spill or leak pollutants.

The Facility has identified equipment and systems used outdoors that may spill or leak potential stormwater pollutants, including trucks, mobile equipment, and onsite machinery. These equipment and systems primarily operate in the potion of the Facility where stormwater is directed to the onsite water treatment system.

ii. Observe the identified equipment and systems to detect leaks or identify conditions that may result in the development of leaks.

Facility personnel perform monthly visual inspections for evidence of deterioration of equipment, containers, and systems that are stored outside, as the weather permits. The inspection is recorded on the monthly monitoring form and identifies corrosion, structural failure, spills, leaks, etc. and equipment is repaired/replaced as needed.

iii. Establish an appropriate schedule for maintenance of identified equipment and systems.

The Facility has an established maintenance schedule for its equipment and systems.

iv. Establish procedure for prompt maintenance and repair of equipment, and maintenance of systems when conditions exist that may result in the development of spills of leaks

The Facility has an established procedure for prompt maintenance and repair of equipment. Most equipment is repaired onsite, in portions of the Facility that do not drain to the stormwater discharge locations.

5.3 Spill and Leak Prevention and Response

The Facility implements the spill and leak prevention and response BMPs described below.

i. Establish procedure and/or controls to minimize spills and leaks

The Facility maintains a SPCC Plan onsite that details the spill control procedures.

ii. Develop and implement spill and leak response procedures to prevent industrial materials from discharging through the stormwater conveyance system. Spilled or leaked industrial material shall be cleaned and disposed of properly.

The Facility maintains a SPCC Plan onsite that details the spill response procedures. All stored oil onsite is provided with secondary containment to prevent discharges of oil in the stormwater conveyance system.

iii. Identify and describe all necessary and appropriate spill and leak response equipment, location(s) of spill and leak response equipment, and spill or leak response equipment maintenance procedures

Spill kits are stored in the oil storage locations noted on Figure 5. Each spill kit is inspected monthly to confirm its contents are adequate to respond to a spill.

iv. Identify and train appropriate spill and leak response personnel

Employee training is discussed in Section 5.6.

5.4 Material Handling and Waste Management

The Facility implements the material handling and waste management BMPs described below.

i. Prevent or minimize handling of industrial materials or wastes that can be readily mobilized by contact with stormwater during a storm event

Most material handling of materials that can be readily mobilized (*e.g.*, particulates) is performed in portions of the Facility that discharge to the onsite water treatment system.

ii. Contain all stored non-solid industrial materials or wastes (e.g., particulates, powders, shredded paper) that can be transported or dispersed via wind erosion or contact with stormwater during handling.

Most material handling of materials that can be readily mobilized (*e.g.*, particulates) is performed in portions of the Facility that discharge to the onsite water treatment system.

iii. Cover industrial waste disposal containers and industrial materials storage containers that contain industrial materials when not in use

The Facility covers industrial waste disposal containers that contain industrial materials where feasible prior to rain events.

iv. Divert run-on and stormwater generated from within the Facility away from all stockpiled materials

Stormwater is diverted away from stockpiled materials using a network of pipes, pumps, and stormwater ponds.

v. Clean all spills of industrial materials/wastes that occur during handling in accordance with the spill response procedures

The Facility cleans relevant spills of industrial materials as discussed in the onsite SPCC Plan.

vi. Observe and clean as appropriate, any other material/waste handling equipment or containers that can be contaminated by contact with industrial materials or wastes.

Equipment at the Facility is properly maintained as discussed in Section 5.2.

5.5 **Erosion and Sediment Control**

The Facility implements the erosion and sediment control BMPs described below, as applicable.

i. Implement effective wind erosion controls

The Facility operates in accordance with the Fugitive Dust Control Plan.

ii. Provide effective stabilization for erodible areas prior to a forecasted storm event.

Erodible areas are stabilized as needed using hydroseed, grading, or check dams. See Section 6 for more details.

iii. Maintain effective perimeter controls and stabilize all site entrances and exits to sufficiently control discharges of erodible materials from discharging or being tracked off the site

The Facility exit is paved to reduce erodible materials from being discharged.

iv. Divert run-on and stormwater generated from within the Facility away from all erodible materials

Facility drainage patterns are shown on the figures. Stormwater is diverted away from erodible materials and into stormwater basins.

5.6 Employee Training

The implementation of an employee awareness program shall be executed to inform personnel of the goals and components of the SWPPP, and to address spill response procedures, good housekeeping, maintenance requirements and material management practices. Employees directly involved in stormwater compliance will be provided training on the use of the SWPPP and its components.

Lehigh must document that an employee awareness program has been established. A log of the dates on which specific employees receive training shall be kept with the Facility's training records. Appendix B contains an example form. The following information should be covered in the employee awareness program.

1. Goals of SWPPP

The purpose of the SWPPP is to identify and evaluate sources of pollutants and to identify and implement sitespecific stormwater control methods to reduce pollutant transport from the site to surrounding surface water bodies. Lehigh should use the SWPPP to guide daily operations and evaluate future design and construction.

2. Components of SWPPP

Facility employees impacting stormwater pollution prevention or part of the PPT must be made aware of the SWPPP's four components:

Introduction

- Facility Assessment
- Stormwater BMPs
- Monitoring Implementation Plan

The PPT must be familiar with all four sections of the SWPPP and review it annually. If the plan is modified (during the annual review or at another time), key personnel must be notified of the changes before they are implemented. All PPT and employee training are documented and the records are stored with the SWPPP. Records of employee training are kept for at least 5 years.

5.7 Quality Assurance and Record Keeping

The Facility implements the quality assurance and record keeping BMPs described below.

i. Develop and implement management procedures to ensure that appropriate personnel implement all SWPPP elements

The PPT is responsible for ensuring that all elements of the SWPPP, including the MIP and BMPs, are implemented. The plant manager directs the PPT to track and complete all required permit conditions.

ii. Develop a method of tracking and recording the implementation of BMPs identified in the SWPPP

BMP implementation is tracked and recorded as discussed in Section 9 of this SWPPP.

iii. Maintain the BMP implementation records, training records, and records related to any spills and clean-up related response activities for a minimum of five (5) years

All records required by the NPDES Permit and SWPPP are maintained for a minimum of 5 years. Quality assurance activities undertaken are documented and entered into the SWPPP records. Minimum records maintained are as follows:

- SWPPP
- Monthly Visual Observations NSWDs and BMP implementation
- Sampling Event Visual Observations Stormwater Discharges
- BMP log
- Annual Visual Observations Annual Evaluation
- Personnel Training
- Significant Spills and Leaks
- Documentation of Dangerous Weather Preventing Inspection or Sampling

5.8 Minimum Best Management Practice Exceptions

The following minimum BMPs are not fully implemented because they have been determined to either not reflect a best industry practice, are not economically practicable, or are not economically achievable.

"Cover all stored industrial materials that can be readily mobilized by contact with stormwater." The material stockpiles are not typically covered during facility operations. Due to the need to frequently access, move, or otherwise handle the stockpiled material on a daily basis, the stockpiles are

generally left uncovered. These operational factors lead to the determination that this practice is not economically practicable or achievable at this Facility.

"Implement effective wind erosion controls." Stockpiled soils have the potential to be transported via wind erosion." Due to the size of and need to frequently handle the stockpiles, they are typically uncovered. These operational factors lead to the determination that this practice is not economically practicable or achievable at this Facility.

6.0 ADVANCED BEST MANAGEMENT PRACTICES

Advanced BMPs reduce or prevent discharges of pollutants in stormwater discharge in a manner that reflects best industry practice considering technological availability and economic practicability and achievability. Examples include:

- Overhead coverage
- Retention ponds, basins or surface impoundments
- Berms or other run-on/run-off channeling devices
- Secondary containment structures
- Treatment through inlet controls, filtration, or vegetative swales that reduce the pollutants in surface waters discharged from the site

Advanced BMPs are implemented at the Facility as necessary, as described below. A copy of the California Stormwater Quality Association (CASQA) BMP Handbook fact sheets for erosion and sediment control BMPs for implementation guidance and reference is attached as Appendix C.

6.1 **Exposure Minimization Best Management Practices**

The Facility stores petroleum products and other fluids and materials associated with equipment maintenance under cover to the extent practicable. This overhead coverage reduces or prevents the potential for stormwater pollutants associated with these activities from contacting or entering stormwater. These potential pollutants include pH and O&G.

6.2 Stormwater Containment and Discharge Reduction Best Management Practices

Industrial stormwater and/or authorized non-stormwater is contained and directed through drainage channels, culverts, drop inlets, and conveyance pipes at the Facility. Stormwater generally flows into one of the sedimentation basins. Water from the YY area slope is captured in the sedimentation basin described above and pumped to the Quarry, treated, and discharge via Discharge Point Nos. 001 or 007. The Facility uses speed bumps and water bars to direct runoff into drainage channels. These drainage channels often include rocked check dams to further slow the stormwater flow. In particular, gabion baskets are used as rock check dams in the drainage channel flowing to Pond 20.

Accumulated stormwater in Pond 30 is pumped under typical operating conditions to the onsite water treatment system. Stormwater does not discharge from Pond 30 at Discharge Point No. 006 under the current flow configuration.

6.3 Treatment Control Best Management Practices

A pH treatment system is located upstream of Pond 20. The Facility has the ability to treat stormwater in this area on an as-needed basis using the sodium bisulfate treatment system. The Facility determines the need for pH adjustment by collecting and analyzing grab samples for pH.

The Facility also has two water treatment systems targeted at reducing pollutants in water discharged at the Facility. The Final Treatment System (FTS) Upper is located adjacent to the Quarry, while the FTS-Lower is located west of the Cement Plant.

6.4 Other Advanced Best Management Practices

6.4.1 Secondary Containment

The Facility uses secondary containment in the maintenance and storage areas to reduce the potential for stored liquids to contact stormwater. The secondary containment reduces or prevents the potential for O&G impact to stormwater. Secondary containment capacities are detailed in the SPCC.

6.4.2 Erosion Control

Erosion control, also referred to as soil stabilization, consists of source control measures that are designed to prevent soil particles from detaching and becoming transported in stormwater runoff. Erosion control BMPs protect the soil surface by covering and/or binding soil particles. The Facility will incorporate erosion control measures that are effective and result in the reduction of sediment related pollutants in stormwater discharges and authorized non-stormwater discharges. The Facility will implement the following practices for effective temporary and longer-term erosion control during soil disturbing activities:

- Preserve existing vegetation where practicable and when feasible.
- Implement temporary erosion control measures with focused implementation prior to the wet season.
- Stabilize non-active areas prior to the wet season.
- Control erosion in concentrated flow paths by applying erosion control products and maintaining swales as required.
- Apply hydroseed for vegetation development or other longer-term erosion control to areas deemed available for longer-term controls (*e.g.*, areas no longer planned for soil disturbance).

Sufficient erosion control materials will be maintained on-site to allow implementation in conformance with the SWPPP. This includes implementation of BMPs in active areas and non-active areas before the onset of rain.

BMPs that should be considered for implementation to prevent erosion following soil disturbing areas were identified:

Scheduling

Operating activities will be scheduled with the incorporation of both soil stabilization and sediment control measure BMPs to reduce the discharge of pollutants. The schedule will limit exposure of disturbed soil to wind, rain, and stormwater run-on and run-off where practicable.

Preservation of Existing Vegetation

Existing vegetation will be maintained to the extent practicable.

Hydroseeding

Hydroseeding or other longer-term erosion control will be applied in areas deemed available for longer-term controls to protect disturbed soil areas from soil erosion. The hydroseeding materials will be applied after final grading operations. The application of hydroseeding materials will be performed in accordance with manufacturer's specifications.

Slope Protection

Where feasible, earth dikes and drainage ditches are used to intercept and direct surface flow away from slope areas to protect recently cut or fill slopes.

Soil Binders

- Soil binding consists of application and maintenance of a soil stabilizer to exposed soil surfaces. Soil binders are materials applied to the soil surface to temporarily prevent water and wind induced erosion of exposed soils on construction sites. Example of soil binders that are recommended are:
 - Earthguard a useful soil stabilizing emulsion specifically formulated to reduce erosion and sediment runoff. Earthguard can be applied by water truck or by spray application.
 - Gorilla-Snot is a biodegradable liquid copolymer used to stabilize and solidify soil or aggregate as well as provide erosion control and dust suppression.

6.4.3 Sediment Control

Sediment control BMPs are designed to intercept and settle out or filter soil particles that have been detached and transported by the force of water. The Facility implements sediment control measures that are effective and result in the reduction of sediment related pollutants in stormwater discharges and authorized non-stormwater discharges.

Sufficient quantities of temporary sediment control materials will be maintained on-site to allow implementation of temporary sediment controls in the event of predicted rain and for rapid response. This includes implementation requirements of BMPs in active areas and non-active areas that require deployment before the onset of rain. BMPs that should be considered for implementation to prevent sediment migration from disturbed soil area were identified:

Sweeping

Paved areas will be vacuum swept prior to an anticipated storm event, or as needed to control of excessive dirt and dust. The sweeping will include increased focus in areas where noticeable tracking of materials occurs.

Flocculants

Floc logs introduce a flocculant into the stormwater to promote and accelerate sedimentation in the stormwater basins. The placement of floc logs should be upstream of the stormwater basins to introduce the flocculants upstream, so it is well mixed with the surface water run-off. Floc logs are typically installed in the drainages leading to Pond 17 and Pond 20.

7.0 STORMWATER MONITORING AND REPORTING PROGRAM (MRP)

The MRP in this section describes a Facility-specific monitoring program related to stormwater discharges to provide indicator monitoring information for assessing the levels of pollutants in stormwater discharges, the effectiveness of BMPs to prevent or reduce pollutants, and the need for corrective actions. This Stormwater MRP does not include monitoring and reporting requirements associated with Discharge Point Nos. 001 and 007. For requirements related to Discharge Point Nos. 001 and 007 refer to Attachment E of the NPDES Permit.

7.1 Stormwater Discharge Locations

There are several discharge locations, described below and shown on Figure 2.

- Discharge Point No. 002: Settled stormwater from slope north of Pond 13B, discharged from Pond 13B
- Discharge Point No. 004: Potential discharge of settled stormwater from rain falling directly on the Rock Plant and runoff from adjacent hillside, discharged from Pond 17
- Discharge Point No 005: Settled stormwater from the former Aluminum Plant, entry road, nearby hillside, and rain falling in the Rock Plant area, discharged from Pond 20
- Discharge Point No 006: Settled stormwater from EMSA, that can be discharged from Pond 30
- Disturbed or non-reclaimed Creek-facing western slopes of WMSA: water that emerges from the YY or other southern slopes of the WMSA that flow into Permanente Creek. If the water is captured and sent back to the Quarry for treatment and disposal via one of the final treatment systems and Discharge Point Nos. 001 and/or 007, then the flows do not have to be sampled pursuant to this plan, as the NPDES permit addressed monitoring and reporting requirements of the locations described above.

7.2 Receiving Water Locations

Under the NPDES Permit, Lehigh performs comprehensive receiving water sampling concurrent with discharge, which characterizes the impact, if any, of Facility-wide discharges. A total of seven receiving water locations are sampled under a variety of conditions: four locations onsite (RSW-001A, RSW-001, RSW-002, and RSW-004) and three offsite (RSW-005 through RSW-007). The sample locations are described below and shown on Figure 2.

Parameter	Description
RSW-001	A point in Permanente Creek within 300 feet upstream of in-stream Pond 13.
RSW-001A	A point in Permanente Creek 200 feet or less downstream from the confluence of Wild Violet Creek and Permanente Creek.

Table 5: Receiving Water Locations

Parameter	Description
RSW-002	A point in Permanente Creek within 50 feet downstream of Discharge Point No. 002.
RSW-004	A point in Permanente Creek within 50 feet downstream of Discharge Point No. 006 and 50 feet upstream of Pond 14.
RSW-005	A point in Permanente Creek at Rancho San Antonio Open Space Upper Bridge (South Meadow Trailhead). CEDEN Name: PER070
RSW-006	A point in Permanente Creek at Heritage Oaks Park. CEDEN Name: PER045
RSW-007	A point in Permanente Creek at Crittenden Middle School. CEDEN Name: PER020

7.2.1 Receiving Water Sampling

Relevant to this SWPPP, the Facility will collect the first receiving water sample(s) of each wet season (November 1 through April 30) after the first storm that causes a "significant stormwater discharge," defined as follows: a continuous discharge of stormwater for a minimum of one hour, or an intermittent discharge of stormwater for a minimum of three hours in a 12-hour period. The sampling schedule is summarized on Table 5. Note RSW-002 only needs to be sampled if Discharge Point No. -002 is discharging.

7.3 Visual Observations

The NPDES Permit requires two basic types of visual observations designed to identify sources of pollutants.

- Monthly Visual Observations: conducted on a day with no precipitation during daylight hours
- Sampling Event Visual Observations: conducted while sampling occurs

As part of the visual observations, the YY area and other slopes facing Permanente Creek that have a history of erosion and/or show evidence of material movement associated with water flow, will be monitored for evidence of erosion or slope movement at least weekly during dry weather, and at least daily during and up to 48 hours after storm events.

7.3.1 Monthly Visual Observations

A member of the PPT visually observes each drainage area monthly. The scope of the visual observation includes the following elements:

- 1) The presence or indication of prior, current, or potential unauthorized non-stormwater discharges and their sources
- 2) Authorized non-stormwater discharges, sources, and associated BMPs
- Outdoor industrial equipment and storage areas, outdoor industrial activities area, BMPs, and all other potential sources of industrial pollutants

7.3.2 Sampling Event Visual Observations

A member of the PPT also visually observes stormwater discharge at the time of sampling. Sampling and corresponding visual observations are only required of stormwater discharges that meet the sampling criteria in

Section 7.3. Observations are not required when dangerous weather conditions exist (*i.e.,* flooding, high winds, or electrical storms), discharge occurs outside scheduled Facility operating hours, or events not sampled are explained in the Annual Report. Observations are also not required for drainage areas that have no exposure to industrial activities and materials.

The inspections include visual observations of stormwater runoff to evaluate the presence of floating or suspended materials, oil and grease, discoloration, turbidity, or other signs of pollutant impact to stormwater runoff. Observations are also made to assess the proper performance of stormwater collection and diversion structures (*e.g.*, surface drains). The SWPPP shall be revised, as necessary, if visual observations indicate that the document is inaccurate or additional BMPs are needed to control or prevent pollutants in stormwater discharges.

A member of the PPT is assigned to perform visual stormwater observations during the sample collection. A backup member of the team shall be assigned when the primary PPT member is absent or unavailable.

7.3.3 YY Area and Other South Slopes Facing Permanente Creek

As part of the visual observations, the YY area and other slopes facing Permanente Creek that have a history of erosion and/or show evidence of material movement associated with water flow, must be monitored for evidence of erosion or slope movement at least weekly during dry weather, and at least daily during and up to 48 hours after storm events. Appendix D includes a template for the monitoring forms. The results of this monitoring will be submitted with Lehigh's monthly NPDES self-monitoring reporting.

7.3.4 Visual Observation Records and Response Procedures

Records of the observations include the name of the observer, date, time, locations observed, observations, and response action(s) taken. In the event that a visual observation indicates a condition that may inadequately reduce or prevent pollutants in industrial stormwater, corrective action will be taken.

The SWPPP shall be revised, as necessary, if visual observations indicate that the document is inaccurate or additional or revised BMPs are needed to address the observations or to reduce or prevent pollutants in industrial stormwater discharges.

Appendix D includes templates for the required visual observations.

7.4 Sampling and Analysis

The Facility will collect and analyze stormwater as specified in the table below, and in accordance with Table E-3 of the NPDES permit. Samples are to be representative of stormwater associated with industrial activities and any commingled authorized non-stormwater discharges. Stormwater is to be sampled at the time of release if it is contained.

Table 6: Stormwater Sampling Frequency

Parameter	Units	Sample Type⁴	Minimum Sampling Frequency
Conductivity	µmhos/cm	Grab	1/ quarter
Flow ⁵	MG	Continuous	1/month
Oil and Grease ⁶	mg/L	Grab	1/quarter
рН	Standard units	Grab	1/quarter
Settleable Matter	mL/L-hr	Grab	1/quarter
TSS	mg/L	Grab	1/quarter
Antimony	µg/L	Grab	1/quarter
Chromium (VI)	µg/L	Grab	1/quarter
Mercury	µg/L	Grab	1/year
Nickel	µg/L	Grab	1/quarter
Selenium	µg/L	Grab	7
Visual Observations ⁸	n/a	n/a	Each occurrence

General Notes:

µg/L= micrograms per liter µmhos/cm= micromhos per centimeter mg/L= milligrams per liter mL/L-hr: milliliters per liter-hour MG= million gallons

⁴Grab samples shall be collected during daylight hours

⁵Flow shall be monitored continuously at all monitoring locations. The following information shall be reported in monthly reports for all monitoring locations: Daily average flow (gpd) and total monthly flow volume (MG

⁶At monitoring locations EFF-006, total organic carbon may be substituted for oil and grease

⁷The selenium monitoring frequency shall be 1/month during the wet season (November 1 through April 30) and twice during the dry season. Selenium samples shall be collected at EFF-002, EFF-004, EFF-005, and EFF-006 during the first significant stormwater discharge of the wet season that occurs in daylight during scheduled Facility operating hours.

⁸Visual observations are listed in Attachment S section II.A of the NPDES Permit and are summarized in Section 7.2 of this SWPPP

7.5 Numeric Effluent Limits and Action Levels

7.5.1 Effluent Limits

The Facility must comply with the effluent limitations in the table below for discharges at locations EFF-002, EFF-004, EFF-005, and EFF-006.

Table 7: Effluent Limitation

Parameter	Units	Average Monthly Effluent Limit	Maximum Daily Effluent Limit	Instantaneous Minimum Effluent Limit	Instantaneous Maximum Effluent Limit
Oil and Grease	mg/L	10	20	-	-
pН	Standard units	-	-	6.5	8.5
Settleable Matter	mL/L-hr	0.10	0.20	-	-
TSS	mg/L	-	50	-	-

General Notes: mg/L= milligrams per liter

mL/L-hr: milliliters per liter-hour

7.5.2 Action Levels

The Facility must also comply with the action levels in the table below for discharges at locations EFF-002, EFF-004, EFF-005, and EFF-006.

Table 8: Stormwater Action Levels

Parameter	Unit	Instantaneous Action Level	Annual Average Action Level ¹
Antimony	μg/L	640	-
Chromium (IV)	μg/L	16	-
Selenium	μg/L	-	5.0
Visible Oil	-	Presence	Presence
Visible Color	-	Presence	Presence

General Notes:

µg/L= micrograms per liter

¹ Comparisons with Annual Action Levels shall be valuated using data collected over each 12-month period from July 1 through the following June 30.

7.5.3 Action Level Response

If the Facility samples any parameter in excess of an action level in Table 7 of this SWPPP, the Facility will review the SWPPP to identify appropriate modifications to existing BMPs or additional BMPs as necessary to reduce pollutant discharge concentrations to levels below the action level. The SWPPP will be updated accordingly before the next storm if possible, but no later than three months following the exceedance.

7.6 Sample Collection and Handling Procedures

Samples are collected in bottles that are either unpreserved (pH and TSS) or preserved (O&G, metals). If the sample analytical method requires an unpreserved bottle, the bottle may be placed directly in the flow of water to collect the sample. If a preserved bottle is required, the sample must be collected in an unpreserved bottle then transferred to the bottle containing the preservative in order to avoid washing the preservative out of the bottle.

The following procedure is followed to, first, determine when to sample and, second, ensure sample integrity:

- Obtain appropriate sample bottles from the laboratory to have them on hand before the first storm event
- Track weather forecasts to determine the expected arrival date and time of the storm event and quantity of rainfall
- Review weather data to determine if the requisite 48 hours of no discharge from any drainage area has elapsed before the anticipated storm event
- After rain has begun falling, check if the storm event is creating discharge and it is safe to collect stormwater samples
- If stormwater discharge is occurring, collect samples within the first 4 hours of the start of the discharge or at the start of Facility operations if the Qualifying Storm W started within the previous 12 hours
- Record visual observations of required items using the sampling form provided in Appendix D
- Properly label the samples and complete the chain of custody for submittal to the analytical laboratory
- Place the samples in a cooler chilled with ice or frozen ice packs and submit the samples to the lab, accompanied by the completed chain of custody on the same day the samples were collected
- Alternatively, have the samples, accompanied by the completed chain of custody, picked up by a courier prior to the close of business on the same day that they are collected

7.6.1 Field Calibration Procedures

For pH, monitoring will be conducted using a calibrated portable instrument. The sampler shall ensure that all field measurements are conducted in accordance with the manufacturer's instructions that accompany the instrument. It is recommended that an equipment calibration be performed 24 hours before an announced rain event that the National Oceanic and Atmospheric Association website identified as having a 50% or greater probability of precipitation.

8.0 ANNUAL COMPREHENSIVE FACILITY COMPLIANCE EVALUATION (ANNUAL EVALUATION)

The site performs one comprehensive site evaluation during each report period (July 1 - June 30). The evaluation is conducted a minimum of eight months and a maximum of sixteen months from the previous Annual Evaluation. At a minimum, the Annual Evaluation consists of:

- A review of all sampling, visual observations, and inspection records conducted during the previous reporting year
- An inspection of all areas of industrial activity and associated potential pollutant sources for evidence of, or the potential for, pollutants entering the stormwater conveyance system
- An inspection of all drainage areas previously identified as having no exposure to industrial activities and materials in accordance with the definitions in Section XVII of the General Permit
- An inspection of equipment needed to implement the BMPs
- An inspection of any BMPs
- A review and effectiveness assessment of all BMPs for each area of industrial activity and associated potential pollutant sources to determine if the BMPs are properly designed, implemented, and are effective in reducing and preventing pollutants in industrial stormwater discharges and authorized NSWDs
- An assessment of any other factors needed to comply with the requirements in the NPDES Permit

The Facility implements SWPPP revisions resulting from the Annual Evaluation within 90 days of the evaluation.

9.0 REPORTING REQUIREMENTS

The Facility electronically submits self-monitoring reports (SMRs) electronically using the State Water Board's California Integrated Water Quality System (CIWQS) Website. For each reporting period established, the Facility submits a SMR to the RWQCB in accordance with the requirements below:

9.1 Transmittal letter

Each SMR will be submitted with a transmittal letter that includes the following:

- 1) Identification of all violations of eluent limits or other waste discharge requirements found during the reporting period
- 2) Details regarding the violations, such as parameters, magnitude, test results, frequency, and dates
- 3) Causes of the violations
- 4) Corrective actions taken or planned to resolve violations and prevent recurrences and dates or time schedules for implementation
- 5) Explanation for any data invalidation. Data should not be submitted in a SMR if it does not meet quality assurance/ quality control standards. However, if the Facility wishes to invalidate a measurement after

submitting a SMR, the Facility will identity the measurement suspected to be invalid and state the Facility's intent to submit within 60 days a formal request to invalidate the measurement.

- 6) Description of blending, if any
- Description of other bypasses, if any. If the Facility bypasses any treatment, it will describe the duration of the bypass and effluent quality during those times
- Signature. The transmittal letter shall be signed in accordance with Attachment D Provision V.B of the NPDES Permit.

Results of YY area monitoring (Section 7.3.3) will be submitted with the Facility's monthly SMRs.

9.2 Compliance Evaluation Summary

Each SMR will include a compliance valuation summary that addresses each parameter for which the NPDES permit specifies effluent limitations, the number of samples taken during the monitoring period, and the number of samples that exceed the effluent limitations.

9.3 More Frequent Monitoring

If the Facility monitors any parameter more frequently than required by the NPDES permit, the Facility will include the results of such monitoring in the calculation and reporting of the data submitted in the SMR.

9.4 Analysis Results

9.4.1 Tabulation

Each SMR will include tabulations of the analyses and observations, including parameters, dates, times, sample station, types of samples, test results, method detection limits, method minimum levels, and method reporting levels if applicable, signed by the laboratory director or other responsible official.

9.4.2 Multiple Samples

When determining compliance with effluent limitations, other than instantaneous effluent limitations, and more than one sample result is available, the Facility will compute the arithmetic mean. If the data set contains one or more results that are "Detected Not Quantified (DNQ)" or "Not Detected (ND)", the Facility will use the following procedure:

- 1) The data set will be ranked from low to high, reported ND determinations the lowest, DNQ determinations next, followed by quantified values.
- 2) The median of the data set will be determined.

9.4.3 Results Not Yet Available

The Facility will make all reasonable efforts to acquire analytical data for required parameter sampling in a timely manner. Certain analyses may require additional time to complete analytical processes and report results. In these cases, the Facility will describe the circumstances in the SMR and include the data for these parameters and relevant discussions of any violations in the next SMR due after the results are available.