Appendix K: Storm Water Pollution prevention Plan (SWPPP)

(Sespe Consulting, updated 2017)

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STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

OMYA Inc.
Lucerne Valley
7225 Crystal Creek Road
Lucerne Valley, CA 92356

WDID No.: 7 36I000880

July 2017

Prepared for:	OMYA Inc. 7225 Crystal Creek Road Lucerne Valley, California 92356
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STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

OMYA Inc.
Lucerne Valley, CA

July 2017

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STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

OMYA Inc.
Lucerne Valley, CA

July 2017

CERTIFICATION

Preparer Certification

This Storm Water Pollution Prevention Plan was prepared under my direction to meet the requirements of the California Industrial General Permit (State Water Resources Control Board Water Quality Order 2014-0057-DWQ, NPDES General Permit No. CAS000001).

Preparer Signature	07-21-17 Date
Pearce Swerdfeger Preparer Name	QISP Preparer Title

Facility 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 that 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.

Signature of Legally Responsible Person (LRP) or Duly Authorized Representative (DAR)	Date
Name of Legally Responsible Person (LRP) or Duly Authorized Representative (DAR)	Title

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OMYA Inc.
Lucerne Valley, CA

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1.0 BASIC FACILITY INFORMATION

The OMYA Inc. (OMYA) Lucerne Valley Facilities (Facilities) consist of the Plant Site, White Knob Quarries (White Knob Quarry, Annex Quarry, White Ridge Quarry), and Sentinel Quarries (Sentinel Quarry, Butterfield Quarry). The Lucerne Valley Plant Site located 4.6 miles south of the community of Lucerne Valley, at 7225 Crystal Creek Road. The White Knob Quarries are located approximately 4.3 miles west-southwest of the Plant Site, and the Sentinel Quarries are located 3.5 miles south of the Plant Site (see figure presented in Appendix A).

The Lucerne Valley Plant Site and Quarries is a mining, milling, packaging, and shipping operation producing high-quality calcium carbonate for products requiring limestone as filler and additives. There are two active quarries associated with the operations including the White Knob Quarries and the Sentinel Quarries, and four (4) waste management units (WMUs). Various ancillary support operations are also conducted at the Facilities including equipment fueling and maintenance, material storage, and a scale.

The industrial operations that occur at the Facilities are presented below. These activities are discussed in more detail in Section 6.

- Mining material using dozers, loaders, graders, and other heavy equipment.
- Processing the material using conveyors, screening the material which separates it by size, and crushing large rocks down into smaller rocks.
- Hauling processed material using dump trucks.
- Storing raw and processed materials in stockpiles.
- Milling, packaging, and shipping finished product off-site.
- Vehicle and heavy equipment fueling and maintenance.
- Vehicle and mobile equipment parking.

Potential storm water pollutants at the Facilities include:

- Oil and grease (O&G);
- pH; and
- Total suspended solids (TSS).

Storm water that leaves the Facilities typically discharges into small ephemeral washes that flow to the north and eventually dissipate into the ground near the city of Lucerne Valley in dry lakes (Rabbit Dry

Lake and Lucerne Valley Dry Lake). A portion of the storm water runoff from the Butterfield Quarry and B5 Pad (Sentinel Quarry area) flows to the south and eventually discharges into Holcomb Creek, which flows to the Mojave River.

1.1 SIC Code

The following SIC code is applicable to the Facilities:

- 1422 (Crushed and Broken Limestone)

2.0 PURPOSE AND GENERAL REQUIREMENTS OF PLAN

In 1987, Congress enacted the Water Quality Act, amending the Federal Water Pollution Control Act to include regulation of the discharge of storm water from industrial and certain municipal sources. The Environmental Protection Agency (EPA) issued final regulations establishing permit application requirements for storm water in the November 16, 1990 Federal Register (55 FR 47990). The regulations provide for individual and group applications and for the issuance of individual and general permits.

In California, the State Water Resources Control Board (SWRCB) elected to issue a statewide general permit that applies to all industrial storm water discharges requiring a permit, except those from construction activities. The Board adopted the Permit and Fact Sheet on November 19, 1991. The Board reissued the Permit and Fact Sheet (Order 97-03-DWQ) on April 17, 1997. On April 1, 2014 the Board adopted an updated Permit and Fact Sheet (Order 2014-0057-DWQ) which took effect July 1, 2015 ("Permit", "General Permit", or "IGP").

This Storm Water Pollution Prevention Plan addresses the requirements of the 2014 Permit, Order 2014-0057-DWQ.

The Permit requires that each Facility:

- Eliminate non-storm water discharges;
- Develop and implement a Storm Water Pollution Prevention Plan (SWPPP); and
- Monitor discharges of storm water.

This Storm Water Pollution Prevention Plan (SWPPP) has been developed as required by the Permit to fulfill the following objectives:

- Identify and evaluate sources of pollutants that may affect the quality of industrial storm water discharges and authorized non-storm water discharges (NSWDs);
- Identify and describe the minimum Best Management Practices (BMPs) and any advanced BMPs implemented to reduce or prevent pollutants in industrial storm water discharges; and authorized NSWDs. BMPs shall be selected to achieve compliance with the General Permit; and
- Identify and describe conditions or circumstances which may require future revisions to be made to the SWPPP.

The letter documenting receipt of the Notice of Intent (NOI) will be kept in Appendix B and a copy of the 2014 General Permit is included in Appendix H. A record of revisions to this SWPPP is included in Appendix C.

The Facilities' Waste Discharger Identification (WDID) number is noted on the cover of this plan.

3.0 PLANNING AND ORGANIZATION

3.1 Pollution Prevention Team

The management of the Facilities has been involved in the preparation and review of this Plan and has provided certification of its accuracy as required by the General Permit. The following individuals comprise the Facilities' Pollution Prevention Team and are responsible for the development, implementation, and maintenance of this SWPPP:

Name	Title	Phone Number	Responsibilities, Duties, and Activities
David Harp	Plant Manager	(760) 694-4925	- Act as signatory authority; - Act as the Team Leader in his absence; - Respond to regulatory actions; and - Retain records.
Luis A. Pacheco Team Leader	Safety and Environmental Manager	(760) 963-1566	- General Permit compliance oversight; - Administrate and coordinate the storm water program; - Review and revise storm water compliance documents; - Annual SWPPP review; - Specify appropriate Best Management Practices (BMPs) for operations; - Ensure that BMPs are installed and maintained; - Conduct / supervise employee training; - Perform visual observations; - Conduct the Annual Comprehensive Facility Compliance Evaluation; - Collect storm water samples; - Analyze storm water samples for pH; - Prepare and submit the Annual Report; and - Submit various compliance documents in SMARTS.
Javier Monarrez	Production Manager	(760) 694-7258	- Ensure that BMPs are installed and maintained; - Perform visual observations; - Collect storm water samples; - Analyze storm water samples for pH; - Conduct the Annual Comprehensive Facility Compliance Evaluation; and - Supporting the Team Leader as necessary.
Manuel Hernandez	Area Manager - Mining	(760) 248-5249	
Doug Riddell	Quarry Manager	(760) 963-2206	

3.2 Other Requirements and Existing Facility Plans

Local, state, and federal requirements that impact, complement, or are consistent with the General Permit were reviewed during the development of this SWPPP. The following plans and permits were reviewed for practices that may help control the discharge of pollutants in storm water:

Hazardous Materials Business Plan (HMBP)

OMYA has prepared a Hazardous Materials Business Plan (HMBP) that addresses the hazardous materials stored and used at the Facilities. The HMBP describes methods and procedures to minimize the potential for hazardous material and waste releases including an emergency response and contingency and spill response procedures.

Spill Prevention Control and Countermeasure (SPCC) Plan

OMYA has prepared a Spill Prevention Control and Countermeasure (SPCC) Plan for the Facilities. The SPCC is designed to minimize the potential for spills or releases of oil and outlines procedures to be followed in the event of an oil spill.

Air Quality Permits

Air permits issued by the Mojave Desert Air Quality Management District (MDAQMD) require the use of baghouses to control fugitive dust emissions from the processing plant.

Waste Discharge Requirements

The four (4) Waste Management Units (WMUs) at the Plant Site are classified as Group C mining waste WMUs and are regulated under Waste Discharge Requirements issued by the Colorado River Basin Regional Water Quality Control Board. WMU #4 is active and regulated under Waste Discharge Requirements Order No. 00-140 by the Colorado River Basin Regional Water Quality Control Board.

3.3 Scheduled Facility Operating Hours

The Plant operates 24 hours per day, seven (7) days per week and only shut down intermittently for maintenance or holidays. The normally scheduled hours for the Facilities' management are Monday through Friday from 8:00 AM to 5:00 PM.

4.0 SITE MAP

Figure 1 is a Site Location Map depicting the locations of the Lucerne Valley Plant Site, Sentinel Quarries and White Knob Quarries. Figure 2 depicts the Lucerne Valley Plant Site. Figure 3 is the Sentinel Quarries Site Maps, and Figure 4 is the White Knob Quarries Site Maps. Figures 1 through 4 illustrate the following facility features in accordance with the General Permit: site boundaries, drainage areas within the facility, site areas affected by run-on from surrounding areas, direction of storm water flow, storm water conveyance systems and physical BMPs, impervious surfaces, materials storage and handing areas, and discharge points (monitoring and sampling locations).

4.1 Description of Drainage Areas and Outfalls

The Lucerne Valley Facilities (Facilities) consist of the Plant Site, White Knob Quarries (White Knob Quarry, Annex Quarry, White Ridge Quarry), and Sentinel Quarries (Sentinel Quarry, Butterfield Quarry, Central Area). The Facilities have eight (8) drainage areas with eleven (11) discharge locations. In general, storm water flows into retention basins located before each outfall to dissipate energy, allow solids to settle out before discharging off-site, and encourage infiltration. Each drainage area is described in detail below. Site figures are presented in Appendix A.

4.1.1 Plant Site

The Plant Site is a milling, packaging, and shipping operation producing high quality calcium carbonate for products requiring limestone as filler and additives. The Plant Site is comprised of approximately 73 acres that are generally flat with a slight slope to the northeast (Figure 2). The Plant Site drainage area is approximately 15 percent impervious, and consists of five (5) drainage areas with nine (9) discharge locations. The discharge points from the Plant Site all discharge to unnamed washes that generally flow to the northeast and eventually join together approximately 1.5 miles northeast the plant. The unnamed wash terminates within Lucerne Valley and Lucerne Dry Lake, found to the north of the Plant Site. This drainage is isolated and may not be subject to oversight by the United States Army Corp of Engineers (USACOE) as water of the United States.

Material disposed of at the four (4) Waste Management Units (WMUs) consists of milled limestone (product) that does not meet production specifications, spilled product, damaged shipping bags (cardboard, polypropylene, and paper), and broken wood pallets. WMUs #1, #2 and #3 are inactive and covered with native soil, and therefore are not expected to pose a threat to storm water quality. WMU #4 is active and regulated under Waste Discharge Requirements Order No. 00-140 by the Colorado River Basin Regional Water Quality Control Board.

Drainage Area 1
Drainage Area 1 (DA1) is located along the western boundary of the Plant Site and includes the office, west warehouse, mobile maintenance facility, truck storage yard (former maintenance yard), and portions of the main processing area.

Drainage Area 1 has three (3) discharge points that discharge to an unnamed wash to the west of the Plant Site.

- Discharge Point 1A is the terminus of the culvert located at the northwest corner of the Plant Site, north of the primary entrance road to the Plant. Discharge Point 1A receives runoff from the main truck loading / unloading area, the west warehouse, the truck storage yard, and paved parking areas via the retention basin south of the west warehouse. The retention basin is equipped with a fabric filter. Minor amounts of storm water from the parking areas and haul

road are not captured in the retention basin will flow to the concrete down drain and commingle with the water from the culvert.
- Discharge Point 1B is the terminus of a riprap lined channel located west of the mobile maintenance facility that receives runoff from the asphalt surface surrounding the mobile maintenance facility. Surface flow discharges from a concrete surface drain to an unnamed wash located to the west of the Plant Site.
- Discharge Point 1C is a concrete lined channel north of the main office that receives runoff from the paved haul road, mobile maintenance facility, and truck storage yard.

During storm events, Discharge Point 1A will serve as the sample point (Sample Point 1) for DA1 (see Section 10.4.7 for Representative Sampling Reduction).

Drainage Area 2

Drainage Area 2 (DA2) is located east of Drainage Area 1, in the center of the Plant Site. DA2 consists of the main processing area, raw materials stockpiles, crushers, conveyors, bulk material storage silos, and is bordered on the north by the elevated railroad platform.

Discharge Point 2 is the end of the culvert that carries water from the rock lined basin located along the railroad tracks northwest of the bulk material loading area (plant storage silos) under the railroad. Discharge Point 2 receives runoff from the main processing area, bulk material storage silos, and portions of the main truck loading / unloading area.

During storm events, Discharge Point 2 will serve as the sample point (Sample Point 2) for DA2.

Drainage Area 3

Drainage Area 3 (DA3) is located east of Drainage Area 2 and encompasses the eastern portion of the Plant Site. DA3 consists of raw materials stockpiles, diesel and gasoline fueling and storage area, miscellaneous outdoor storage areas, closed WMUs #1 and #2, and is bordered on the north by the elevated railroad platform.

Drainage Area 3 has three (3) discharge points that discharge to separate unnamed washes to the north of the Plant Site.
- Discharge Point 3A is the end of the northernmost culvert in DA3 that carries water from the basin east of the bulk material loading area (plant storage silos) under the railroad. Discharge Point 3A receives runoff from the processing area, raw materials stockpiles, and diesel and gasoline fueling and storage area.
- Discharge Point 3B is the end of the southernmost culvert in DA3 that carries water under the railroad. Discharge Point 3B receives runoff from the raw materials stockpiles, diesel and gasoline fueling and storage area, miscellaneous outdoor storage areas, and closed WMUs #1 and #2.
- Discharge Point 3C is the eastern portion of the Plant Site, near closed WMU #2. Discharge Point 3C will receive very limited storm water discharges from the WMU and storage areas.

During storm events, the curb inlet to the basin prior to Discharge Point 3A will serve as the sample point (Sample Point 3) for DA3 (see Section 10.4.7 for Representative Sampling Reduction). This is an "Alternative Discharge Location" as allowed by Section XI.C.3.i of the IGP since the basin that discharges via the culvert at Discharge Point 3A receives storm water flows from surrounding, non-industrial areas (e.g., undisturbed areas and rail lines).

Drainage Area 4
Drainage Area 4 (DA4) is located on the north side of the train tracks, north of the main plant. DA4 consists of the truck loading area, and drains to a concrete retention basin on the northeast side of the truck loading area. Discharge Point 4 is the weir where storm water will overflow from the concrete retention basin and discharges to the north.

During storm events, Discharge Point 4 will serve as the sample point (Sample Point 4) for DA4.

Drainage Area 5
Drainage Area 5 (DA5) is located on the north side of the train tracks, at the east end of the Plant Site. DA5 consists of WMU #4 and drains to the northwest corner of the WMU into an earthen retention basin. Discharge Point 5 is the location where storm water overflows from the retention basin and discharges to the north.

During storm events, Discharge Point 5 will serve as the sample point (Sample Point 5) for DA5.

4.1.2 Sentinel Quarries

The Sentinel Quarry Site is located 3.5 miles south of the Plant Site in the Fawnskin Mining Area and is composed of two (2) quarry areas (Sentinel Quarry and Butterfield 3 Quarry) and three (3) operational areas: the B5 Pad and Black Hole Pad (Overburden Sites) and historic B5 Quarry. The total area of the Sentinel Quarry Site is approximately 60 acres. The Sentinel Quarry Site drainage area is less than one (1) percent impervious and consists of three (3) drainage areas with three (3) discharge locations (Figure 3). Surface water flow from the Sentinel Quarry site generally occurs through two drainages; the Furnace Canyon Creek Drainage and the Holcomb Creek Drainage.

Since the site is located within the boundary of the San Bernardino National Forest at the top of the range crest of the San Bernardino Mountains, drainage is generally away from the mining area. In addition, the quarry area falls into two (2) different Regional Water Board jurisdictional boundaries. The Sentinel Quarry, Central Area, and eastern portion of Butterfield Quarry fall within boundaries of the Colorado River Basin Regional Water Quality Control Board, and the B5 Pad and western portion of Butterfield Quarry are regulated by the Lahontan Regional Water Quality Control Board.

Drainage Area 6
Drainage Area 5 (DA6) is located on the far east of the mining areas and includes the Butterfield Quarry. Material is mined in DA6 and hauled to the nearby crushing facilities to be crushed and processed. The majority of the storm water that falls in DA6 is captured in the pit and will not discharge. DA6 has one (1) discharge point along the haul road to the Central Area. Discharge Point 6 flows to the south into an unnamed intermittent drainage that and eventually into Holcomb Creek.

During storm events, Discharge Point 6 will serve as the sample point (Sample Point 6) for DA6.

Drainage Area 7
Drainage Area 7 (DA7) is located south of the active mining areas and includes runoff from the Central Area, made up of the B5 Pad, historic B5 Quarry, and Black Hole Pad. Off-specification or overburden material is hauled and dumped on the B5 Pad. Surface flows from the Central Area are generally contained and do not discharge; occasionally surface flows breach the sides of the B5 pad discharge to the south. A small retention basin is located at the bottom of the B5 Pad to collect storm water flows from the sides of the pad. Discharge Point 7 is the location where storm water will overflow from the

retention basin. Discharge Point 7 flows to the south into an unnamed intermittent drainage that and eventually into Holcomb Creek.

During storm events, Discharge Point 7 will serve as the sample point (Sample Point 7) for DA7.

Drainage Area 8
Drainage Area 8 (DA8) is located on the northwest portion of the quarry area and includes the Central Area and Sentinel Quarry. The Sentinel Quarry is an active quarry that includes, crushing, sorting, and conveying material. Due to the topography of the Sentinel Quarry pit, storm water that falls in DA8 will typically flow to the pit bottom and not discharge. Therefore, storm water discharges from DA8 are very unlikely. In an extreme rain event, storm water may discharge from a low point in the berm along the eastern border of the quarry area. Discharge Point 8 flows to the east into an unnamed intermittent drainage that and eventually into Furnace Canyon Creek.

During storm events, Discharge Point 8 will serve as the sample point (Sample Point 8) for DA8.

4.1.3 White Knob Quarries

The White Knob Quarry Site is located 4.3 miles west of the Plant Site on the north-facing slopes of the San Bernardino Mountains and is composed of three (3) overburden sites and three (3) quarry areas: Annex Quarry, White Knob Quarry, and White Ridge Quarry. The total area of the White Knob Quarry Site is approximately 145 acres. The White Knob Quarry Site drainage area is less than one (1) percent impervious and consists of one (1) drainage area with one (1) discharge location (Figure 4).

The White Knob Quarry Site is located in an unnamed watershed west of Silver Creek. Drainage runoff from the White Knob Quarry site ultimately drains to Rabbit Dry Lake, located on the floor of Lucerne Valley to the north of the quarry site. These drainages are likely isolated and may not be subject to oversight by the USACOE as waters of the United States.

Drainage Area 9
Drainage Area 9 (DA9) is comprised of all the active areas of the White Knob Quarry Site. A large portion of the storm water that falls in DA9 is either retained in the quarry pit or various retention basins around the site. Storm water flows that are not retained on-site are generally intercepted by the haul road or berms and flow to the northeast. At the base of the mine haul road, storm water is captured in a large sediment basin prior to discharging. The large sediment basin overflows to a smaller retention basin prior to entering the ephemeral wash.

Discharge Point 9 is the location where storm water overflows from the final retention basin into the wash. Discharges from Discharge Point 9 flow to the north in the unnamed ephemeral wash, which eventually drains to Rabbit Dry Lake. During storm events, the outflow from the retention basin will serve as the sample point (Sample Point 9) for DA9. This is an “Alternative Discharge Location” as allowed by Section XI.C.3 of the IGP.

Non-Industrial Areas: Historic Mine Sidecast
Inactive, historic sidecast material north of the White Knob Pit and west of the Annex Quarry are not considered industrial areas and therefore storm water that falls in these areas will not be monitored as a part of this SWPPP. This material is displaced native material that does not threaten the quality of storm water.

Historic mining techniques resulted in the sidecast of natural material down the slopes of the adjacent hillsides. Current mining activities at the White Knob Quarries no longer contribute sidecast material to the adjacent slopes.

4.1.4 Haul Roads

The Crystal Creek Haul Road and White Knob Haul Roads provide access to the Sentinel Quarry Site and White Knob Quarry Site from the Plant Site. The portions of the haul roads that are not within, or immediately adjacent to, the quarry sites or Plant Sites are not involved in industrial activities and are therefore not covered by this SWPPP. However, Omya has still implemented BMPs (sediment basins, berms, and other erosion control features) on the ancillary disturbance areas that include haul and access roads to quarries and overburden sites.

5.0 LIST OF INDUSTRIAL MATERIALS

Table 1 presents a list of significant industrial materials stored or used at the site. The figure in Appendix A shows the locations of the significant materials listed below.

Table 1: Significant Materials

Material (Potential Pollutants)	Storage Location(s); Typical Quantity Stored; Typical Frequency of Storage	Receiving Location(s); Typical Quantity Received; Typical Frequency of Receiving	Shipping Location(s); Typical Quantity Shipped; Typical Frequency of Shipping	Handling Location(s); Typical Quantity Handled; Typical Frequency of Handling
Calcium carbonate ore (TSS)	Raw ore is mined and stockpiled at the active quarries (Butterfield, Sentinel, White Knob). Raw ore is stockpiled on the southern portion of the Plant Site. Intermediate products (crushed ore) are stored throughout the Plant Site, primarily south of the processing plant. The amount of raw material and finished aggregate varies seasonally based on production, but is usually in excess of 200,000 tons. Ore is mined and stored year-round.	Ore is not received from off-site; it is mined at the quarries.	Finished products are shipped from storage silos on the northern portion of the site. The ore is loaded into bulk haul trucks that can haul up to 26 tons of material, loaded into bags that are hauled on trucks, or loaded into a rail car for bulk export. The frequency of shipping varies based on customer demand and product is shipped every day the facility is in operation.	Ore is handled throughout the active operational areas. This includes the active mining areas as well as the processing and stockpile areas. The Facility can process a maximum of 650,000 tons per year. This material is handled continuously when the Facility is in operation.
Fuel – Diesel and Gasoline (Oil & Grease)	Diesel fuel is stored year-round in aboveground storage tanks in the following locations: - Plant Site, fueling area (225,507 gallons) - Plant Site, fuel island (1,000 gals.) - Mobile Maintenance Facility (75 gallons) - White Knob Quarry (5,000 gals.) - Sentinel Quarry (10,000 gals.) - Sentinel Quarry haul road, Turn 5 (1,000 gallons) - Mobile Refueler (4,200 gals.) Gasoline is stored in a 1,000-gallon tank at the Plant Site fuel island.	Fuel is received where the fuel storage tanks are located. Up to 7,000 gallons may be received at any one time. Fuel is delivered to the site year-round as it is needed, typically weekly.	Fuel is not normally shipped from the site; it is combusted in on-site equipment.	Fuel is normally handled in the areas where it is stored. However, fuel is present in on-site equipment which travels throughout the Facilities. It may also be present in the Mobile Maintenance Facility where equipment is serviced. Up to 200 gallons may be handled at any one time. Fuel is handled year-round.

Material (Potential Pollutants)	Storage Location(s); Typical Quantity Stored; Typical Frequency of Storage	Receiving Location(s); Typical Quantity Received; Typical Frequency of Receiving	Shipping Location(s); Typical Quantity Shipped; Typical Frequency of Shipping	Handling Location(s); Typical Quantity Handled; Typical Frequency of Handling
Lubricating oil (Oil & Grease)	Lubricating oil (motor oil, hydraulic oil, transmission fluid, etc.) is stored year-round in aboveground storage tanks and 55-gallon drums in the following locations: - Mobile Maintenance Facility (6,800 gallons) - Plant Maintenance Lube Storage Area (770 gallons)	Oils are received at the locations where the storage containers are located. Up to 700 gallons may be received at any one time. Oil is delivered to the site year-round, typically monthly.	Waste oil is stored in the waste oil tank in the Mobile Maintenance Facility. The capacity of this tank is 1,000 gallons. Up to 1,000 gallons may be shipped at a time (when the tank is full). Waste oil is shipped from the site year-round, typically quarterly.	Oil is normally handled in the Mobile Maintenance Facility and Plant Maintenance Lube Storage Area. However, oil is present in equipment which travels throughout the Facility. Up to 55 gallons may be handled at any one time. Oil is handled year-round.

6.0 POTENTIAL POLLUTANT SOURCES

The activities at the Facility described below have the potential to impact storm water.

6.1 Industrial Processes

The following industrial processes are conducted at the site:

- Calcium carbonate ore mining and processing;
- Mobile equipment operation, fueling, and maintenance; and
- Vehicle and mobile equipment parking.

Each of these processes is discussed in more detail in the following sections. A discussion of the material handling and storage areas associated with these processes is presented in Section 6.2.

6.1.1 Calcium Carbonate Ore Mining and Processing

Designation(s) on site map:

The Plant Site is a calcium carbonate milling, packaging, and shipping operation. The Plant Site is comprised of approximately 73 acres. The Sentinel Quarry Site is located 3.5 miles south of the Plant Site and is composed of three (3) operational areas: Sentinel Quarry, Central Area (B5 Overburden Pad, historic B5 Quarry, Black Hole Overburden Pad), and Butterfield 3 Quarry. The total area of the Sentinel Quarry Site is approximately 60 acres. The White Knob Quarry Site is located 4.3 miles west of the Plant Site on the north-facing slopes of the San Bernardino Mountains and is composed of three (3) overburden sites and three (3) quarry areas: Annex Quarry, White Knob Quarry, and White Ridge Quarry. The total area of the White Knob Quarry Site is approximately 145 acres.

Description of process:

Calcium carbonate ore (ore) is mined from the active mining area using dozers and other heavy equipment, and occasionally explosives. Explosives are detonated subgrade, which limits airborne particulates.

Initial processing (primary crushing) occurs in the quarry areas. A permanent crushing unit is used for primary crushing at the Sentinel Quarry, and a mobile crusher is relocated from the Plant Site to the White Knob Quarry during active mining operations. After initial processing, 75 - 100-ton haul trucks are used to haul the ore to the Plant Site where it is stockpiled on the south side of the Plant prior to further processing. Stockpiled ore is further processed by the secondary and tertiary crusher before being sent to the processing mill via conveyor for finishing. Finished product is stored in silos north of the plant or loaded into bags to be shipped off-site.

Occasional maintenance (preventative and repair) is performed as necessary on processing equipment.

Type of significant materials handled in the process:

The process includes handling natural crustal material (calcium carbonate ore, overburden and waste rock, etc.). Minor amounts of additives are also used during processing.

Characteristics of significant materials handled in the process:

Natural crustal materials that have the potential to contribute suspended solids (TSS) to storm water discharges.

Quantity of significant materials handled in the process:

Typically, about 200,000 tons of material may be in process or in storage at any one time.

Manufacturing, cleaning, rinsing, recycling, disposal, or other activities related to the process:

Manufacturing includes crushing, screening, sorting, and milling operations.

Material that does not meet production specifications, spilled product, damaged shipping bags (cardboard, polypropylene, and paper) and broken wood pallets are disposed of at Waste Management Unit #4, northeast of the processing plant.

6.1.2 Mobile Equipment Operation, Fueling, and Maintenance

Designation(s) on site map:

Mobile equipment (haul trucks, dozers, front end loaders, etc.) is operated throughout the Plant Site and quarries.

Mobile equipment fueling occurs at the fuel storage tanks on the east side of the Plant Site or at the tanks located at either of the quarries.

Mobile equipment maintenance and repair are primarily conducted in the Mobile Maintenance Facility located on the western portion of the Plant Site. However, if equipment breaks down elsewhere and cannot be moved to the Mobile Maintenance Facility, it will be repaired in the field.

Description of process:

Mobile equipment is used to mine and haul aggregate material.

Fueling consists of fueling equipment with diesel fuel from aboveground storage tanks.

Equipment maintenance and repairs consists of maintaining the equipment by servicing it and performing repairs when it breaks down.

Type of significant materials handled in the process:

Significant hazardous materials associated with this process includes fuel (diesel, gasoline) and lubricating oils (motor oil, hydraulic oil, transmission fluid, etc.). Small quantities of other materials such as antifreeze, brake cleaner, grease, and battery acid may also be used in the process.

Characteristics of significant materials handled in the process:

Significant materials handled in the process are oils and greases. Smaller quantities used, such as battery acids, have a low pH.

Quantity of significant materials handled in the process:

Up to 226,507 gallons of diesel are stored at the Plant Site, up to 5,000 gallons of diesel fuel are stored at the White Knob Quarry, and up to 10,000 gallons of diesel fuel are stored at the Sentinel Quarry. Up to 4,000 gallons of oils and greases may be stored in the Mobile Maintenance Facility at any time. Up to 770 gallons of oil and greases may be stored at the Plant Maintenance Lube Storage Area at any time. Smaller quantities of other materials (antifreeze, cleaners, etc.) are present in the Mobile Maintenance Facility.

Manufacturing, cleaning, rinsing, recycling, disposal, or other activities related to the process:

Mobile equipment cleaning operations necessary as a part of maintenance and repair operations are conducted in the southernmost bay of the Mobile Maintenance Facility.

Hazardous wastes generated from mobile equipment operation, fueling, and maintenance are recycled or sent to a licensed treatment facility. Non-hazardous wastes are disposed of in the trash.

6.1.3 Vehicle and Mobile Equipment Parking

Designation(s) on site map:

The main passenger vehicle parking areas are near the offices on the west side of the Plant Site. Trucks, on-site mobile equipment, and other vehicles are primarily parked in the gated Truck Loading Yard east of the Mobile Maintenance Facility.

Description of process:

Haul trucks, mobile equipment, and other vehicles are parked at the Facility.

Type of significant materials handled in the process:

Fuels, oils, greases, and other vehicle fluids (antifreeze, brake fluid, battery acid, etc.) may be generated by spills or leaks from vehicles.

Characteristics of significant materials handled in the process:

Fuels, oils, greases, and other vehicle fluids are petroleum products that may contribute oil and grease to storm water discharges. Spilled battery acid is acidic and may contribute pH to storm water discharges.

Quantity of significant materials handled in the process:

Limited amounts of fluids (approximately 200 gallons for fuel, significantly less for other materials) are present in each vehicle.

Manufacturing, cleaning, rinsing, recycling, disposal, or other activities related to the process:

There is no manufacturing, cleaning, rinsing, recycling, or disposal related to vehicle parking.

6.2 Material Handling and Storage Areas

The following sections discuss Facility material handling and storage areas.

6.2.1 Hazardous Material Handling and Storage

Designation on site map:

Hazardous materials are handled throughout the Facilities.

Description of handling / storage area:

Significant quantities of hazardous materials are stored at the Plant Site in the Mobile Maintenance Facility; this is also the primary locations where hazardous materials are used. However, vehicles and mobile equipment contain hazardous materials and they can be located throughout the site.

Type of material handled:

Table 2 summarizes the approximate amount, type, and location of hazardous materials maintained on-site.

Table 2: Hazardous Materials Summary

Chemical	Typical Quantity	Location	Potential SW Contaminants
Ammonium Nitrates*	200,000 pounds	White Knob Quarry	Nitrate
Diesel Fuel	242,582 gallons	Plant Fueling Area Plant Fuel Island Mobile Maintenance Facility White Knob Quarry Sentinel Quarry Sentinel Haul Road, Turn 5	Oil & Grease
Cement Grinding Aid	12,500 gallons	Plant Site Mill Building	TSS, pH
Gasoline	1,000 gallons	Plant Fuel Island	Oil & Grease
Lubricating Oils	8,000 gallons	Mobile Maintenance Facility Plant Maintenance Lube Storage	Oil & Grease
Coatex M 2420	4,400 gallons	Plant Site Mill Building	pH

*Ammonium nitrates are typically brought on-site by the contractor who performs blasting operations. Storage of ammonium nitrates on-site for long periods of time is unlikely, but possible.

Characteristics of material handled:

The type of storm water contamination that can potentially be caused by each of the hazardous materials stored on-site is summarized in Table 2.

Quantity of material handled:

The approximate quantity of each hazardous material stored on-site is presented in Table 2.

Description of shipping, receiving and loading procedures:

These materials are delivered to the site by trucks and unloaded where they are stored. Drums and totes of material (e.g., lube oil) are unloaded from trucks and placed in storage areas. Bulk materials (e.g., diesel fuel, gasoline) are directly loaded into storage tanks.

Ammonium nitrates are brought on-site by the contractor who performs blasting operations.

Waste oil is shipped off-site in by a vacuum truck that removes material from the waste oil tank.

Spill or leak prevention and response procedures:

Equipment and machinery is maintained in good operating condition to minimize the potential for spills and leaks. If there is a spill, Facility personnel will respond using the procedures in the SPCC and Hazardous Materials Business Plan. The basic spill response procedure is to: alert others, stop the spill, contain the spill, clean up the spill, and notify the appropriate regulating agencies.

Absorbent material and spill kits are kept on-site to clean up / absorb incidental spills.

Containment structures and capacity:

The large diesel tank (225,507 gallons) rests on a gravel foundation and footing and is surrounded by an earthen berm. The remaining diesel tanks and gasoline tanks are either Convault (triple-lined) tanks or double walled tanks. The small diesel container in the Mobile Maintenance Facility is an elevated tank that, if spilled, would flow into a floor trench that drains to a concrete sump. The lubricating oil tanks in the Mobile Maintenance Facility are located in a concrete vault (floors and walls). Oil-containing drums are secondarily contained by spill pallets.

Secondary containment devices are sufficiently large to contain the contents of the tanks or drums that they contain, plus rain water (as applicable).

6.3 Dust and Particulate Generating Activities

The following activities at the facility may generate dust and particulate matter that may be deposited within the Facility boundary:

<u>Mining operations:</u>
Industrial activities that generate dust: Blasting, removing material from the ground and moving it to the processing areas.
Discharge locations: Active mining areas.
Source type: Fugitive emissions of crustal material.
Characteristics: Natural crustal material.

<u>Ore processing operations:</u>
Industrial activities that generate dust: Crushing, screening, and conveying aggregate material.
Discharge locations: Crushers in the mining pits, crushing units and ore processing plant at the Plant Site.
Source type: Fugitive emissions of crustal material.
Characteristics: Natural crustal material.

Vehicle travel over unpaved roads:
Industrial activities that generate dust: Vehicle travel over unpaved roads.
Discharge locations: Unpaved roads.
Source type: Fugitive emissions of crustal material.
Characteristics: Natural crustal material.

6.4 Significant Spills and Leaks

The Facility has not experienced a significant spill or leak of industrial materials or hazardous substances in the past five (5) years that resulted in, or had the potential to result in, discharge from the Facility's storm water conveyance system.

6.5 Non-Storm Water Discharges (NSWDs)

This Facility is not expected to cause any ***authorized*** non-storm water discharges during normal operations. The incidental leaks and spills associated with normal Facility operations are minor, are effectively mitigated by BMPs, and are not expected to discharge from the site. Normal operations do not cause unauthorized non-storm water discharges.

All ***unauthorized*** non-storm water discharges have been eliminated by containing process water generated at the Facility. Water line breaks or tank and equipment leaks and spills may cause unauthorized non-storm water discharges. A discharge from the Facility could occur if there was a very large spill.

6.6 Erodible Surfaces

Approximately 15% of the Plant Site is made up of impervious surfaces. Less than 1% of the other site areas surface is impervious (covered and / or paved); the remaining surface areas are pervious. Therefore, there is the potential for soil erosion by contact with storm water. Storm water that falls on the active mining areas typically flows to the retention basins that collect eroded soil and minimize the potential for it being discharged from the site.

6.7 Off-site Run-on

Due to the mountainous location of the site, some storm water run-on is expected. When possible, storm water flows from off-site are directed around industrial areas and are not commingled with storm water runoff from the industrial areas. However, storm water run-on cannot always be redirected around the site and will, in many cases, be commingled with storm water from the Facility. Although the run-on will be from undisturbed, non-industrial areas, heavy flows may contain high levels of sediment (TSS).

6.8 Summary of Potential Pollutant Sources and Best Management Practices

The following table summarizes potential pollutant sources present at the Facility. Section 8 contains narrative descriptions of the BMPs implemented at the site.

Table 3: Summary of Potential Pollutant Sources and Best Management Practices

Activity	Area	Pollutant Source(s)	Potential Pollutant(s)	Best Management Practices
Ore Mining and Processing	Mining occurs in the active White Knob and Sentinel Quarries. Primary crushing occurs in the quarries, and secondary crushing, tertiary crushing, milling, packaging, and shipping occurs at the Plant Site. Stockpiled material is primarily stored on the southern portion of the Plant Site. The finished material is stored in silos at the processing plant.	Mining, blasting, hauling, and processing (crushing, milling, packaging) ore	O&G pH TSS	Preservation of existing vegetation. Reclaiming areas when mining is completed. Discharge prevention (retention basins, grading, berms). Dust control on the haul roads. Preventive maintenance to minimize leaks. Maintaining retention basins in good condition. Maintain baghouses in processing plant. Maintain / replace fabric filter on the drop inlet. Good housekeeping. Prompt spill clean-up. Routine inspections. Employee training.
Mobile Equipment Operation, Fueling, and Maintenance	Throughout the Facilities, primarily at the Plant Site in the Mobile Maintenance Facility and Fueling Area, and in the active mining areas	Spills and leaks from equipment	O&G pH	Discharge prevention (retention basins, grading, berms). Overhead coverage (when feasible). Vehicle maintenance to minimize leaks. Loading and unloading procedures. Prompt spill clean-up. Properly disposing of waste materials. Maintaining spill control/cleanup material. Good housekeeping. Routine inspections. Employee training.

Activity	Area	Pollutant Source(s)	Potential Pollutant(s)	Best Management Practices
Vehicle and Mobile Equipment Parking	Vehicles and mobile equipment	Spills and leaks from equipment	O&G pH	Discharge prevention (retention basins, grading, berms). Vehicle maintenance to minimize leaks. Maintaining spill control/cleanup material. Prompt spill clean-up. Good housekeeping. Routine inspections. Employee training.
Hazardous Material Handling and Storage	Throughout the Facilities, primarily in the Mobile Maintenance Facility and Plant Maintenance Lube Storage Area	See Table 2	pH O&G	Discharge prevention (retention basins, grading, berms). Overhead coverage (when feasible). Loading and unloading procedures. Secondary containment. Preventive maintenance to minimize leaks. Prompt spill clean-up. Properly disposing of waste materials. Maintaining spill control/cleanup material. Good housekeeping. Routine inspections. Employee training.
Dust and Particulate Generating Activities	Throughout Facility	Mining, blasting, hauling, and processing (crushing, milling, packaging) ore; travel over unpaved roads	TSS	Dust control on the haul roads. Maintain baghouses in processing plant. Detonate explosives subgrade to limit airborne particulates. Good housekeeping. Routine inspections. Employee training.
Soil Erosion	Throughout Facilities	Exposed surfaces	TSS	Preservation of existing vegetation. Reclaiming areas when mining is completed. Pacing (where feasible). Maintaining retention basins in good condition. Routine inspections. Employee training.

7.0 ASSESSMENT OF POTENTIAL POLLUTANT SOURCES

Areas of the Facility that are most likely to contribute pollutants to storm water discharges and authorized non-storm water discharges include the following:

- **Ore Mining and Processing:** Mining and processing activities primarily occur outdoors and are a potential source of storm water pollutants. Processes that could contribute pollutants to storm water discharges include:
    - Raw ore materials.
    - Crushing, processing, milling, and packaging.
    - Blasting.
    - Spills or leaks from processing equipment.
    - Vehicle traffic over unpaved areas.
    - Dust and particulate generating activities.

- **Mobile Equipment Operation, Fueling, and Maintenance:** The operations have the potential to contribute pollutants to storm water discharges. This includes:
    - Spills from fueling operations.
    - Spill from equipment failures.
    - Spills from material storage, transfer, and use.
    - Waste materials generated during maintenance activities.

- **Hazardous Material Storage:** Hazardous materials stored and used at the site have the potential to adversely impact storm water. This includes:
    - Spills from material storage, transfer, and use.
    - Spills from loading / unloading operations.

- **Vehicle and Mobile Equipment Parking:** Vehicle parking is conducted outdoors and may contribute pollutants to storm water. The quantity and type of contamination are expected to be minimal. However, this source could contribute pollutants to storm water discharges if there is a spill or leak that is not properly cleaned up.

Pollutants that are likely to be present in storm water discharges include:
- Oil and grease (from equipment fluids: fuel, oil, grease);
- pH (from vehicles); and
- Total suspended solids (from mining, processing operations, stockpile storage, and unpaved areas at the site).

Each of these pollutants is readily mobilized by contact with storm water.

Pathways in which these pollutants may be exposed to storm water:
- Precipitation that falls on outdoor storage areas and equipment;
- Dust and particulate emissions that are deposited within facility boundaries; and
- Spills and leaks.

Although large quantities of ammonium nitrate may be used on-site, nitrates are not expected to be present in storm water because they are not stored on-site. When the ammonium nitrates are used in blasting, the potential pollutants are confined to the mining pit areas where storm water that contacts the material will be contained.

Sampling, visual observation, and inspection records are presented in Section 10.

In general, existing BMPs are effective in reducing or preventing pollutants in industrial storm water discharges except for total suspended solids. It is believed that high TSS levels in storm water discharges can be attributed to naturally steep slopes and soil. Although best industry practice BMPs (see Section 8) have been implemented at the site, TSS may still exceed the NAL levels listed in the Permit.

Industrial pollutants generated at this facility are not expected to cause or contribute to an exceedance of a water quality standard in receiving waters that are 303(d) listed or that have approved TMDLs (see Section 10.4.3).

Table 4 is a summary of the Facility's likely storm water contamination sources and the associated pollutants.

Table 4: Summary of Likely Sources of Pollutants and Corresponding Pollutants

Pollutant Source	Pollutant
Ore Mining and Processing	O&G pH TSS
Mobile Equipment Operation, Fueling, and Maintenance	O&G pH
Vehicle and Mobile Equipment Parking	O&G pH
Hazardous Material Handling and Storage	O&G pH
Dust and Particulate Generating Activities	TSS
Soil Erosion	TSS

8.0 STORM WATER BEST MANAGEMENT PRACTICES (BMPS)

Best Management Practices (BMPs) to reduce the impact of Facility operations on storm water are presented in the following sections. These sections include two different categories of BMPs: Minimum BMPs and Advanced BMPs.

8.1 Minimum BMPs

Minimum BMPs are BMPs that require mandatory implementation (to the extent feasible) and maintenance. The minimum BMPs listed below are in place at the Facility.

8.1.1 Pollution Prevention Team

The Pollution Prevention Team presented in Section 3.1 has the primary responsibility for storm water pollution prevention. The following BMPs are implemented at the site to ensure adequate implementation of this SWPPP and compliance with the General Permit:

Team Leader

The Storm Water Pollution Prevention Team Leader is responsible for implementing the following BMPs:

- Ensure that BMPs are properly implemented and maintained. BMPs that are installed incorrectly or not properly maintained may not achieve the desired pollution prevention goals. The Team Leader is responsible for ensuring that BMPs are functioning properly.

- Visual observations. The General Permit requires a number of inspections. If an inadequate BMP is noted during an inspection, the Team Leader is responsible for ensuring that the BMP is repaired.

- SWPPP review and update. At least once each year, the Team Leader will review this SWPPP and site operations to determine if the SWPPP needs updating (including determining if any additional BMPs are necessary). The Team Leader is responsible for ensuring that this SWPPP is updated as appropriate.

- Employee training. Employee training (discussed below) is one of the most important BMPs because it informs employees of the potential impacts of Facility operations and their actions on storm water discharges. The Team Leader is responsible for conducting routine training for employees as well as refresher training when deemed necessary (e.g., when employees are observed acting in a manner that does not comply with this SWPPP).

- Storm water sampling. Analysis of storm water runoff can provide information regarding the effectiveness of BMPs. The Team Leader is responsible for the implementation of the storm water sampling program outlined in Sections 10 and 11 of this document.

Team Members

Storm Water Pollution Prevention Team Members are responsible for assisting the Team Leader in implementing BMPs including:

- BMP design.

- BMP implementation including repairing or notifying the Team Leader of inadequate BMPs they discover.

- Performing visual observations and storm water sampling.

- Employee training.

8.1.2 Good Housekeeping BMPs

Good housekeeping (maintaining a clean and orderly facility) is important in minimizing pollutants in storm water. The following good housekeeping BMPs are implemented at the site:

- The Facility is observed monthly to determine housekeeping needs (see Section 10.2). This is a review of outdoor areas associated with industrial activity, storm water discharge locations, drainage areas, conveyance systems, waste handling/disposal areas, and perimeter areas impacted by off-facility materials or storm water run-on. Identified debris, waste, spills, tracked materials, or leaked materials are cleaned and disposed of properly. This also includes inspecting the retention basins and surrounding areas for potential overflow conditions.

- Minimizing or preventing material tracking. This includes:
    - Sweeping material that is tracked onto paved areas.

- Minimizing the generation of dust from industrial materials and activities. This includes:
    - Spraying haul roads with a dust suppressant semi-annually; and
    - Maintaining the processing plant baghouses in good operating condition.

- Where feasible, covering stored industrial materials that can be readily mobilized by contact with storm water (see Section 8.2.1).

- Containing stored non-solid industrial materials or wastes (e.g., particulates, powders, etc.) that can be transported or dispersed by the wind or contact with storm water.

- Preventing disposal of any rinse/wash waters or industrial materials into the storm water conveyance system. The wash water from the Mobile Maintenance Facility is captured in the concrete sump and recycled.

- Maintaining the retention basins in good condition by cleaning out sediment regularly.

- Maintaining the drop inlet fabric filter in good condition, and replacing when necessary.

- Minimizing storm water discharges from non-industrial areas (e.g., storm water flows from employee parking area) that contact industrial areas of the facility.

- Minimizing authorized NSWDs from non-industrial areas (e.g., potable water, fire hydrant testing, etc.) that contact industrial areas of the facility.

- Maintaining storage areas in an organized fashion.

- Proper disposal of trash and other debris. Trash dumpsters and other containers are located throughout the Facility.

8.1.3 Preventive Maintenance BMPs

Maintaining equipment and vehicles in good working order minimizes the potential for spills and leaks that can contribute pollutants to storm water. The following preventive maintenance procedures are implemented at the site:

- Identifying the equipment or systems that may spill or leak and observing them regularly (as applicable).

- Maintaining vehicles and equipment in accordance with the manufacturers' recommendation or standard industry practices to minimize the potential for failure.

- Conducting vehicle maintenance activities under covered areas or off-site (when feasible).

- Establishing an appropriate schedule and procedures for prompt maintenance and repair of equipment and systems.

- Inspection practices as discussed in Sections 10 and 11.

8.1.4 Spill and Leak Prevention and Response BMPs

Spill and leak prevention and response BMPs in place at the Facility include:

- Establishing procedures and/or controls to minimize spills and leaks.

- Ensuring that process water is not discharged.

- Developing and implementing spill and leak response procedures to prevent industrial materials from discharging through the storm water conveyance system. These procedures are presented in the Facility's SPCC and Hazardous Materials Business Plan. These procedures identify and describe necessary and appropriate spill and leak response equipment, location(s) of spill and leak response equipment, and spill or leak response equipment maintenance procedures.

- Promptly responding to spills and leaks including: stopping the spill / leak, containing spilled material on-site when possible; prompt cleanup of spilled material; and regulatory notification and reporting.

- Cleaning up spills and stained soil using appropriate absorbent material. Neutralizing spills of acidic (i.e., battery acid) or caustic liquids prior to spreading absorbent material on them. Absorbent material must be picked up and placed in appropriate drums until proper disposal is arranged.

- Maintaining an adequate supply of spill control and spill clean-up equipment.

- Storing drums of fuel and oil on secondary containment. Covering outdoor drums with a tarp if rain is predicted.

- Ensuring that loading and unloading BMPs are followed (see Section 8.1.5).

- Maintaining vehicles and equipment in good condition to minimize the potential for a release (see Section 8.1.3). Checking for drips from equipment and for sheen on puddles or oil-stained soil.

- Training personnel in spill prevention and response (see Section 8.1.7).

8.1.5 Material Handling and Waste Management BMPs

Procedures to ensure the proper storage and handling of materials and waste are implemented at the Facility to minimize the potential for storm water impacts. The following BMPs are in place at this Facility:

- Preventing or minimizing handling of industrial materials or wastes that can be readily mobilized by contact with storm water during a storm event.

- When possible, covering waste disposal containers and storage containers when not in use. Note: it is not always possible to obtain large waste containers (e.g., roll off bins) that have covers from the waste disposal company. When possible and available, containers with lids will be used.

- Recycling wastes whenever possible. Storing recyclable wastes as neatly and safely as new materials are stored. If not stored properly, recyclable wastes can deteriorate to a point where they cannot be economically recycled. Additionally, wastes left uncovered outside can also pollute storm water.

- Where feasible, diverting run-on and storm water generated from within the facility away from stockpiled materials. Note: this is not always feasible as the Facility contains large stockpiles of ore and it is not always possible to divert storm water around these piles. Other BMPs (e.g., retention basins) are in place to control sediment.

- Observing and, as appropriate, cleaning outdoor material or waste handling equipment or containers that can be contaminated by contact with industrial materials or wastes. This includes:
    - Maintenance and repair areas will be inspected regularly for improperly stored material, stains, and leaks.
    - Inspecting hazardous materials and waste storage areas to ensure material is properly contained and there are no leaks or stains. Integrity of tanks and drums in storage areas will be monitored. Pumps, drains, sumps, dispensers, nozzles, hoses, etc., will be inspected.

- Ensuring that an employee monitors hazardous material and waste loading and unloading activities in order to respond promptly to spills. Spills or wastes that occur during handling will be cleaned promptly (see Section 8.1.4).

- Utilizing a drip pan under tank connection points during hazardous material and waste loading and unloading activities. Material in these pans should be properly disposed and the pans should be cleaned when they are full and at the end of each day.

- Only using containers that are in good condition and compatible with the material they hold.

8.1.6 Erosion and Sediment Control BMPs

Erosion and sediment control BMPs in place at the Facility include:

- Preserving natural and existing vegetation in place until areas are ready to be mined.

- Implementing effective wind erosion controls. The haul roads to both quarries are sprayed with a dust suppressant solution semi-annually to help control dust.

- Providing effective stabilization for inactive areas, finished slopes, and other erodible areas prior to a forecasted storm event.

  Due to the nature of the operations at the site (surface mining), it is not possible to completely stabilize every erodible surface to eliminate all possibility of erosion. Surface mining covers large areas and includes constantly changing landscapes and elevations, frequent movement of stockpiles, and variance in location of materials. Therefore, it is not feasible (nor does it reflect best industry practice for surface mines) to implement stabilization controls throughout the entire facility. Other BMPs (e.g., retention basins) are in place to limit the amount of eroded material in storm water discharges.

- Reclaiming areas where mining has been completed or will not be mined for an extended period to prevent erosion.

- Diverting run-on and storm water generated from within the facility away from erodible materials. Due to the nature of the operations at the site, it is not possible to divert run-on and storm water away from erodible materials such as the ore stockpiles. Other BMPs (e.g., retention basins) are in place to limit the amount of eroded material in storm water discharges.

- Maintaining the retention basins in good condition and removing excess sediment to maximize capacity. This minimizes the amount of sediment discharged from the site.

- Maintaining the drop inlet fabric filter in good condition, and replacing when necessary.

- Checking and maintaining drainage swales and structures to prevent blockage and ensure that they are working properly.

8.1.7 Employee Training BMP

In order to effectively manage storm water, Facility staff must be trained to be aware of storm water issues, the General Permit, and site activities and conditions that may adversely affect storm water. Affected employees will be trained in the storm water program at the time of hire and refresher training will be given as needed. Training consists of a review of the SWPPP as it relates to the area in which the employee works and the employee's job function. Storm water training will include the following:

- Requirements of the SWPPP;

- Spill response and reporting procedures; and

- BMP implementation, evaluation, observations, and monitoring for BMPs outlined in this SWPPP.

In addition, employees who will be conducting monitoring and sampling will be trained in those tasks.

If the Facility is in Baseline status for all parameters (see Section 11), Facility personnel can conduct the training. If the Facility enters Level 1 status (see Section 11), appropriate team members must be trained by a QISP.

Records of training will be maintained. The forms presented in Appendix D can be used to conduct and document storm water training activities.

8.1.8 Quality Assurance and Recordkeeping BMPs

At least once each year, this plan and current operations will be reviewed to ensure that this SWPPP is adequate for the site and it is being properly implemented. See Section 10.7 for more information.

Quality Assurance, record keeping, and internal reporting practices related to storm water sampling are presented in Section 10.

8.2 Advanced BMPs

Advanced BMPs are additional BMPs that must be implemented (to the extent feasible) as necessary to reduce or prevent discharges of pollutants in storm water in a manner that reflects best industry practice. The advanced BMPs listed below are in place at the Facility.

8.2.1 Exposure Minimization BMPs

The following areas at the Plant Site are covered:

- Offices.
- Warehouses.
- Mobile Maintenance Facility.
- Portions of the Production operations.
- Packing areas.
- Storage silos.
- Sea cargo containers.
- Fuel island.

In addition to the above buildings, when drums of oil are stored outside they are stored in a closed containers.

Due to the nature of the operations at the Quarries (surface mining), it is not possible to cover all of the equipment used or areas where industrial activity occurs. Surface mining covers large areas and includes constantly changing landscapes and elevations, frequent movement of stockpiles, and variance in location of materials. Therefore, it is not feasible (nor does it reflect best industry practice for surface mines) to implement the installation of storm resistant shelters to prevent the contact of storm water with the identified industrial materials or areas of industrial activity. Other BMPs (e.g., retention basins) are in place where overhead coverage is not feasible.

8.2.2 Storm Water Containment and Discharge Reduction BMPs

Containment and discharge reduction BMPs installed at the Facility include:

- The Quarry areas and the majority (85%) of the Plant Site are unpaved. This allows storm water that falls on the site to infiltrate.

- This site contains a number of retention basins that collect storm water. Nearly all of the basins are unlined, allowing storm water to infiltrate, and limit the frequency and volume of storm water discharges from the site.
    - The Plant Site has retention basins located in various locations on the upgradient side of the facility to intercept and control run-on, and on the downgradient side of the facility to manage discharges.
    - The haul roads to both the White Knob and Sentinel Quarries have a series of retention basins to manage storm water flows from the road.

- The mining areas are maintained as a pit as long as possible. This allows storm water to infiltrate and limit the frequency and volume of storm water discharges from the site.

Any new ponds / basins installed after July 1, 2015 must meet the volume and flow specifications presented in the General Permit. All hydrologic calculations must be certified by a California licensed Professional Engineer.

8.2.3 Treatment Control BMPs

No treatment control BMPs have been installed at the site. Sampling data does not indicate that treatment control is necessary. If future sampling results indicate the need for treatment control, this BMP will be revisited.

8.2.4 Other Advanced BMPs

No other advanced BMPs were identified as being practical or necessary for this site.

Table 5 summarizes the BMPs implemented to prevent discharge of pollutants in storm water runoff; potential pollutants; implementation timing, location, personnel, procedures, and materials / equipment. Descriptions of the specific BMPs being implemented were provided in previous subsections. Implementation of BMPs is described in more detail in Section 8.3.

Table 5: BMP Description Table

BMP	Pollutants Designed to Control	When to Implement BMP	Locations to Implement BMP	Person Responsible for Implementing	Procedures to Implement BMP	Equipment and Tools to Implement BMP	Additional Observation Needed?
Pollution Prevention Team	O&G pH TSS	All year	Throughout Facility	Pollution Prevention Team Leader	See Section 8.1.1	None.	No
Good Housekeeping	O&G pH TSS	All year	Throughout Facility	Pollution Prevention Team Leader	Maintain baghouses. Maintain drop inlet fabric filter. Sweep paved areas. Spray roads semi-annually. Use proper trash containers; keep closed when not in use. Keep storage areas neat. Keep vehicles and equipment clean. Use trays under portable toilets.	Trash containers, brooms, rags, spill response kits, trays for portable toilets.	No
Preventive Maintenance	O&G pH TSS	All year	Throughout Facility	Pollution Prevention Team Leader	Maintain equipment in good working order. Use drip pans when conducting activities outdoors. Conduct maintenance indoors (when feasible).	Wrenches, screwdrivers, and other tools. Drip pans.	No
Spill and Leak Prevention and Response	O&G pH TSS	All year	Throughout Facility	Pollution Prevention Team Leader	Maintain secondary containment. Store drums on containment pallets. Promptly respond to spills and leaks. Oversee loading and unloading operations. Conduct maintenance indoors (when feasible).	Brooms, rags, spill response kits.	No

BMP	Pollutants Designed to Control	When to Implement BMP	Locations to Implement BMP	Person Responsible for Implementing	Procedures to Implement BMP	Equipment and Tools to Implement BMP	Additional Observation Needed?
Material Handling and Waste Management	O&G pH TSS	All year	Throughout Facility	Pollution Prevention Team Leader	Oversee loading operations. Use drip pans when conducting activities outdoors. Use containers in good condition. Cover waste containers and industrial materials (when feasible). Store metal on elevated racks.	Drip pans, containers, trash cans, storage racks.	No
Erosion and Sediment Control	TSS	All year	Throughout Facility	Pollution Prevention Team Leader	Preserve existing vegetation. Reclaim mined areas. Maintain basins in good condition, remove built up sediment.	Shovels, heavy equipment.	No
Employee Training	O&G pH TSS	All year	Throughout Facility	Environmental Manager	Train employees in storm water, hazardous materials, and spill prevention/response requirements and practices.	SWPPP, General Permit.	No
Quality Assurance and Recordkeeping	O&G pH TSS	All year	Throughout Facility	Pollution Prevention Team Leader	Review storm water documents in accordance with the SWPPP. Maintain records.	Pens, paper, binders, filing cabinets.	No
Exposure Minimization	O&G pH TSS	All year	Throughout Facility	Pollution Prevention Team Leader	Use overhead coverage when possible.	Roofed areas.	No
Storm Water Containment and Reduction	O&G pH TSS	All year	Throughout Facility	Pollution Prevention Team Leader	Maintain basins in good condition, remove accumulated sediment.	Shovels, heavy equipment.	No

8.3 BMP Implementation Tracking

The Permit requires that facilities track the implementation of BMPs. The following table will be used to track the implementation of BMPs. Existing BMPs are shown. As new BMPs are installed or used at the Facility, this table must be updated.

Table 6: BMP Table

BMP Category	BMP	Date Implemented
Pollution Prevention Team	Pollution Prevention Team	Existing
Good Housekeeping	Maintain baghouses	Existing
	Maintain drop inlet fabric filter	Existing
	Clean built up sediment in retention basins	Existing
	Proper trash disposal	Existing
	Spray roads with dust suppressant	Existing
	Cleaning tracked material	Existing
	Dust generation	Existing
	Maintain storage areas	Existing
	Prompt spill response	Existing
	Keep equipment clean	Existing
	Install trays under portable toilets	Existing
Preventive Maintenance	Equipment observations	Existing
	Maintain processing and mobile equipment	Existing
	Overhead coverage (Mobile Maintenance Facility)	Existing
	Maintenance schedules	Existing
Spill and Leak Prevention and Response	Maintain secondary containment	Existing
	Store drums on portable containment	Existing
	Prompt spill response	Existing
	Maintain spill response supplies	Existing
Material Handling and Waste Management	Monitor un/loading operations	Existing
	Use drip pans	Existing
	Use appropriate containers	Existing
	Close disposal containers	Existing
	Recycle wastes when possible	Existing
	Waste Management Units	Existing
Erosion and Sediment Control	Preserve existing vegetation	Existing
	Reclaim mined areas	Existing
	Retention basins	Existing
	Spray roads with dust suppressant	Existing
Employee Training	Employee training	Existing
Quality Assurance and Recordkeeping	Quality assurance and recordkeeping	Existing
Exposure Minimization	Container storage	Existing
	Overhead coverage (buildings)	Existing
Storm Water Containment and Reduction	Maintain retention basins	Existing
	Clean out built up sediment	Existing
	Maintain quarry as pit	Existing
	Unpaved areas for infiltration	Existing

8.4 Temporary Suspension of Industrial Activities

The Permit allows facilities to discontinue monitoring activities in certain situations if the Facility suspends industrial activities for ten (10) or more consecutive days. In order to be eligible for this, additional BMPs must be implemented to ensure that Facility operations do not adversely impact storm water.

Prior to suspending industrial operations, the following facility stabilization BMPs are required to be implemented in order to stabilize the Facility and to maintain compliance with the IGP:

- Cover trash enclosures;
- Place drip pans under oil-containing equipment;
- Ensure drums of hazardous materials are stored in secondary containment areas or on portable containment pallets and are covered with a tarp if stored outside;
- Ensure that the retention basins are cleaned out and have adequate capacity;
- Clean up and organize materials, equipment, and operational areas and cover industrial materials as applicable.

The General Permit also allows the suspension of monitoring if it is infeasible to do so (e.g., the Facility is not staffed). Since no personnel will be on-site while the industrial activities are suspended, the Facility is not required to do the following once the above BMPs are implemented:

- Perform monthly visual observations; or
- Perform sampling and analysis.

The Facility must upload via SMARTS at least seven (7) calendar days prior to the planned temporary suspension of industrial activities:

- Any SWPPP revisions specifically addressing the facility stabilization BMPs;
- The justification for why monitoring is infeasible at the facility during the period of temporary suspension;
- The date the facility is fully stabilized for temporary suspension of the industrial activities; and
- The projected date that industrial activities will resume at the facility.

Upon resumption of industrial activities, the Facility will confirm and / or update the date that the industrial activities have resumed in SMARTS.

9.0 SWPPP GENERAL REQUIREMENTS

9.1 Plan Availability

This SWPPP will be kept at the site and made available to a representative of the Regional Water Quality Control Board (RWQCB) or a representative of the local storm water management agency upon request.

9.2 Plan Revision

This plan must be updated:

1. When the Regional Water Quality Control Board or a representative of the local storm water management agency notifies the Facility that it does not meet one or more of the minimum requirements of the regulations.

2. Prior to implementing changes at the Facility that:
   i. May significantly increase the quantities and pollutants in storm water discharges;
   ii. May cause a new area of industrial activity at the Facility to be exposed to storm water; or
   iii. Begin an industrial activity which would introduce a new pollutant source at the Facility.

3. When determined necessary by the Qualified Industrial Storm Water Practitioner (QISP) based on the results of an Exceedance Response Action (ERA) Evaluation or Report.

4. When determined to be necessary based on a review of storm water compliance records including:
   i. Monthly Visual Observations;
   ii. Sample Event Visual Observations;
   iii. Storm water sample results;
   iv. Annual Comprehensive Facility Compliance Evaluation; and
   v. Annual Reports.

Significant plan revisions must be uploaded and certified via SMARTS within 30 days. Significant revisions include any of the items discussed above.

Non-significant revisions must be certified and submitted via SMARTS once every 3 months.

10.0 STORM WATER MONITORING IMPLEMENTATION PLAN (MIP)

Completion of the tasks outlined in this section is the responsibility of the Pollution Prevention Team Leader (see Section 3.1).

10.1 Monitoring Implementation Plan Objectives

This Monitoring Implementation Plan (MIP) has been developed as part of the SWPPP to:

- Ensure that storm water discharges are in compliance with discharge prohibitions, Numeric Action Levels (NALs), and receiving water limitations specified in the General Permit.

- Ensure practices at the Facility to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges are evaluated and revised to meet changing conditions.

- Aid in the implementation and revision of this SWPPP.

- Measure the effectiveness of BMPs to prevent or reduce pollutants in storm water discharges and authorized non-storm water discharges.

10.2 Monthly Visual Observations

Visual observations must be made at least once per calendar month. Each drainage area must be visually observed for the following:

- The presence or indication of prior, current, or potential unauthorized non-storm water discharges (NSWDs);

- Authorized NSWDs, sources, and associated BMPs; and

- Outdoor industrial equipment and storage areas, outdoor industrial activities, BMPs, and all other potential sources of industrial pollutants.

Observations will be conducted during daylight hours of the scheduled Facility operating hours (see Section 3.3) on days without precipitation. An explanation for uncompleted monthly visual observations must be included in the Annual Report.

The inspections will be documented. Documentation must include the following information:
- Date;
- Approximate time;
- Locations observed;
- Presence and probable source of any observed pollutants;
- Name of person(s) that conducted the observation; and
- Any response actions and/or additional SWPPP revisions necessary in response to the observations.

Monthly Visual Observations will be recorded using the *Monthly Visual Observation Form* in Appendix E or some other form that documents the same information.

BMPs must be revised as necessary when the observations indicate pollutant sources have not been adequately addressed in the SWPPP.

10.3 Sample Event Visual Observations

Visual observations will be conducted at the same time sampling occurs at each discharge location where a sample is obtained (see Section 10.4).

The General Permit also requires that observations be made of all stored or contained storm water at the time discharge is sampled. This Facility does not routinely discharge (i.e., pump out) stored or contained storm water through the Facility outfalls so these observations may not be necessary. If contained storm water is pumped out of one of the sediment ponds (or some other location) and discharged from the site, these discharges must be observed using the procedures outlined in this section.

No volume-based or flow-based BMPs will be employed at the Facility. If these BMPs are employed in the future, visual observations and sampling will be required for any storm water discharges that bypass the system.

The inspections will look for evidence of floating and suspended materials, oil and grease, discolorations, turbidity, odor, trash/debris, and source(s) of any pollutants.

The inspections will be documented and include the following information:

- Date;
- Approximate time;
- Locations observed;
- Presence and probable source of any observed pollutants;
- Name of person(s) that conducted the observation; and
- Any response actions and/or additional SWPPP revisions necessary in response to the observations.

BMPs will be revised as necessary when the observations indicate pollutant sources have not been adequately addressed in the SWPPP.

The inspections will be recorded on the *Sampling Event Visual Observation Form* presented in Appendix E or using some other form that documents the same information.

10.4 Sampling Program

The General Permit requires that during each storm water year (July 1 through June 30), four (4) storm water discharge samples must be collected. Two (2) samples must be collected within the first half of the reporting year (July 1 to December 31), and two samples must be collected within the second half of the reporting year (January 1 to June 30).

Samples must be obtained from storm events that produce a discharge from at least one drainage area and are preceded by 48 hours with no discharge from any drainage area. Samples from each discharge location must be collected within four (4) hours of the start of discharge or the start of facility operations if the discharge began within the previous 12-hour period.

10.4.1 Sampling Locations

Samples will be collected at the Sampling Points described in Section 4.1 and presented on the figures in Appendix A. The Plant Site has five (5) sample points, White Knob Quarries have one (1) sample point, and Sentinel Quarries have three (3) sample points.

10.4.2 Sampling Methods

Sampling consists of collecting grab samples from a storm event that produces discharge from at least one drainage area and is preceded by 48 hours with no discharge from any drainage area.

Samples collected must be representative of all storm water associated with industrial activities.

Procedure for Obtaining a Grab Sample: Only use the sample containers provided by the analytical laboratory to collect storm water samples. (The use of any other type of container may contaminate the sample.)

All sample bottles will be prepared by the test lab prior to performing the following sample procedures.

1. Collect grab samples from each outfall that is discharging using the appropriate container (see Section 10.4.3). Ensure that the sample is free of excess debris (i.e., leaves, paper fragments, etc.). Fill the container to the top.
2. Some sample containers may contain a small amount of preservative. Be sure not to lose the preservative when filling the container. To prevent contamination, do not touch the inside of the sample container or cap or put anything into the sample containers before collecting storm water samples.
3. Do not overfill sample containers. Overfilling can change the analytical results.
4. Tightly screw on the cap of each sample container without stripping the threads of the cap.
5. Complete and attach a label for each sample container. Label samples with the following information:

   Date and time of sample collection.
   The name of the person collecting the sample.
   The sample collection location or discharge point.
   The preservative used.

6. Carefully pack the sample containers into the shipping container to prevent breakage and maintain temperature during shipment. Place frozen ice packs (or bags of ice) 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 the samples.
7. Complete a Chain-of-Custody form for each set of samples. The Chain-of-Custody form must include the Facility'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. Chain-of-Custody forms will be furnished by the test lab. (A sample Chain-of-Custody form is presented in Appendix E.)
8. Upon shipping the sample containers, obtain the signature of the person relinquishing the sample containers.

9. Send the samples to the laboratory via their courier or by delivering them to the lab.

Use the *Sampling Log* in Appendix E to document sampling activities. Store completed *Sampling Logs* in Appendix F.

10.4.3 Analytical Methods

Storm water samples will be analyzed for the parameters listed in Table 7 which were selected based on the requirements in the General Permit and a review of site operations. All laboratory analysis must be conducted by a laboratory certified by the State Department of Health Services.

The Facility is classified as the following SIC Code:

> SIC Code 1422 – Crushed and Broken Limestone. The General Permit does not identify any additional parameters that storm water samples from this Facility must be analyzed for.

Table 7: Sampling Requirements for All Outfalls

Potential Pollutant	Sample Type	Sample Container	Preservative	Other	Analytical Method
Oil and grease (O&G)	Grab	1 liter amber glass	H_2SO_4	Cool to 4°C (40°F)	EPA 1664A
Total suspended solids (TSS)	Grab	1 liter plastic	None	Cool to 4°C (40°F)	SM 2540-D
pH	Grab	See Section 10.4.3.1			

The Facility does not directly discharge to a receiving water body listed on the SWRCB's 303(d) list of impaired water bodies sourced from the 2010 Integrated Report. Storm water that discharges from the site eventually dissipates into dry lakes in Lucerne Valley. A small portion of storm water discharged from the southern portion of the Sentinel Quarries (Butterfield Quarry and B5 Pad) flows to the Holcomb Creek which eventually discharges to the Mojave River.

The IGP requires dischargers to identify in their assessment of potential pollutant sources applicable industrial parameters related to receiving waters with 303(d) listed impairments or approved TMDLs. Subsequently, the SWRCB has instructed facilities to identify in their assessment of potential pollutant sources all 303(d) listed impairments within a facility's Hydrologic Unit Code Ten (HUC-10) watershed. Table 8 identifies the 303(d) listed pollutants within the facility's HUC-10 watersheds for which it is impaired (as populated by SMARTS). Note that the portions of the Facilities are located in various HUC-10 watersheds due to the large expanse of the sites.

Table 8: 303(d) Listed Pollutants in HUC-10 Watershed

Parameter	Pollutant
Crystal Creek-Lucerne Lake #1810010004 (Plant Site and portions of the Sentinel Quarries)	
None	
Deep Creek #1809020801 (Portions of the Sentinel Quarries [Butterfield Quarry and B5 Pad])	
Nitrate, Nitrite and total Nitrogen	Nitrate
Total Dissolved Solids	Total Dissolved Solids
Silver Creek-Rabbit Lake #1810010005 (White Knob Quarries)	
None	

Nitrates and dissolved solids are not expected to be present in the industrial storm water discharges from the Butterfield Quarry or B5 Pad; therefore, storm water samples will not be analyzed for Nitrate or TDS.

10.4.3.1 pH Method

Storm water samples must be analyzed for pH as soon as practicable, but no later than 15 minutes after the sample is collected.

The General Permit allows facilities that have never entered Level 1 status for pH to screen for pH using wide range litmus pH paper or other equivalent test kits. This facility has never entered Level 1 status for pH; therefore, it is eligible to screen pH using these tests. If pH paper is used, the person performing the analysis must be properly trained in how to use it.

If the Facility enters Level 1 in the future, pH analysis will have to be conducted using a properly calibrated field meter. If a field meter is used to measure pH levels in storm water discharges, the meter must be calibrated and the analysis must be performed using the manufacturer's instructions.

pH analytical results (and information about sample collection) will be documented on the *Sampling Log Form* presented in Appendix E. Completed *Sampling Logs* will be kept in Appendix F.

10.4.4 Data Analysis

Analytical results from each storm water sample must be submitted via SMARTS within 30 days of obtaining results for each sampling event. Laboratory reports will be kept in Appendix F.

10.4.5 Quality Assurance/Quality Control (QA/QC)

All samples must be submitted to a laboratory that is certified by the State of California Department of Health Services.

Field and laboratory quality assurance procedures are required in order to produce accurate and valid storm water monitoring results. As part of the QA/QC protocol, Chain-of-Custody forms will be prepared for all samples collected during the storm water event. The Chain-of-Custody forms document the possession and the responsibility for the sample from sample collection through sample analysis. All personnel responsible for the sample will sign, date and retain one copy of the form. The test laboratory

will receive the original form along with the sample. A sample chain of custody form is presented in Appendix E.

10.4.6 Exceptions

If performing visual inspections or collecting the required samples is rendered impossible due to adverse climatic conditions or because the discharge occurs outside of scheduled facility operating hours, a description of why the sampling or visual inspections could not be conducted, including the documentation of all significant storm water discharge events must be submitted with the annual report.

10.4.7 Representative Sampling Reduction

The General Permit allows facilities to reduce the number of locations to be sampled in each drainage area if the industrial activities and BMPs in the area are similar. Drainage Area 1 (DA1) has three (3) discharge locations (Discharge Points 1A, 1B, and 1C) and Drainage Area 3 (DA3) has three (3) discharge locations (Discharge Points 3A, 3B, and 3C). The outfalls for each drainage area are expected to discharge storm water that is substantially similar; therefore, the sample point for DA1 will be Discharge Point 1A and the sample point for DA3 will be Discharge Point 3A.

The justification for the Representative Sampling Reduction for Drainage Area 1 and Drainage Area 3 is:

- *Identification and description of each drainage area and corresponding discharge location(s)*:

  Drainage Area 1 (DA1) is located along the western boundary of the Plant Site and includes the office, west warehouse, mobile maintenance facility, truck storage yard (former maintenance yard), and portions of the main processing area. DA1 has three (3) discharge points that discharge to an unnamed wash to the west of the Plant Site.

  Drainage Area 3 (DA3) is located east of Drainage Area 2 and encompasses the eastern portion of the Plant Site. DA3 consists of raw materials stockpiles, diesel and gasoline fueling and storage area, miscellaneous outdoor storage areas, closed WMUs #1 and #2, and is bordered on the north by the elevated railroad platform. DA3 has three (3) discharge points that discharge to separate unnamed washes to the north of the Plant Site.

  A complete description of DA1, DA3, and the discharge points is included in Section 4.1.1.

- *Description of the industrial activities that occur throughout the drainage area*:
  DA1 primarily consist of operations ancillary to the calcium carbonate ore production process. DA consists primarily of offices, maintenance areas, parking, storage, and roads.

  DA3 is primarily comprised of the industrial storage areas. Ore stockpiles, diesel fuel and gasoline tanks, and other miscellaneous storage occur in DA3. Historic, closed Waste Management Units (WMUs) #1 and #2 are also located in DA3.

- *Description of the BMPs implemented in the drainage area*:
  BMPs implemented in DA1 and DA3 are described in Section 8 of this plan.

- *Description of the physical characteristics of the drainage area*:
  DA1 is slopes slightly to the north-northwest. DA1 is approximately 60% impervious. Storm water that falls in DA1 sheet flows to one of the designated discharge outfalls (Discharge Points 1A, 1B, or 1C). Discharge Point 1A is the outlet of the culvert from the truck loading area. Discharge Point 1B is the end of the riprap lined channel behind the Mobile Maintenance Facility. Discharge Point 1C is the terminus of the concrete lined channel north of the Main Office that runs adjacent to the entrance driveway.

  DA3 slopes slightly to the northeast and is bordered to the north by the elevated railroad tracks. DA3 is approximately 10% impervious. Storm water that falls in DA3 sheet flows to one of the designated discharge outfalls (Discharge Points 3A, 3B, or 3C). Discharge Point 3A is the outlet of the culvert from the retention basin north of the electrical substation, west of the mill. Discharge Point 3B is the outlet of the culvert east of the fueling area. Discharge Point 3C is the location where sheet flow leaves the industrial area of the Plant Site and joins the ephemeral wash that runs adjacent to the drainage area boundary.

  The discharge points from the Plant Site all discharge to unnamed washes that generally flow to the northeast and eventually join together approximately 1.5 miles northeast the plant. The unnamed wash terminates within Lucerne Valley and Lucerne Dry Lake, found to the north of the Plant Site.

- *Rationale that demonstrates that the industrial activities and physical characteristics of the drainage area(s) are substantially similar*:
  DA1 encompasses most of the ancillary operations on the site (maintenance, hazardous material storage, truck parking, loading, etc.). Industrial activities that may affect storm water in DA1 are expected to be substantially similar.

  DA3 encompasses primarily storage areas of the Plant Site. Therefore, the industrial activities that may affect storm water discharged from Discharge Point 3A, 3B, or 3C are expected to be substantially similar. Stockpile storage, ore processing, general site traffic, impervious and pervious surfaces, and fueling occur in DA3.

- *Identification of the discharge location(s) selected for representative sampling, and rationale demonstrating that the selected location(s) to be sampled are representative of the discharge from the entire drainage area*:
  Discharge Point 1A is the designated location for representative sampling for DA1 (Sample Point 1). Discharge Point 1A is the nearest outfall to the truck loading area and warehouse, which is where the majority of the industrial operations in DA1 occur. Discharge Point 1B receives very little storm water runoff due to site topography, and Discharge Point 1C will received substantial non-industrial storm water (employee parking for the office).

  Discharge Point 3A is the designated location for representative sampling for DA3 (Sample Point 3). Discharge Point 3A is the near the processing operations, stockpiled ore, and fueling area and is a conservative sampling location because it is expected to receive the majority of the storm water discharged from DA3.

In DA1, if there is no discharge from Outfall 1A, then Outfall 1B will be sampled. If there is no discharge from Outfalls 1A and 1B, then Outfall 1C will be sampled. Similarly, in DA3, if there is no discharge from

Outfall 3A, then Outfall 3B will be sampled. If there is no discharge from Outfalls 3A and 3B, then Outfall 3C will be sampled.

10.4.8 Qualified Combined Samples

The Permit allows an analytical laboratory to combine samples from multiple drainage areas if the industrial activities and BMPs in the areas are similar. This option will not be used. If the Facility wishes to use this option in the future, this plan will need to be updated.

10.5 Record Keeping

This Facility must maintain either a paper or electronic copy of all storm water monitoring information, records, data, and reports required by the General Permit for a period of at least five (5) years. Copies will be available for review by the Water Board's staff at the facility during scheduled operating hours.

10.6 Storm Water Multiple Application and Report Tracking System (SMARTS)

The following documents must be certified and submitted in the Storm Water Multiple Application and Report Tracking System (SMARTS):

- Notice of Intent (NOI);
- Storm Water Pollution Prevention Plan (SWPPP);
- Annual Reports;
- Sample results;
- Any Level 1 or Level 2 documents prepared to address NAL Exceedances (see Section 11.3); and
- Notice of Termination (NOT).

10.7 Annual Comprehensive Facility Compliance Evaluation (Annual Evaluation)

The General Permit requires that an Annual Comprehensive Facility Compliance Evaluation (Annual Evaluation) of the Facility be conducted every reporting year (July 1 to June 30). If the Annual Evaluation is conducted fewer than eight (8) months or more than 16 months after the previous Annual Evaluation, the justification must be documented. If an Annual Evaluation determines that this SWPPP needs to be updated, revisions will be made within 90 days of the Annual Evaluation.

The Annual Evaluation must include:

- A review of all visual observation records, inspection records, and sampling and analysis results from the previous reporting year.
- A visual inspection of areas of industrial activity and associated potential pollutant sources for evidence of, or the potential for, pollutants to enter the storm water conveyance system.
- An inspection of all drainage areas identified as having no exposure to industrial activities.
- A review and evaluation of BMPs and equipment needed to implement BMPs to determine whether the BMPs are adequate, properly implemented and maintained, or whether additional BMPs are needed.

The Annual Evaluation will be documented on the *Annual Comprehensive Facility Compliance Evaluation Form* in Appendix E or some other form that documents the same information.

10.8 Annual Report

An annual report must be prepared by July 15 of each year and submitted using the standardized format and checklists in SMARTS. The report must include the following:

- A Compliance Checklist that indicates whether or not the facility is in compliance with all applicable requirements of the Permit;
- An explanation for any non-compliance of requirements within the reporting year, as indicated in the Compliance Checklist;
- An identification, including page numbers/sections, of all revisions made to the SWPPP within the reporting year; and
- The date(s) of the Annual Evaluation.

A copy of the completed Annual Report should be printed out of SMARTS and stored in Appendix G.

11.0 NUMERIC ACTION LEVELS / EXCEEDANCE RESPONSE ACTIONS

11.1 Numeric Action Levels (NALs)

The Numeric Action Levels (NALs) that are applicable to the operations at this Facility are presented in the following table.

Table 9: Numeric Action Levels

Pollutant	Units	Annual NAL	Instantaneous Maximum NAL
pH	pH Units	(None)	Less than 6.0, *or* Greater than 9.0
Total Suspended Solids	mg/L	100	400
Oil and Grease	mg/L	15	25

11.2 NAL Exceedances

The Facility must compare the results of the samples collected to the NALs in the table above. An NAL Exceedance occurs (and additional actions must be taken) when either of the following occurs:

Annual NAL Exceedance:

- Determine the average concentration for each parameter using the results of all the sampling and analytical results for the entire Facility for the reporting year (from July 1 through June 30).

- Compare the average concentration for each parameter to the corresponding Annual NAL value in Table 9.

- An Annual NAL Exceedance occurs when the average of all the analytical results for the parameter exceeds the Annual NAL value for that parameter listed in Table 9.

Instantaneous Maximum NAL Exceedance:

- Compare all sampling and analytical results from each distinct sample collected at the Facility during the reporting year (from July 1 through June 30) to the corresponding Instantaneous Maximum NAL values in Table 9.

- An Instantaneous Maximum NAL Exceedance occurs when two (2) or more analytical results from samples taken for any single parameter within a reporting year (July 1 through June 30):
    - Exceed the instantaneous maximum NAL value (for TSS and O&G); or
    - Are outside of the instantaneous maximum NAL range for pH (<6.0 or >9.0).

If an Annual NAL Exceedance or Instantaneous Maximum NAL Exceedance occurs, additional action must be taken. See Section 11.3 for more information.

11.3 Compliance Status / Exceedance Response Actions

There are three levels of status under the Permit:

- Baseline Status;
- Level 1 Status; and
- Level 2 Status.

Status is determined for each individual parameter. For example, it is possible that a facility is Baseline Status for one pollutant, Level 1 status for another pollutant, and Level 2 status for the third parameter.

Baseline Status

When the Permit takes effect (July 1, 2015) the Facility will have Baseline status for all parameters.

Level 1 Status

Baseline status for any given parameter elevates to Level 1 status if sampling results indicate an NAL Exceedance for that parameter. Therefore, if the sampling results indicate that either an Annual NAL Exceedance or an Instantaneous Maximum NAL Exceedance has occurred, the Facility will change to Level 1 status for that parameter on July 1 following the reporting year.

If the Facility enters Level 1 status, the following actions must be completed:

- By October 1 following the start of Level 1 status for any parameter:
    - Complete an evaluation, with the assistance of a Qualified Industrial Storm Water Practitioner (QISP), of the industrial pollutant sources at the Facility that are or may be related to the NAL Exceedance; and
    - Identify in the evaluation the corresponding BMPs in the SWPPP and any additional BMPs and SWPPP revisions necessary to prevent future NAL Exceedances and to comply with the requirements of the Permit.
- Based upon the above evaluation, as soon as practicable but no later than January 1 following the start of Level 1 status:
    - Revise this SWPPP as necessary and implement any additional BMPs identified in the evaluation;
    - Certify and submit via SMARTS a Level 1 ERA Report prepared by a QISP that includes the following:
        - A summary of the Level 1 ERA Evaluation; and
        - A detailed description of the SWPPP revisions and any additional BMPs for each parameter that exceeded an NAL.
    - Certify and submit via SMARTS the QISP's identification number, name, and contact information (telephone number, e-mail address).

The Facility will return to Baseline status once a Level 1 ERA report has been completed, all identified additional BMPs have been implemented, and results from four (4) consecutive QSEs that were sampled subsequent to BMP implementation indicate no additional NAL Exceedances for that parameter.

Level 2 Status

Level 1 status for any given parameter changes to Level 2 status if sampling results indicate an NAL Exceedance for that same parameter while in Level 1 status. Therefore, if the sampling results indicate that either an Annual NAL Exceedance or an Instantaneous Maximum NAL Exceedance has occurred while in Level 1 status, the Facility will change to Level 2 status for that parameter on July 1 following the reporting year.

If the Facility enters Level 2 status, the following actions must be completed:

- By January 1 following the start of Level 2 status for any parameter:
    - Certify and submit via SMARTS a Level 2 ERA Action Plan prepared by a QISP that addresses each new Level 2 NAL Exceedance. For each new Level 2 NAL Exceedance, the Level 2 Action Plan must identify which of the technical demonstration reports will be performed.
    - Identify in the evaluation the corresponding BMPs in the SWPPP and any additional BMPs and SWPPP revisions necessary to prevent future NAL Exceedances and to comply with the requirements of the Permit.
- Certify and submit (via SMARTS) the QISP's identification number, name, and contact information (telephone number, e-mail address).
- The Level 2 ERA Action Plan must, at a minimum, address the drainage areas with corresponding Level 2 NAL Exceedances.
- All elements of the Level 2 ERA Action Plan must be implemented as soon as practicable and completed no later than 1 year after submitting the Level 2 ERA Action Plan.
- The Level 2 ERA Action Plan shall include a schedule and a detailed description of the tasks required to complete the Discharger's selected technical demonstration(s). This will include preparing and submitting a technical demonstration report. This activity must be coordinated with the QISP.

12.0 SUMMARY OF COMPLIANCE REQUIREMENTS

The following list summarizes the storm water compliance requirements for the Facility:

- Implement and maintain Best Management Practices (BMPs) as outlined in Section 8 to reduce the amount of pollutants in storm water discharges and authorized non-storm water discharges.

- During the storm water compliance year (July 1 – June 30), conduct visual observations once per calendar month during daylight hours of dry weather. Record the observations using the *Monthly Visual Observation Form* in Appendix E. Refer to Section 10.2 for more information.

- Conduct Sampling Event Visual Observations at all discharge locations when storm water samples are collected. Record the observations using the *Sampling Event Visual Observation Form* in Appendix E. Refer to Section 10.3 for more information.

- Collect samples from two (2) Qualifying Storm Events (QSEs) in the first half of the compliance year (July 1 to December 31) and collect samples from two (2) QSEs during the second half of the compliance year (January 1 to June 30). Samples must be collected from Sample Points 1 - 8. QSEs are defined as a precipitation event that produces a discharge for at least one drainage area and is preceded by 48 hours with no discharge from any drainage area. Samples must be collected during the first four (4) hours of the start of discharge or the start of Facility operations if the discharge began within the previous 12 hours. Refer to Section 10.4 for more information.

- Analyze storm water samples for pH within 15 minutes of collecting them.

- Report all sample results in SMARTS within 30 days of obtaining them.

- Compare sample results to the Numeric Action Levels (NALs) to see if there have been any NAL Exceedances. Refer to Section 11 for more information.

- If there has been an NAL Exceedance, contact a Qualified Industrial Storm Water Practitioner (QISP) and work with him/her to prepare and submit the required reports. Refer to Section 11 for more information.

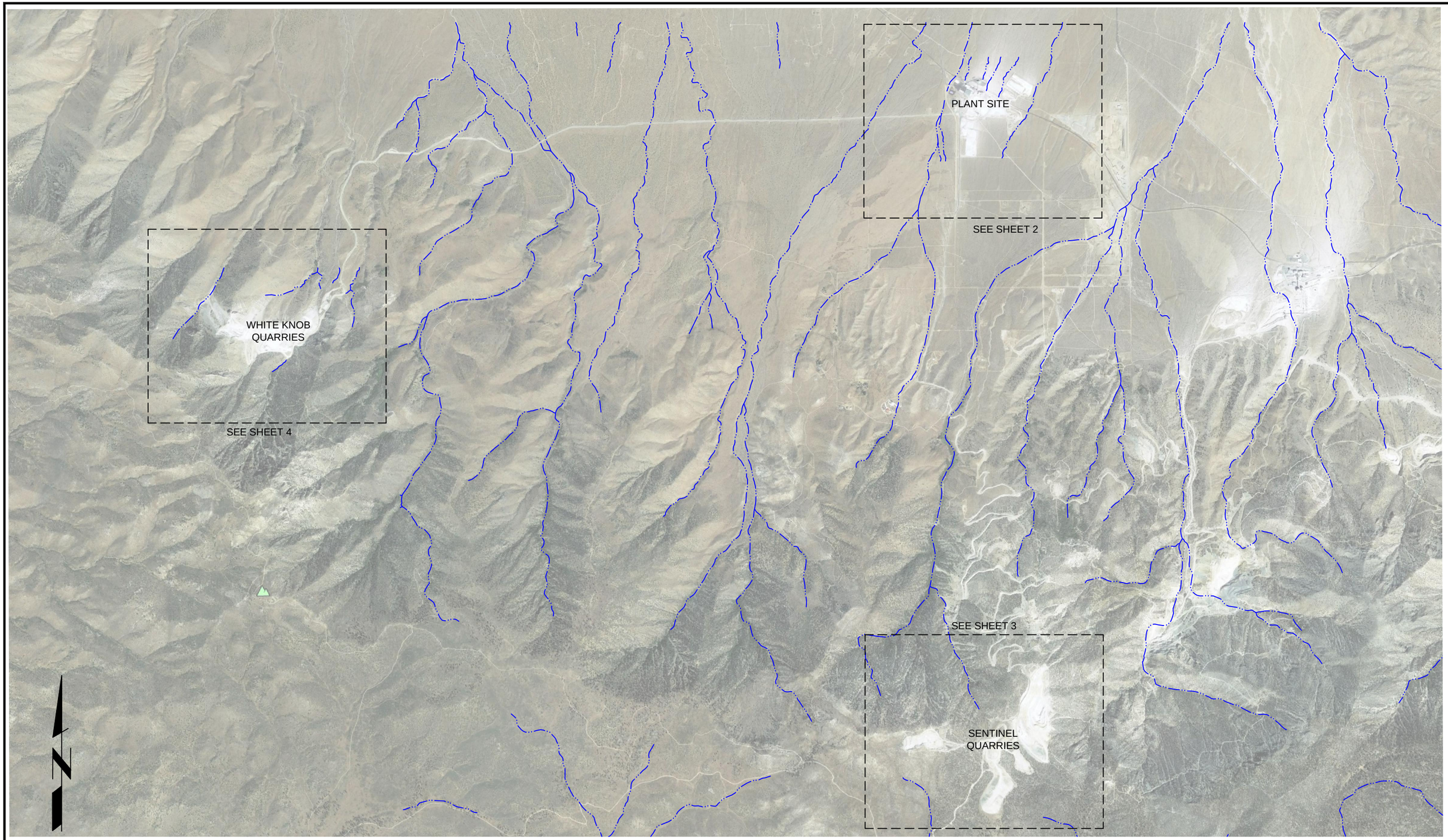
- Conduct an Annual Comprehensive Facility Compliance Evaluation (ACSCE) at least once per reporting year. Document the evaluation using the *Annual Comprehensive Facility Compliance Evaluation Form* in Appendix E. Refer to Section 10.7 for more information.

- Submit an Annual Report by July 15 of each year via SMARTS. Refer to Section 10.8 for more information.

- Train affected employees in storm water requirements, this SWPPP, and their duties to ensure compliance with the Permit. Refer to Section 8.1.7 for more information.

APPENDIX A

FIGURES



N.T.S.

LEGEND

EPHEMERAL STREAM / WASH

DATUM: HORZ= NAD83, CALIFORNIA ZONE 5, US FOOT
VERT=NAVD88

SESPE CONSULTING, INC.
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OMYA CALIFORNIA
LUCERNE VALLEY FACILITIES
SWPPP
SITE LOCATION MAP

SCALE: HORIZ. AS SHOWN / VERT. AS SHOWN	FIGURE NUMBER 1
DRAWN BY: G. CAMUS	
CHECKED BY: APS	DATE: JULY 2017

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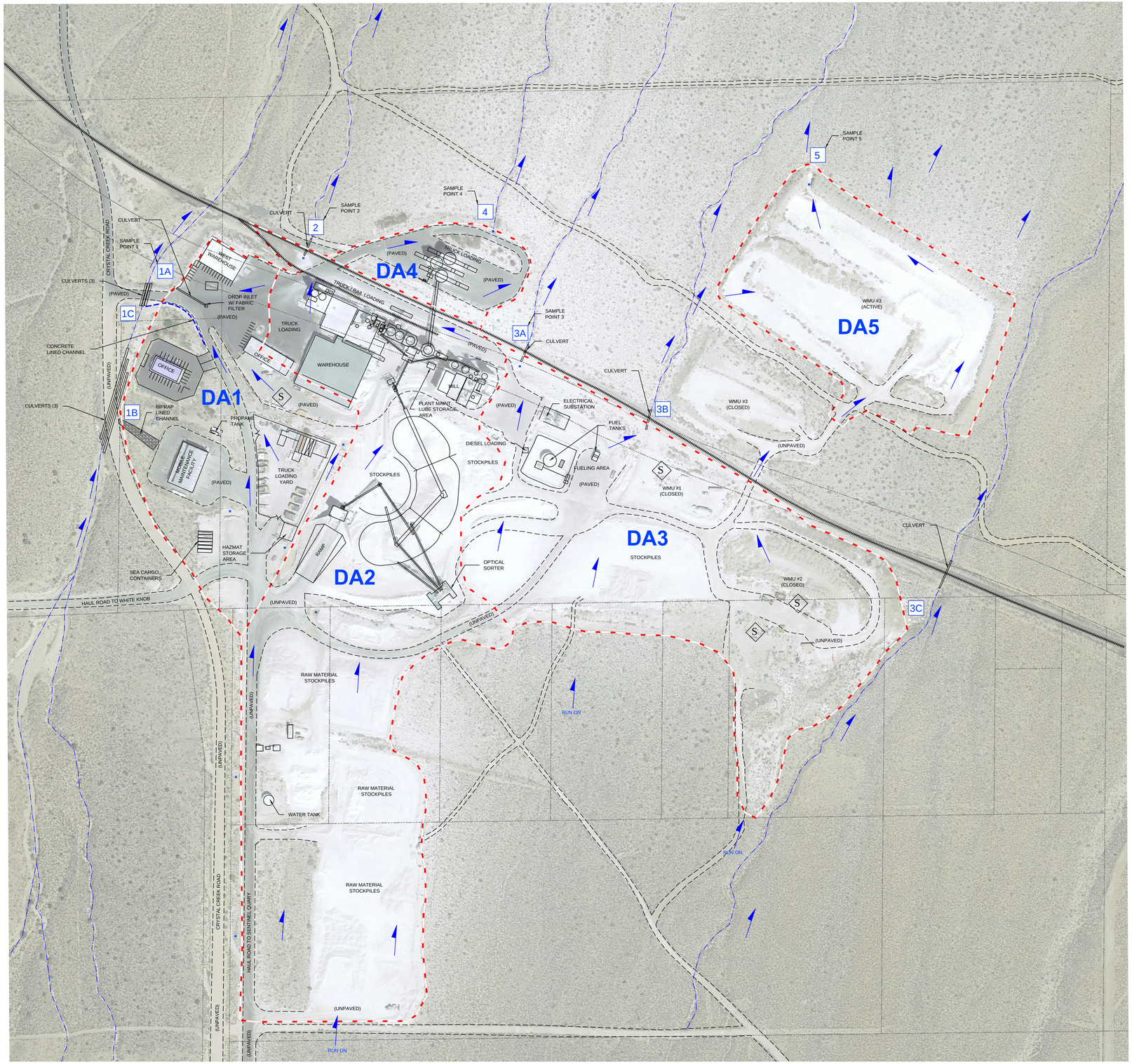

LEGEND

- **DA#** — DRAINAGE AREA LABEL
- FLOW DIRECTION
- (S) — AREAS OF MATERIAL HANDLING & PROCESSING, &/OR STORAGE OF EQUIPMENT & VEHICLES
- DRAINAGE AREA BOUNDARY
- UNNAMED EPHEMERAL WASH
- RETENTION BASIN
- [#] — DISCHARGE POINT
- RAILROAD TRACKS
- PARCEL LINES

NOTES:

- UNPAVED AREAS OF THE FACILITY MAY BE SUBJECT TO SOIL EROSION.
- THERE ARE NO MUNICIPAL STORM DRAIN INLETS IN THE VICINITY.
- STOCKPILED MATERIALS ON-SITE (I.E., ORE, METAL, ETC.) MAY BE DIRECTLY EXPOSED TO STORM WATER. STOCKPILE AREAS ARE LABELED AS SUCH AND DEPICTED ON THE AERIAL PHOTOGRAPH.
- NO SIGNIFICANT SPILLS OR LEAKS HAVE BEEN IDENTIFIED AT THE SITE.
- INDUSTRIAL ACTIVITIES SUBJECT TO THE GENERAL PERMIT OCCUR THROUGHOUT ACTIVE AREAS OF THE FACILITY.
- MATERIAL HANDLING AND PROCESSING OCCURS THROUGHOUT ALL ACTIVE AREAS OF THE FACILITY, PRIMARILY AT THE STOCKPILE LOCATIONS, PROCESSING AREAS, AND EQUIPMENT STORAGE AREAS.
- SHIPPING OF FINISHED PRODUCT PRIMARILY OCCURS IN DA2 AND DA4. RECEIVING OF MATERIALS PRIMARILY OCCURS IN THE AREAS WHERE THEY ARE STOCKPILED / STORED.
- DUST AND PARTICULATE GENERATION MAY OCCUR THROUGHOUT THE ACTIVE AREAS OF THE FACILITY, PRIMARILY IN THE PROCESSING PLANT AND STOCKPILE AREAS.

DATUM: HORZ= NAD83, CALIFORNIA ZONE 5, US FOOT
VERT=NAVD88

150 0 150 300
SCALE IN FEET

N

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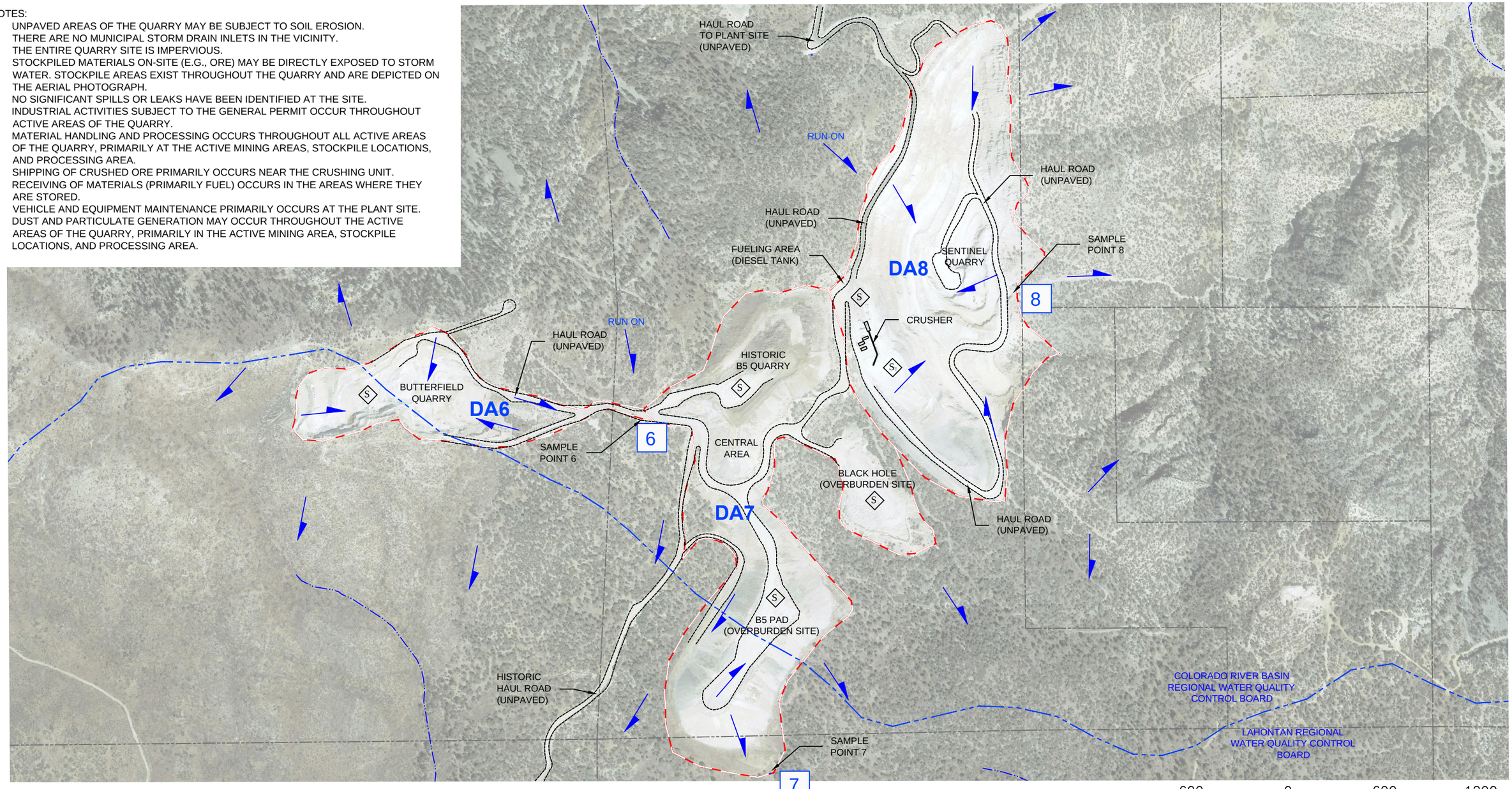
OMYA CALIFORNIA
LUCERNE VALLEY FACILITIES
SWPPP
PLANT SITE

SCALE: HORIZ. AS SHOWN
VERT. AS SHOWN
DRAWN BY: G. CAMUS
CHECKED BY: APS
FIGURE NUMBER 2
DATE: JULY 2017

NOTES:

- UNPAVED AREAS OF THE QUARRY MAY BE SUBJECT TO SOIL EROSION.
- THERE ARE NO MUNICIPAL STORM DRAIN INLETS IN THE VICINITY.
- THE ENTIRE QUARRY SITE IS IMPERVIOUS.
- STOCKPILED MATERIALS ON-SITE (E.G., ORE) MAY BE DIRECTLY EXPOSED TO STORM WATER. STOCKPILE AREAS EXIST THROUGHOUT THE QUARRY AND ARE DEPICTED ON THE AERIAL PHOTOGRAPH.
- NO SIGNIFICANT SPILLS OR LEAKS HAVE BEEN IDENTIFIED AT THE SITE.
- INDUSTRIAL ACTIVITIES SUBJECT TO THE GENERAL PERMIT OCCUR THROUGHOUT ACTIVE AREAS OF THE QUARRY.
- MATERIAL HANDLING AND PROCESSING OCCURS THROUGHOUT ALL ACTIVE AREAS OF THE QUARRY, PRIMARILY AT THE ACTIVE MINING AREAS, STOCKPILE LOCATIONS, AND PROCESSING AREA.
- SHIPPING OF CRUSHED ORE PRIMARILY OCCURS NEAR THE CRUSHING UNIT. RECEIVING OF MATERIALS (PRIMARILY FUEL) OCCURS IN THE AREAS WHERE THEY ARE STORED.
- VEHICLE AND EQUIPMENT MAINTENANCE PRIMARILY OCCURS AT THE PLANT SITE.
- DUST AND PARTICULATE GENERATION MAY OCCUR THROUGHOUT THE ACTIVE AREAS OF THE QUARRY, PRIMARILY IN THE ACTIVE MINING AREA, STOCKPILE LOCATIONS, AND PROCESSING AREA.



LEGEND

- DA# — DRAINAGE AREA LABEL
- — FLOW DIRECTION
- (S) — AREAS OF MATERIAL HANDLING & PROCESSING, &/OR STORAGE OF EQUIPMENT & VEHICLES
- — DRAINAGE AREA BOUNDARY
- — UNNAMED EPHEMERAL WASH
- — CATCH BASIN
- — WATER BOARD BOUNDARY
- # — DISCHARGE POINT
- — PARCEL LINES

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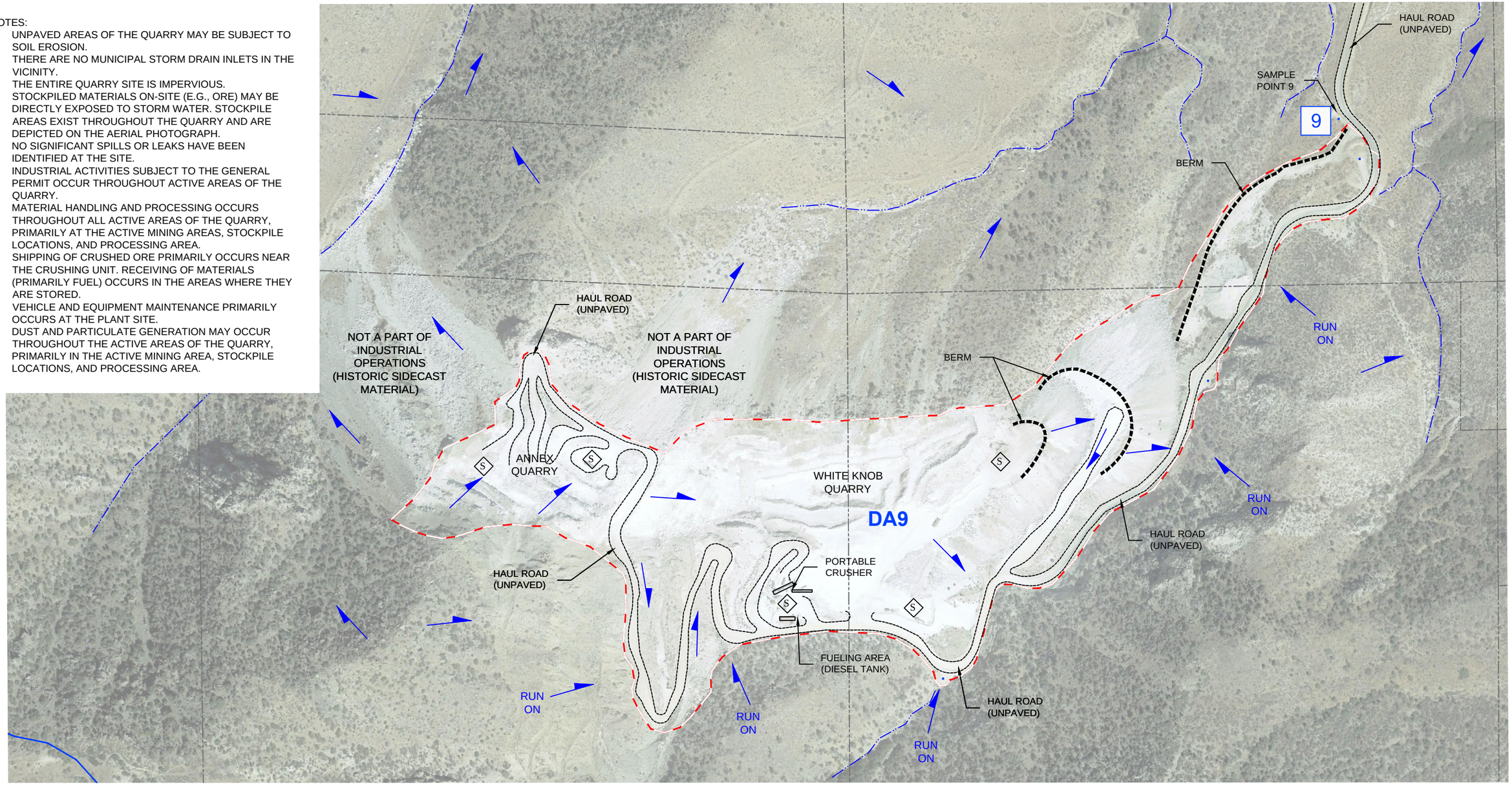
OMYA CALIFORNIA
LUCERNE VALLEY FACILITIES
SWPPP
SENTINEL QUARRIES

SCALE: HORIZ AS SHOWN / VERT. AS SHOWN	FIGURE NUMBER 3
DRAWN BY: G. CAMUS	
CHECKED BY: APS	DATE: JULY 2017

NOTES:

- UNPAVED AREAS OF THE QUARRY MAY BE SUBJECT TO SOIL EROSION.
- THERE ARE NO MUNICIPAL STORM DRAIN INLETS IN THE VICINITY.
- THE ENTIRE QUARRY SITE IS IMPERVIOUS.
- STOCKPILED MATERIALS ON-SITE (E.G., ORE) MAY BE DIRECTLY EXPOSED TO STORM WATER. STOCKPILE AREAS EXIST THROUGHOUT THE QUARRY AND ARE DEPICTED ON THE AERIAL PHOTOGRAPH.
- NO SIGNIFICANT SPILLS OR LEAKS HAVE BEEN IDENTIFIED AT THE SITE.
- INDUSTRIAL ACTIVITIES SUBJECT TO THE GENERAL PERMIT OCCUR THROUGHOUT ACTIVE AREAS OF THE QUARRY.
- MATERIAL HANDLING AND PROCESSING OCCURS THROUGHOUT ALL ACTIVE AREAS OF THE QUARRY, PRIMARILY AT THE ACTIVE MINING AREAS, STOCKPILE LOCATIONS, AND PROCESSING AREA.
- SHIPPING OF CRUSHED ORE PRIMARILY OCCURS NEAR THE CRUSHING UNIT. RECEIVING OF MATERIALS (PRIMARILY FUEL) OCCURS IN THE AREAS WHERE THEY ARE STORED.
- VEHICLE AND EQUIPMENT MAINTENANCE PRIMARILY OCCURS AT THE PLANT SITE.
- DUST AND PARTICULATE GENERATION MAY OCCUR THROUGHOUT THE ACTIVE AREAS OF THE QUARRY, PRIMARILY IN THE ACTIVE MINING AREA, STOCKPILE LOCATIONS, AND PROCESSING AREA.



LEGEND

- DA# — DRAINAGE AREA LABEL
- — FLOW DIRECTION
- — AREAS OF MATERIAL HANDLING & PROCESSING, &/OR STORAGE OF EQUIPMENT & VEHICLES
- — DRAINAGE BOUNDARY
- — BERM/WALLS
- — UNNAMED EPHEMERAL WASH
- — CATCH BASIN
- — WATER BOARD BOUNDARY
- # — DISCHARGE POINT
- — PARCEL LINES

DATUM: HORZ= NAD83, CALIFORNIA ZONE 5, US FOOT
VERT=NAVD88

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OMYA CALIFORNIA
LUCERNE VALLEY FACILITIES
SWPPP
WHITE KNOB QUARRIES

SCALE: HORIZ. AS SHOWN
VERT. AS SHOWN
DRAWN BY: G. CAMUS
CHECKED BY: APS
FIGURE NUMBER 4
DATE: JULY 2017

APPENDIX B

NOTICE OF INTENT RECEIPT LETTER

APPENDIX C

REVISION RECORD

STORM WATER POLLUTION PREVENTION PLAN
REVISION AND AMENDMENTS RECORD

OMYA Inc.
Lucerne Valley, CA

Record all additions, changes or deletions made to the SWPPP as a result of changes in equipment, policy or regulatory agency requirements. The SWPPP must be amended in accordance with the procedures in Section 9.2.

Date of Amendment	Section Amended	Comments
June 2015	All Sections	New SWPPP created to reflect new General Permit.
July 2017	All Sections	Updated entire SWPPP and Site Map.

APPENDIX D

TRAINING PROGRAM AND RECORDS

STORM WATER POLLUTION PREVENTION PLAN
EMPLOYEE TRAINING OUTLINE

OMYA Inc.
Lucerne Valley, CA

Purpose: To familiarize employees responsible for storm water compliance with on-site sources of potential pollutants, Best Management Practices, and requirements associated with the Facility's storm water program.

Topics to be covered during training include the following:

1. The General Permit and its requirements.

2. The purpose of the SWPPP.

3. Drainage area and outfall location (Section 4).

4. Facility activities that have the potential to impact storm water discharges (Section 6).

5. Potential pollutant sources at the Facility (Section 7).

6. Facility Best Management Practices (BMPs) as outlined in the SWPPP (Section 8).

7. Spill response procedures regarding:
    - Notification of supervisory personnel
    - Spill control
    - On-site spill response equipment

8. Past spill events, failures of the plan, malfunctioning components discovered during inspections, and any recently developed or implemented spill measures.

9. For personnel who will be conducting inspections: Inspection procedures (Sections 11 and 12).

10. For personnel who will be collecting storm water samples: Sampling procedures (Sections 11 and 12).

11. For personnel who will be analyzing samples for pH:

    a. How to use the pH paper; or
    b. How to calibrate and use the pH meter in accordance with manufacturer's specifications.

12. Record keeping requirements.

STORM WATER POLLUTION PREVENTION PLAN
EMPLOYEE TRAINING LOG

OMYA Inc.
Lucerne Valley, CA

Employees charged with responsibilities in the Facility Storm Water Pollution Prevention Plan have been trained in the following areas of this program.

- Program purpose and requirements.
- Potential pollutant sources at the Facility.
- Facility drainage and outfalls.
- Spill response procedures.
- Facility Best Management Practices (BMPs).
- Inspection requirements.
- Storm water sampling requirements.
- Recordkeeping requirements.

Instructor Name	**Signature**	**Date**

I hereby certify that I have received Training in the Storm Water Pollution Prevention Plan (SWPPP). I am familiar with the procedures outlined in and requirements of the Plan.

Employee Name	**Signature**	**Date**

APPENDIX E

MONITORING IMPLEMENTATION PLAN FORMS

Monthly Visual Observation Form
Sampling Event Visual Observation Form
Sampling Log
Annual Comprehensive Facility Compliance Evaluation Form
Sample Chain of Custody Form

Monthly Visual Observation Form	
Note: Observations must be conducted at least once per calendar month, during daylight hours of the scheduled Facility operating hours, on days without precipitation.	
Date of Observation:	Time of Observation:
Site Information	
Site Name:	**Omya Lucerne Valley**
Site Address:	**7225 Crystal Creek Road, Lucerne Valley, CA 92356**
WDID Number:	**7 36I000880**
Observations	
Locations Observed:	
☐ Plant Site	☐ Mobile Maintenance Facility / Hazardous Material Storage Areas
☐ White Knob Quarries	☐ Outfalls / Discharge Points / Sampling Points
☐ Sentinel Quarries	☐ _____
☐ Processing Equip. (Crushers, Mill)	☐ _____
☐ Equipment Storage Areas	☐ _____
☐ Access / Haul Roads	☐ _____
Review each drainage area for the presence or indication of prior, current, or potential ***unauthorized*** non-storm water discharges (NSWDs). - Are unauthorized NSWDs observed: Yes ☐ No ☐ - If yes, identify probable source and necessary corrective actions.	
Review ***authorized*** non-storm water discharges (NSWDs) and their associated Best Management Practices. - Are authorized NSWDs observed: Yes ☐ No ☐ - If yes, are associated BMPs in place? Yes ☐ No ☐ (Note: there are no authorized non-storm water discharges at this time. If they are discovered, the SWPPP must be updated.)	
If pollutants are observed in non-storm water discharges, identify the source of the pollutants.	
Review the following:	
☐ Outdoor industrial equipment	☐ Outdoor industrial activities areas
☐ BMPs	☐ All other potential sources of industrial pollutants
Findings / Necessary Response Actions / SWPPP Revisions Needed	
This Observation was Performed by:	
Name:	Title:
Signature:	Date:

Sampling Event Visual Observation Form	
Note: Visual inspections must be performed when storm water samples are collected. (Samples must be taken during the first four hours of discharge or during the first four hours of scheduled facility operating hours if discharge began in the previous twelve hours.)	
Date of Observation:	Time of Observation:
Site Information	
Site Name:	**Omya Lucerne Valley**
Site Address:	**7225 Crystal Creek Road, Lucerne Valley, CA 92356**
WDID Number:	**7 36I000880**
Discharge Observations	
Discharge Location(s):	
Observe storm water discharge at each discharge location (refer to Appendix A). Note if the following is present or absent in storm water discharge.	
Floating Material	Present ☐ Absent ☐
Suspended Material	Present ☐ Absent ☐
Oil and Grease	Present ☐ Absent ☐
Discolorations	Present ☐ Absent ☐
Turbidity	Present ☐ Absent ☐
Odors	Present ☐ Absent ☐
Trash / Debris	Present ☐ Absent ☐
If the above pollutants are noted, identify the source of the pollutant.	
Findings / Necessary Response Actions / SWPPP Revisions Needed	
This Observation was Performed by:	
Name:	Title:
Signature:	Date:

Sampling Log	
Sampling Date:	Time Discharge Began:
Facility Name:	**Omya Lucerne Valley**
Facility Address:	**7225 Crystal Creek Road, Lucerne Valley, CA 92356**
WDID Number:	**7 36I000880**
Sampler Name:	

Field Meter Calibration

pH Meter ID No./Description:

Calibration Date/Time:

Field pH Measurements

Discharge Location Identifier	pH	Time

Samples Collected

Discharge Location Identifier	Constituent	Time
	Oil and Grease (O&G)	
	Total Suspended Solids (TSS)	

Additional Sampling Notes:

Annual Comprehensive Facility Compliance Evaluation Form	
Note: The Annual Evaluation must be performed once each reporting year (July 1 to June 30). The Annual Evaluation must be performed at least 8 months, but no more than 16 months, since the last Annual Evaluation.	
Date of Evaluation:	
Site Information	
Site Name:	**Omya Lucerne Valley**
Site Address:	**7225 Crystal Creek Road, Lucerne Valley, CA 92356**
WDID Number:	**7 36I000880**
Annual Evaluation	
Evaluate the following:	
☐ Review all sampling, visual observation, and inspection records conducted during the previous reporting year	
☐ Inspect all areas of industrial activity and associated potential pollutant sources for evidence of, or the potential for, pollutants entering the storm water conveyance system	
☐ Inspect all drainage areas previously identified as having no exposure to industrial activities in accordance with the definitions of Section XVII of the General Permit	
☐ Inspect the equipment needed to implement the BMPs outlined in the SWPPP	
☐ Inspect BMPs implemented	
☐ Review and assess the effectiveness of 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 storm water discharges	
☐ Any other factors needed to comply with the General Permit	
☐ Review all changes to the SWPPP during the reporting year	
Findings / Corrective Actions Identified (note if SWPPP change is needed)	
Inspector Information	
Evaluator Name:	Evaluator Title:
Signature:	Date:

Sample Chain-of-Custody Form

(The analytical lab will provide the actual chain-of-custody form to complete.)

E.S. Babcock & Sons, Inc. Environmental Laboratories
(951) 653-3351 FAX (951) 653-1662
www.babcocklabs.com

Chain of Custody & Sample Information Record

Client:	**Contact:**	**Phone No.**
FAX No.	**Email:**	**Additional Reporting Requests**
Project Name: ______	**Turn Around Time:** Routine / *3-5 Day Rush / *48 Hour Rush / *24 Hour Rush	Include QC Data Package: ☐ Yes ☐ No FAX Results: ☐ Yes ☐ No Email Results: ☐ Yes ☐ No State EDT: ☐ Yes ☐ No
Project Location:	*Lab TAT Approval: By: *Additional Charges May Apply	(Include Source Number in Notes)

Sampler Information

Name: ______

Employer: ______

Signature: ______

Sample ID	Date	Time	# of Containers & Preservatives: Unpreserved	H2SO4	HCl	HNO3	Na2S2O3	NaOH	NaOH/ZnAcetate	NH4Cl	MCAA			Total # of Containers	Sample Type: Routine	Resample	Special	Analysis Requested									Matrix	Notes
																											DW = Drinking Water WW = Wastewater GW = Groundwater S = Soil SG = Sludge L = Liquid M = Miscellaneous	

Relinquished By (sign)	Print Name / Company	Date / Time	Received By (Sign)	Print Name / Company

(For Lab Use Only) Sample Integrity Upon Receipt					Lab Notes
Sample(s) Submitted on Ice?	Yes	No		**Temperature**	
Custody Seal(s) Intact?	Yes	No	N/A	°C	
Sample(s) Intact?	Yes	No		☐ Cooler Blank	

Lab No. ______

Page _____ **of** _____

APPENDIX F

LABORATORY ANALYSIS RESULTS
COMPLETED SAMPLING LOGS

APPENDIX G

SUBMITTED ANNUAL REPORTS

APPENDIX H

INDUSTRIAL STORM WATER GENERAL PERMIT (NPDES GENERAL PERMIT 2014-0057-DWQ)

Not included in the electronic copy.

A copy of the Industrial Storm Water General Permit (NPDES General Permit 2014-0057-DWQ) will be maintained on-site with the hard copy of the SWPPP.

An electronic version of the Permit can be downloaded from the following website:
http://www.swrcb.ca.gov/water_issues/programs/stormwater/industrial.shtml