# APPENDIX M

Stormwater Pollution Prevention Plan

## Lexington Quarry

# Stormwater Pollution Prevention Plan

Prepared By:

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July 2010

# STORMWATER POLLUTION PREVENTION PLAN

WEST COAST AGGREGATES, INC.
LEXINGTON QUARRY
Los Gatos, California

Prepared for compliance with Section A of the National Pollutant Discharge Elimination System (NPDES) General Permit for stormwater discharges associated with Industrial Activity Water Control Order: 97-03-DWG

Prepared for:
West Coast Aggregates, Inc.
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Prepared on:
July 27, 2010

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# SECTION 1. SITE INFORMATION

## *Site Information*

| | |
|---|---|
| Project Name: | Lexington Quarry |
| Project Address: | 18500 Limekiln Canyon Road<br>Los Gatos, CA 95030 |
| Owner: | West Coast Aggregates, Inc. |
| Owner's Address: | 37350 South Bird Road<br>Tracy, CA 95376 |
| Owner's Phone: | (209) 835-5020 |
| Contact: | Richard DeAtley<br>President, West Coast Aggregates, Inc. |
| Plant Supervisor: | Dan McManus |

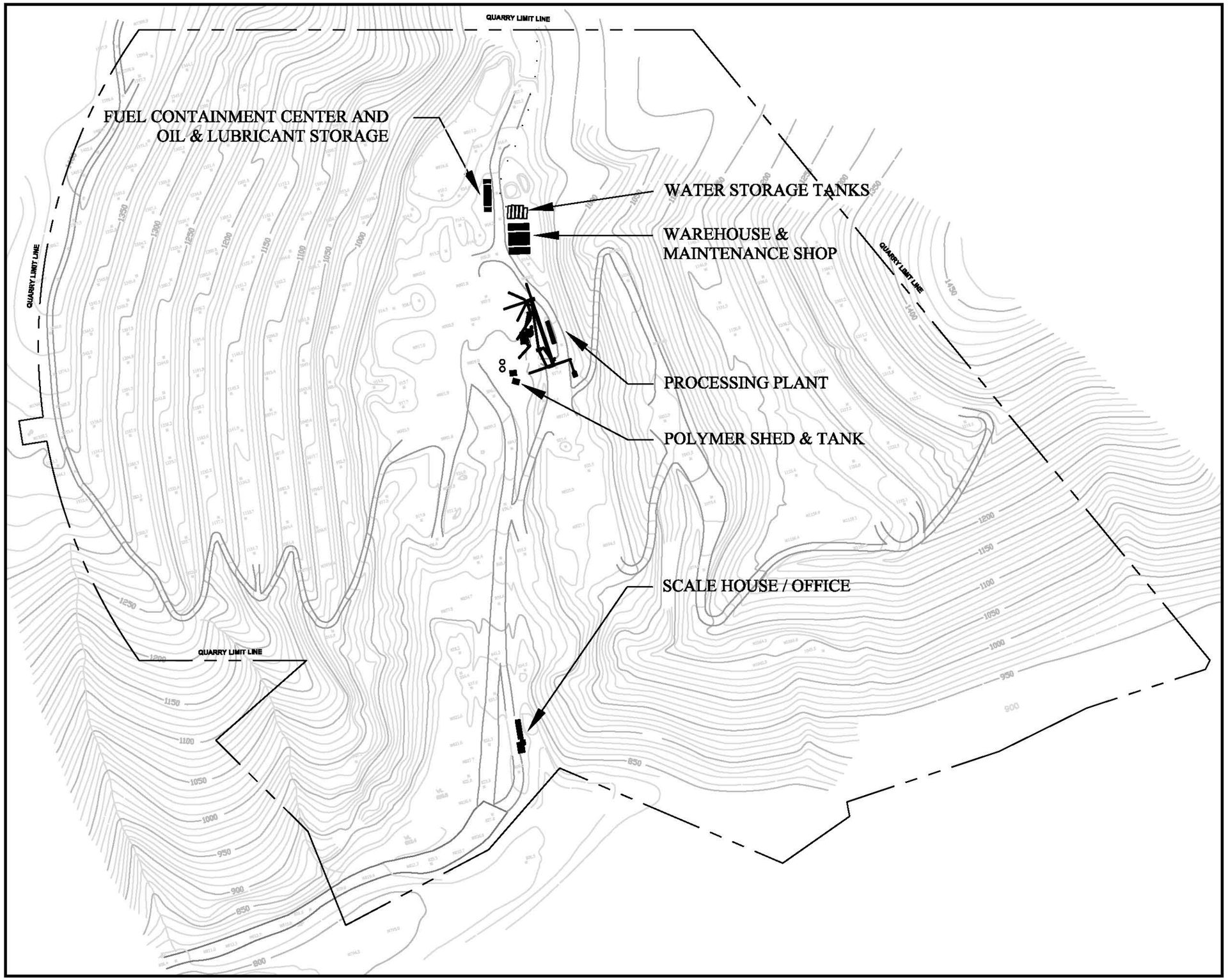
## *Certification*

Preparer:

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

Signed: _____ Date: _____

Title: _____




# SWPPP
# QUARRY BUILDINGS & EQUIPMENT

## LEXINGTON QUARRY
WEST COAST AGGREGATES, INC.

UNPAVED ROAD

PAVED ROAD

BUILDING/EQUIPMENT

SCALE IN FEET
0 100 200

1
FIGURE

NORTH

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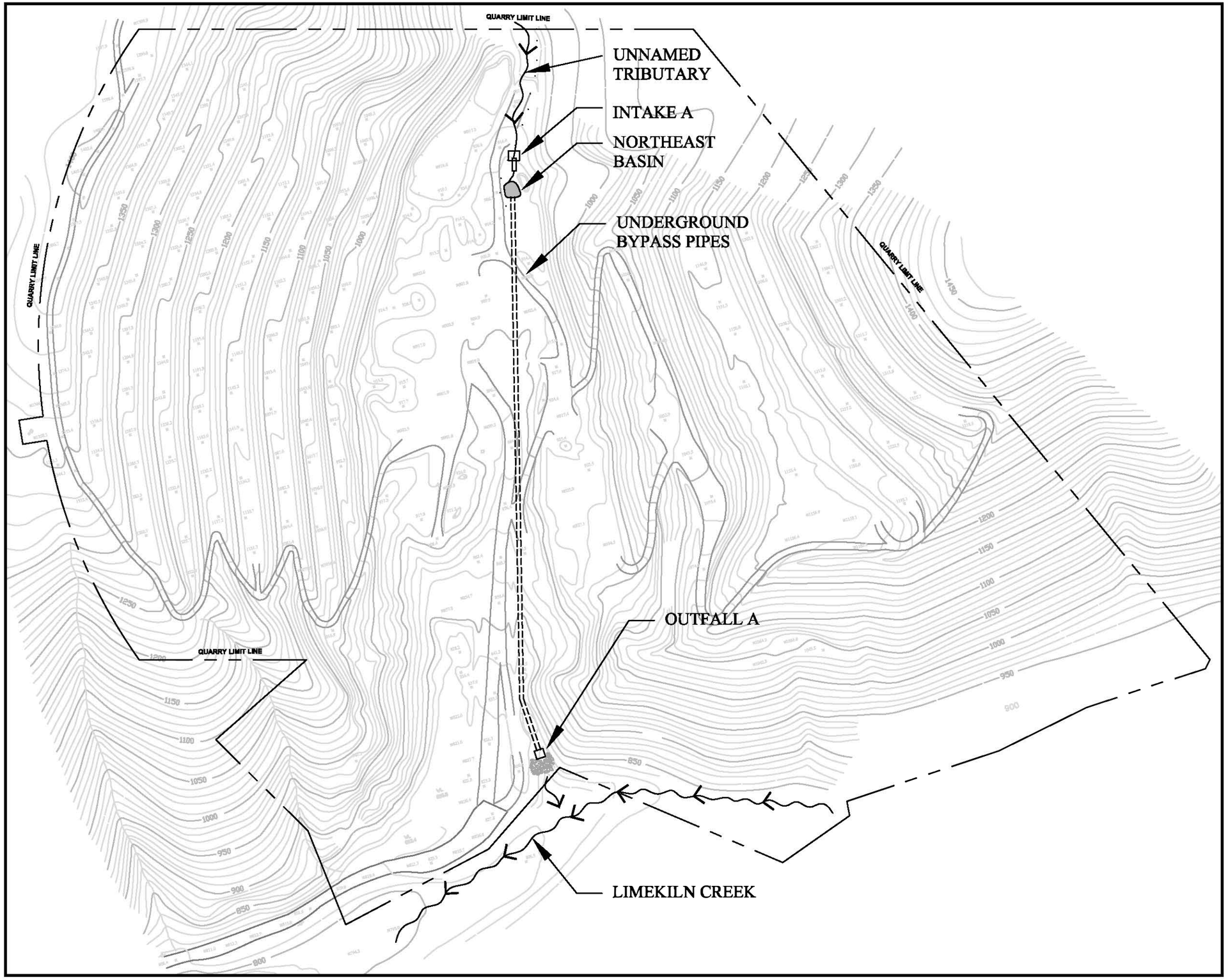


# SWPPP
# INTERCEPTED CREEK

## LEXINGTON QUARRY
WEST COAST AGGREGATES, INC.

- SEDIMENT BASN
- BYPASS PIPE
- ENERGY DISSIPATOR
- INTAKE/OUTFALL
- UNPAVED ROAD
- PAVED ROAD

SCALE IN FEET
0 100 200

2 FIGURE

NORTH

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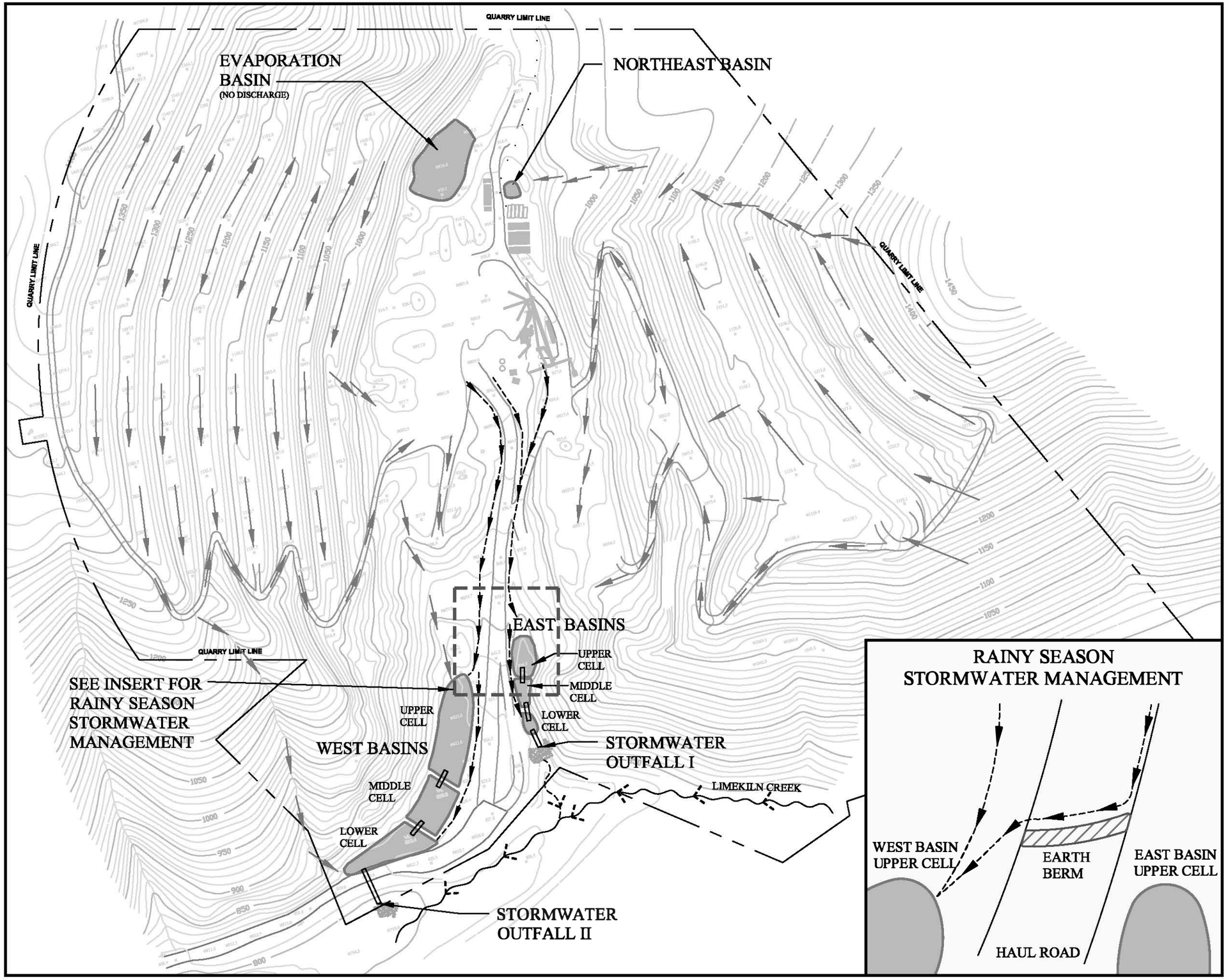


# SWPPP STORMWATER SYSTEM

## LEXINGTON QUARRY
WEST COAST AGGREGATES, INC.

- DIRECTION OF SHEET FLOW
- DRAINAGE DITCH & DIRECTION OF FLOW
- SEDIMENT BASIN
- CULVERT
- ENERGY DISSIPATOR
- UNPAVED ROAD
- PAVED ROAD

SCALE IN FEET
0 100 200

FIGURE 3

NORTH

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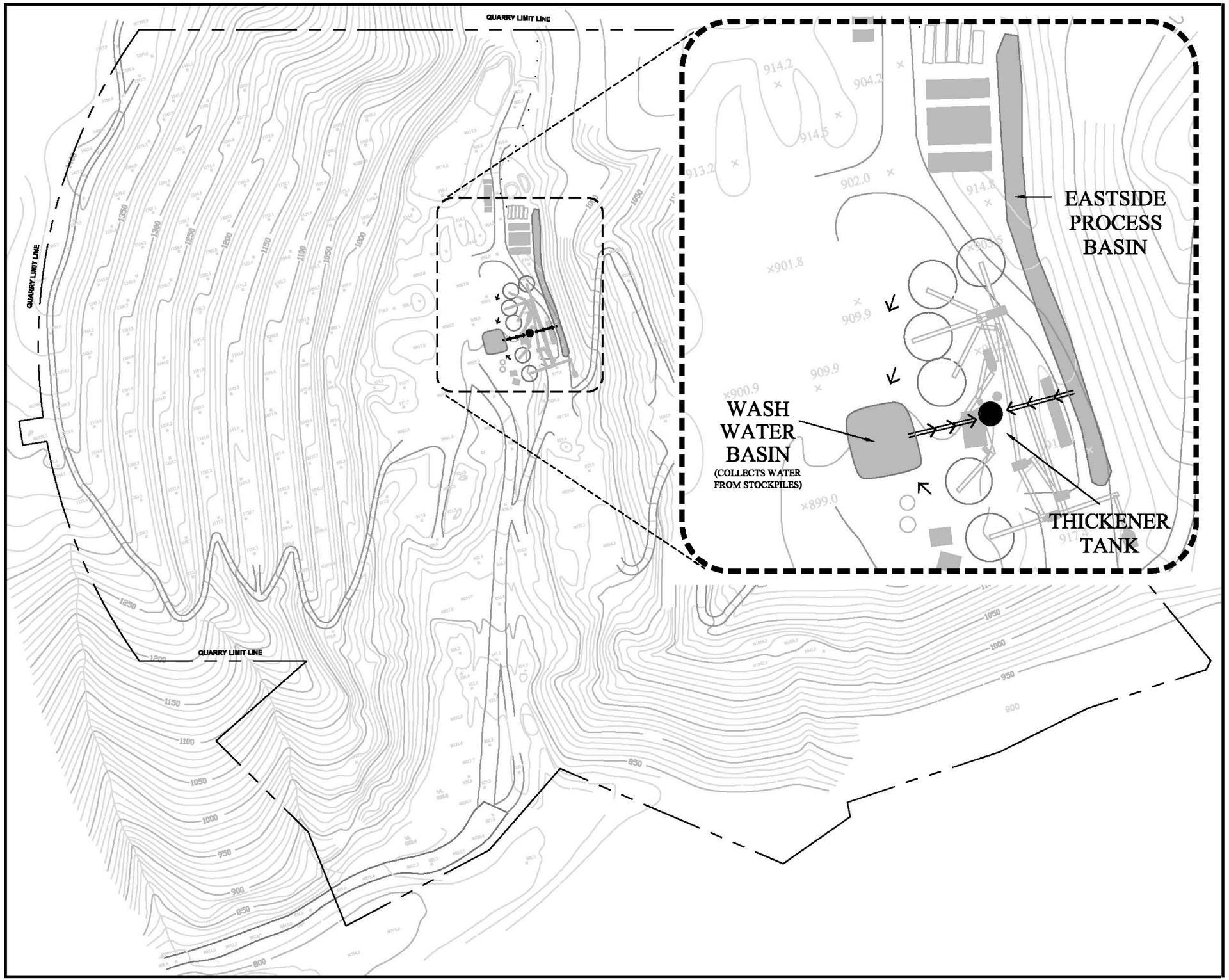


# SWPPP
# WASTE WATER SYSTEM

## LEXINGTON QUARRY
**WEST COAST AGGREGATES, INC.**

- UNPAVED ROAD
- PAVED ROAD
- DIRECTION OF FLOW
- UNDERGROUND PIPE
- SEDIMENT BASN

SCALE IN FEET
0 100 200

FIGURE 4

NORTH


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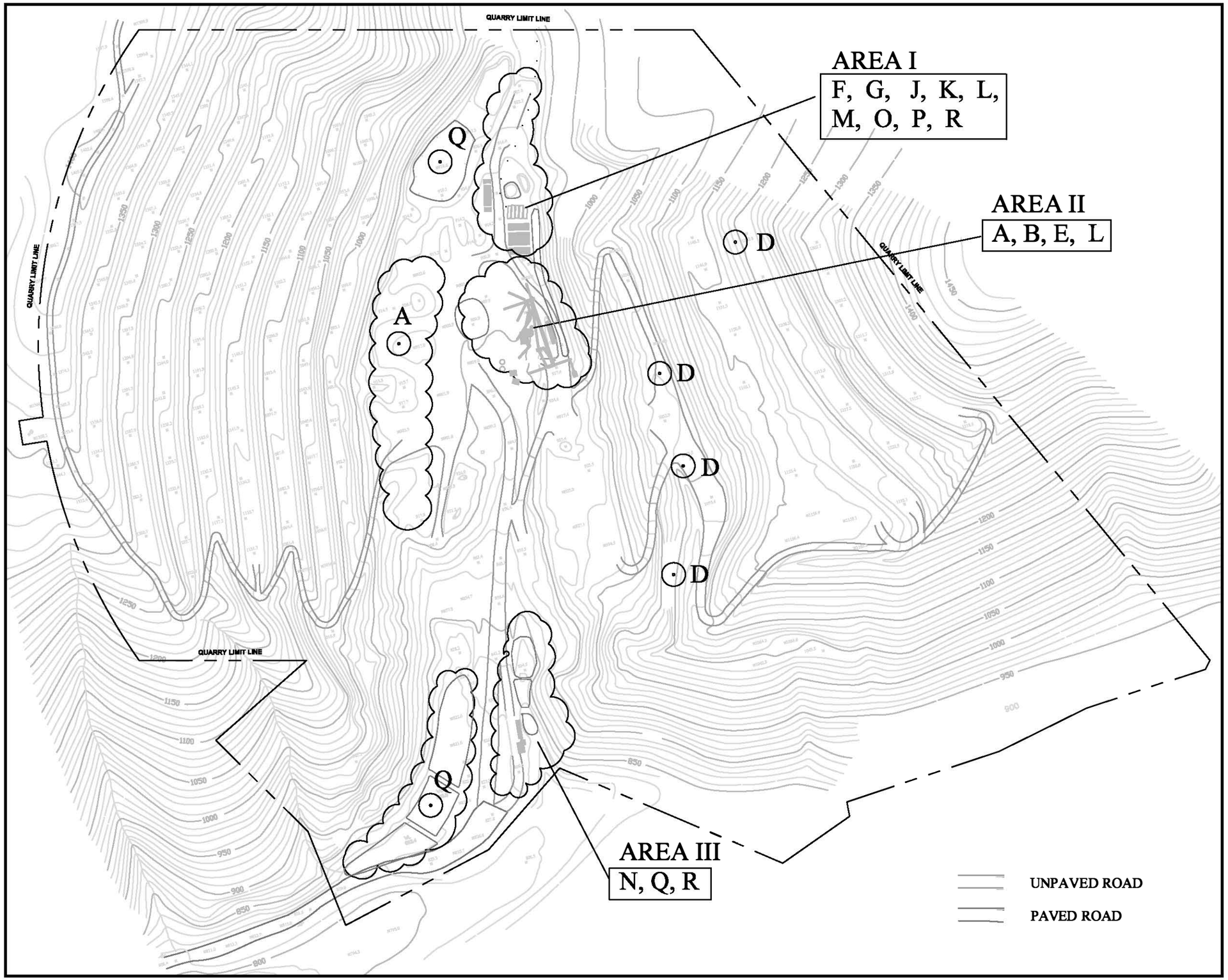


# SWPPP
# SOURCES OF POTENTIAL POLLUTION

## LEXINGTON QUARRY
WEST COAST AGGREGATES, INC.

A. AGGREGATE STOCKPILES

B. AGGREGATE PROCESSING AREA

D. HILLSIDE MINING

E. AGGREGATE HANDLING

F. VEHICLE EQUIPMENT MAINTENANCE

G. AIR COMPRESSORS

J. LUBRICANT STORAGE

K. ABOVE GROUND LEVEL STORAGE TANKS

L. HAZ MAT STORAGE

M. HAZ MAT WASTE STORAGE

N. MUNICIPAL GARBAGE DUMPSTER

O. UNPAVED VEHICLE PARKING

P. BONEYARD

Q. STORMWATER COLLECTION BASINS

R. PAVED VEHICLE PARKING

SCALE IN FEET
0 100 200

5
FIGURE

NORTH

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# SECTION 3. FACILITY DESCRIPTION

## *Description of Facilities and Activities*

This Stormwater Pollution Prevention Plan is prepared for Lexington Quarry, an existing hill-side mining operation, accessed from Limekiln Canyon Road near Lexington Reservoir in Los Gatos, California. The rock crushing and screening operation produces base rock, drain rock, gabion, and fill materials. The quarry has four (4) to eight (8) employees and operates from 6:30am to 3:00pm, Monday through Friday, year round.[1]

Lexington Quarry was established within a canyon. Processing equipment, storage of quarried materials, and truck loading activities are all located in the bottom of the canyon (quarry floor). Equipment used to harvest rock includes front-end loaders, bulldozers, and graders. The harvested rock is transported to the processing area by loaders where it is crushed, screened, and sorted by size before being conveyed to the appropriate stockpile. The stockpiled rock is sold directly to customers by transferring the aggregate from the stockpile into the customer's truck with a front-end loader.

Buildings at the site include the office trailer, scale house, fuel containment center, secondary containment structure, rock plant control shed, maintenance shop, and several sheds for tools and supply materials.

Stormwater runoff from the quarry floor and quarried slopes flows into several V-ditches and sediment basins to remove sediment from the runoff. Stormwater control measures are designed to detain run-off onsite in sediment basins to allow the sediments in the stormwater to settle. When the basins reach their capacity, they discharge through two (2) separate outfalls and ultimately into Limekiln Creek, which flows into Lexington Reservoir.

## *Description of Significant Materials*

Materials present on the facility that may contribute pollutants to stormwater run-off include:

- Rock, Gravel, Sand, Silt, and/or Clay
- Petroleum Products (fuel, oil, lubricants)
- Waste Oil

Exposure to potential pollutants may vary dramatically in different areas of industrial activity.

[1] Saturday operations as described in the Approved July 2010 Reclamation Plan.

### *Description of Activities*

The following areas contribute to runoff on the site. All of the following areas are sloped toward V-ditches which flow into two (2) sediment basin systems; the East Basins which ultimately discharge into an unnamed tributary of Limekiln Creek and the West Basins which ultimately discharge to Limekiln Creek.

1. *Maintenance and Fueling Area:* The maintenance area has approximately 540 square feet of impervious area (Figure 5, Area I). In this area, equipment and vehicles are serviced and maintained. During operations, this area may house oils and grease. The fueling area has an impervious surface consisting of approximately 20 square feet. This area is used to fuel vehicles operating within the quarry area. Possible pollutants in this area include fuel, oils and lubricants.
2. *Processing Plant:* The processing plant consists of approximately 1,260 square feet of impervious surface (Figure 5, Area II). Activities that may contribute to pollutants in this area consist of the processing of the aggregate, grease and flocculants.
3. *Stockpiles and Excavation:* This area is used for stockpiles and is pervious. The extraction of rock and the release of sediment would contribute to pollutants in this area.
4. *Office and Scale House:* This has an impervious surface of approximately 540 square feet (Figure 5, Area III). The activities that may contribute to pollutants in this area include the parking of vehicles and trucks. The garbage dumpster is also located in this area.

### *Stormwater Drainage Facilities*

Lexington Quarry was established within a canyon. The east and west hillsides both drain into the valley where the quarry floor lies. The stormwater drainage from the quarry floor is directed into V-ditches that run along both sides of the crowned main haul road. The V-ditches connect directly to two (2) separate series of sediment basins, the East Basins and the West Basins.

#### *Stormwater Runoff from East Slopes*

The stormwater runoff from the east slopes and the quarry floor drain downhill through two (2) separate V-ditches which converge about 400 feet north of the office building, as shown in Figure 3. From the base of the east slopes, the V-ditch runs along the east side of the haul road before emptying into the upper cell of the East Basins. The East Basins are composed of three separate cells, each with a standpipe at the southern end. When the water level reaches the height of the standpipe in the upper and middle cells, water is released into a culvert that empties into the next cell. Remaining runoff from the lower section of the haul road is carried through a V-ditch and also drains into the lower cell of the East Basins. The lower cell has a culvert at its southern end which serves as Stormwater Outfall I. When the lower cell becomes full, water flows through the outfall, onto a riprap energy dissipater, and into the lower portion of an unnamed tributary of Limekiln Creek.

During the rainy season and/or severe storm events, a berm is constructed across the haul road (see insert on Figure 3) to divert stormwater from the V-ditches associated with the East Basin system into the West Basins. The West Basins have a larger capacity and are therefore more equipped to handle high volume runoff associated with severe storm events.

*Stormwater Runoff from the West Slopes*

The stormwater runoff from the north end of the west slopes drains into an Evaporation Basin positioned at the base of the slopes, just north of the material stockpiles. This Evaporation Basin holds the capacity of the stormwater runoff generated by the slopes and does not discharge.

The stormwater runoff from the remainder of the west slopes and the quarry floor drain downhill through a series of V-ditches and into the upper cell of the West Basins. The West Basins are composed of three separate cells, each with a standpipe at the southern end. When the water level reaches the height of the standpipe in the upper and middle cells, water is released into a culvert that empties into the next cell. The lower cell has a standpipe at the southern end which serves as Stormwater Outfall II. When the lower cell becomes full, water flows through the outfall, onto a riprap energy dissipater and into Limekiln Creek.

***Wastewater System***

The processing plant has a controlled wastewater system (Figure 4). The water in the Eastside Process Basin is supplied from water storage tanks that are filled from on-site wells. The freshwater is pumped from the Eastside Process Basin and into the processing plant. The freshwater cycles through the plant and empties into the thickening tank. Within the thickening tank, flocculent is added to the wastewater which helps sediment settle to the bottom of the tank. The wastewater is pumped back into the Eastside Process Basin and the cycle is repeated. The coagulated sediments are removed from the tank and stockpiled. Runoff from adjacent stockpiles and from around the plant area are directed to the process water basin next to the thickening tank. Water from the process water basin is also cycled through the processing plant, emptied into the thickener tank, and then transferred into the Eastside Process Basin. The amount of water in the Eastside Process Basin is controlled by adjusting the amount of water that is pumped into the basin from the water storage tanks. Under this wastewater system the process water is kept separate from the stormwater system.

***Potential Pollutants in Stormwater Discharge***

Potential pollutants in stormwater discharged from this facility may include materials associated with equipment repair and maintenance, such as; petroleum hydrocarbons, anti-freeze, oil, grease, and lubricants. Sediment from stockpiles, benches, excavated slopes, and unpaved roads are also a source of potential pollutants in the stormwater discharge. This plan discusses proper implementation measures to help mitigate and greatly reduce, if not eliminate, the amount of potential pollutants in stormwater runoff that reaches the stormwater outfalls.

***Dust and Particulate Generating Activities***

Some industrial activities generate dust or particulates. Airborne particulates are regulated by the Bay Area Air Quality Management District (BAAQMD). Material handling equipment (i.e. conveyors, crushers, screens, bins, and mobile equipment) may be sources of fugitive dust. In general, the particulates which may be deposited within the facility boundary are included in the "Potential Pollutants in Stormwater Discharge" section.

The quantity of dust and particulate that may settle within the facility is highly dependent upon the type of emission control devices on the equipment, production levels and ambient conditions. Approximations of dust and particulate matter quantities may be obtained through BAAQMD.

### *History of Significant Spills since April 17, 1994*

Since April 17th, 1994, there have been no significant spills or leaks of toxic or hazardous pollutants (including chemicals) that have been reported on the United States Environmental Protection Agency Form R (40 CFR 372), nor have there been any spills or leaks of oil or substances in excess of reportable quantities (40 CFR 110, 112, 117, or 302).

## SECTION 4. NON-STORMWATER DISCHARGES

### *Identification of non-stormwater discharge*

Dry weather observations were made to identify potential non-stormwater discharges. The visual observation did identify natural non-stormwater discharges (e.g. seeps and springs).

### *Certification of Compliance Schedule for Permit*

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

## SECTION 5. SEDIMENT AND EROSION CONTROL PRACTICES

The following Sedimentation and Erosion Control Measures have been implemented at the Lexington Quarry:

*Diversion of Stormwater Upstream/Upland from the Facility*

Stormwater from offsite is diverted underneath the facility in culverts or bypass pipes to minimize the volume of water that may cause erosion onsite and to reduce the amount of stormwater exposed to this industrial activity.

- An unnamed tributary to Limekiln Creek is diverted, via culvert for a short distance and flows into the Northeast Basin. From the Northeast Basin, water enters the bypass pipes at Intake A and discharges at Outfall A (Figure 2).

*Protection of Discharge Points*

Stormwater discharge points are constructed with energy dissipating devices such as rip-rap or other concrete structures.

- Outfall A is significantly secured with rip-rap in order to disperse the energy generated by the velocity of the water.
- Stormwater Outfalls I and II both discharge onto rip-rap to disperse the energy generated by the velocity of the water.
- The bypass pipes that run under the quarry floor, as well as culverts that are used on the site to direct stormwater into different cells of sediment basins, are sized to accommodate 100 year storms and are aligned to minimize abrupt changes in direction.

*Culvert/Bypass Pipe Design*

The bypass pipes that run under the quarry floor, as well as culverts that are used onsite to direct stormwater into different cells of sediment basins, are sized to accommodate 100-year storms and are aligned to minimize abrupt changes in direction in the flow path.

*Stabilization of Moderate and Steep Slopes*

Slopes greater than thirty percent (30%) are stabilized by hydroseeding and revegetation.

- Intervening slopes between benches to the east and west of the quarry floor have been hydroseeded and revegetated to reduce erosion.
- Areas surrounding sediment basins as well as inactive slopes have been hydroseeded to control the amount of sediment transferred to the basins.
- Earthen berms, coir wattles, and back sloping benches direct stormwater runoff into V-ditches along back of the bench and away from cut slopes.

*Grade Road to Inside Bank*

Roads cut on the hillsides are graded to drain towards the inside bank so runoff from the road surface will not flow directly downhill and erode the surface of the road.

- The haul road is crowned so that stormwater drains to either side of the road into V-ditches, thus preventing sheet drainage down the road.
- Benches are designed and constructed to be back sloped to direct stormwater runoff into V-ditches along back of the bench and away from cut slopes.

*Stormwater Detention (delayed surface discharge)*

Approximately 100% of the stormwater run-off from the facility is directed into one or more retention/sediment basins to allow sediment to settle prior to discharge.

- There are six (6) sediment basins (three (3) cells of East Basins and three (3) cells of West Basins) and one (1) retention basin (Evaporation Basin) which detain the site's stormwater runoff.
- The six (6) sediment basins are designed to detain the stormwater for a significant period of time to allow sediment to settle out of the stormwater prior to discharge.

*Filtration/Settling of Sediment in Drainage Ways*

Sediment basins are strategically placed in order to retain stormwater and allow sediments to settle prior to discharge.

*Maintaining Unpaved Roads*

Unpaved roads are routinely graded to prevent erosion of the road surface.

## SECTION 6. LIST OF SIGNIFICANT MATERIALS

This section identifies significant materials stored at the facility that may potentially contaminate stormwater. Figure 5 shows the location of the processing areas and the materials storage. In addition, the facility has a Hazardous Materials Business Plan that provides detailed information on potential contaminants.

| SIGNIFICANT MATERIAL | LOCATION* WHERE THE MATERIALS ARE STORED, HANDLED, RECEIVED, OR SHIPPED | SIGNIFICANT QUANTITIES REGULARLY PRESENT AT FACILITY |
|---|---|---|
| Rock, Sand, Silt, and/or Clay | Stockpiled throughout Facility | |
| Diesel | Area I | 5,000 gallons |
| Crankcase Oil | Area I | 570 gallons |
| Gear Lubricant | Area I and II | 30 gallons |
| Acetylene (for Welding) | Area I and II | 250 cubic feet |
| Oxygen | Area I and II | 475 cubic feet |
| Waste Oil | Area I | 200 gallons |
| Used Oil Filters | Area I | 25 units |
| Flocculent (wet/dry) | Area II | 125 gallons/2,000lbs |
| Gasoline | Area I and II | 10 gallons |

*Area referenced can be found in Figure 5

# SECTION 7. POTENTIAL SOURCES AND TYPE OF STORMWATER POLLUTION

## *Area I. Maintenance and Storage Area*

Narrative and Assessment

Area I, the maintenance and storage area (Figure 5), is where equipment and vehicles are serviced and maintained. This area includes the fuel containment center, drum shed and oil shed where most of the potential pollutants are stored. These buildings are enclosed and not subject to direct contact with rainfall or stormwater. The fuel containment center was built to function as a secondary containment system capable of containing the volume of all of the stored materials within the structure. The oil shed containing tanks of oil and grease has a recessed concrete floor. The drum shed is used to store empty containers awaiting removal by the supplier. The contents in both sheds are protected from the elements. North of the fueling containment center is the "Boneyard" which is used to store retired equipment or equipment awaiting repair.

The warehouse and maintenance shop are used to service vehicles and store the oxygen and acetylene tanks as well as other miscellaneous products in small quantities.

The potential pollutants from this area include diesel, gasoline, anti-freeze, lubricants and used oil. Since the structures are enclosed and protected from the elements, and all have secondary containment, it is unlikely that potential pollutants from this area could contaminate any stormwater.

Stormwater runoff from Area I is collected in a V-ditch on the west side of the haul road. The V-Ditch follows the haul road past Area II and eventually empties into the upper cell of the West Basins. The West Basins are designed to detain water for a long enough period of time to allow sediment to settle before discharging through Stormwater Outfall II.

Best Management Practices

Best Management Practices identified in Section 8 (Potential Sources of Pollution and Associated Best Management Practices) to address potential pollutants and sources in Area I include: F. Vehicle Equipment Maintenance, G. Air Compressors, J. Lubricant Storage, K. Above Ground Fueling Tanks, L. Hazardous Materials, M. Hazardous Material Waste Storage, O. Unpaved Vehicle Parking, P. Boneyard and R. Vehicle Parking.

## *Area II. Processing Plant and Stockpiles*

Narrative and Assessment

Area II is where the processing plant and aggregate stockpiles are located. Stockpiles vary in size and heavy equipment is moved through this area frequently.

Potential pollutants from this area include dust, soil, gasoline, hydraulic fluid and grease from equipment, rock, sand, soil, and transportation impacts from trucks and other heavy equipment. The equipment and the stockpiles are exposed to the elements.

Stormwater runoff from Area II is directed to two separate locations. Runoff from the stockpiles in this area is directed to the south towards the process water basin that is part of the waste water system. The water collected in the process water basin is recycled and used in the processing plant.

Some stormwater generated from this area drains to the south in a V-ditch along the east side of the haul road. The V-ditch empties into the upper cell of the East Basins. The East Basins are designed to detain water for a long enough period of time to allow sediment to settle before discharging through Stormwater Outfall I.

During the rainy season and/or severe storm events, a berm is constructed across the haul road (see insert on Figure 3) to divert stormwater from the V-ditch on the east side of the haul road into the West Basins. The West Basins have a larger capacity and therefore are more equipped to handle the large volumes of runoff associated with severe storm events.

Best Management Practices

Best Management Practices identified in Section 8 (Potential Sources of Pollution and Associated Best Management Practices) to address potential pollutants and sources in Area II are: A. Aggregate Stockpiles, B. Aggregate Processing Area, and E. Aggregate Handling and L. Hazardous Material Storage.

### *Area III. Office Building and Scale House*

Narrative and Assessment

Area III includes the office/scale house area and the main parking area for visitors. There are two buildings in this area surrounded by impervious surfaces. The office building has a small paved parking area to the west, below the truck scale.

Potential pollutants from this area include dust, soil, oil and anti-freeze from vehicles, and transportation impacts. Structures have proper gutter and downspout systems to direct the stormwater to appropriate areas.

The stormwater runoff from this area is directed to the lower cell of the West Basins.

Best Management Practices

Best Management Practices identified in Section 8 (Potential Sources of Pollution and Associated Best Management Practices) to address potential pollutants and sources in Area III are; N. Municipal Dumpster, Q. Stormwater Basins, and R. Paved Vehicle Parking.

## SECTION 8. POTENTIAL SOURCES OF POLLUTION AND ASSOCIATED BMPS

| Location Identifier | Source | Potential Pollutants | Implemented Best Management Practices | Expected BMP Effectiveness |
|---|---|---|---|---|
| **A** | Aggregate Stockpiles | Sediment | Run-off treated in silt retention basin or device | Remove sediment from runoff |
| | | | Stockpiles places on slightly sloped ground to facilitate collection and treatment of run-off drainage | Provide proper drainage |
| | | | Drainage features constructed to facilitate collection and treatment of drainage | Provide proper drainage and treatment for stormwater to make as free of pollutants as possible |
| | | | Run-off directed into numerous sediment basins | Capture as much runoff as possible |
| **B** | Aggregate Processing Area | Sediment | Reduce spillage | Ensure separation of process water from stormwater |
| | | | Run-off directed into numerous sediment basins | Remove sediment from runoff |
| | | | Drainage features constructed to facilitate collection and treatment of drainage | Provide proper drainage and treatment for stormwater to make as free of pollutants as possible |
| | | | Excess lubrication leaked from bearings is regularly cleaned up | Help control the amount of pollutants that could potential contaminate stormwater |
| **D** | Hillside Mining | Sediment | Minimize disturbed areas and maintain natural ground cover when practical | Control erosion and airborne dust particulate |
| | | | Consider seasonal impact on mining areas and restrict activities during inclement weather | Control impacts that could be severe sensitive during wet weather |
| | | | Run-off directed into numerous sediment basins | Remove sediment from runoff |
| | | | Drainage features constructed to facilitate collection and treatment of drainage | Provide proper drainage and treatment for stormwater to make as free of pollutants as possible |
| | | | Employ fugitive emission air quality controls | Reduce emissions and stay current with standards |
| **E** | Aggregate Handling | Sediment | Conform to air quality permit | Reduce emissions and stay current with standards |
| | | | Minimize handling of materials | Reduce the potential impacts from unnecessary handling of materials |

| Location Identifier | Source | Potential Pollutants | Implemented Best Management Practices | Expected BMP Effectiveness |
|---|---|---|---|---|
| **F** | Vehicle/equipment maintenance | Petroleum Hydrocarbons, Anti-Freeze, Oil & Grease | Vehicle/equipment maintenance performed only in one designated area | Reduce the potential impacts from unnecessary storage of materials |
| | | | Vehicle/equipment maintenance performed inside garage or building | Prevent spillage of material outdoors |
| | | | Outdoor maintenance area paved | Keep materials from contact with stormwater and ease of clean up of spills |
| | | | Clearly labeled drums and containers placed in convenient locations | Facilitate proper cleanup of spills |
| | | | Waste receptacles monitored and arrangements for pickups made promptly | Eliminate contact with stormwater |
| | | | Waste oil and filters are recycled | Eliminate contact with stormwater |
| | | | Procedures established to ensure draining of engine fluids and transfering to waste containers without spillage | Eliminate spillage of material |
| | | | Drip pans placed under vehicles/equipment when draining fluids or leaks suspected | Facilitate proper cleanup of spills |
| | | | Area equipped with dry spill cleanup equipment & covered standby drums | Facilitate proper cleanup of spills |
| | | | Employees instructed on proper cleanup procedures for minor spills | Facilitate proper cleanup of spills |
| **G** | Air Compressors | Petroleum hydrocarbons | Drip pan under compressors | Reduce the potential impacts from unnecessary storage of materials |
| | | | Seals regularly inspected and maintained | Prevent spillage of material |
| | | | One compressor is kept indoors and one compressor is kept outdoors | |

| Location Identifier | Source | Potential Pollutants | Implemented Best Management Practices | Expected BMP Effectiveness |
|---|---|---|---|---|
| J | Lubricant Storage | Petroleum Hydrocarbons | All lubricant container clearly labeled | Promote awareness |
| | | | All lubricant materials containers closed | Keep materials from contact with stormwater |
| | | | Lubricant materials stored in designated areas only | Keep material in controlled area, and out of contact with stormwater |
| | | | Lubricant material storage areas secured to prevent unauthorized access | Keep materials from contact with stormwater and keeps materials contained |
| | | | Lubricant material storage maintained in accordance with applicable Federal, State and local regulations and codes | Keep material in controlled area, and out of contact with stormwater |
| | | | Inspections of condition of containers and area inspected regularly | Keep materials from contact with stormwater |
| | | | Leaking or deteriorated containers placed in new containers | Keep materials from contact with stormwater |
| | | | Signs posted to identify storage areas | Promote awareness |
| | | | Lubricant material kept indoors and undercover | Keep materials from contact with stormwater and keeps materials contained |
| | | | Materials safety data sheets kept at the facility for all hazardous materials | Promote Awareness. Minimize contact with stormwater |
| | | | Lubricant materials inventory minimized where practical | Reduce the potential impacts from unnecessary storage of materials |
| | | | Stored in a covered structure with secondary containment to prevent rain contact | Reduce the potential impacts from unnecessary storage of materials |
| | | | Sign posted to instruct employees that all hazardous materials spills must be cleaned up promptly; specify procedures for cleanup, and require notification of supervisor | Promote awareness |
| | | | Spill cleanup equipment clearly labels and stored where accessible | Facilitate cleanup of spills |
| | | | Proper security measures implemented to prevent vandalism | Eliminate spillage during vandalism |

| Location Identifier | Source | Potential Pollutants | Implemented Best Management Practices | Expected BMP Effectiveness |
|---|---|---|---|---|
| K | Above ground storage tanks and fueling area | Petroleum hydrocarbons | Tank has secondary containment to prevent release of fuel even with total tank failure | Facilitate cleanup of spilled materials |
| | | | Sign posted to instruct employees that all fuel spills must be cleaned up promptly, specify procedures for cleanup, and require notification of supervisor | Facilitate cleanup of spills |
| | | | Sign posted to instruct employees to not leave filling hose unattended during fueling | Preventing spills |
| | | | Nozzle of fueling hose should have auto shut-off mechanism | Preventing spills |
| | | | Spill cleanup equipment clearly labeled and stored near fuel pumps in the main shop area | Facilitate cleanup of spills |
| | | | Proper security measures implemented to prevent spills due to vandalism | Eliminate spillage in the event of vandalism |
| L | Hazardous Materials storage area (examples: lubricant, oil, flocculants) | Petroleum hydrocarbons, heavy materials and flocculants | All hazardous material containers clearly labeled | Promote awareness |
| | | | All hazardous materials containers closed | Keep material from contact with stormwater |
| | | | Hazardous materials stored in designated areas only | Keep material in controlled area |
| | | | Hazardous material storage areas secured to prevent unauthorized access | Keep material in controlled area |
| | | | Hazardous material storage maintained in accordance with Federal, State, and local regulations and codes | Keep material under control and out of contact with stormwater |
| | | | Container conditions are routinely inspected and resolved | Keep material under control |
| | | | Leaking or deteriorated containers placed in new containers | Keep material under control and out of contact with stormwater |
| | | | Signs posted to identify storage areas | Promote awareness |
| | | | The majority of hazardous materials kept indoors or undercover | Keep material under control and out of contact with stormwater |
| | | | Material safety data sheets kept at facility for all hazardous materials | Promote awareness |
| | | | Hazardous materials inventory minimized where practical | Reduce the potential impacts from unnecessary storage of materials |
| | | | Sign posted to instruct employees that all hazardous material spills must be cleaned up promptly, specify procedures for cleanup, and require notification of supervisor | Promote awareness |

| Location Identifier | Source | Potential Pollutants | Implemented Best Management Practices | Expected BMP Effectiveness |
|---|---|---|---|---|
| **L (cont.)** | Hazardous Materials storage area (examples: lubricant, oil, flocculants) | Petroleum hydrocarbons, heavy materials and flocculants | Spill cleanup equipment clearly labeled and stored where accessible | Facilitate cleanup of spills |
| | | | Proper security measures implemented to prevent spills due to vandalism | Eliminate spillage in the event of vandalism |
| | | | All hazardous materials are stored in secondary containers | Keep material under control and out of contact with stormwater |
| **M** | Hazardous Materials waste storage (used oil filters and used absorbents) | Petroleum hydrocarbons, Solvents, Acids | All hazardous waster containers clearly labeled | Promote awareness |
| | | | All hazardous waste containers closed | Keep materials from contact with stormwater |
| | | | Hazardous waste stored in designated areas only | Keep material in controlled area |
| | | | Hazardous waste storage secured to prevent unauthorized access | Keep material in controlled area |
| | | | Hazardous waste storage maintained in accordance with applicable Federal, State, and local regulations and codes | Keep material under control and out of contact with stormwater |
| | | | Inspections of condition of containers and area inspected regularly | Keep material under control |
| | | | Leaking or deteriorated containers placed in new containers | Keep materials from contact with stormwater |
| | | | Remove and dispose of properly all hazardous wastes in accordance with applicable regulations | Keep materials from contact with stormwater |
| | | | Signs posted to identify storage areas | Promote awareness. Keep material under control |
| | | | Hazardous waste kept indoors | Keep material out of contact with stormwater or keeps material contained |
| | | | Waste oil tank placed in secondary containment to prevent release of fuel even with total tank failure | Facilitate cleanup of spillage. Eliminate contact with stormwater |
| | | | Secondary containment and storage tank stored inside building to present rain contact | Keep material under control and out of contact with stormwater |
| | | | Sign posted to instruct employees that all waste material spills must be cleaned up promptly, specify procedures for cleanup, and require notification of supervisor | Promote awareness and facilitate the cleanup of spills |
| | | | Spill cleanup equipment clearly labeled and stored where accessible | Facilitate cleanup of spills |
| | | | Proper security measures implemented to prevent spills due to vandalism | Eliminate spills in the event of vandalism |
| | | | Used oil filers are drained and stored in approved UN container | Eliminate contact with stormwater |

| Location Identifier | Source | Potential Pollutants | Implemented Best Management Practices | Expected BMP Effectiveness |
|---|---|---|---|---|
| **N** | Municipal garbage dumpster | biodegradable organic materials (e.g. BOD, COD) N, (N+N) | Dumpster with lid used to keep out rain water and prevent debris from blowing away | Eliminate contact with stormwater |
| | | | Water tight dumpster used to keep free liquids in garbage contained | Eliminate contact with stormwater |
| | | | Dumpster located away from storm drain inlet or other stormwater conveyance feature | Eliminate contact with stormwater |
| **O** | Unpaved vehicle / equipment parking or outside storage areas | Petroleum Hydrocarbons, Oil, Grease, Anti-freeze, Sediment | Vehicles/equipment regularly inspected and serviced | Eliminate collection of contaminants |
| | | | Run-off collected and passed through holding sediment basins | Allow for the most settlement of contaminate prior to release |
| | | | Leaks from vehicles/equipment promptly repaired once discovered | Eliminate leakage of contaminants |
| | | | Drip pans used temporarily to collect leakage until repaired | Facilitate cleanup of leakage material |
| **P** | Boneyard/ Surplus equipment storage | Petroleum Hydrocarbons, Oil and Grease, Anti-freeze, Metals, Sediment | Equipment regularly inspected | Eliminate spill material from having contact with runoff |
| | | | Area is primarily used for non-motorized equipment | Eliminating potential for leakage from equipment |
| | | | Equipment is kept away from creek buffer | Eliminate potential for runoff to become contaminated and flow into creek buffer |
| **Q** | Stormwater collection and on site containment | Sediment, Petroleum hydrocarbons Metals pH | Impede flow velocity to drop out sediments | Allow for sediment to settle out of stormwater |
| | | | Raise spillover points at drainage inlets to promote drop out of sediments, after drying collect and recycle sediment | Allow for the most settlement of contaminate prior to release |
| | | | Water Truck | Help control amount of airborne dust particles |
| **R** | Paved vehicle parking | Petroleum, Hydrocarbons, Oil, Grease, Anti-freeze, Sediment | Quarry vehicles regularly inspected and serviced | Eliminate collection of contaminants |
| | | | Leaks from quarry vehicles promptly repaired once discovered | Eliminate leakage of contaminants |

## SECTION 9. FACILITY-WIDE BEST MANAGEMENT PRACTICES

Facility-wide BMPs are those practices that are not pollutant source specific, and that assist in preventing and/or minimizing pollutants in stormwater runoff. The facility-wide BMPs that have been or are planned to be implemented at Lexington Quarry will be implemented prior to the rainy season.

***Employee Education*** All employees are instructed in the Stormwater Pollution Prevention Plan and their individual responsibilities in preventing the discharge of pollutants to stormwater.

# SECTION 10. PREVENTATIVE MAINTENANCE ACTIVITIES AND GOOD HOUSEKEEPING PRACTICES

### *Preventative Maintenance Activities*

Preventative maintenance at this facility is performed to prevent leaks and other accidental releases from equipment and storage containers and to maximize the removal of pollutants by BMPs. Examples of preventative maintenance tasks performed at this facility include:

- Check seals on all equipment containing petroleum hydrocarbons or other pollutants, and replace as necessary.
- Check seals on all containers holding petroleum hydrocarbons, chemicals, or other potential pollutants and replace as necessary.
- Check seals on gasoline and diesel fueling nozzles, and replace as necessary.
- Check accuracy of gauges that indicate liquid levels in storage tanks.
- Clear drainage channels of debris and accumulated sediments, if any, before rainy season and after heavy rain.
- Periodically remove sediment from all sediment basins to retain capacity.
- Repair and improve erosion control measures before the beginning of each rainy season.

### *Good Housekeeping Practices*

Good housekeeping practices are measures that maintain a clean and orderly working environment. These measures include immediately cleaning up spilled materials, regularly sweeping paved areas or using vacuum trucks, and depositing waste in designated receptacles. Employees are responsible for maintaining their work areas. Supervisors are responsible for ensuring that work areas are orderly.

## SECTION 11. SPILL PREVENTION AND RESPONSE

Materials stored and used at the facility could cause significant water quality impacts if accidentally released. Spilled materials could enter the stormwater drainage system and possibly be discharged to surface water. Spills could also cause soil and groundwater contamination. Measures have been implemented to minimize the possibility of spills. In addition, spill response procedures have been established for this facility. Above ground storage tanks (ASTs) containing hydrocarbons generally require secondary containment. The spill prevention and response measures implemented by this facility are indicated below.

- A Spill Prevention Control and Countermeasure Plan has been developed and implemented in conformance with Title 40, Code of Federal Regulations, Part 112.

- Petroleum storage and prevention of releases may also fall under the California Above Ground Petroleum Storage Act as amended through 1995 or later, based upon the facility being subject to 40 CFR 112. Petroleum ASTs are registered with the State, and Annual AST reports are filed.

- The size criteria for inclusion of a facility with ASTs containing oil products under 40 CFR 112 is:
    - If any tank's capacity is greater that 660 gallons, or
    - The total capacity of ASTs exceed 1,329 gallons,
    - If underground storage exceeds 40,000 gallons.

- Registration and fee payment under the California Above Ground Storage Act as amended through 1995 applies to any AST if the capacity is greater than 660 gallons. A fee is due the SWRCB for registering each AST exceeding 10,000 gallons.

### Spill Prevention and Response Measures

*Hazardous Materials Business Plan*

A Hazardous Materials Business Plan pursuant to Chapter 6.95 of the California Health and Safety Code has been prepared for this facility. The plan contains a hazardous materials inventory and emergency response procedures.

*Spill Prevention Control and Countermeasure Plan*

A Spill Prevention Control and Countermeasure Plan, pursuant to Section 311 of the Federal Clean Water Act, has been prepared for this facility. The plan specifies appropriate containment for ASTs and effective spill prevention procedures.

*Secondary Containment*

ASTs, other containers of products or waste and piping to dispensers all have secondary containment. Spilled material in the containments is promptly cleaned up and disposed of properly.

*Employee Training*

Employees who work with chemical and petroleum materials are trained in the proper use, handling, storage, and disposal practices. Employees are also trained in proper spill response procedures.

*Spill Containment and Cleanup Equipment*

A supply of spill containment and cleanup equipment is kept on-site for prompt responses. Available equipment includes; personal protective equipment, absorbent materials, containment booms, and empty approved 55-gallon drums.

*Regular Inspection of Hazardous Materials and Waste Storage Areas*

Employees who regularly work with chemical and petroleum products and waste are instructed to inspect storage areas regularly and to initiate corrective measures, if needed.

*Proper Location of Hazardous Materials Storage Locations Away from Storm Drain Inlets and Drainage Ways*

Chemical and petroleum material storage areas are located away from stormwater drainage ways to minimize the possibility that spills would be discharged into the storm drainage system.

*Notification Procedure in Case of Spill Emergency*

Employees are instructed to immediately notify the plant superintendent, as soon as practical, of any spills. The plant superintendent will notify agencies listed in the emergency response plan, as required.

*List of Contractors Compiled to Assist in Spill Response*

A list of names and phone numbers of the nearest emergency response contractors have been compiled and are available in the facility office. The plant superintendent is authorized to retain the services of contractors to contain and cleanup spills.

*Material Safety Data Sheets (MSDS)*

MSDSs of the hazardous materials present at the facility are kept on-site and are kept current.

# SECTION 12. EMPLOYEE TRAINING AND INSPECTIONS

## *Employee Training*

Section A.8.v. of the General Permit requires that the Stormwater Pollution Prevention Plan (SWPPP) include training of personnel who are responsible for implementing activities identified in the SWPPP, conducting inspections, sampling/visual observations and managing stormwater. This section details the spill response, good housekeeping, material handling procedures and actions necessary to implement all BMPs identified in the SWPPP.

Awareness and knowledge of stormwater pollution is a key element of the SWPPP. All employees working in the active quarry area receive stormwater training. The Plant Superintendent will review the SWPPP annually and report any changes to LSA Associates, Inc. for needed updates. All training will be documented with a sign-in sheet, and a refresher course will be given annually.

The training includes:

- Review of the updated SWPPP;
- All new and existing personnel working in the active quarry area view a stormwater training video tape/DVD called, "Ground Water Stormwater Guidelines for the Construction Industry".

### *Spill Prevention and Response*

The spill prevention and response training for quarry staff shall include training on:

- Inspecting storage areas to ensure that hazardous materials containers are in good condition;
- Looking for stains and drips from equipment, sheen on puddles or oil-stained soil, and how to locate the source of such contamination and to take corrective action;
- Transferring contents of leaky containers to new containers or packing them safely in larger containers (checking the MSDS for materials compatibility);
- Maintaining supplies of absorbent materials, neutralizing agents, drums or trash cans, brooms, and shovels where significant amounts of materials are used and in the hazardous materials storage areas and fueling areas; and
- Never washing down a spill with water.

### *Good Housekeeping and Preventative Maintenance*

The employee training program is intended to increase employee awareness of how their daily work activities and work areas contribute pollutants to stormwater discharges, and to suggest ways that their work habits could be modified to reduce the amount of pollutants that are eventually washed away in stormwater. Employee training on good housekeeping and preventative maintenance shall include:

- Inspecting maintenance and repair areas for proper storage of materials;
- Inspecting all sediment basins and drainage systems to see if they are filled or clogged and are functioning properly;
- Cleaning out sediment basins and removing sediment to maintain maximum capacity;
- Inspecting and maintaining all drainage channels to prevent blockages and assure that they are working properly; and
- Maintaining vehicles and equipment regularly to prevent leaks.

*Materials Handling Procedures*

The employee training for materials handling procedures shall include:

- Checking all fuel pumps and dispensing systems for leaks;
- Always staying next to the fueling station when fueling equipment or vehicles;
- Only allowing properly trained staff to handle hazardous materials; and
- Making sure that containers are compatible with the items stored.

## *Inspections*

Inspections are performed to ensure that Best Management Practices are being implemented and to identify conditions that may allow pollutants to be discharged with stormwater. These inspection records are maintained in the office located at the quarry. The inspections that will be performed are listed below:

*Annual SWPPP Review (Annually in June)*

All aspects of the SWPPP will be reviewed for accuracy, and revised as necessary. The annual inspection of the quarry is to determine if the SWPPP is being properly implemented. The inspection will coincide with preparation of the annual report and supports the Annual Comprehensive Site Compliance Evaluation. In addition, if there are substantial changes to the site prior to the annual inspection those changes shall be reflected in the SWPPP immediately and updated accordingly, with a revised copy mailed to the Regional Water Quality Control Board and Santa Clara County.

*Routine Inspection* (*Quarterly)*

The entire facility will be visually inspected on a scheduled basis to determine the effectiveness of SWPPP implementation and to ensure BMPs are working properly. All hazardous materials and waste areas, parking and equipment storage areas, aggregate storage and processing areas, and other areas containing the pollutant sources will be inspected. The inspection will include an assessment of whether good housekeeping practices and preventative maintenance activities are being performed. Corrective actions will be implemented if deficiencies are identified.

*After Storm Events*

Quarry staff shall inspect erosion control BMPs following significant storm events. Erosion controls shall be inspected and conditions noted wherever material is stored outside, at the non-paved areas, and at the discharge points. As a preventative measure, quarry staff will also conduct facility inspections prior to anticipated storm events to identify areas that may need attention or additional corrective actions prior to the storm.

*Turbidity Monitoring* (*Four (4) rain fall events when discharging, years 2010 – 2012)*

Turbidity monitoring shall be conducted in Limekiln Creek, the tributary creek, and downstream of sediment basin discharge points during the time that the quarry is actively operating. The baseline sampling location for turbidity measurements shall be upstream of any areas of disturbance, such a landslide or rockfall above the creek, associated with quarry activities.

Measured turbidity of Limekiln Creek downstream of the last discharge point from the quarry shall not be greater than 10 percent in areas where the natural turbidity is greater than 50 Nephelometric Turbidity Units (NTU) and not greater than 5 percent in areas where the natural turbidity is less than 50 NTU.

For the first three (3) years of the Use Permit (August 2010 – August 2012), sampling will be conducted during four (4) rainfall events per year. Sampling will include, at a minimum, sampling at Sample Point 1 and Sample Point 3 (Figure 6). If the measured increase in turbidity at Sample Point 3 when compared to Sample Point 1 exceeds the standard in the Basin Plan, the Planning Office shall be contacted and sampling will immediately be completed at all of the sampling points to identify the source of additional turbidity. Sampling will be undertaken during the first storm event of the season when one or more of the basins is discharging and three additional times during the rainy season during or immediately following rainfall events when one or more of the basins is discharging. After three years, if sampling has not exceeded the standard in the Basin Plan, sampling frequency may be reduced to the first storm event and one additional storm event during which there is discharge from one or more stilling basins.

*Non-stormwater discharge visual observation* (*Quarterly)*

All stormwater discharge points and drainage ditches will be visually inspected for evidence of dry weather discharge. If discharge is found, the source(s) and corrective measures will be identified, as appropriate. The dry-weather inspection may be performed at the same time as the routine inspection.

*Wet weather Discharge Visual Observation* (*Once a Month, Oct-May)*

During the months from October to May, quarry staff will also conduct monthly stormwater discharge inspections. The detention basins as well as stormwater discharge points and drainage ditches will be visually inspected for evidence of pollutant discharge. If discharge is found, the source(s) and corrective measures will be identified, as appropriate. The wet-weather inspection may be performed at the same time as the routine inspection.

*Erosion Control Inspection* (*Each Significant Rain Storm)*

Erosion potential of slopes, drainage channels, and unpaved areas at the facility should be assessed. Repairs and maintenance should be completed and additional erosion control measures should be implemented prior to the rainy season. Corrective actions should be implemented if deficiencies are identified.

*pH Field (Water Samples, Oct-May)*

Only required of rock crushing, and sand and gravel facilities as they are a Subchapter N facility with Federal effluent limitation. Measure pH in field, acceptable range is between 6.5 to 8.5.

*Stormwater Runoff Volume* (*Water Samples, Oct-May)*

Only required of rock crushing, sand and gravel or asphaltic concrete facilities as they are a Subchapter N facility with Federal effluent limitation guidelines. Estimate runoff volume.

*Stormwater Sampling and Analysis (1st storm after Oct.1 with discharge and 2nd between Oct – May)*

These inspections include noting if stormwater is discharging from the site;

- The color or turbidity of the discharge.
- If the discharge has a sheen, did the discharge contain debris?
- Measuring estimated flow rate.

Water sampling kit to be obtained from Sequoia Analytical Laboratories. Water sample analyzed for pH; Total Suspended Solids (TSS); Total Organic Carbons (TOC); and Specific Conductivity (EC).

The Plant Superintendent is responsible for supervising containment and cleanup activities in the processing area of the quarry. The Superintendent is also responsible for overseeing containment and cleanup activities in and around the shop, maintenance and fueling areas. However, the Superintendent will assign properly-trained personnel to contain and cleanup any release. In the unlikely event that discharged material reaches State waters, or if there is a possibility that stormwater could convey discharged material to State waters, the Plant Superintendent shall immediately notify the following agencies:

Central Coast Regional Water Quality Control Board: 805-549-3147

California Department of Fish and Game: 707-944-5500

Santa Clara County Environmental Health Department: 408-918-3400

# MONTHLY INSPECTION FORMS

## ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION

To be filled out by reviewer

Reviewer: _____ Date:_____

| SWPPP Element | Describe revisions made to SWPPP to reflect changes/differences identified at the site | Date SWPPP scheduled to be modified |
|---|---|---|
| Site Map | | |
| Pollutant Sources | | |
| Source-Specific BMP's | | |
| Facility-Wide BMP's | | |
| Sedimentation and Erosion | | |
| Spill Prevention | | |
| Inspection Procedures | | |
| Record Keeping | | |
| Employee Training | | |

To be filled out by person responsible for SWPPP implementation.
I have reviewed the above table and have supervised revisions to the SWPPP, as needed.

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

Signature: _____ Position:_____ Date:_____

## ROUTINE INSPECTION FORM

*To be filled out by inspector.*

Inspector: _____ Date: _____

| Potential Sources | | Check if inspected | Is there evidence of spills, leaks or poor housekeeping? | | Describe condition and necessary corrective measure |
|---|---|---|---|---|---|
| Areas inspected | | | Yes | No | |
| 1 | Aggregate stockpiles | | | | |
| 2 | Aggregate processing | | | | |
| 3 | Return rubble | | | | |
| 4 | Hillside mining | | | | |
| 5 | Aggregate handling | | | | |
| 6 | Plant specific (other) | | | | |
| 10 | Truck & equipment wash | | | | |
| 11 | Equipment painting areas | | | | |
| 13 | Vehicle/equipment maintenance shop | | | | |
| 14 | Air compressors | | | | |
| 16 | Used brake pads | | | | |
| 17 | Lubricant storage | | | | |
| 20 | AST fuel and fueling | | | | |
| 21 | Hazardous materials storage | | | | |
| 22 | Hazardous waste storage | | | | |
| 30 | Municipal garbage dumpster | | | | |
| 31 | Paved parking & outside storage | | | | |
| 32 | Unpaved parking & outside storage | | | | |
| 33 | Boneyard/surplus equipment storage | | | | |
| 34 | Stormwater collection | | | | |
| 40 | Off-site trackout | | | | |
| 41 | Off-site cleanout of trucks | | | | |
| | | | | | |
| | | | | | |

*To be filled out by person responsible for SWPPP implementation.*

Have identified corrective actions been implemented to correct deficiencies noted during inspection?
( ) Yes ( ) No

Date corrective actions completed: _____

Signature: _____Date: _____

## NON-STORMWATER DISCHARGE VISUAL OBSERVATION FORM*

*To be filled out by inspector.*

Date: _____

Weather: _____

Inspector(s): _____

| | | Water Being Discharged? | |
|---|---|---|---|
| Outfall No. | Outfall Location | Yes | No |
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |

Note: A supplemental form must be completed for each outfall where water is observed during dry weather.

* "Non-stormwater discharge" is runoff that is created by something other than rainfall or delayed rainfall runoff such as (this is not an all inclusive list):

a) "authorized" non-stormwater runoff:
- ground water
- spring water

b) "unauthorized" non-stormwater runoff:
- washing off building or paved areas
- vehicle washing

**SUPPLEMENTAL NON-STORMWATER DISCHARGE VISUAL FROM**

(For observed flows)

*To be filled out by inspector*

Outfall No.: _____

Outfall type: ( ) Pipe ( ) Culvert ( ) Ditch ( ) Basin ( ) Other - Specify:

| Physical Observations (Check appropriate descriptions) | |
|---|---|
| Color | ( ) clear ( ) black/gray ( ) brown ( ) green<br>( ) other – specify: |
| Clarity | ( ) clear ( ) slightly cloudy ( ) muddy<br>( ) other – specify: |
| Odor | ( ) none ( ) sewage ( ) musty ( ) petroleum ( ) chemical<br>( ) other – specify: |
| Sheen | ( ) none ( ) slight sheen ( ) significant sheen<br>( ) other – specify: |
| Floating Debris | ( ) none ( ) garbage/litter ( ) construction debris ( ) sewage<br>( ) other – specify: |
| Volume Estimate | ( ) less than 1 gpm ( ) between 1 to 5 gpm<br>( ) between 5 to 10 gpm ( ) between 10 to 50 gpm<br>( ) between 50 to 100 gpm ( ) greater than 100 gpm |

Field pH* _____

Potential Source(s) of Water: _____

*To be filled out by person responsible for SWPPP implementation:*

Date of review: _____

Actual source(s) of dry weather discharge: _____

Corrective Action Required: ( ) Yes ( ) No Revision of SWPPP Required? ( ) Yes ( ) No

Corrective Action Plan: _____

Date corrective action will be completed: _____

Date corrective action actually completed: _____

Signature: _____Date: _____

*Potential Sources of Water: delayed stormwater runoff; spring or ground water or unauthorized sources such as truck washing or washing off buildings or pavement.

## EROSION CONTROL INSPECTION FORM

*To be filled out by inspector.*

Inspector: _____

Date: _____

| Locations of Potential Erosion | Is there any evidence of erosion? | | Are Erosion Control Measures Functioning Properly? | | Describe condition and necessary corrective action. |
|---|---|---|---|---|---|
| | Yes | No | Yes | No | |
| Earthen drainage channels/ditches | | | | | |
| Detention/retention basin | | | | | |
| Stormwater discharge points | | | | | |
| Entrance/exit to culverts | | | | | |
| Interceptor ditches | | | | | |
| Unpaved areas | | | | | |
| Side slopes for raised site | | | | | |

*To be filled out by person responsible for SWPPP*

Have identified corrective actions been implemented to correct deficiencies noted during inspection?
Yes ( ) No ( )

Date corrective actions completed: _____

Signature: _____ Date: _____

## WET WEATHER VISUAL OBSERVATION FORM

(Fill out one form for one inspection day each month
between Oct 1 and May 31)

*To be filled out by inspector.*

Date: _____

Weather: _____

Inspector(s): _____Outfall No.: _____

Rainfall event information:

Time Rainfall Began: _____ ( ) AM ( ) PM

Time Rainfall Ended: _____ ( ) AM ( ) PM

Rainfall Amount: _____ inches

Previous rainfall information:

Date Last Significant Storm Ended: _____

*To be completed by person responsible for SWPPP implementation (after reviewing inspection logs)*

1. Was discharge from overflow or was basin discharged by operator? Overflow ( ) Manuel ( )

2. Was the stormwater discharged at any outfall turbid or colored? ( ) Yes ( ) No

3. Did stormwater discharged at any outfall have an order? ( ) Yes ( ) No

4. Did stormwater discharged have a sheen? ( ) Yes ( ) No

5. Did stormwater discharged contain debris? ( ) Yes ( ) No

6. If the answer to any of questions 2 through 5 is yes, is corrective action necessary? ( ) Yes ( ) No

7. What is the estimated flow rate? _____ gpm

If the answer to question 6 is yes, describe corrective action and date of completion.
If the answer is no, explain why not:

_____
_____
_____

Signature: _____ Date: _____

## STORMWATER SAMPLING FORM

*To be filled out by inspector.*

Date: _____ Number of Outfall: _____

Sampler Name: _____

Time Rainfall Began: _____ ( ) AM ( ) PM

Destination Lab: Test America Analytical Testing Corp. Lab Contact: Phone: (925) 484-1919

| Sample Shipment Date: | ( ) Overnight UPS | (Chain of Custody Number) |
|---|---|---|
| | ( ) Overnight FedEx | |
| | ( ) Laboratory Courier | |
| | ( ) Other: | |

Date of last storm: _____

( ) Basin Outfall*
( ) Ditch Outfall
( ) Pipe Outfall

Time Discharge Began: _____ ( ) AM ( ) PM

Time of Sample Collection: _____ ( ) AM ( ) PM

➔pH Measured in Field _____ pH units

If sample is not collected within 60 minutes of the beginning of discharge, provide explanation:

_____

_____

_____

_____

* If discharge from basin does not occur during a storm event, i.e. stormwater is retained for subsequent discharge, record the date of the most recent storm that produced significant stormwater discharge.

## STORMWATER DISCHARGE VOLUME FIELD FORM

Date: _____ Inspector Name(s): _____

Facility Name: Lexington Quarry

Time Rainfall Began: _____ ( ) AM ( ) PM

Rain Gauge Reading: _____ inches

Time Rainfall Ended: _____ ( ) AM ( ) PM

Date Rainfall Ended: _____

Rain Gauge Reading: _____ inches

Volume Calculation for Discharges During a Storm Event

Runoff Volume (cubic feet) =

Total rainfall (inches) x (1/12) x [Facility Paved Area (sq. ft.) x 0.9 + Facility Unpaved Area (sq. ft.) x 0.5]

= _____ x (1/12) x [ **5,000** x (0.9) + **1,960,200** x (0.5) ] = _____ Runoff Volume (cubic feet)
(*paved area)* *( unpaved area)*

Volume Calculation for Delayed Discharges From Basin

Volume Discharged (cubic feet)

= Depth Water Lowered in Basin (feet) x Surface Area of Basin(sq. ft.)

= _____ x _____ = _____ cubic feet
*(depth lowered)* *(surface area)*

Volume Discharged (cubic feet)

= Flow Rate (gallons per minute) x Duration of Discharge (minutes) x 1

N.A.

= _____ x _____ x 1 = _____ cubic feet
*(flow rate)* *(duration)*

## FIELD pH SAMPLING FORM

*To be filled out by inspector.*

Date: _____

Outfall: _____

Sampler Name: _____

Time Rainfall began: _____ ( ) AM ( ) PM

Date of last storm: _____

( ) Basin Outfall

( ) Ditch Outfall

( ) Pipe Outfall

➔pH Measured in Field: _____ pH units

## LIMEKILN CREEK TURBIDITY TESTING FORM

| Bottle Label / Color | Sample Point ID # | Sampling Station Locations | Date Sample Collected | Time Sample Collected | Approx. Depth (inches) | Replicate Sample ID | Turbidity (NTU) | Avg NTU |
|---|---|---|---|---|---|---|---|---|
| | | Downstream | | | | A | | |
| | | Downstream | | | | B | | |
| | | Downstream | | | | C | | |
| | | Upstream | | | | X | | |
| | | Upstream | | | | Y | | |
| | | Upstream | | | | Z | | |
| | | | | | | | Δ Downstream - Upstream | |

Does Turbidity Exceed Standard? ☐ YES ☐ NO

*Noted on recent/current precipitation (predicted and actual) and water levels in basins:*

_____ inches rainfall over _____ # of days

*Dates of Previous Sampling Events This Season:*

_____ / _____ / _____ _____ / _____ / _____

_____ / _____ / _____ _____ / _____ / _____

*Sampled/Recorded by:*

Signature: _____ Date: _____

## STORMWATER TRAINING

Instructor: _____ Date Given: _____

Topic Title:_____Length of Session: _____

| | Employee Signature | Employee Plant Site |
|---|---|---|
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Plant Superintendent Signature Date