

## D. INDUSTRIAL PROCESSES

Presented below are descriptions of the facility's industrial processes that have the potential for exposure to storm water or authorized non-storm water discharges.

1. Location: Clay and Sand Mines

Designation on site map: D1 (Clay), D1A (Sand)

Description of the type, characteristics, and quantity of significant materials used in or resulting from the process: Approximately 120,000 cubic yards may be mined at one time.

Description of the manufacturing, cleaning, rinsing, recycling, disposal, and/or other activities related to the process: Clay and overburden are mined from one mine. The clay is used for manufacturing bricks. The overburden is used as backfill to stabilize the mined areas. The clay and overburden that are mined are placed in stockpiles where the clay is eventually pushed by a front-end loader to the mixing area. The stockpiled overburden is eventually back filled into the mined area. Sand is mined at the site. The sand is taken to the Aggregate Wash Plant and is washed then stockpiled. The stockpiled washed sand is loaded onto trucks and taken off site.

Description of containment structures (type, material, height, etc.) and corresponding containment capacities: Storm water runoff from the mines and stockpiles drain to retention basins and excavated pits on site.

2. Location: Mixing Area

Designation on site map: D2

Description of the type, characteristics, and quantity of significant materials used in or resulting from the process: Approximately 10,000 cubic yards of clay and grog are blended together to make one batch. Approximately three batches are mixed each month.

Description of the manufacturing, cleaning, rinsing, recycling, disposal, and/or other activities related to the process: Clay is mixed with other imported materials and grog using earth moving equipment. The mixture is then placed directly into the grinding plant. Mixing is conducted outside using earth moving equipment.

Description of containment structures (type, material, height, etc.) and corresponding containment capacities: There are several small mixing areas near the brick manufacturing plant. Storm water runoff from the mixing area drains to the surrounding vegetation, dirt roads, and subsequently to earthen basins.

## D. INDUSTRIAL PROCESSES (CONTINUED)

Presented below are descriptions of the facility's industrial processes that have the potential for exposure to storm water or authorized non-storm water discharges.

3. Location: Grinding Plant

Designation on site map: D3

Description of the type, characteristics, and quantity of significant materials used in or resulting from the process: Approximately 750 cubic yards of clay mixture are ground inside the grinding plant each day.

Description of the manufacturing, cleaning, rinsing, recycling, disposal, and/or other activities related to the process: The raw clay materials are transported to the grinding plant by front end loader.

Description of containment structures (type, material, height, etc.) and corresponding containment capacities: Grinding is conducted inside a building and is protected from coming into contact with storm water. The building is equipped with a filter baghouse system to capture and control dust and particles that are generated during the grinding process.

4. Location: Aggregate Wash Plant

Designation on site map: D4

Description of the type, characteristics, and quantity of significant materials used in or resulting from the process: One Aggregate Wash Plant is operated at the facility.

The Plant receives sand mined on site as well as rock derived from off site. The sand and rock (aggregate) is screened and washed, and then stockpiled according to size for loading into trucks and shipment off site. The waste product and wash water is recycled through the system where the solids are separated from the water.

Description of the manufacturing, cleaning, rinsing, recycling, disposal, and/or other activities related to the process: The waste product and wash water is recycled through the system where the solids are separated from the water through the addition of a flocculant agent and belt filter presses. The resulting solids are stockpiled by conveyor belt to a temporary drying location. The solids are either backfilled in the mine pits, transported off site to end users, or reused on site in the brick manufacturing process.

Description of containment structures (type, material, height, etc.) and corresponding containment capacities: The Aggregate Wash Plant has two steel settling tanks for solids removal and two filter presses for further water separation.

## D. INDUSTRIAL PROCESSES (CONTINUED)

Presented below are descriptions of the facility's industrial processes that have the potential for exposure to storm water or authorized non-storm water discharges.

5. Location: Extruder, Kilns, Ovens, Tumblers, Coaters, Cutters

Designation on site map: D5

Description of the type, characteristics, and quantity of significant materials used in or resulting from the process: Brick manufacturing processed and operations (i.e., brick extruding, firing, curing, coating, tumbling and cutting processes) are conducted under cover and away from contact with storm water.

Description of the manufacturing, cleaning, rinsing, recycling, disposal, and/or other activities related to the process: Mixed clay is molded into bricks, which are heat-dried and fired. Some of the cured bricks undergo further processing by being cut, coated and tumbled.

Description of containment structures (type, material, height, etc.) and corresponding containment capacities: Molding, firing, tumbling, cutting and coating operations are located under cover and/or within contained areas.

6. Location: Grog Accumulation/Processing Area

Designation on site map: D6

Description of the type, characteristics, and quantity of significant materials used in or resulting from the process: Grog stockpiles and crushed grog stockpiles. The grog stockpiles may have approximately 5000 cubic yards of grog. Each crushed grog stockpile may contain approximately 500 tons of crushed grog.

Description of the manufacturing, cleaning, rinsing, recycling, disposal, and/or other activities related to the process: Rejected bricks (i.e., grog) are taken to the Grog Stockpile to await being crushed. The grog is crushed into particle sizes and separated into piles by color. Crushed grog is recycled, reprocessed to make brick, or sold to customers.

Description of containment structures (type, material, height, etc.) and corresponding containment capacities: The grog accumulation/processing area drains to the adjacent vegetated area.

## D. INDUSTRIAL PROCESSES (CONTINUED)

Presented below are descriptions of the facility's industrial processes that have the potential for exposure to storm water or authorized non-storm water discharges.

7. Location: Maintenance Areas and Shops

Designation on site map: D7

Description of the type, characteristics, and quantity of significant materials used in or resulting from the process: The maintenance areas are completely enclosed and/or covered. Vehicle maintenance and repair activities are conducted within the maintenance area away from contact with storm water.

Description of the manufacturing, cleaning, rinsing, recycling, disposal, and/or other activities related to the process: Vehicle and equipment maintenance and parts storage.

Description of containment structures (type, material, height, etc.) and corresponding containment capacities: Maintenance area and shop #2 is located within a building and on a covered concrete pad. Around the concrete pad is a shallow v-ditch to capture liquids that may spill in this area.

8. Location: Brick Cutting Area

Designation on site map: D8

Description of the type, characteristics, and quantity of significant materials used in or resulting from the process: Wastewater generated from brick cutting is collected into a 500-gallon tank. Excess water may be re-used for cutting bricks or discharged to a shallow unpaved basin to evaporate.

Description of the manufacturing, cleaning, rinsing, recycling, disposal, and/or other activities related to the process: Bricks are cut using water to reduce the amount of airborne particulates generated by the process.

Description of containment structures (type, material, height, etc.) and corresponding containment capacities: The 24 square foot steel tank is open on the top and holds approximately 500-gallons

## D. INDUSTRIAL PROCESSES (CONTINUED)

Presented below are descriptions of the facility's industrial processes that have the potential for exposure to storm water or authorized non-storm water discharges.

9. Location: Ready-Mix Concrete Batch Plant

Designation on site map: D9

Description of the type, characteristics, and quantity of significant materials used in or resulting from the process: Ready-mix concrete is mixed with cement, admixture and water. The batch plant can produce approximately 300 cubic yards of ready-mix per hour. A colored powder may be added during the mixing process to give the ready-mix its desired color. Admixture is kept in twelve plastic tanks in a bermed area next to the batch processing plant.

Description of the manufacturing, cleaning, rinsing, recycling, disposal, and/or other activities related to the process: The ready-mix is loaded into mixing trucks and transported off site. The ready-mix batch processing and mixing truck loading area is rinsed down daily. The concrete pad that ready-mix trucks use to access the loading area is cleaned regularly.

Description of containment structures (type, material, height, etc.) and corresponding containment capacities: The twelve admixture tanks are contained within an area surrounded by a one foot concrete berm. The wash out material from the ready-mix plant is discharged into an adjacent earthen basin.

10. Location: Manufactured Stone Area

Designation on site map: D10

Description of the type, characteristics, and quantity of significant materials used in or resulting from the process: Artificial stone is made with a concrete mix, pumice, and admixture. The mixture is placed in molds and allowed to dry inside a covered area.

Description of the manufacturing, cleaning, rinsing, recycling, disposal, and/or other activities related to the process: The used molds are stored outside and covered with plastic tarps. Residual or waste concrete is transferred to the designated area to be incorporated into recycled road base material.

Description of containment structures (type, material, height, etc.) and corresponding containment capacities: The artificial stone manufacturing, mold pouring and drying, takes place indoors and under covered concrete outside the building. A small amount of pumice is kept in a three sided enclosure to prevent airborne dispersion.

## D. INDUSTRIAL PROCESSES (CONTINUED)

Presented below are descriptions of the facility's industrial processes that have the potential for exposure to storm water or authorized non-storm water discharges.

11. Location: Aggregate Crushing Plant

Designation on site map: D11

Description of the type, characteristics, and quantity of significant materials used in or resulting from the process: The crushing plant receives raw aggregate materials (sand and rock) from on and off site sources. The aggregates are crushed and screened to size and then transported via conveyor belt to the Aggregate Wash Plant. All materials introduced into the plant are transferred to the Aggregate Wash Plant; there are no waste materials from the crushing operations.

Description of the manufacturing, cleaning, rinsing, recycling, disposal, and/or other activities related to the process: The aggregate materials are crushed and screened using two cone crushers and two vibrating screens. The materials are transported through the plant by conveyor belts.

Description of containment structures (type, material, height, etc.) and corresponding containment capacities: Water spray nozzles and dust collectors are used to minimize and/or capture any dust generated during the aggregate crushing and screening process.

## **E. DUST AND PARTICULATE GENERATING ACTIVITIES**

Presented below are descriptions of the facility's dust and particulate generating activities that have the potential for exposure to storm water or authorized non-storm water discharges.

A small amount of water is applied to disturbed areas that receive relatively high traffic to control dust. Water is also sprayed at the Ready-mix and Aggregate Plant Areas to control dust. The facility's brick manufacturing, storage and distribution area is paved. The Grinding Plant is completely enclosed with a filter baghouse system that captures dust generated from grinding operations. Brick manufacturing operations are kept indoors. Tumblers and cutters use water to eliminate/minimize dust generation.

## **F. SOIL EROSION LOCATIONS**

Presented below are descriptions of the facility locations where soil erosion may occur as a result of industrial activity, storm water discharges associated with industrial activity, or authorized non-storm water discharges.

Most of the facility's pervious areas are covered with vegetation. The access roads and excavation areas throughout the mine are potential sources of erosion. If it is observed that runoff from the access roads and excavation areas has the potential to adversely impact the facility's storm water quality, the facility shall implement BMPs to address the concern and the SWPPP will be updated accordingly.

**G. LIST OF SIGNIFICANT MATERIALS**

Presented below is a list of significant materials that are handled and stored at your facility. Significant materials include raw materials, intermediate products, final or finished products, recycled materials, and waste or disposed materials.

MATERIAL	STORAGE LOCATION(S); TYPICAL QUANTITY STORED; AND TYPICAL FREQUENCY OF STORAGE	RECEIVING LOCATION(S); TYPICAL QUANTITY RECEIVED; AND TYPICAL FREQUENCY OF RECEIVING	SHIPPING LOCATION(S); TYPICAL QUANTITY SHIPPED; AND TYPICAL FREQUENCY OF SHIPPING	HANDLING LOCATION(S); TYPICAL QUANTITY HANDLED; AND TYPICAL FREQUENCY OF HANDLING
Mined Clay and Overburden	C1 on Site Map. Approximately 75,000 cubic yards stored in stockpiles throughout the year.	C1 on Site Map. The stockpile is replenished approximately every six months whereby approximately 75,000 cubic yards of clay and overburden are excavated.	Mined clay and overburden are not shipped off site.	C1 on Site Map. The mined clay is handled daily as it is transported from the stockpile to the Mixing Area. Approximately 3,000 cubic yards of clay is used each week.
Overburden	C1 on Site Map. Approximately 20,000 cubic yards are accumulated in stockpiles.	C1 on Site Map.		C1 on Site Map. Some of the overburden is mixed with the clay, while most is backfilled.
Ground Clay Mixture	D1 on Site Map. Approximately 10,000 cubic yards of ground clay mixture is stored on site.	D1 on Site Map. Over 750 cubic yards of material is received from the Grinding Plant each day by covered conveyor belt.	The material is not shipped off-site	D1 on Site Map. Over 750 cubic yards of the material is handled daily.

**G. LIST OF SIGNIFICANT MATERIALS (CONTINUED)**

Presented below is a list of significant materials that are handled and stored at your facility. Significant materials include raw materials, intermediate products, final or finished products, recycled materials, and waste or disposed materials.

MATERIAL	STORAGE LOCATION(S); TYPICAL QUANTITY STORED; AND TYPICAL FREQUENCY OF STORAGE	RECEIVING LOCATION(S); TYPICAL QUANTITY RECEIVED; AND TYPICAL FREQUENCY OF RECEIVING	SHIPPING LOCATION(S); TYPICAL QUANTITY SHIPPED; AND TYPICAL FREQUENCY OF SHIPPING	HANDLING LOCATION(S); TYPICAL QUANTITY HANDLED; AND TYPICAL FREQUENCY OF HANDLING
Finished Brick Products	C4 on Site Map. Approximately 10,000 pallets of bricks are stored on site.	The facility does not receive finished brick products from outside sources.	C4 on Site Map. Approximately 1,200 pallets of bricks are shipped off site each day.	C4 and C7 on Site Map. Approximately 1,200 pallets of finished brick products are handled each day.
Grog	C8 on Site Map. Approximately 5000 cubic yards of grog is kept in stockpiles.	The facility does not receive grog from outside sources.	Grog is not shipped off site.	C8 and D6 on Site Map. Grog is handled on a daily basis as it is identified, separated, and transported from the finished bricks to the grog stockpile, and when it is crushed.
Crushed Grog	C9 on Site Map. Approximately 500 tons stored on site.	The facility does not receive crushed grog from outside sources.	C9 on Site Map. Only a very small amount of crushed grog is shipped off site and sold to outside vendors.	C9 and D6 on Site Map. Grog is crushed periodically at the grog accumulation and processing area.

**G. LIST OF SIGNIFICANT MATERIALS (CONTINUED)**

Presented below is a list of significant materials that are handled and stored at your facility. Significant materials include raw materials, intermediate products, final or finished products, recycled materials, and waste or disposed materials.

MATERIAL	STORAGE LOCATION(S); TYPICAL QUANTITY STORED; AND TYPICAL FREQUENCY OF STORAGE	RECEIVING LOCATION(S); TYPICAL QUANTITY RECEIVED; AND TYPICAL FREQUENCY OF RECEIVING	SHIPPING LOCATION(S); TYPICAL QUANTITY SHIPPED; AND TYPICAL FREQUENCY OF SHIPPING	HANDLING LOCATION(S); TYPICAL QUANTITY HANDLED; AND TYPICAL FREQUENCY OF HANDLING
Brick Cutting Wastewater	C19 on Site Map. As much as 500 gallons of wastewater from brick cutting operations is stored on site.	The facility does not receive brick cutting water from outside sources.	The facility does not ship brick cutting wastewater off site.	C19 and D8 on Site Map. As much as 300 gallons to 500 gallons of brick cutting wastewater can be generated and handled on site.
Hydraulic Oil	C11 on Site Map. Approximately 250 gallons of hydraulic oil is stored on site.	C11 on Site Map. Approximately 250 gallons of hydraulic oil is received each month or whenever necessary.	Hydraulic oil is not shipped off site.	C11 and D7 on Site Map. Hydraulic oil is handled during daily vehicle/equipment maintenance and repair activities.
Used Oil (Oil/Transmission Fluid/Hydraulic Fluid)	C12 and D5 on Site Map. Approximately 1,000 gallons of used oil is stored on site.	The facility does not receive used oil from outside sources.	C12 on Site Map. The used oil AST is pumped every month or whenever necessary. 55-gallon drums of used oil are also hauled off site whenever the AST is emptied.	C12 and D7 on Site Map. Used oil is handled during daily vehicle/equipment maintenance and repair activities.

**G. LIST OF SIGNIFICANT MATERIALS (CONTINUED)**

Presented below is a list of significant materials that are handled and stored at your facility. Significant materials include raw materials, intermediate products, final or finished products, recycled materials, and waste or disposed materials.

MATERIAL	STORAGE LOCATION(S); TYPICAL QUANTITY STORED; AND TYPICAL FREQUENCY OF STORAGE	RECEIVING LOCATION(S); TYPICAL QUANTITY RECEIVED; AND TYPICAL FREQUENCY OF RECEIVING	SHIPPING LOCATION(S); TYPICAL QUANTITY SHIPPED; AND TYPICAL FREQUENCY OF SHIPPING	HANDLING LOCATION(S); TYPICAL QUANTITY HANDLED; AND TYPICAL FREQUENCY OF HANDLING
Transmission Fluid	C13 on Site Map. Approximately 300 gallons of transmission fluid is stored on site.	C13 on Site Map. Approximately 300 gallons of transmission fluid is received every month or whenever necessary.	The facility does not ship transmission fluid off site.	C13 and D7 on Site Map. Transmission fluid is handled during daily vehicle/equipment maintenance and repair activities.
Diesel	C14 on Site Map. Approximately 33,000 gallons of diesel is stored on site.	C14 on Site Map. Approximately 33,000 gallons of diesel is received every two weeks.	Diesel is not shipped off site.	C14 and C25 on Site Map. Diesel is handled daily whenever vehicles and equipment are refueled.
Gasoline	C15 on Site Map. Approximately 1,200 gallons of gasoline is stored on site.	C15 on Site Map. Approximately 1,200 gallons of gasoline is received every month.	Gasoline is not shipped off site.	C15 and C25 on Site Map. Gasoline is handled daily whenever vehicles/equipment are refueled.

**G. LIST OF SIGNIFICANT MATERIALS (CONTINUED)**

Presented below is a list of significant materials that are handled and stored at your facility. Significant materials include raw materials, intermediate products, final or finished products, recycled materials, and waste or disposed materials.

MATERIAL	STORAGE LOCATION(S); TYPICAL QUANTITY STORED; AND TYPICAL FREQUENCY OF STORAGE	RECEIVING LOCATION(S); TYPICAL QUANTITY RECEIVED; AND TYPICAL FREQUENCY OF RECEIVING	SHIPPING LOCATION(S); TYPICAL QUANTITY SHIPPED; AND TYPICAL FREQUENCY OF SHIPPING	HANDLING LOCATION(S); TYPICAL QUANTITY HANDLED; AND TYPICAL FREQUENCY OF HANDLING
Motor Oil	C10 on Site Map. Approximately 1,000 gallons of motor oil is stored on site.	C10 on Site Map. Approximately 1,000 gallons of motor oil is received every month or whenever necessary.	Motor oil is not shipped off site.	C26, C27 and D7 on Site Map. Motor oil is handled during daily vehicle/equipment maintenance and repair activities.

## H. PAST SPILLS AND LEAKS

Presented below is information on significant spills or leaks of toxic or hazardous pollutants to storm water that have occurred after April 17, 1994. Included are toxic chemicals (listed in 40 CFR, Part 302) that have been discharged to storm water as reported on U. S. Environmental Protection Agency (U.S. EPA) Form R, and oil and hazardous substances in excess of reportable quantities (see 40CFR, Parts 110, 117, and 302).

Pollutant: NONE. There have been no spills of reportable quantities as specified.

Source(s): \_\_\_\_\_

Date(s) of spill or leak: \_\_\_\_\_

Approximate location: \_\_\_\_\_

Designation on site map: \_\_\_\_\_

Approximate quantity: \_\_\_\_\_

Cause: \_\_\_\_\_

Cleanup or remedial actions that have occurred or are planned: \_\_\_\_\_

Approximate remaining quantity of materials that may be exposed to storm water or non-storm water discharges: \_\_\_\_\_

Preventative measures to ensure spills or leaks do not reoccur: \_\_\_\_\_

## I. NON-STORM WATER DISCHARGE INVESTIGATION

Presented below is a description of non-storm water discharges at the facility:

Visual description of non-storm water discharge: Generally clear water leaked from pumps and hoses while water trucks are being filled.

Date(s) observed: Daily

Source(s) of non-storm water discharge: Reclaimed water from the adjacent housing development on the East side of the facility, on site well water, and captured storm water.

Quantity of non-storm water discharge (per typical event, annually, etc.): 3 to 5 gallons per day.

Typical frequency of discharge: Daily

Associated drainage area of non-storm water discharge: None.

Authorized by 1997 General Permit? X yes          no

Description of BMPs to prevent or reduce contact of non-storm water discharges with significant materials or equipment:

The water trucks are filled in an area with minimal exposure to industrial activities. Water that is leaked during filling flows directly back into the reservoir from which it was pumped or dissipates into the surrounding soil. The filling area is inspected regularly and cleaned as necessary.

## **J. SUMMARY OF STORM WATER DISCHARGE SAMPLING DATA**

Presented below is a summary of storm water discharge sampling data previously collected from the facility.

Copies of storm water sample analysis results are kept on site and readily available upon request.

**K. MATERIALS, EQUIPMENT, AND VEHICLE MANAGEMENT PRACTICES EMPLOYED TO MINIMIZE CONTACT OF SIGNIFICANT MATERIALS WITH STORM WATER DISCHARGE**

Presented below are descriptions of the materials, equipment, and vehicle management practices that are employed at the facility to minimize contact of significant materials with storm water discharges.

1. Material Stockpiles - These areas represent a potential source of sediment and are located as far as practicable from Temescal Creek. Stockpiled material is stored in large “coned up” piles to minimize surface area, subsequent soil erosion and dust generation. Runoff from the stockpile area(s) are diverted to sedimentation basins when possible.
2. Bone Yard Areas - Existing surplus equipment is inspected periodically to reduce the potential for exposure to storm water. Measures to reduce or eliminate exposure to storm water include covering items and placing drip pans under vehicles and machinery.
3. Fueling Areas - Products records are maintained for gasoline and diesel fuel storage tanks to aid in detecting leaks. Absorbent materials are maintained in the fueling areas.
4. Vehicle Maintenance Shops - Floor areas are cleaned with dry materials and absorbents are maintained on site for cleanup of spills and leaks.
5. Maintenance Areas - To the extent practicable, maintenance is conducted in a building or covered area. Leaks and spills are cleaned up with the use of absorbents disposed of properly.
6. Recycled Concrete - Concrete is allowed to harden and then stored in designated areas for eventual recycling as road base or other construction materials.
7. Wash Out Area – The ready-mix trucks wash out at the ready-mix plant where the wash water and sediments are captured in a concrete basin. The sediment is allowed to settle out, and the water is pumped to an adjacent earthen basin. The dried sediment is subsequently re-used in the ready-mix operations.

**L. STRUCTURAL AND NON-STRUCTURAL CONTROL MEASURES UTILIZED TO  
REDUCE THE POTENTIAL FOR POLLUTANTS TO CONTAMINATE STORM WATER  
DISCHARGE**

Presented below are descriptions of the existing structural and non-structural control measures that are utilized at the facility to reduce the potential for pollutants to contact storm water discharge.

1. Unused equipment and stock materials are stored in their appropriate place.
2. Trash is deposited in the proper trash containers so that is not washed or blown away during storm events.
3. Concrete and asphalt surfaces in and around the outside staging area are swept regularly. The paved employee parking area is regularly swept to prevent the discharge of pollutants to Temescal Creek.
4. Material Handling Areas - These areas are inspected and maintained properly to reduce the potential for pollutants to be discharged off site in storm water.
5. Bone Yard Areas - Existing surplus equipment is inspected periodically to reduce the potential for exposure of leaks and spills to storm water. Measures to reduce or eliminate exposure to storm water include covering items and placing drip pans under vehicles and machinery until maintenance is performed.
6. Fueling Areas - Products records are maintained for gasoline and diesel fuel storage tanks to aid in detecting leaks. Absorbent materials are maintained in the fueling areas.
7. Vehicle Maintenance Shops - Floor areas are cleaned with dry materials and absorbents are maintained on site for cleanup of spills and leaks.
8. Unpaved Access Roads - Airborne dust is minimized by periodic watering of the dirt roads or use of commercial chemical dust suppressants.

**L. STRUCTURAL AND NON-STRUCTURAL CONTROL MEASURES UTILIZED TO  
REDUCE THE POTENTIAL FOR POLLUTANTS TO CONTAMINATE STORM WATER  
DISCHARGE (CONTINUED)**

Presented below are descriptions of the existing structural and non-structural control measures that are utilized at the facility to reduce the potential for pollutants to contact storm water discharge.

9.        Material Stockpiles - These areas represent a potential source of sediment and are located as far as practicable from Temescal Creek. Runoff from the stockpile area(s) are diverted to sedimentation basins when possible.
  
10.       Paved Areas - Paved areas represent a source of sediment, hydrocarbons, and other pollutants. These areas are swept on a regular basis to prevent tracking onto adjacent streets and to prevent their discharge from the facility during rainfall events.
  
11.       Maintenance Areas - To the extent practicable, maintenance is conducted in a building or covered area. Leaks and spills are cleaned up with the use of absorbents disposed of properly.
  
12.       Ready-mix Truck Loading Area – The concrete pavement surrounding the ready-mix truck loading area is cleaned regularly.
  
13.       Waste Concrete -Waste concrete hardens and is then stored in designated areas for eventual recycling as road base or other construction materials.
  
14.       Wash Out Area - The ready-mix trucks wash out at the ready-mix plant where the wash water and sediments are captured in a concrete basin. The sediment is allowed to settle out, and the water is pumped to an adjacent earthen basin. The dried sediment is subsequently re-used in the ready-mix operations.
  
  
15.       The undisturbed sections of the undeveloped open space generally has a 2.5:1 (H:V) slope and are vegetated to minimize erosion and weathering.
  
16.       Undeveloped spaces drain into retention and detention basins that enable the captured storm water runoff to infiltrate the ground and allow suspended solids to settle.
  
17.       The mixing areas are graded and unpaved to promote infiltration and minimize runoff.

**L. STRUCTURAL AND NON-STRUCTURAL CONTROL MEASURES UTILIZED TO  
REDUCE THE POTENTIAL FOR POLLUTANTS TO CONTAMINATE STORM WATER  
DISCHARGE (CONTINUED)**

Presented below are descriptions of the existing structural and non-structural control measures that are utilized at the facility to reduce the potential for pollutants to contact storm water discharge.

- 18.     The grinding plant is a fully enclosed building. The grinding process and the dust that is subsequently generated are contained inside the building where they are kept from coming into contact with storm water.

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- 19.     The extruder, kilns, drying ovens, and tumblers are contained within a fully enclosed building that prevents the brick manufacturing processes from coming into contact with storm water.

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- 20.     Conveyor belts, which are covered to protect raw materials from coming into contact with storm water are used to transport raw materials from the mixing area, to the grinding plant, and to the extruder.

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- 21.     The maintenance area and shop is completely enclosed and protected from coming into contact with storm water runoff.

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- 22.     The hazardous waste accumulation area is located beneath an overhang and is enclosed within secondary containment.

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- 23.     The above ground diesel storage tanks are double-walled steel tanks with spill control, and located within a secondary containment structure.

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- 24.     Approximately 98 percent of the area where the bricks are manufactured, stored and distributed is paved and gently graded to flow towards the heavily vegetated outfall between the brick storage area and Temescal Creek.

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- 25.     Aggregate Crushing Plant (D11) is located in a depressed area where storm water runoff collects in an adjacent basin.

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**M. INDUSTRIAL STORM WATER TREATMENT FACILITIES**

Presented below is a description of existing storm water treatment facilities at the facility.

Location	Description of Treatment Facility	Description of Pollutants Removed During Treatment	Frequency of Treatment Facility		
			Inspection	Maintenance	Cleaning
Retention Basins (presented on site maps)	Storm water runoff from mine is collected in the basins (pits) and allowed to infiltrate the ground or re-used on site.	Sediment, suspended solids, debris	Prior to forecasted storm events	As needed	As needed
Detention Basins (presented on site maps)	Storm water runoff from graded and undeveloped areas is collected in the basins and allowed to infiltrate the ground. Excess water in the basin discharges through a raised outlet pipe or spillway structure.	Sediment, suspended solids, debris	Prior to forecasted storm events	As needed	As needed

## **N. PREVENTATIVE MAINTENANCE PROGRAMS**

Presented below are descriptions of the preventative maintenance programs that are employed at the facility to minimize contact of significant materials with storm water discharges.

Mobile equipment which services the outside areas of the plant (trucks, forklifts, cart, etc.) is maintained on a regular service schedule with respect to its fluids and is inspected daily for leaks by equipment operators. Fueling islands and gasoline/diesel ASTs are regularly inspected for leaks.

## O. GOOD HOUSEKEEPING PROGRAMS

Presented below are descriptions of the good housekeeping programs that are employed at the facility to minimize contact of significant materials with storm water discharge.

1. Unused equipment and stock materials are stored in their appropriate place.
2. Trash is deposited in the proper trash containers so that it is not washed or blown away during storm events.
3. Concrete and asphalt surfaces in and around the outside staging area are swept regularly. The paved employee parking area is regularly swept to prevent the discharge of pollutants to Temescal Creek.
4. Material Handling Areas - These areas are inspected and maintained properly to reduce the potential for pollutants to be discharged off site in storm water.
5. Bone Yard Areas - Existing surplus equipment is inspected periodically to reduce the potential for exposure to storm water. Measures to reduce or eliminate exposure to storm water include covering items, placing drip pans under vehicles and machinery until maintenance is performed.
6. Fueling Areas - Product records are kept for gasoline and diesel fuel storage tanks to aid in detecting leaks. Absorbent materials are maintained in the fueling areas.
7. The ready-mix and truck scale entrance/exit is swept regularly to reduce the amount of soil tracking off site.
8. Vehicle Maintenance Shops - Floor areas are cleaned with dry materials and absorbents are maintained on site for cleanup of spills and leaks.

**O. GOOD HOUSEKEEPING PROGRAMS (CONTINUED)**

Presented below are descriptions of the good housekeeping programs that are employed at the facility to minimize contact of significant materials with storm water discharge.

- 9. Unpaved Access Roads - Airborne dust is minimized by periodic watering of the dirt roads.
  - 10. Material Stockpiles - These areas represent a potential source of sediment and are located as far as practicable from Temescal Creek. Runoff from the stockpile area(s) are diverted to sedimentation basins when possible.
  - 11. Paved Areas - Paved areas represent a source of sediment, hydrocarbons, and other pollutants. These areas are swept on a regular basis to prevent tracking onto adjacent streets and to prevent their discharge from the facility during rainfall events.
  - 12. Maintenance Areas - To the extent practicable, maintenance is conducted in a building or covered area. Leaks and spills are cleaned up using absorbent materials and disposed of properly.
  - 13. Wash Out Area - The ready-mix trucks wash out at the ready-mix plant where the wash water and sediments are captured in a concrete basin. The sediment is allowed to settle out, and the water is pumped to an adjacent earthen basin. The dried sediment is subsequently re-used in the ready-mix operations.
  - 14. Recycled Concrete -Concrete is allowed to harden and then stored in designated areas for eventual recycling as road base or other construction materials.
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## **P. SPILL PREVENTION AND RESPONSE PROGRAMS**

Presented below are descriptions of the spill prevention and response plans that are employed at the facility to minimize contact of significant materials with storm water discharges.

Spills of materials such as clay, oil, water, and lubricant at the plant are first confined to stop the spread and then, if it is a liquid, absorbed using absorbent material. When the material is absorbed and dry it is removed and loaded into drums for later disposal. The spill site is scraped and absorbent is re-applied until spilled material is removed. Spills of hazardous chemical materials are handled by the maintenance crew under the supervision of the environmental manager. The chemical is neutralized (if appropriate) and absorbed using the proper material and then loaded into drums for later disposal. The spill site is scraped and absorbent is re-applied until spilled material is removed (see SPCC Plan).

## Q. SEDIMENT AND EROSION PREVENTION

Presented below are descriptions of the sediment and erosion prevention management controls that are employed at the facility to minimize contact of significant materials with storm water discharge.

1. The facility has multiple detention and retention basins along with mining pits that capture storm water and sediment. The water collected in the retention basins and pits stay on site and used in industrial processes. The deposited sediment is later excavated and stockpiled for future use. The detention basins are designed to capture the storm water and allow for enough time for suspended solids to settle.
  2. The facility visually inspects each outfall, detention basin and retention basin prior to forecast storm events to make certain that the appropriate BMPs have been implemented.
  3. The site entrances and exits are paved with asphalt and/or Portland cement concrete to minimize erosion and track out of materials. Interior unpaved roads are graded and maintained to provide positive drainage with runoff directed to the appropriate basins.
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## R. EMPLOYEE TRAINING PROGRAMS

Presented below are descriptions of the employee training programs that are employed at the facility to minimize contact of significant materials with storm water discharges.

1. Facility employees are trained on Good Management Practices (GMPs) that include good housekeeping and preventative maintenance.
2. Facility employees responsible for compliance with the storm water program are trained annually. Training includes discussions on storm water sampling and inspection procedures, best management practices, non-storm water discharges, and general good housekeeping practices.
3. Facility employees are trained on spill response and cleanup procedures.

## S. INSPECTION PROGRAMS

Presented below are descriptions of the inspection programs employed at the facility to minimize contact of significant materials with storm water discharge.

1.        **Weekly Manager Inspections**

- Managers walk the facility weekly to identify and correct potential problem areas.

2.        **Wet Season Manager Inspections**

- Managers walk the facility prior to forecasted storm events to identify and correct potential problem areas.

3.        **Corporate Audit**

- A facility wide corporate audit is conducted to assess compliance with regulatory and corporate requirements. If issues are identified, a work plan is developed to rectify the problem.

4.        **Non-Storm Water Visual Observation**

- Quarterly in-house non-storm water visual observations to assess if authorized or non-authorized discharges exist.
- Complete Non-Storm Water Visual Observation Form.

5.        **Storm Water Visual Observations**

- Monthly in-house storm water visual observations during the wet season (between October 1 and May 31).
- Complete Storm Water Visual Observations Form.

6.        **Annual Comprehensive Site Compliance Evaluation**

- Review visual observation & inspection records.
- Conduct visual inspection of potential pollution sources.
- Conduct a visual inspection of best management practices (BMPs) listed in the SWPPP.
- Identify SWPPP revisions, if needed.
- Complete Annual Comprehensive Site Compliance Evaluation Form.

### T. BMP SUMMARY TABLE

Presented below is a description of all storm water BMPs implemented at the facility for each potential pollutant source.

POTENTIAL POLLUTION SOURCE	POTENTIAL POLLUTANT(S)	BEST MANAGEMENT PRACTICES
Mining activities	Dust generation, erosion and sedimentation from mining activities.	<ul style="list-style-type: none"> <li>• Only a small section of the facility's open space is mined. The undeveloped areas are graded (generally a 2.5:1 slope ratio) and vegetated to prevent/minimize mass wasting and erosion.</li> <li>• The mined section is only actively mined whenever production needs arise.</li> <li>• Water is applied to the dirt roads daily to reduce the amount of airborne particulates due to trucking activities.</li> <li>• The retention and detention basins are inspected before and after each storm event, and are excavated whenever necessary to maintain their design storage capacities.</li> </ul>
Stockpile erosion and sedimentation.	Clay and overburden.	<ul style="list-style-type: none"> <li>• The stockpiles of imported materials that are added to the clay mixture and are stored in the mixing area and covered during storm events.</li> <li>• The mixing areas are relatively flat and not paved and, therefore, very little storm water runoff flows from the area. Trained facility personnel are present during operations.</li> </ul>

**T. BMP SUMMARY TABLE (CONTINUED)**

Presented below is a description of all storm water BMPs implemented at the facility for each potential pollutant source.

POTENTIAL POLLUTION SOURCE	POTENTIAL POLLUTANT(S)	BEST MANAGEMENT PRACTICES
Grinding Plant	Dust generation, spreading and tracking of ground particles.	<ul style="list-style-type: none"> <li>• The grinding plant is fully enclosed and grinding is completely contained.</li> <li>• Trained facility personnel are present during grinding operations.</li> <li>• The plant is regularly swept to minimize tracking outside the building.</li> <li>• A filter baghouse system has been installed to capture dust and particles generated from the grinding process.</li> </ul>
Dust generation and wastewater generated from brick cutting operations	Clay dust and wastewater	<ul style="list-style-type: none"> <li>• Brick cutting operations are conducted in covered areas.</li> <li>• Wastewater generated from cutting operations is collected and properly disposed.</li> <li>• The areas are regularly swept and debris is collected.</li> <li>• The areas are regularly inspected to assess whether wastewater is effectively being contained and collected.</li> </ul>

**T. BMP SUMMARY TABLE (CONTINUED)**

Presented below is a description of all storm water BMPs implemented at the facility for each potential pollutant source.

POTENTIAL POLLUTION SOURCE	POTENTIAL POLLUTANT(S)	BEST MANAGEMENT PRACTICES
Dust and debris generated from loading/unloading operations.	Brick dust and debris.	<ul style="list-style-type: none"> <li>• Finished bricks are palletized and wrapped in plastic.</li> <li>• The areas are regularly inspected and swept to minimize accumulation and tracking of dust and debris generated during loading.</li> </ul>
Dust generation from brick crushing process, erosion and sedimentation of crushed brick stockpiles, and tracking of crushed brick particles from vehicle/equipment traffic.	Clay dust.	<ul style="list-style-type: none"> <li>• The retail area, entrance and access road is regularly inspected to control sediment being tracked from the area due to vehicle/equipment traffic.</li> <li>• The retail area, entrance and access road is regularly swept to control/contain sediment tracking.</li> </ul>

**T. BMP SUMMARY TABLE (CONTINUED)**

Presented below is a description of all storm water BMPs implemented at the facility for each potential pollutant source.

POTENTIAL POLLUTION SOURCE	POTENTIAL POLLUTANT(S)	BEST MANAGEMENT PRACTICES
Dust and debris generated from loading operations	Brick dust and debris.	<ul style="list-style-type: none"> <li>• Finished bricks are palletized and wrapped in plastic.</li> <li>• Grog is placed in containers, which are used to transport them to the grog accumulation/processing area.</li> <li>• The areas are regularly inspected and swept to minimize accumulation and tracking of dust and debris generated during loading.</li> </ul>
Accidental releases of vehicle fluids from repair/maintenance operations.	Motor oil, hydraulic and transmission fluids, diesel and gasoline, waste vehicle/equipment fluids, and waste cleanup materials.	<ul style="list-style-type: none"> <li>• The area is covered and completely enclosed.</li> <li>• Repair and maintenance activities are conducted inside the covered and enclosed area.</li> <li>• Vehicle/equipment oil, hydraulic and other vehicle fluids are stored in protected containers and tanks with spill control structures located inside the covered and enclosed area.</li> <li>• Spent dry-sweep and cleanup materials are stored in clearly labeled containers.</li> <li>• Spill cleanup materials are readily available to control/contain and cleanup accidental spills and releases.</li> <li>• The area is regularly inspected and spills/releases are addressed as soon as practicable.</li> </ul>

**T. BMP SUMMARY TABLE (CONTINUED)**

Presented below is a description of all storm water BMPs implemented at the facility for each potential pollutant source.

POTENTIAL POLLUTION SOURCE	POTENTIAL POLLUTANT(S)	BEST MANAGEMENT PRACTICES
Accidental spills/releases of vehicle/equipment fluids and fuels during loading and unloading operations.	Motor and hydraulic oils, used oil, transmission fluids, gasoline and diesel.	<ul style="list-style-type: none"> <li>• The diesel AST is located within a spill control and spill containment structure.</li> <li>• The ASTs are regularly inspected for spill and leaks, and are cleaned as necessary.</li> <li>• The Used Oil AST is regularly emptied, and the other ASTs are not filled to capacity.</li> <li>• Spill kits are located near the ASTs for quick response in the event of a spill or leak.</li> <li>• Only trained personnel are allowed to fuel vehicles and fill/empty the ASTs.</li> <li>• Spills or leaks that are observed are cleaned immediately or as soon as practicable.</li> </ul>
Trash Bins	Suspended solids, trash and debris.	<ul style="list-style-type: none"> <li>• The area is regularly inspected and cleaned as necessary.</li> <li>• Trash is shipped off-site once per week.</li> </ul>

**T. BMP SUMMARY TABLE (CONTINUED)**

Presented below is a description of all storm water BMPs implemented at the facility for each potential pollutant source.

POTENTIAL POLLUTION SOURCE	POTENTIAL POLLUTANT(S)	BEST MANAGEMENT PRACTICES
Used oil drums (spill or leaks).	Used oils and/or lubricants	<ul style="list-style-type: none"> <li>• Stationary equipment located throughout the facility are repaired/maintained on site. Used oil is collected in drums and/or tanks, which are secured when filled and are transported via forklift to a covered secondary contained area where they await off site transport by a licensed waste hauler.</li> <li>• Spill kits are readily available to control, contain and/or clean spills/leaks that may accidentally occur.</li> <li>• Only trained personnel are allowed to handle the filled drums and/or tanks.</li> </ul>
Baghouse (captured filtered dust).	Fine clay particulates.	<ul style="list-style-type: none"> <li>• Filtered material is either mixed with clay to make bricks or are collected and secured inside containers, which are properly disposed.</li> <li>• Spent filter cartridges are properly secured and disposed.</li> <li>• The filter baghouse is regularly inspected and cleaned whenever necessary.</li> </ul>

**T. BMP SUMMARY TABLE (CONTINUED)**

Presented below is a description of all storm water BMPs implemented at the facility for each potential pollutant source.

POTENTIAL POLLUTION SOURCE	POTENTIAL POLLUTANT(S)	BEST MANAGEMENT PRACTICES
Ready-mix Plant.	Admixture, colorant, wastewater, ready-mix truck concrete washout.	<ul style="list-style-type: none"> <li>• Twelve admixture tanks are contained within a bermed area under the conveyor belts.</li> <li>• Colorant container area is inspected for residue on the container surfaces and ground.</li> <li>• Truck washout water from the ready-mix area is captured at the plant. The washout water is contained and the sediments are allowed to settle out. The water is then pumped to an earthen basin and the sediments are re-used in the ready-mix operations.</li> <li>• Concrete pad is cleaned regularly.</li> </ul>
Access roads and excavation areas	Soil erosion	<ul style="list-style-type: none"> <li>• Torn plastic and silt fencing is replaced when no longer effective at reducing erosion.</li> <li>• Dirt roads are watered every day to reduce erosion caused by wind.</li> <li>• Deteriorating silt fencing and plastic are replaced as needed.</li> </ul>

**T. BMP SUMMARY TABLE (CONTINUED)**

Presented below is a description of all storm water BMPs implemented at the facility for each potential pollutant source.

POTENTIAL POLLUTION SOURCE	POTENTIAL POLLUTANT(S)	BEST MANAGEMENT PRACTICES
Aggregate Plants	Waste soil from washed sand activities.	<ul style="list-style-type: none"> <li>• The waste product and wash water is recycled through the system where the solids are separated from the water through the addition of a flocculant agent and belt filter presses. The resulting solids are stockpiled by conveyor belt to a temporary drying location. The solids are either backfilled in the mine pits, transported off site to end users, or reused on site in the brick manufacturing process.</li> </ul>
Stone Manufacturing	Cement, admixture and pumice	<ul style="list-style-type: none"> <li>• Pouring stone molds and drying activities are performed under cover and away from storm water contact.</li> <li>• Pumice is stored outside in a three side structure to reduce airborne dust.</li> <li>• Admixture containers are routinely checked for leaks.</li> <li>• Used mold are covered with a tarp until they can be re-used.</li> </ul>

**U. STORM WATER POLLUTION PREVENTION PLAN CERTIFICATION**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designated to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of 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.

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_

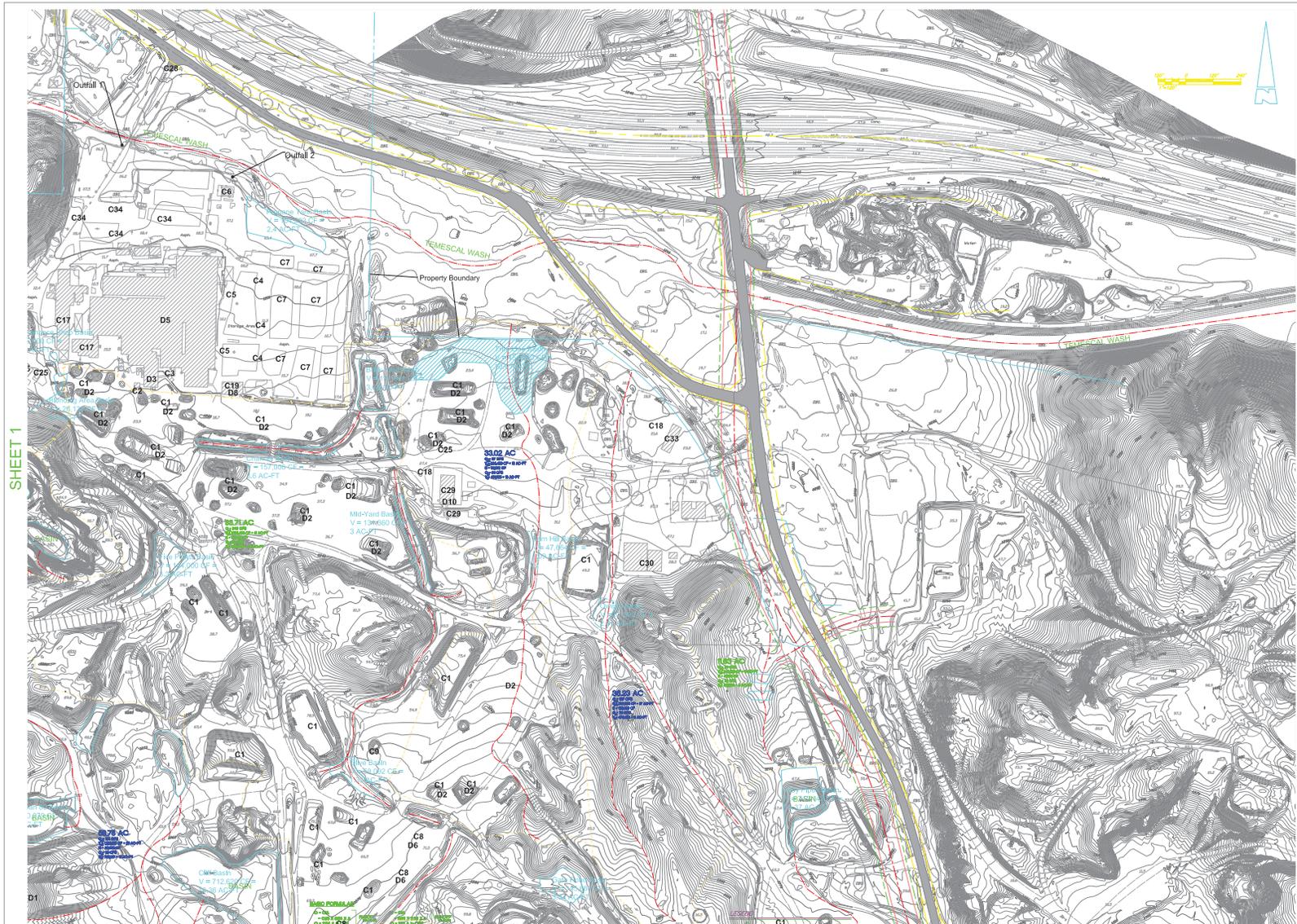
Title: \_\_\_\_\_

NOTE: All reports, certification, or other information required by the General Permit or requested by the Regional Water Quality Control Board, the State Board, EPA or local storm water management agency shall be signed by the above signatory or by a duly authorized representative.

# FIGURES

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SHEET 1

MAY 2008 AERIAL TOPOGRAPHY

V = 0.0000000000  
 W = 0.0000000000  
 X = 0.0000000000  
 Y = 0.0000000000  
 Z = 0.0000000000

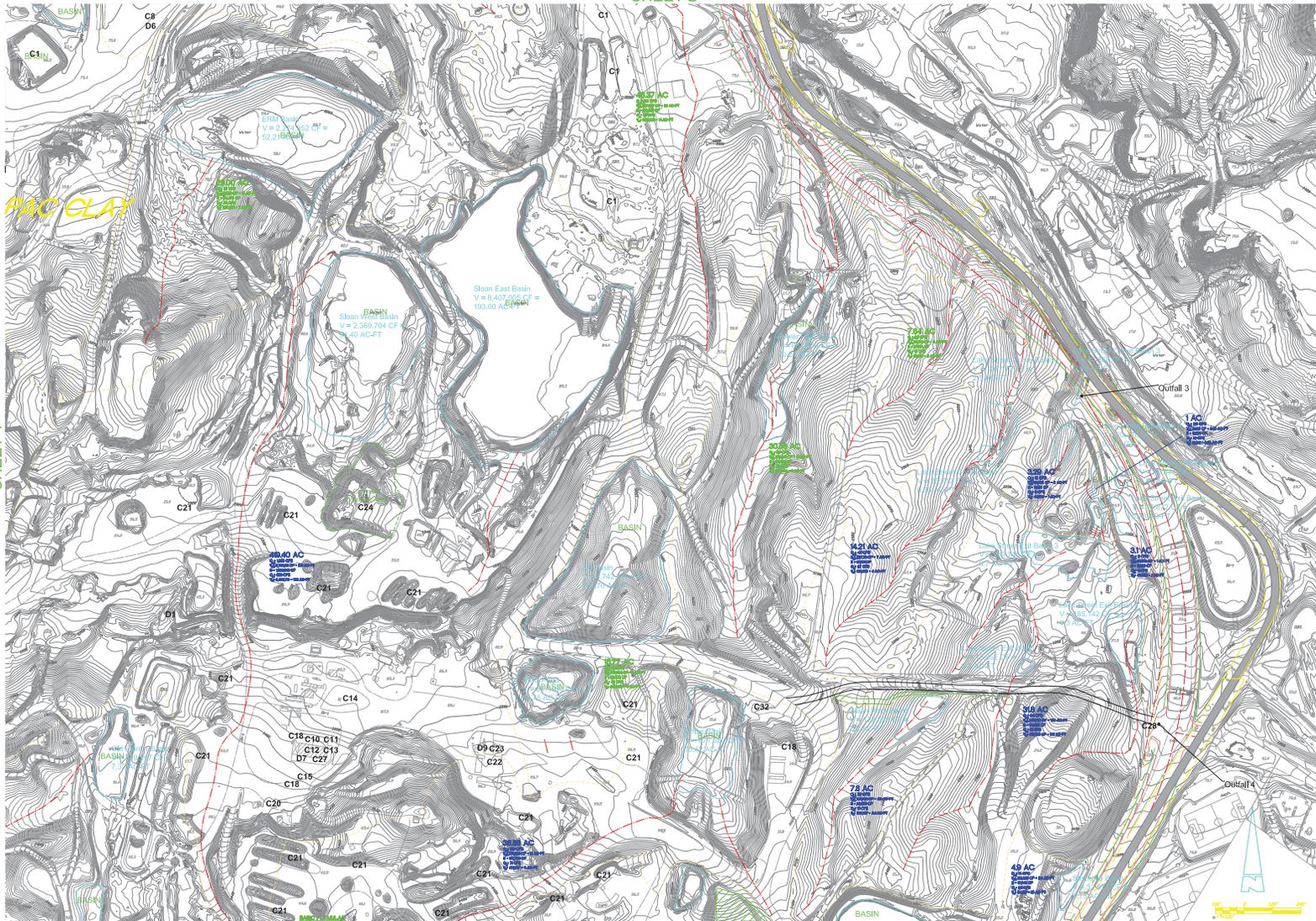
SHEET 3

- CENTER LINE
- EXISTING CONTOUR ELEVATION
- DOWNE
- WATERSHED BOUNDARY
- PROPERTY LINE

SHEET 2 OF 5



SHEET 2



SHEET 4

SHEET 5

SHEET 3 OF 5

MAY 2008 AERIAL TOPOGRAPHY

1" = 1" @ 100' HORIZ. SCALE  
 1" = 10' VERT. SCALE  
 1" = 1" @ 100' HORIZ. SCALE  
 1" = 10' VERT. SCALE  
 1" = 1" @ 100' HORIZ. SCALE  
 1" = 10' VERT. SCALE

**LEGEND**  
 ——— CENTER LINE  
 ——— EXISTING CONTOUR ELEVATION  
 ——— FILLLINE  
 ——— WATERSHED BOUNDARY  
 ——— PROPERTY LINE







## **APPENDIX A**

# **INDUSTRIAL ACTIVITIES STORM WATER GENERAL PERMIT**

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