

Lehigh Southwest Cement Company
Permanente Plant
Report of Waste Discharge
November 30, 2011

1.0 Introduction

The Lehigh Southwest Cement Company Permanente Plant (Lehigh) produces Portland cement from limestone quarried at the facility location in Cupertino, California. Figure 1 illustrates the property location. The Permanente Plant is submitting this Report of Waste Discharge (ROWD) to request authority to discharge mine drainage, process, and stormwater into surface waters of the United States at various outfalls. The receiving water is Permanente Creek in western Santa Clara County, California. This ROWD is being submitted to the San Francisco Bay Regional Water Quality Control Board (RWQCB).

Lehigh is currently discharging the aforementioned mine drainage and process waters under the authority of the General Permit for Aggregate Mining and Sand Washing/Offloading, NPDES No. CAG982001 (the Sand & Gravel permit). Lehigh is currently discharging industrial stormwater under the authority of the California Industrial Stormwater General Permit (Water Quality Order No. 97-03-DWQ).

Lehigh has been compiling information and collecting water monitoring data during 2011 in cooperation with the RWQCB to describe the water management and discharges at the Permanente Plant. Much of the information contained in this ROWD comes from these 2011 efforts.

Figure 2 illustrates the overall Permanente Plant layout.

The ROWD consists of the following forms and documents:

- California Form 200
- USEPA NPDES application Form 1
- USEPA NPDES application Form 2C
- Supporting descriptions and figures in this document which will correspond to specific sections of the aforementioned forms.

2.0 Outfalls

The discharges to surface waters that are the subject of this ROWD are described below in three categories: mine drainage; process water; and stormwater associated with industrial activities.

2.1 Mine Drainage

Outfall Identifier: Pond 4A

Outfall (Standpipe) Latitude: 37d 19'1.68" N

Outfall (Standpipe) Longitude: 122d 6' 41.94" W

Assessor Parcel Number: 351-09-022

This discharge consists of water pumped from the limestone quarry located in the western section of the plant property. Stormwater from the slopes of the quarry, surrounding hillsides, and the adjacent West Materials Storage Area (WMSA) flows into the quarry. In addition, groundwater seeps into the quarry. Both of these waters are collected in ponds at the quarry bottom and on upper levels. Collected water is filtered using cartridge-type and/or sand filters. Water is then pumped in a common pipeline out of the quarry into Pond 4A (Figure 3). Pumping rates vary and Table 1 provides measured rates for 2011. The current maximum pumping capacity is 2000 gallons per minute (gpm).

Water in Pond 4A is allowed to settle and overflow into a standpipe in the center of the pond. Water flows through the standpipe by gravity and discharges into Permanente Creek adjacent to Pond 4A. The discharge point is approximately 40 feet lower in elevation than Pond 4A (Plate 1).

Table 1
 Lehigh Southwest Cement Company
 Permanente Plant Quarry Pumping Volumes
 Gallons per Minute (GPM)

Date	GPM	Date	GPM	Date	GPM
1/1/2011	558.4	2/1/2011	1656.3	3/1/2011	1958.5
1/2/2011	558.2	2/2/2011	648.7	3/2/2011	1959.7
1/3/2011	558.7	2/3/2011	573.4	3/3/2011	1954.6
1/4/2011	558.6	2/4/2011	1340.1	3/4/2011	1952.3
1/5/2011	558.9	2/5/2011	542.0	3/5/2011	1952.9
1/6/2011	559.3	2/6/2011	880.0	3/6/2011	1955.1
1/7/2011	559.0	2/7/2011	881.3	3/7/2011	1955.7
1/8/2011	558.8	2/8/2011	999.7	3/8/2011	1954.8
1/9/2011	558.7	2/9/2011	892.7	3/9/2011	1953.6
1/10/2011	559.0	2/10/2011	893.0	3/10/2011	1953.3
1/11/2011	558.6	2/11/2011	851.2	3/11/2011	1954.6
1/12/2011	1061.6	2/12/2011	755.5	3/12/2011	1955.1
1/13/2011	1957.1	2/13/2011	1.2	3/13/2011	1954.9
1/14/2011	1959.0	2/14/2011	0.0	3/14/2011	1953.9
1/15/2011	1959.4	2/15/2011	1236.8	3/15/2011	1953.7
1/16/2011	1960.4	2/16/2011	1799.4	3/16/2011	1955.8
1/17/2011	1961.8	2/17/2011	700.7	3/17/2011	1957.5
1/18/2011	285.5	2/18/2011	674.8	3/18/2011	1956.0
1/19/2011	836.5	2/19/2011	460.3	3/19/2011	704.7
1/20/2011	1272.2	2/20/2011	42.8	3/20/2011	10.9
1/21/2011	919.1	2/21/2011	870.0	3/21/2011	20.6
1/22/2011	0.0	2/22/2011	658.4	3/22/2011	685.1
1/23/2011	193.0	2/23/2011	867.9	3/23/2011	1150.1
1/24/2011	1494.0	2/24/2011	0.0	3/24/2011	701.8
1/25/2011	1892.5	2/25/2011	726.4	3/25/2011	397.9
1/26/2011	1009.5	2/26/2011	379.9	3/26/2011	595.6
1/27/2011	842.9	2/27/2011	1388.9	3/27/2011	1154.1
1/28/2011	922.5	2/28/2011	1957.5	3/28/2011	1684.8
1/29/2011	846.2			3/29/2011	1441.6
1/30/2011	866.6			3/30/2011	896.7
1/31/2011	19.6			3/31/2011	1965.4

Table 1 (Cont.)
 Lehigh Southwest Cement Company
 Permanente Plant Quarry Pumping Volumes
 Gallons per Minute (GPM)

Date	GPM	Date	GPM	Date	GPM
5/1/2011	718.6	6/1/2011	715.7	7/1/2011	977.1
5/2/2011	0.0	6/2/2011	784.4	7/2/2011	712.8
5/3/2011	912.0	6/3/2011	422.8	7/3/2011	861.4
5/4/2011	1292.7	6/4/2011	340.0	7/4/2011	333.7
5/5/2011	1331.6	6/5/2011	964.3	7/5/2011	0.0
5/6/2011	676.0	6/6/2011	965.0	7/6/2011	950.7
5/7/2011	679.3	6/7/2011	586.1	7/7/2011	1093.0
5/8/2011	866.1	6/8/2011	0.0	7/8/2011	880.4
5/9/2011	865.4	6/9/2011	316.5	7/9/2011	669.1
5/10/2011	1034.3	6/10/2011	772.4	7/10/2011	380.4
5/11/2011	964.7	6/11/2011	968.7	7/11/2011	327.9
5/12/2011	963.9	6/12/2011	969.4	7/12/2011	534.2
5/13/2011	954.6	6/13/2011	970.0	7/13/2011	568.1
5/14/2011	877.6	6/14/2011	994.0	7/14/2011	671.4
5/15/2011	704.3	6/15/2011	1098.3	7/15/2011	708.5
5/16/2011	0.0	6/16/2011	949.9	7/16/2011	398.9
5/17/2011	832.3	6/17/2011	279.5	7/17/2011	346.0
5/18/2011	1275.8	6/18/2011	1.1	7/18/2011	580.2
5/19/2011	700.1	6/19/2011	0.0	7/19/2011	681.2
5/20/2011	855.2	6/20/2011	0.0	7/20/2011	880.1
5/21/2011	958.0	6/21/2011	1346.0	7/21/2011	662.9
5/22/2011	957.8	6/22/2011	1291.7	7/22/2011	705.3
5/23/2011	957.7	6/23/2011	1057.4	7/23/2011	565.6
5/24/2011	387.9	6/24/2011	849.5	7/24/2011	422.8
5/25/2011	822.2	6/25/2011	335.1	7/25/2011	353.5
5/26/2011	908.7	6/26/2011	368.3	7/26/2011	617.7
5/27/2011	908.6	6/27/2011	0.0	7/27/2011	667.4
5/28/2011	653.9	6/28/2011	588.9	7/28/2011	443.8
5/29/2011	522.5	6/29/2011	1803.3	7/29/2011	491.5
5/30/2011	920.2	6/30/2011	911.1	7/30/2011	440.7
5/31/2011	958.8			7/31/2011	312.6

Table 1 (Cont.)
Lehigh Southwest Cement Company
Permanente Plant Quarry Pumping Volumes
Gallons per Minute (GPM)

Date	GPM
8/1/2011	312.3
8/2/2011	397.3
8/3/2011	322.2
8/4/2011	327.5
8/5/2011	484.0
8/6/2011	481.7
8/7/2011	484.2
8/8/2011	474.9
8/9/2011	587.9
8/10/2011	392.4
8/11/2011	315.0
8/12/2011	323.3
8/13/2011	611.8
8/14/2011	307.0
8/15/2011	207.2
8/16/2011	589.5
8/17/2011	684.6
8/18/2011	479.3
8/19/2011	177.0
8/20/2011	413.1
8/21/2011	613.6
8/22/2011	95.0
8/23/2011	590.8
8/24/2011	244.8
8/25/2011	199.2
8/26/2011	212.3
8/27/2011	437.9
8/28/2011	765.3
8/29/2011	141.3
8/30/2011	420.9
8/31/2011	438.0

2.2 Process Water

These outfalls discharge a mixture of water that is used in the aggregate preparation and cement manufacturing processes. These outfalls also combine stormwater associated with industrial activity with process water; thus, the commingled discharge is characterized as process water for purposes of this application.

Outfall Identifier: Pond 13B

Outfall (Overflow) Latitude: 37d 19'0.27" N

Outfall (Overflow) Longitude: 122d 6' 6.01" W

Assessor Parcel Number: 351-09-022

Pond 13 B is located adjacent to and on the north bank of Permanente Creek (Figure 3). Pond 13 B receives water conveyed by pipeline from the Primary Crusher and stormwater runoff from its surrounding area. The Primary Crusher receives mined limestone from the quarry and reduces it to less than six inches in size. The limestone is sprayed with water to control fugitive dust as it moves through the crusher system. The crusher system is housed in a building on the slope of Permanente Creek canyon. Fresh water is used to wash down the floor of the building. Some lubricants from the crusher system are collected in the wash water. These are removed from the water by an oil skimmer prior to pumping. This water is collected at the bottom of the crusher in concrete ponds and pumped into the pipeline which then flows by gravity to Pond 13 A.

Pond 13 A is used for settling of suspended solids and overflows into Pond 13 B. Pond 13 B has an overflow structure but typically the water seeps through the pond sides and bottom and surfaces at the bank of the Creek (Plate 2).

Outfall Identifier: Pond 9

Outfall (Overflow) Latitude: 37d 18'48.21" N

Outfall (Overflow) Longitude: 122d 5' 26.09" W

Assessor Parcel Number: 351-10-033

Pond 9 is located adjacent to the north bank of Permanente Creek, south of the cement plant (Plate 4). Pond 9 receives a) stormwater runoff from upgradient roads and hillsides b) pumped water from the Dinky shed basin c) pumped water from Pond 11 and d) municipal or reclaim water (not containing WWTP effluent) used to wash down the haul road upgradient of the pond. The fine material removed from the aggregate in the Rock Plant is hauled to deposit locations on the road upgradient from Pond 9. This material, which contains entrained process water, can fall onto the road and be washed into Pond 9. This pond also receives process water pumped from Pond 11 which is part of the Cement Plant Reclaim Water Process/Stormwater Sub-System.

Pond 9 is allowed to fill to the top of a standpipe after flowing through a rock mound. The standpipe flows by gravity to a discharge pipe into Permanente Creek.

Outfall Identifier: Pond 17

Outfall (Overflow) Latitude: 37d 18'51.53" N

Outfall (Overflow) Longitude: 122d 5' 20.14" W

Assessor Parcel Number: 351-10-033

Pond 17 is located above the south bank of Permanente Creek adjacent to the Rock Plant access road (Plate 4). Stormwater runoff from the Rock Plant road is diverted into Pond 17 through grated channels in the road. Although primarily stormwater, it is possible that some stormwater which has contacted Rock Plant fine material inadvertently spilled from haul trucks can flow into the basin. Similar to Pond 9, this contact with the process water entrained in the material characterizes the water as process water. The Pond typically discharges in response to storm events. The discharge is at the inlet of the overflow pipe which runs down the bank to discharge into Permanente Creek.

Outfall Identifier: Pond 20

Outfall (Overflow) Latitude: 37d 19'12.59" N

Outfall (Overflow) Longitude: 122d 5' 21.98" W

Assessor Parcel Number: 351-10-005

Pond 20 is located at the base of a slope south of the historic, non-operational, Aluminum Plant and general plant entry road (Plate 6). Pond 20 is a shallow pond that receives stormwater runoff from the slope, Aluminum plant, and the entry road. The cement plant utilizes a drive-through water spray truck wash system. The water is collected and routed to a concrete sump at the base of the slope below the Aluminum Plant, slightly west and upgradient of Pond 20. Typically, the water in the Truck Wash sump is pumped to Reclaim Water Tank A. However, water can overflow this sump and into Pond 20 a) in a storm event of sufficient size b) in the event of pump failure or c) if the rate of truck wash water entering is greater than the pumping capacity. The mixture of this wash water would then make the discharge from Pond 20 process water.

The discharge from Pond 20 continues to flow northeasterly and enters Permanente Creek near the entry road overpass.

Cement Plant Reclaim Water System

The cement plant collects water used at several locations and stormwater runoff that falls within the Plant Stormwater Drainage Area. The system consists of two sub-systems: 1) the Wastewater Treatment Plant effluent system and 2) the process and stormwater system. These are illustrated diagrammatically in Plates 3 and 4 respectively.

Lehigh performed a Water Balance Study in September 2011 to understand the rates of various water flows in the Reclaim Water System. The results of that study have been updated with recent changes that ceased use of Reclaim water containing WWTP effluent in Rock Plant No. 3. These updated rates are provided in this ROWD for the two sub-systems below.

Wastewater Treatment Plant Sub-system

The Wastewater Treatment Plant (WWTP) treats domestic wastewater generated from lavatories and showers in the cement plant area buildings. The WWTP operates under the authority of RWQCB Waste Discharge Requirement (WDR) No. 94-038. This WDR authorizes use of this effluent for gas conditioning (cooling) in the pre-heater tower of the cement rotary kiln

and for spraying on the cement plant roads for dust suppression. There is no discharge to Permanente Creek from the WWTP from normal operations, and no specific NPDES Permit coverage is being sought. However, Lehigh includes the description below of the WWTP flows for the sake of completeness from a water balance standpoint.

As diagrammatically illustrated in Plate 3, the WWTP effluent is pumped via a Lift Tank into an open top 1.6 million gallon capacity concrete tank called Thickener Tank 1 (this tank was used to “thicken” the wet cement slurry feed mixture in the old “wet” cement plant, now demolished; the name remains, but does not reflect any current processes). From the Thickener Tank the WWTP effluent is routed to a surge tank feeding a booster pump. This pump sends the effluent to its two consumptive uses.

Table 1 provides the water balance rates for the WWTP sub-system. As can be seen, water from the process and stormwater sub-system is used to provide the additional volume needed to meet the consumptive use demand. This water flows one-way from Pond 11. Table 1 also demonstrates that the ratio of process/stormwater to WWTP effluent in the WWTP sub-system is greater than 7.5 to 1.

Process and Stormwater Subsystem

Municipal water is used in various processes in the cement plant. The municipal process water recovered from these uses in the cement plant and storm water runoff from the vicinity is collected in a collection system that is a network of sub-grade components (grated inlets, concrete sumps, trenches, and pipelines) and surface components (tanks and pipelines). At certain junctions, these conduits converge in concrete vaults and are routed to the next junction point. Plate 4 diagrammatically illustrates this system.

The collected water is routed to the topographic low point in the system, Reclaim Water Tank A, located in Area 1, the raw materials and fossil fuel storage area.

The primary storage structures in this sub-system are connected via the flow paths as follows:

- **Reclaim Water Tank A** receives inflow from the following sources:
 - Two Truck washes: one for cement hauling trucks and one for aggregate hauling trucks
 - Plant sub-grade collection system (stormwater included)
 - Rock plant solids thickener overflow (intermittent only) via Pond 17
 - Equipment garage floor drain sumps
 - Periodic blow down from closed-circuit cooling water systems
 - Overflow/overspray from water sprays onto material conveyor belts
- **Pond 11** receives inflow from
 - Reclaim Water Tank A
 - Stormwater runoff from above topography

The Reclaim Water System has a finite capacity. However, the recently initiated pumped discharge from Pond 11 into Pond 9 that then discharges into Permanente Creek is designed to maintain storage capacity. This capacity is intended to allow inflows from intense storm events or malfunctions (e.g. those that cause excess inflow of municipal water into the Reclaim system) to be contained, thus avoiding discharges from the Emergency Discharge described below. Table 2 provides water balance flows of the process and stormwater sub-system.

Table 2
 Permanente Cement Plant Reclaim Water System
 Process / Stormwater Sub-system
 Water Balance (gallons)
 November 2011

INPUTS	January	February	March	April	May	June	July	August	Sept	October	November	December	Average	Average Wet Weather	Average Dry Weather	TOTAL
	Wet Season					Dry Season				Wet Season						
Rock Plants 1 and 2	27,000	26,000	31,000	37,000	41,000	8,000	8,500	7,800	7,400	40,000	35,000	28,000	25,000	32,000	7,900	300,000
Cement Haul Truck Wash	43,000	41,000	56,000	59,000	62,000	68,000	71,000	70,000	67,000	70,000	60,000	49,000	60,000	54,000	69,000	720,000
Aggregate Haul Truck Wash	1,800,000	1,500,000	2,000,000	2,200,000	2,600,000	2,800,000	3,100,000	3,000,000	2,700,000	3,100,000	2,700,000	2,000,000	2,458,000	2,186,000	2,900,000	29,500,000
Stormwater	340,000	460,000	330,000	110,000	53,000	0	0	0	37,000	130,000	350,000	480,000	191,000	314,000	9,300	2,290,000
Sub-Total	2,210,000	2,027,000	2,417,000	2,406,000	2,756,000	2,876,000	3,180,000	3,078,000	2,811,000	3,340,000	3,145,000	2,557,000	2,734,000	2,586,000	2,986,300	32,800,000
CONSUMPTIVE USES & DISCHARGES	January	February	March	April	May	June	July	August	Sept	October	November	December	Average	Average Wet Weather	Average Dry Weather	TOTAL
	Wet Season					Dry Season				Wet Season						
Pond 11 Make up to WWTP Effluent System	1,500,000	1,420,000	1,500,000	1,710,000	1,900,000	2,610,000	2,700,000	2,700,000	2,610,000	1,900,000	1,610,000	1,500,000	1,972,000	1,591,000	2,655,000	23,660,000
Pond 11 Evaporation	50,000	20,000	50,000	110,000	160,000	320,000	610,000	640,000	590,000	330,000	160,000	110,000	263,000	119,000	540,000	3,150,000
Pond 11 / 9 discharge (Calculated to maintain system storage capacity)	660,000	587,000	867,000	586,000	696,000	0	0	0	0	1,110,000	1,375,000	947,000	569,000	876,000	0	6,830,000
Sub-Total	2,210,000	2,027,000	2,417,000	2,406,000	2,756,000	2,930,000	3,310,000	3,340,000	3,200,000	3,340,000	3,145,000	2,557,000	2,803,000	2,586,000	3,195,000	33,640,000
NET	0	0	0	0	0	-54,000	-130,000	-262,000	-389,000	0	0	0	-70,000	0	-208,800	-840,000

Emergency and Malfunction Discharge Points

The Cement Plant reclaim Process and Stormwater sub-system has three identified points of potential discharge should flooding or malfunctions cause an exceedance of the overall or component circulation systems. These are currently authorized to discharge in malfunction or flooding conditions by the Sand and Gravel Permit.

Outfall Identifier: Dinky Shed basin Overflow

Outfall (Overflow) Latitude: 37d 18'51.29" N

Outfall (Overflow) Longitude: 122d 5' 22.60" W

Assessor Parcel Number: 351-10-033

The Dinky Shed Basin is located adjacent to the north bank of Permanente Creek just east of Pond 9 (Plate 5). The basin receives stormwater that flows down the Rock Plant access road and flows from below diversions in that road that direct stormwater to Pond 17. Although primarily stormwater, it is possible that some stormwater which has contacted Rock Plant fine material inadvertently spilled from haul trucks can flow into the basin. Similar to Pond 9, this contact with the process water entrained in the material characterizes the basin water as process water. The water in this basin is pumped into Pond 9. This basin rarely overflows, but it is possible that in a rain event large enough to exceed the pumping capacity, or in the event of a pump failure during a storm, this basin could overflow into Permanente Creek. The discharge and sampling point would be at the overflow from the pond. There is no overflow structure and any such overflow would meander to the creek.

Outfall Identifier: Rock Plant Sump Overflow

Outfall (Overflow) Latitude: 37d 18'46.25" N

Outfall (Overflow) Longitude: 122d 5' 26.65" W

Assessor Parcel Number: 351-10-033

The Rock Plant produces construction aggregate from limestone quarried at the Permanente Plant. The limestone is reduced into various sizes by crushing. Fine material is removed from the aggregate by washing with water. The fine material in the resulting process water is removed through the use of flocculant and coagulant chemicals in a thickener. The collected slurry is filtered and the filter cake is hauled for deposit on the Permanente plant property.

The wash water is collected in a concrete sump at a low point in the system (Plate 5). The water is pumped up to the thickener. This sump is adjacent to the south bank of Permanente Creek. A berm lies between the sump and the creek bank. Some stormwater from the Rock Plant also enters this sump. Although unlikely, it is possible that the sump could overflow to Permanente Creek in a rain event large enough to exceed the pumping capacity or in the event of a pump failure during a storm, and if the overflow overtopped the surrounding berm. There is no overflow structure.

**Outfall Identifier: Cement Plant Reclaim Process and stormwater sub-system –
Emergency Discharge Point**

Outfall (Diversion) Latitude: 37d 19'05.14" N

Outfall (Diversion) Longitude: 122d 5' 21.98" W

Assessor Parcel Number: 351-10-005

In the event the capacity of the Reclaim Water System (Reclaim Water Tank A and Pond 11) is exceeded, the system has a point to relieve this excess in an underground concrete vault located near the low point of the system (Plate 4). In the event of an overflow, the water would flow through an underground pipe, through a concrete vault, and then into another pipeline where it discharges into Permanente Creek. The Lat Long provided is for the actual point of diversion to the creek.

General Industrial Stormwater Discharges

The Permanente Plant discharges stormwater runoff that has contacted “significant materials” as defined in the California Industrial Stormwater General Permit (Water Quality Order No. 97-03-DWQ). These discharges do not comingle with process waters. Lehigh requests authority for these discharges to continue under the General Permit or under the permit that is the subject of this application.

The stormwater discharges emanate from areas on the property directly adjacent to Permanente Creek. These flows are not directed to one of the ponds and discharge points described above. These “Drainage areas” are described below.

Several of the drainage areas have physical constraints to sampling: a) they contain steep topography and dense vegetation that require access by foot only b) this access can be unsafe in rain events c) discharges to Permanente Creek are intermittent. Some drainage areas have no identifiable points where discharge would occur during moderate to heavy storm events. Discharge may occur during torrential events, but human access would not be possible at those times.

Lehigh has identified sampling points for most drainage areas that are representative of discharges from “significant materials”, which comprise a small percentage of surface area in the drainage area.

The stormwater drainage areas in Figures 4 through 8 were delineated by following topographical divides that group the stormwater into an area of similar significant materials and represented by sampling points where possible. The general direction of stormwater runoff flow is indicated by blue arrows. Sampling points are labeled and marked with a red dot.

Drainage Areas

Following are the drainage areas that can contain discharges of general industrial stormwater to “waters of the United States”.

West Materials Storage Area Slope – 71 acres containing approximately 5 acres of historically mined material

Quarry Slope Drainage Area – 26 acres containing approximately 1.5 acres of historically mined material

Crusher Slope Drainage Area – 70 acres that contains land graded for mining related equipment, some historically mined material, and currently mined material.

Aluminum Plant Drainage Area – 33 acres that contains the buildings remaining from the inoperative Kaiser Aluminum Plant

East Materials Storage Area (EMSA) Drainage Area – 40 acres that contains currently mined material

Drainage Area Descriptions

West Materials Storage Area Slope drainage area lies south of the West Materials Storage Area on the north bank of Permanente Creek (Figure 4). The area is almost completely covered with dense, native vegetation and its steep slopes make access to Permanente Creek extremely difficult. A rough trail exists angling about halfway down the slope. A stormwater sampling point (SW 1) is proposed at the end of this trail in a gully that drains from the only historically mined material in the area. The specific description of this point is:

Outfall Identifier: SW 1

Outfall (Diversion) Latitude: 37d 19'15.45" N
Outfall (Diversion) Longitude: 122d 7' 49.02" W
Assessor Parcel Number: 351-09-011

Potential Pollutants: Total Suspended Solids (TSS), metals, selenium, turbidity

Quarry Slope drainage area lies south of the Permanente quarry on the north bank of Permanente Creek (Figure 5). The area is almost completely covered with dense, native vegetation and its steep slopes make access to Permanente Creek impossible. A rough trail exists angling down the slope to the site of the historic Kaiser House next to Permanente Creek. A stormwater sampling point (SW 2) is proposed on this trail in a gully that drains from the only historically mined material in the area. The specific description of this point is:

Outfall Identifier: SW 2

Outfall (Diversion) Latitude: 37d 19'4.17" N
Outfall (Diversion) Longitude: 122d 7' 8.19" W
Assessor Parcel Number: 351-09-011

Potential Pollutants: TSS, metals, selenium, turbidity

Crusher Slope drainage area lies south of the Permanente Quarry on the north bank of Permanente Creek (Figure 6). The active Primary Crusher is located in this area however the stormwater from the land surrounding the crusher is collected in basins and is pumped into a pipeline that drains to Ponds 13A and 13 B described above.

Currently mined material is stockpiled in the area east of Ponds 13 A and B. The remaining stormwater that contacts significant materials generally drains into a small canyons that terminate at the road along Permanente Creek.

This road contains a large berm as required by the Mine Safety and Health Administration (MSHA) between the road and the creek. This berm prevents runoff from entering the creek. Small earthen basins have been constructed to intercept this stormwater and keep it from covering the road. There are a few locations where concrete K rails are used in place of the complete berm. These K rails sit on a smaller berm and have holes in them about 2 feet above the road surface. If the road was filled with water up to those holes a discharge could occur. However, human access would not be possible to sample. At this time there are no identifiable sampling points for stormwater in this drainage area.

Potential Pollutants: TSS, metals, selenium, turbidity, Oil & Grease (O&G)

Aluminum Plant drainage area lies east of the cement plant on the northwest bank of Permanente Creek (Figure 7). The former Kaiser Aluminum plant buildings and the Union Pacific railroad property lie in this area. Stormwater from the Aluminum Plant is collected and piped to a ditch that flows by gravity to Ponds 19 and 20 with Pond 20 being the final discharge point as described above.

Other stormwater flows diffusely down the slope below the Aluminum Plant (and cement plant entrance road) and eventually combines with the Pond 20 discharge. There is no other identifiable point discharge for stormwater in this area that is not included in previously described discharges above.

Potential Pollutants: TSS, metals, turbidity, Oil & Grease

East Materials Storage Area lies east of the cement plant. Currently mined overburden and rock from the Permanente quarry is placed in this area for long term storage (Figure 8). Stormwater from the area is collected in a series of earthen basins and ultimately directed to Pond 30. Pond 30 has a standpipe which allows stormwater to accumulate and solids to settle prior to discharge. The overflow from Pond 30 is a sampling point described as follows:

Outfall Identifier: SW 4

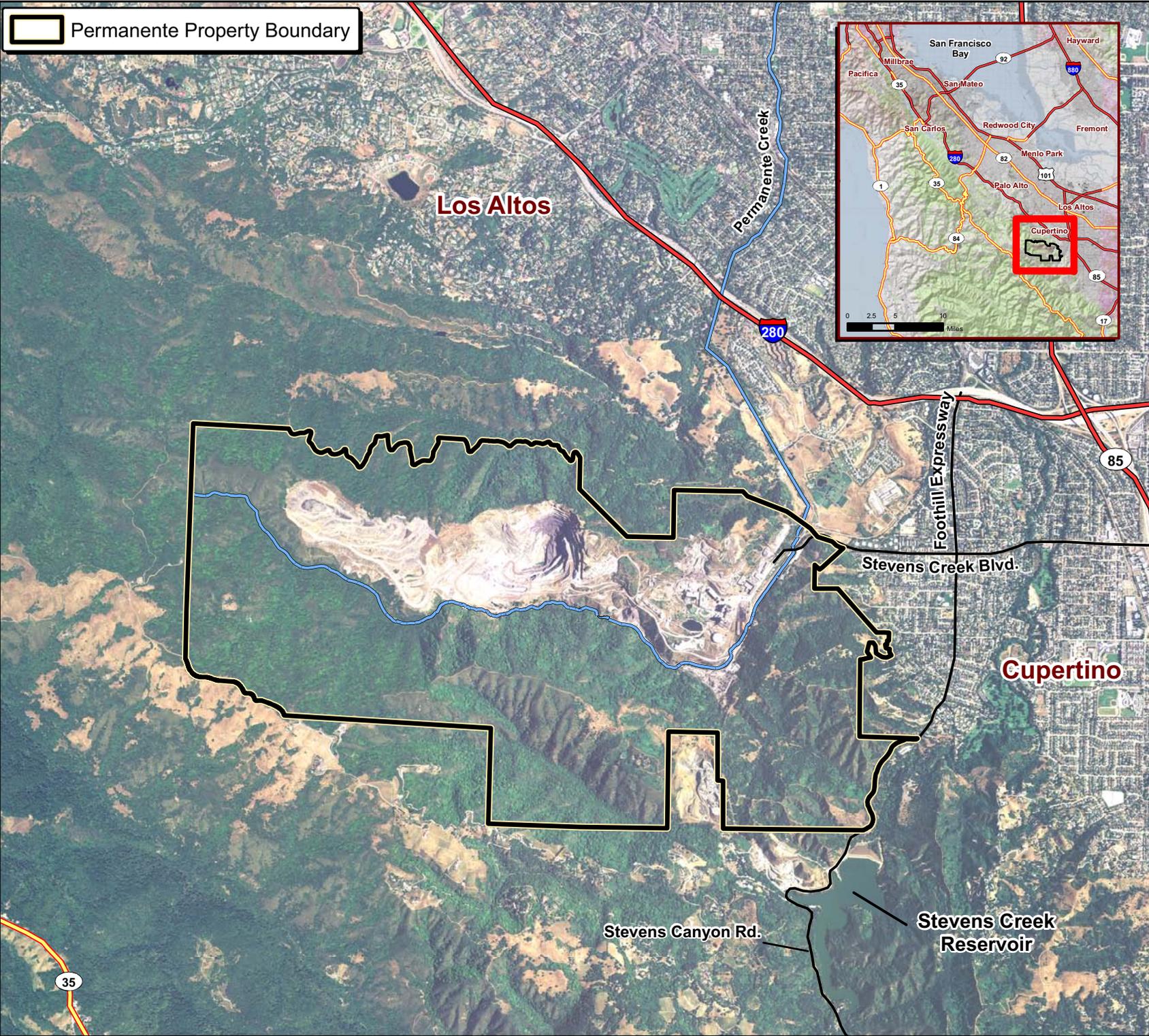
Outfall (Diversion) Latitude: 37d 19'23.33" N

Outfall (Diversion) Longitude: 122d 5' 7.89" W

Assessor Parcel Number: 351-10-038

Potential Pollutants: TSS, metals, selenium, turbidity

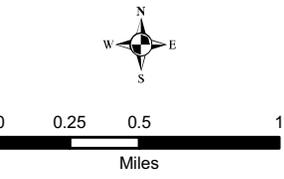
Figures and Plates



Lehigh Permanente
Quarry
Santa Clara County, CA

Figure 1.
Permanente Property
Location Map

Draft Attorney Work Product
Privileged and Confidential



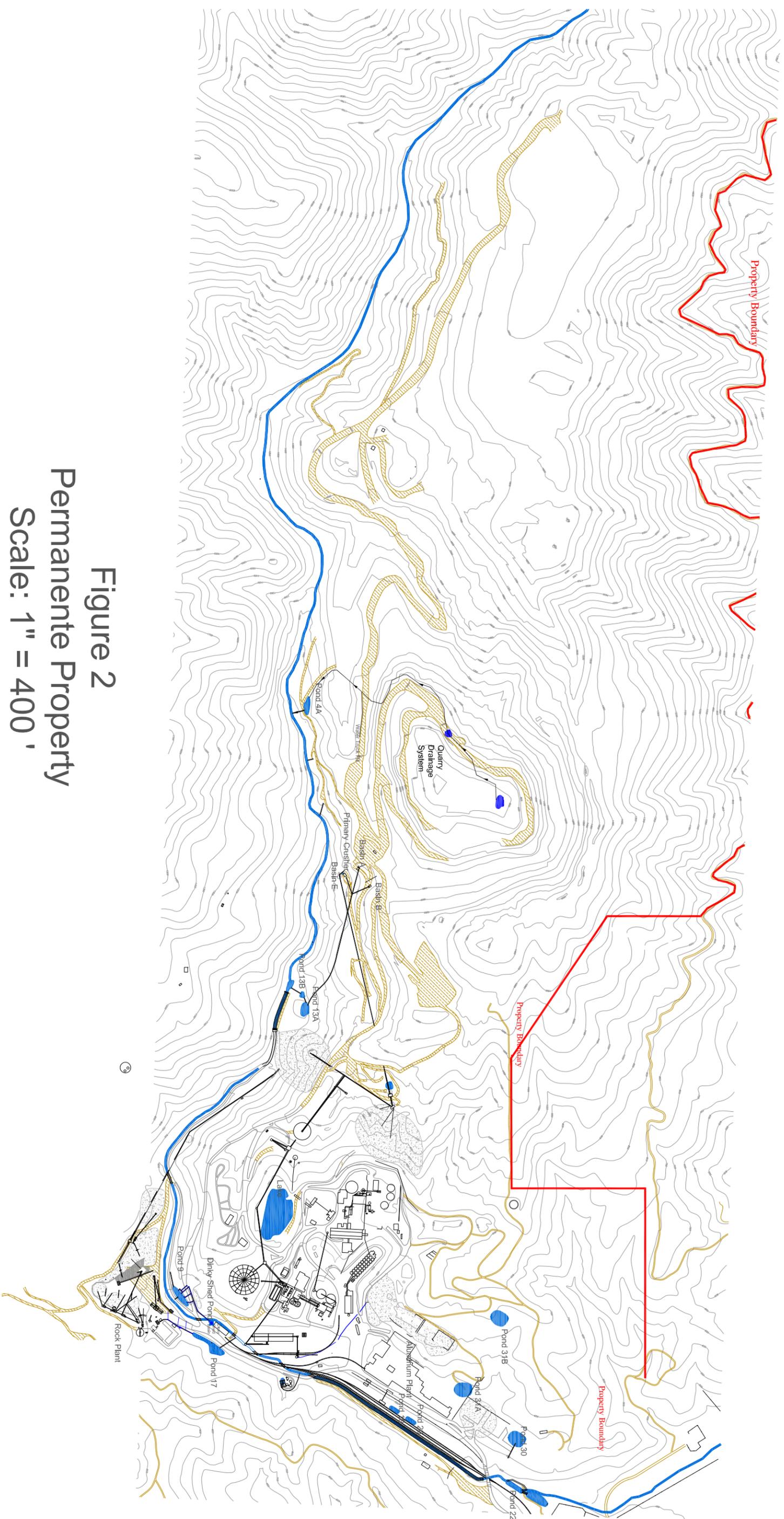


Figure 2
 Permanente Property
 Scale: 1" = 400 '
 November 2011

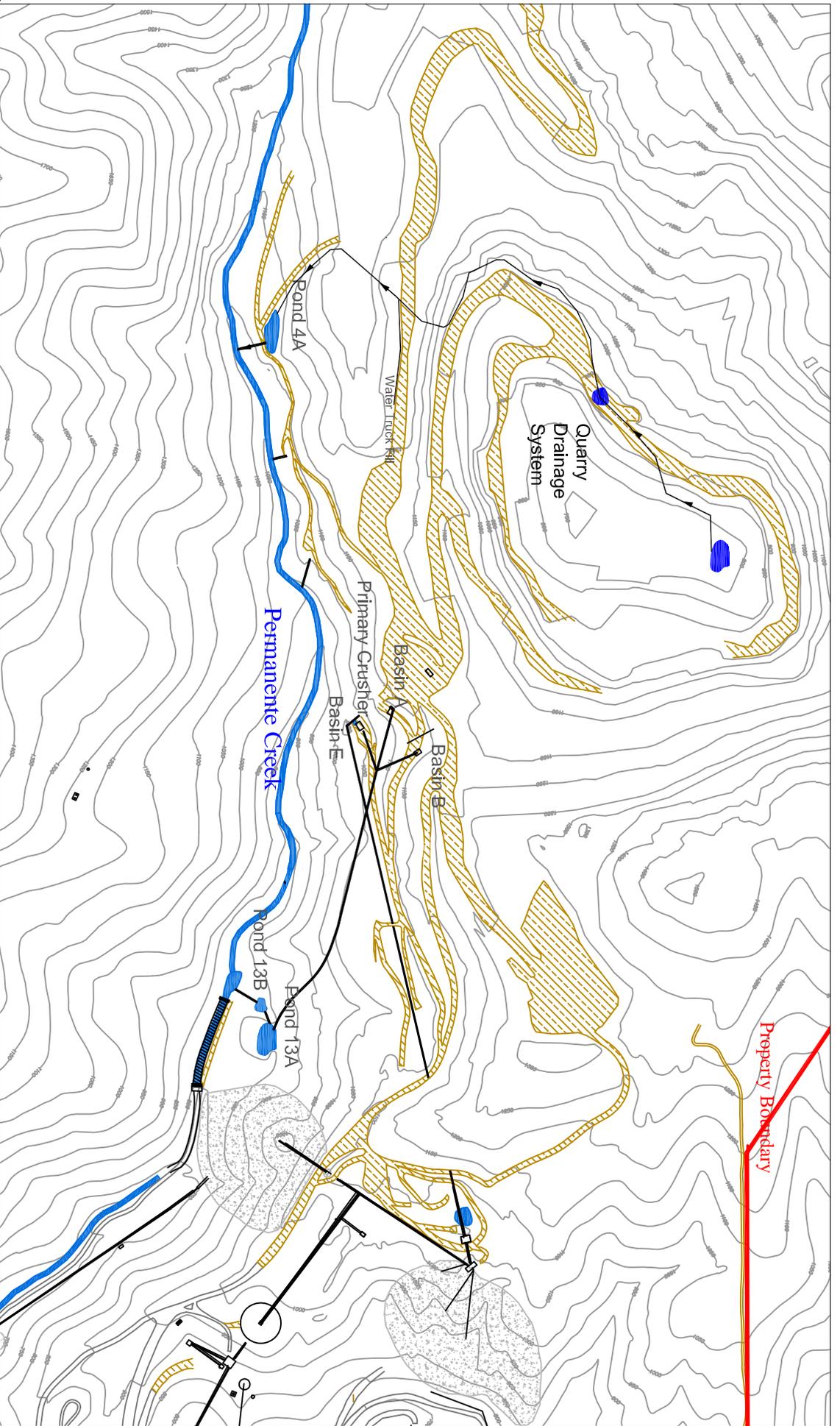


Figure 3
 Permanente Quarry Area
 Scale: 1" = 600'

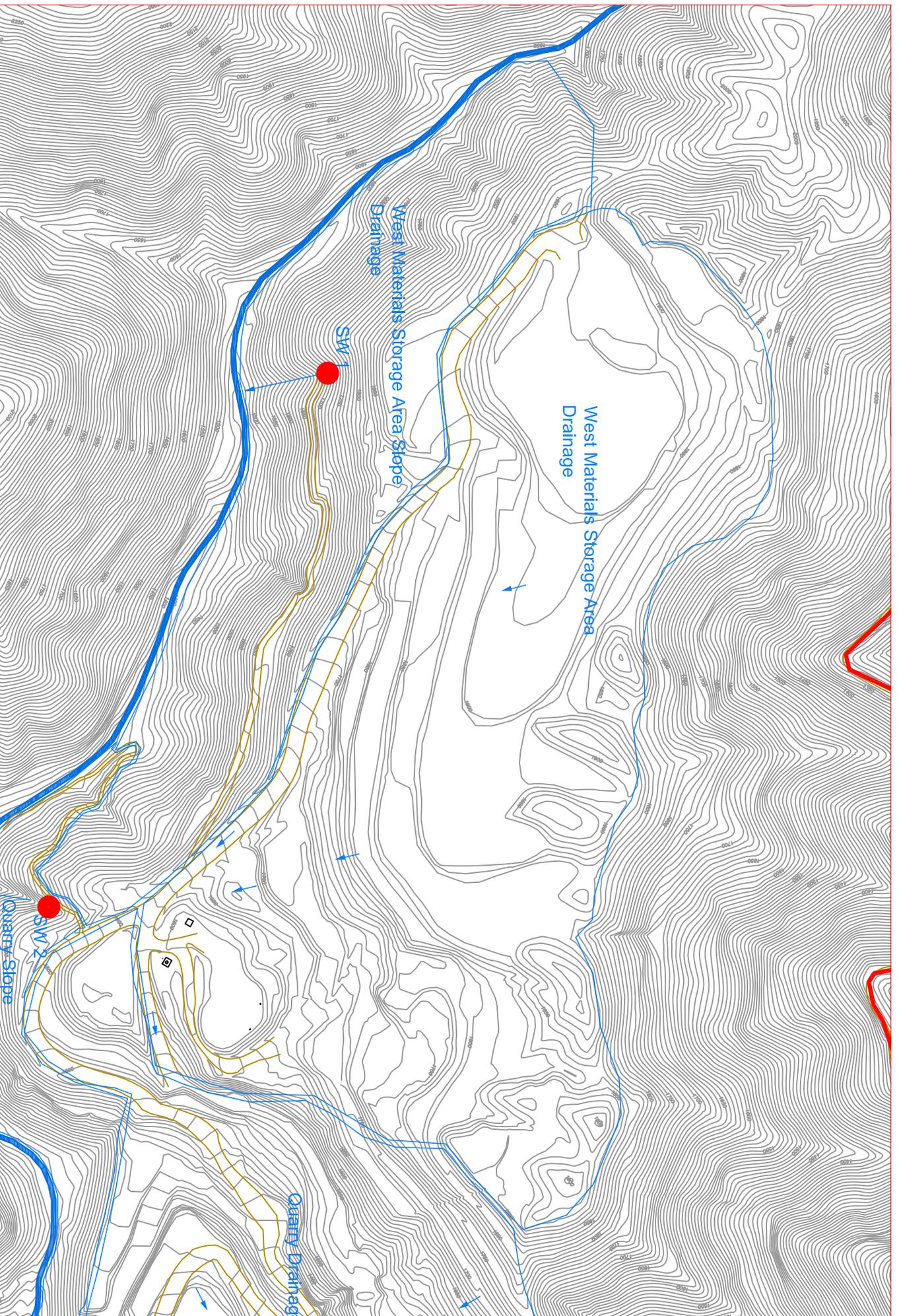


Figure 4
West Materials Storage Area Slope
Drainage Area



Figure 5
Quarry Slope Drainage Area

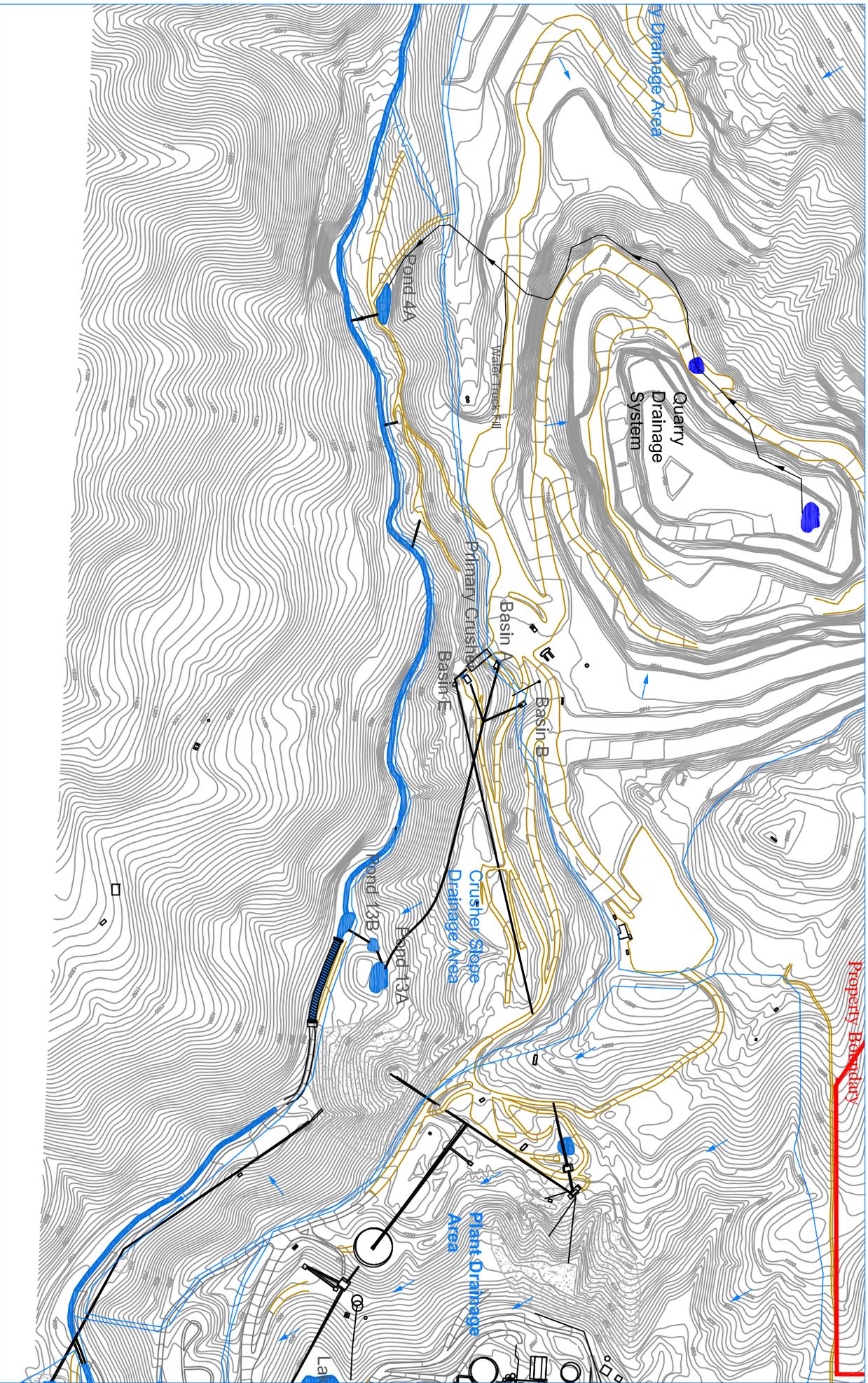


Figure 6
Crusher Slope Drainage Area

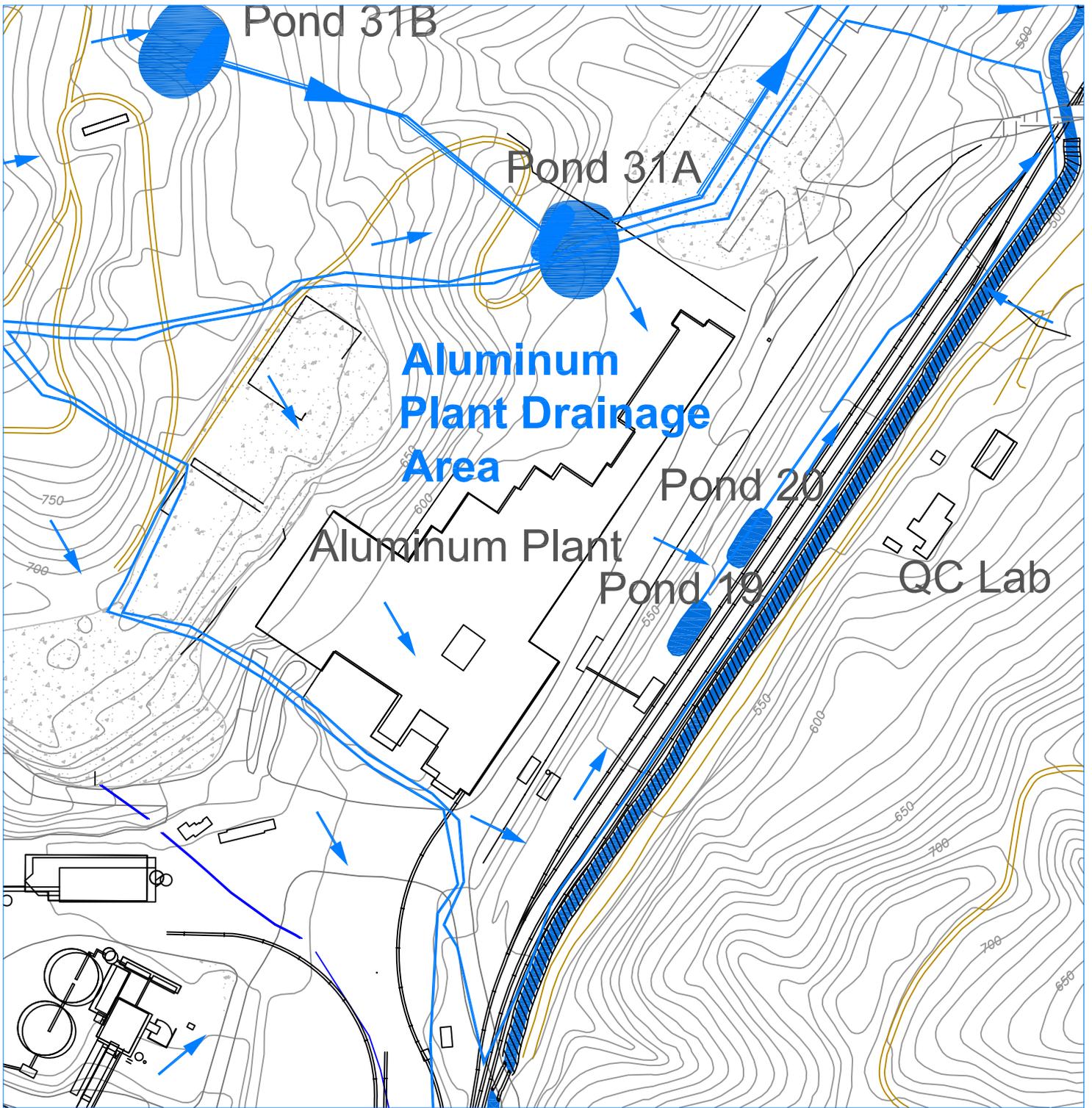


Figure 7
Aluminum Plant Drainage
Area

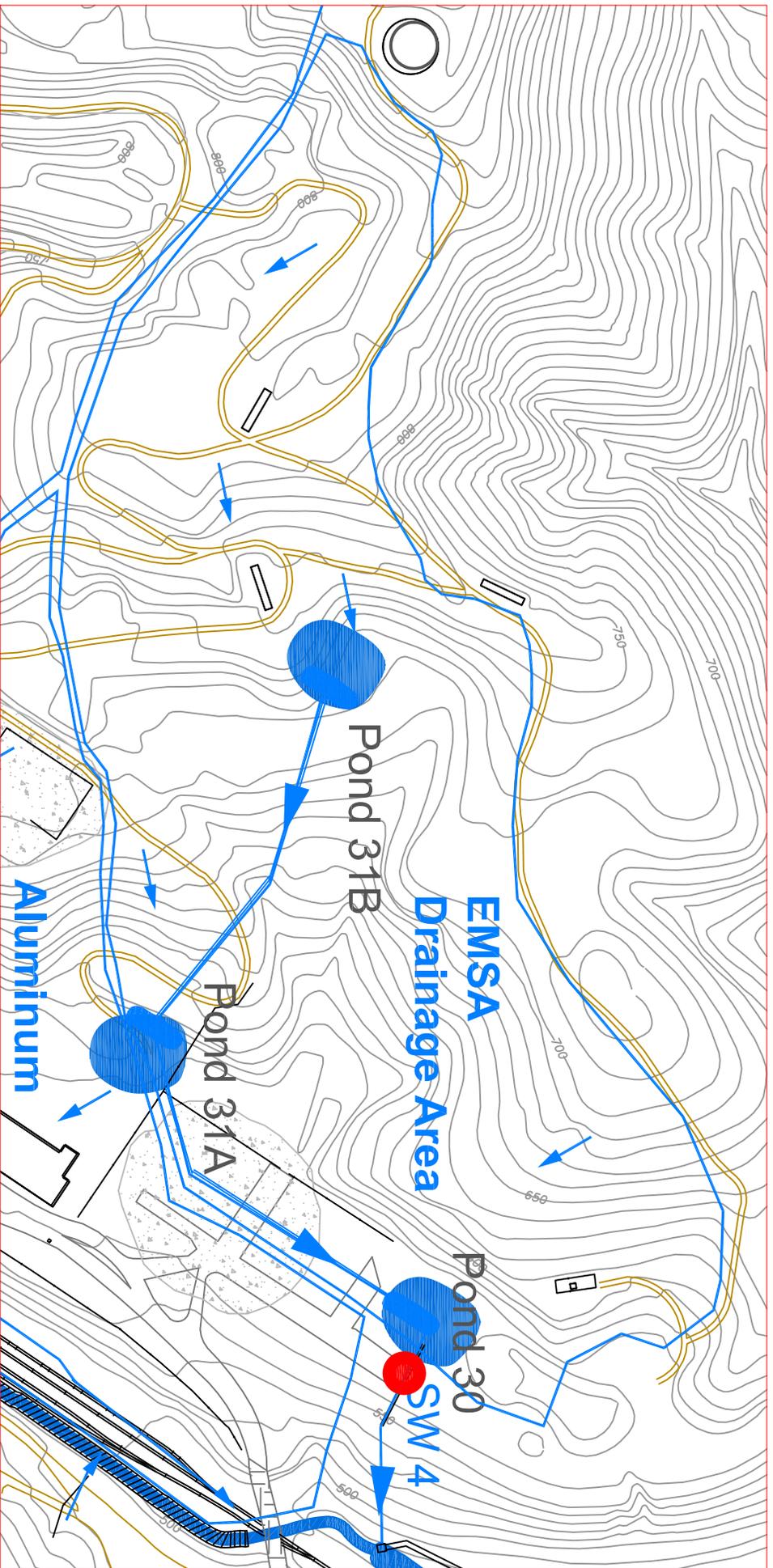


Figure 8

East Materials Storage Area
Drainage Area



Plate 1

Quarry Pond 4A



Plate 2
Pond 13B



Plate 3

Cement Plant Reclaim Water System WWTP Effluent Sub-system



Plate 4
Process / Stormwater
Sub-system



Plate 5

Rock Plant Sump and Dinky Shed basin Overflows



Plate 6
Pond 20 Overflow

Application Forms



State of California
Regional Water Quality Control Board

APPLICATION/REPORT OF WASTE DISCHARGE GENERAL INFORMATION FORM FOR WASTE DISCHARGE REQUIREMENTS OR NPDES PERMIT



I. FACILITY INFORMATION

A. Facility:

Name:			
Address:			
City:	County:	State:	Zip Code:
Contact Person:		Telephone Number:	

B. Facility Owner:

Name:		Owner Type (Check One)	
Address:		1. <input type="checkbox"/> Individual	2. <input type="checkbox"/> Corporation
City:	State:	3. <input type="checkbox"/> Governmental Agency	4. <input type="checkbox"/> Partnership Agency
Zip Code:	5. <input type="checkbox"/> Other: _____		
Contact Person:		Telephone Number:	Federal Tax ID:

C. Facility Operator (The agency or business, not the person):

Name:		Operator Type (Check One)	
Address:		1. <input type="checkbox"/> Individual	2. <input type="checkbox"/> Corporation
City:	State:	3. <input type="checkbox"/> Governmental Agency	4. <input type="checkbox"/> Partnership Agency
Zip Code:	5. <input type="checkbox"/> Other: _____		
Contact Person:		Telephone Number:	

D. Owner of the Land:

Name:		Owner Type (Check One)	
Address:		1. <input type="checkbox"/> Individual	2. <input type="checkbox"/> Corporation
City:	State:	3. <input type="checkbox"/> Governmental Agency	4. <input type="checkbox"/> Partnership Agency
Zip Code:	5. <input type="checkbox"/> Other: _____		
Contact Person:		Telephone Number:	

E. Address Where Legal Notice May Be Served:

Address:		
City:	State:	Zip Code:
Contact Person:		Telephone Number:

F. Billing Address:

Address:		
City:	State:	Zip Code:
Contact Person:		Telephone Number:



APPLICATION/REPORT OF WASTE DISCHARGE GENERAL INFORMATION FORM FOR WASTE DISCHARGE REQUIREMENTS OR NPDES PERMIT



II. TYPE OF DISCHARGE

Check Type of Discharge(s) Described in this Application (A or B):

[] A. WASTE DISCHARGE TO LAND

[] B. WASTE DISCHARGE TO SURFACE WATER

Check all that apply:

- [] Domestic/Municipal Wastewater Treatment and Disposal
[] Cooling Water
[] Mining
[] Waste Pile
[] Wastewater Reclamation
[] Other, please describe:

- [] Animal Waste Solids
[] Land Treatment Unit
[] Dredge Material Disposal
[] Surface Impoundment
[] Industrial Process Wastewater

- [] Animal or Aquacultural Wastewater
[] Biosolids/Residual
[] Hazardous Waste (see instructions)
[] Landfill (see instructions)
[] Storm Water

III. LOCATION OF THE FACILITY

Describe the physical location of the facility.

1. Assessor's Parcel Number(s) Facility: Discharge Point:

2. Latitude Facility: Discharge Point:

3. Longitude Facility: Discharge Point:

IV. REASON FOR FILING

[] New Discharge or Facility [] Changes in Ownership/Operator (see instructions)
[] Change in Design or Operation [] Waste Discharge Requirements Update or NPDES Permit Reissuance
[] Change in Quantity/Type of Discharge [] Other:

V. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

Name of Lead Agency:
Has a public agency determined that the proposed project is exempt from CEQA? [] Yes [] No
If Yes, state the basis for the exemption and the name of the agency supplying the exemption on the line below.
Basis for Exemption/Agency:
Has a "Notice of Determination" been filed under CEQA? [] Yes [] No
If Yes, enclose a copy of the CEQA document, Environmental Impact Report, or Negative Declaration. If no, identify the expected type of CEQA document and expected date of completion.
Expected CEQA Documents:
[] EIR [] Negative Declaration
Expected CEQA Completion Date:

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY



State of California Regional Water Quality Control Board

APPLICATION/REPORT OF WASTE DISCHARGE GENERAL INFORMATION FORM FOR WASTE DISCHARGE REQUIREMENTS OR NPDES PERMIT



VI. OTHER REQUIRED INFORMATION

Please provide a COMPLETE characterization of your discharge. A complete characterization includes, but is not limited to, design and actual flows, a list of constituents and the discharge concentration of each constituent, a list of other appropriate waste discharge characteristics, a description and schematic drawing of all treatment processes, a description of any Best Management Practices (BMPs) used, and a description of disposal methods. Also include a site map showing the location of the facility and, if you are submitting this application for an NPDES permit, identify the surface water to which you propose to discharge. Please try to limit your maps to a scale of 1:24,000 (7.5' USGS Quadrangle) or a street map, if more appropriate.

VII. OTHER

Attach additional sheets to explain any responses which need clarification. List attachments with titles and dates below:

Three horizontal lines for listing attachments.

You will be notified by a representative of the RWQCB within 30 days of receipt of your application. The notice will state if your application is complete or if there is additional information you must submit to complete your Application/Report of Waste Discharge, pursuant to Division 7, Section 13260 of the California Water Code.

VIII. CERTIFICATION

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

Print Name: HENRIK WESSELING Title: PLANT MANAGER
Signature: [Handwritten Signature] Date: 11-28-2011

FOR OFFICE USE ONLY

Table with 4 columns: Date Form 200 Received, Letter to Discharger, Fee Amount Received, Check #

FORM 1 GENERAL	U.S. ENVIRONMENTAL PROTECTION AGENCY GENERAL INFORMATION Consolidated Permits Program <i>(Read the "General Instructions" before starting.)</i>	I. EPA I.D. NUMBER <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:5%;">S</td> <td style="width:85%;"></td> <td style="width:5%;">T/A</td> <td style="width:5%;">C</td> </tr> <tr> <td>F</td> <td></td> <td></td> <td>D</td> </tr> <tr> <td>1</td> <td>2</td> <td>13</td> <td>14 15</td> </tr> </table>	S		T/A	C	F			D	1	2	13	14 15
S		T/A	C											
F			D											
1	2	13	14 15											
LABEL ITEMS	PLEASE PLACE LABEL IN THIS SPACE	GENERAL INSTRUCTIONS If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in area below. Also, if any of the preprinted data is absent (<i>the area to the left of the label space lists the information that should appear</i>), please provide it in the proper fill-in area(s) below. If the label is complete and correct, you need not complete Items I, III, V, and VI (<i>except VI-B which must be completed regardless</i>). Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.												
I. EPA I.D. NUMBER														
III. FACILITY NAME														
V. FACILITY MAILING ADDRESS														
VI. FACILITY LOCATION														
II. POLLUTANT CHARACTERISTICS														
INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of bold-faced terms .														
SPECIFIC QUESTIONS	Mark "X" YES NO FORM ATTACHED	Mark "X" YES NO FORM ATTACHED												
A. Is this facility a publicly owned treatment works which results in a discharge to waters of the U.S.? (FORM 2A)	16 17 18	19 20 21												
C. Is this a facility which currently results in discharges to waters of the U.S. other than those described in A or B above? (FORM 2C)	22 23 24	25 26 27												
E. Does or will this facility treat, store, or dispose of hazardous wastes? (FORM 3)	28 29 30	31 32 33												
G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)	34 35 36	37 38 39												
I. Is this facility a proposed stationary source which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)	40 41 42	43 44 45												
B. Does or will this facility (<i>either existing or proposed</i>) include a concentrated animal feeding operation or aquatic animal production facility which results in a discharge to waters of the U.S.? (FORM 2B)														
D. Is this a proposed facility (<i>other than those described in A or B above</i>) which will result in a discharge to waters of the U.S.? (FORM 2D)														
F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)														
H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)														
J. Is this facility a proposed stationary source which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)														
III. NAME OF FACILITY														
C 1	SKIP													
15	16 - 29	30												
IV. FACILITY CONTACT														
A. NAME & TITLE (<i>last, first, & title</i>)		B. PHONE (<i>area code & no.</i>)												
C 2														
15	16	45 46 48 49 51 52 55												
V. FACILITY MAILING ADDRESS														
A. STREET OR P.O. BOX														
C 3														
15	16	45												
B. CITY OR TOWN		D. ZIP CODE												
C 4														
15	16	40 41 42 47 51												
VI. FACILITY LOCATION														
A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER														
C 5														
15	16	45												
B. COUNTY NAME														
C 6														
15	16	46 70												
C. CITY OR TOWN		D. STATE												
C 6														
15	16	40 41 42 47 51 52 54												

CONTINUED FROM THE FRONT

VII. SIC CODES (4-digit, in order of priority)											
A. FIRST						B. SECOND					
C						C					
7	3	2	4	1		7	1	4	2	2	
(specify) Cement hydraulic production						(specify) Crushed and broken limestone					
15	16	17	18	19		15	16	17	18	19	
C. THIRD						D. FOURTH					
C						C					
7	1	4	2	9		7					
(specify) Crushed and broken stone						(specify)					
15	16	17	18	19		15	16	17	18	19	

VIII. OPERATOR INFORMATION												
A. NAME											B. Is the name listed in Item VIII-A also the owner?	
C												<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
8	Lehigh Southwest Cement Company											
15	16	17	18	19	20	21	22	23	24	25	26	

C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box: if "Other," specify.)										D. PHONE (area code & no.)			
F = FEDERAL S = STATE P = PRIVATE M = PUBLIC (other than federal or state) O = OTHER (specify)										P (specify)		(408) 996-4000	
15	16	17	18	19	20	21	22	23	24	25	26		

E. STREET OR P.O. BOX											
24001 Stevens Creek Blvd											
26	27	28	29	30	31	32	33	34	35	36	37

F. CITY OR TOWN						G. STATE		H. ZIP CODE		IX. INDIAN LAND	
B Cupertino						CA		95014		Is the facility located on Indian lands? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
15	16	17	18	19	20	40	41	42	43	44	45

X. EXISTING ENVIRONMENTAL PERMITS											
A. NPDES (Discharges to Surface Water)						D. PSD (Air Emissions from Proposed Sources)					
C	T	I				C	T	I			
9	N					9	P				
CAG982001											
15	16	17	18	19	20	30	31	32	33	34	35
B. UIC (Underground Injection of Fluids)						E. OTHER (specify)					
C	T	I				C	T	I			
9	U					9					
						CAS000001 (specify) California General Industrial Stormwater Permit					
15	16	17	18	19	20	30	31	32	33	34	35
C. RCRA (Hazardous Wastes)						E. OTHER (specify)					
C	T	I				C	T	I			
9	R					9					
						(specify)					
15	16	17	18	19	20	30	31	32	33	34	35

XI. MAP
 Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers, and other surface water bodies in the map area. See instructions for precise requirements.

XII. NATURE OF BUSINESS (provide a brief description)
 The Lehigh Southwest Cement Company Permanente Plant (Lehigh) produces Portland cement from limestone quarried at the facility location in Cupertino, California. Lehigh also produces construction aggregate from the same quarry.
 See attached for further descriptions.

XIII. CERTIFICATION (see instructions)
 I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME & OFFICIAL TITLE (type or print)				B. SIGNATURE				C. DATE SIGNED			
Henrik Wesseling, Plant Manager								11-28-2011			

COMMENTS FOR OFFICIAL USE ONLY											
C											
15	16	17	18	19	20	21	22	23	24	25	26

Please print or type in the unshaded areas only.

FORM 2C NPDES		U.S. ENVIRONMENTAL PROTECTION AGENCY APPLICATION FOR PERMIT TO DISCHARGE WASTEWATER EXISTING MANUFACTURING, COMMERCIAL, MINING AND SILVICULTURE OPERATIONS <i>Consolidated Permits Program</i>					
I. OUTFALL LOCATION							
For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.							
A. OUTFALL NUMBER <i>(list)</i>	B. LATITUDE			C. LONGITUDE			D. RECEIVING WATER <i>(name)</i>
	1. DEG.	2. MIN.	3. SEC.	1. DEG.	2. MIN.	3. SEC.	
001 Pond 4A	37.00	19.00	1.68	122.00	6.00	41.94	Permanente Creek
002 Pond 13B	37.00	19.00	0.27	122.00	6.00	6.01	Permanente Creek
003 Pond 9	37.00	18.00	48.21	122.00	5.00	26.09	Permanente Creek
004 Pond 17	37.00	18.00	51.53	122.00	5.00	20.14	Permanente Creek
005 Pond 20	37.00	19.00	12.59	122.00	5.00	21.98	Permanente Creek
II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES							
A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfalls. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.							
B. For each outfall, provide a description of: (1) All operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) The average flow contributed by each operation; and (3) The treatment received by the wastewater. Continue on additional sheets if necessary.							
1. OUTFALL NO. <i>(list)</i>	2. OPERATION(S) CONTRIBUTING FLOW			3. TREATMENT			
	a. OPERATION <i>(list)</i>	b. AVERAGE FLOW <i>(include units)</i>		a. DESCRIPTION	b. LIST CODES FROM TABLE 2C-1		
001	Quarry dewatering	1000 gallons per minute (gpm)		Quarry water pumped discharge is filtered with cartridge filters prior to settling discharge.	1Q	1U	
	Pond 4A						
002	Rock Crushing	Unknown		Dust control water overspray and wash down water have oil and grease skimmed prior to settling pond discharge of combined process and stormwater.	1H	1U	
	Stormwater	585 gpm average peak monthly					
	Ponds 13 A and B						
003	Truck wash	400 gpm pumped from Pond 11		Wwater is settled in Ponds 11 and 9 prior to discharge	1U		
	Cement plant process & cooling water	included in 400 gpm					
	Stormwater	170 gpm average peak monthly					
	Pond 9						
004	Aggregate crushing and washing	Unknown and intermittent (rare)		Settling pond	1U		
	Stormwater	529 gpm average peak monthly					
	Pond 17						
005	Truck wash sump overflow (periodic)	Unknown		Settling Pond (Pond 20)	1U		
	Stormwater	2.7 million gallons per 24 h					
	Pond 20						
					1U		
OFFICIAL USE ONLY <i>(effluent guidelines sub-categories)</i>							

CONTINUED FROM THE FRONT

C. Except for storm runoff, leaks, or spills, are any of the discharges described in Items II-A or B intermittent or seasonal? <input checked="" type="checkbox"/> YES (complete the following table) <input type="checkbox"/> NO (go to Section III)								
1. OUTFALL NUMBER (list)	2. OPERATION(S) CONTRIBUTING FLOW (list)	3. FREQUENCY		4. FLOW				C. DURATION (in days)
		a. DAYS PER WEEK (specify average)	b. MONTHS PER YEAR (specify average)	a. FLOW RATE (in mgd)		B. TOTAL VOLUME (specify with units)		
				1. LONG TERM AVERAGE	2. MAXIMUM DAILY	1. LONG TERM AVERAGE	2. MAXIMUM DAILY	
002 Pond 13B	Pumped flow from crusher Basin E (estimate)	5	12	0.1	0.1			
003 Pond 9	Pumped flow from Pond 11	2	12	0.67	1.0			
004 Pond 17	Thickener tank clean out (estimate)	2	2	2.0	4.0			
005 Pond 20	Truck wash sump overflow (estimate)	5	12	0.144	0.288			
III. PRODUCTION								
A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility? <input checked="" type="checkbox"/> YES (complete Item III-B) <input type="checkbox"/> NO (go to Section IV)								
B. Are the limitations in the applicable effluent guideline expressed in terms of production (or other measure of operation)? <input checked="" type="checkbox"/> YES (complete Item III-C) <input type="checkbox"/> NO (go to Section IV)								
C. If you answered "yes" to Item III-B, list the quantity which represents an actual measurement of your level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls.								
1. AVERAGE DAILY PRODUCTION						2. AFFECTED OUTFALLS (list outfall numbers)		
a. QUANTITY PER DAY	b. UNITS OF MEASURE	c. OPERATION, PRODUCT, MATERIAL, ETC. (specify)						
10,340	thousands of pounds per day	Portland cement clinker				001, 002, 003, 004, 005		
11,520	thousands of pounds per day	Portland cement				001, 002, 003, 004, 005		
IV. IMPROVEMENTS								
A. Are you now required by any Federal, State or local authority to meet any implementation schedule for the construction, upgrading or operations of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions. <input type="checkbox"/> YES (complete the following table) <input checked="" type="checkbox"/> NO (go to Item IV-B)								
1. IDENTIFICATION OF CONDITION, AGREEMENT, ETC.	2. AFFECTED OUTFALLS		3. BRIEF DESCRIPTION OF PROJECT	4. FINAL COMPLIANCE DATE				
	a. NO.	b. SOURCE OF DISCHARGE		a. REQUIRED	b. PROJECTED			
B. OPTIONAL: You may attach additional sheets describing any additional water pollution control programs (or other environmental projects which may affect your discharges) you now have underway or which you plan. Indicate whether each program is now underway or planned, and indicate your actual or planned schedules for construction. <input type="checkbox"/> MARK "X" IF DESCRIPTION OF ADDITIONAL CONTROL PROGRAMS IS ATTACHED								

CONTINUED FROM PAGE 2

V. INTAKE AND EFFLUENT CHARACTERISTICS

A, B, & C: See instructions before proceeding – Complete one set of tables for each outfall – Annotate the outfall number in the space provided.
 NOTE: Tables V-A, V-B, and V-C are included on separate sheets numbered V-1 through V-9.

D. Use the space below to list any of the pollutants listed in Table 2c-3 of the instructions, which you know or have reason to believe is discharged or may be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

1. POLLUTANT	2. SOURCE	1. POLLUTANT	2. SOURCE

VI. POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

Is any pollutant listed in Item V-C a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?

YES (list all such pollutants below)

NO (go to Item VI-B)

Empty space for listing pollutants and providing details for the 'YES' response.

CONTINUED FROM THE FRONT

VII. BIOLOGICAL TOXICITY TESTING DATA

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

YES (identify the test(s) and describe their purposes below)

NO (go to Section VIII)

Acute toxicity analyzed on samples taken from Permanente Creek in the plant area. results indicated no acute toxicity present.

VIII. CONTRACT ANALYSIS INFORMATION

Were any of the analyses reported in Item V performed by a contract laboratory or consulting firm?

YES (list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below)

NO (go to Section IX)

A. NAME	B. ADDRESS	C. TELEPHONE (area code & no.)	D. POLLUTANTS ANALYZED (list)
All			

IX. CERTIFICATION

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

A. NAME & OFFICIAL TITLE (type or print) Henrik Wesseling, Plant Manager	B. PHONE NO. (area code & no.) (408) 996-4000
C. SIGNATURE 	D. DATE SIGNED 11-28-2011

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (use the same format) instead of completing these pages. SEE INSTRUCTIONS.

EPA I.D. NUMBER (copy from Item 1 of Form 1)

OUTFALL NO.
001 Pond 4A

V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT				3. UNITS (specify if blank)				4. INTAKE (optional)			
	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS						
a. Biochemical Oxygen Demand (BOD)												
b. Chemical Oxygen Demand (COD)	0	0			0		3	mg/l	kg			
c. Total Organic Carbon (TOC)	0.51	5.54			0.41		3	mg/l	kg			
d. Total Suspended Solids (TSS)	28	305.22			26		3	mg/l	kg			
e. Ammonia (as N)												
f. Flow	VALUE	2.88 mgd			VALUE	1.44 mgd	daily			VALUE		
g. Temperature (winter)	VALUE	12.5			VALUE		2	°C		VALUE		
h. Temperature (summer)	VALUE				VALUE			°C		VALUE		
i. pH	MINIMUM	7.8	MAXIMUM	9.9	MINIMUM		11	STANDARD UNITS				

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT				4. UNITS				5. INTAKE (optional)			
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS						
a. Bromide (24959-67-9)		X												
b. Chlorine, Total Residual		X												
c. Color														
d. Fecal Coliform		X												
e. Fluoride (16984-48-8)														
f. Nitrate-Nitrite (as N)														

001 Pond 4A

ITEM V/B CONTINUED FROM FRONT

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT				4. UNITS				5. INTAKE (optional)	
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE (1) CONCENTRATION	b. MAXIMUM 30 DAY VALUE (1) CONCENTRATION	c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE (1) CONCENTRATION	b. NO. OF ANALYSES	
g. Nitrogen, Total Organic (as N)												
h. Oil and Grease			0	0	0	0	3	mg/l	kg			
i. Phosphorus (as P), Total (7723-14-0)												
j. Radioactivity												
(1) Alpha, Total												
(2) Beta, Total												
(3) Radium, Total												
(4) Radium 226, Total												
k. Sulfate (as SO ₄) (14808-79-8)												
l. Sulfide (as S)												
m. Sulfite (as SO ₃) (14265-45-3)												
n. Surfactants												
o. Aluminum, Total (7429-90-5)												
p. Barium, Total (7440-39-3)												
q. Boron, Total (7440-42-8)												
r. Cobalt, Total (7440-48-4)												
s. Iron, Total (7439-89-6)												
t. Magnesium, Total (7439-95-4)			42	457.8	41	223.5	3	mg/l	kg			
u. Molybdenum, Total (7439-98-7)												
v. Manganese, Total (7439-96-5)												
w. Tin, Total (7440-31-5)												
x. Titanium, Total (7440-32-6)												

CONTINUED FROM PAGE 3 OF FORM 2-C

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a (secondary industries, nonprocess wastewater outfalls, and nonrequired GC/MS fractions), mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2c for acrolein, acrylonitrile, 2,4 dinitrophenol, or 2-methyl-4, 6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (all 7 pages) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT				4. UNITS			5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)	c. LONG TERM AVRG. VALUE (if available)	d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE	
				(1) CONCENTRATION	(2) MASS						(1) CONCENTRATION	(2) MASS
1M. Antimony, Total (7440-36-0)				8	0.09		7.1	3	ug/l	kg		
2M. Arsenic, Total (7440-38-2)				2.7	0.03		2.3	3	ug/l	kg		
3M. Beryllium, Total (7440-41-7)				0	0		0	3	ug/l	kg		
4M. Cadmium, Total (7440-43-9)				0.44	0.005		0.33	3	ug/l	kg		
5M. Chromium, Total (7440-47-3)				2.6	0.028		2.3	3	ug/l	kg		
6M. Copper, Total (7440-50-8)				1.8	0.02		1.55	3	ug/l	kg		
7M. Lead, Total (7439-92-1)				0	0		0	3	ug/l	kg		
8M. Mercury, Total (7439-97-6)				5.55	6.1e-5		5.02	3	ng/l	kg		
9M. Nickel, Total (7440-02-0)				100	1.1		96	3	ug/l	kg		
10M. Selenium, Total (7782-49-2)				54	0.589		45	3	ug/l	kg		
11M. Silver, Total (7440-22-4)				0	0		0	3	ug/l	kg		
12M. Thallium, Total (7440-28-0)				0.37	0.004		0.37	3	ug/l	kg		
13M. Zinc, Total (7440-66-6)				11	0.12		11		ug/l	kg		
14M. Cyanide, Total (57-12-5)				0	0		0	3	ug/l	kg		
15M. Phenols, Total				0	0		0	3	ug/l	kg		

METALS, CYANIDE, AND TOTAL PHENOLS

DIOXIN												
2,3,7,8-Tetra-chlorodibenzo-P-Dioxin (1764-01-6)			X									

DESCRIBE RESULTS 25 D/F compounds 4 pg/1; max kg = 4.36e-8

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CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER <i>(if available)</i>	2. MARK "X"			3. EFFLUENT				4. UNITS				5. INTAKE <i>(optional)</i>	
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	b. MAXIMUM 30 DAY VALUE <i>(if available)</i>		c. LONG TERM AVRG. VALUE <i>(if available)</i>		a. CONCENTRATION	b. MASS	d. NO. OF ANALYSES	a. LONG TERM AVERAGE VALUE ⁽¹⁾	(2) MASS	b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS						
GC/MS FRACTION – VOLATILE COMPOUNDS													
1V. Acrolein (107-02-8)				0	0			ug/l	kg	3			
2V. Acrylonitrile (107-13-1)				0	0			ug/l	kg	3			
3V. Benzene (71-43-2)				0	0			ug/l	kg	3			
4V. Bis (Chloro-methyl) Ether (542-88-1)				0	0			ug/l	kg	3			
5V. Bromoform (75-25-2)				0	0			ug/l	kg	3			
6V. Carbon Tetrachloride (56-23-5)				0	0			ug/l	kg	3			
7V. Chlorobenzene (108-90-7)				0	0			ug/l	kg	3			
8V. Chloro-dibromomethane (124-48-1)				0	0			ug/l	kg	3			
9V. Chloroethane (75-00-3)				0	0			ug/l	kg	3			
10V. 2-Chloro-ethylvinyl Ether (110-75-8)				0	0			ug/l	kg	3			
11V. Chloroform (67-66-3)				0	0			ug/l	kg	3			
12V. Dichloro-bromomethane (75-27-4)				0	0			ug/l	kg	3			
13V. Dichloro-difluoromethane (75-71-8)				0	0			ug/l	kg	3			
14V. 1,1-Dichloro-ethane (75-34-3)				0	0			ug/l	kg	3			
15V. 1,2-Dichloro-ethane (107-06-2)				0	0			ug/l	kg	3			
16V. 1,1-Dichloro-ethylene (75-35-4)				0	0			ug/l	kg	3			
17V. 1,2-Dichloro-propane (78-87-5)				0	0			ug/l	kg	3			
18V. 1,3-Dichloro-propylene (542-75-6)				0	0			ug/l	kg	3			
19V. Ethylbenzene (100-41-4)				0	0			ug/l	kg	3			
20V. Methyl Bromide (74-83-9)				0	0			ug/l	kg	3			
21V. Methyl Chloride (74-87-3)				0	0			ug/l	kg	3			

CONTINUED FROM PAGE V-4

1. POLLUTANT AND CAS NUMBER <i>(if available)</i>	2. MARK "X"			3. EFFLUENT				4. UNITS				5. INTAKE <i>(optional)</i>			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE <i>(if available)</i>		c. LONG TERM AVRG. VALUE <i>(if available)</i>		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – VOLATILE COMPOUNDS <i>(continued)</i>															
22V. Methylene Chloride (75-09-2)				0	0					3	ug/l	kg			
23V. 1,1,2,2-Tetrachloroethane (79-34-5)				0	0					3	ug/l	kg			
24V. Tetrachloroethylene (127-18-4)				0	0					3	ug/l	kg			
25V. Toluene (108-88-3)				0	0					3	ug/l	kg			
26V. 1,2-Trans-Dichloroethylene (156-60-5)				0	0					3	ug/l	kg			
27V. 1,1,1-Trichloroethane (71-55-6)				0	0					3	ug/l	kg			
28V. 1,1,2-Trichloroethane (79-00-5)				0	0					3	ug/l	kg			
29V. Trichloroethylene (79-01-6)				0	0					3	ug/l	kg			
30V. Trichlorofluoromethane (75-69-4)				0	0					3	ug/l	kg			
31V. Vinyl Chloride (75-01-4)				0	0					3	ug/l	kg			
GC/MS FRACTION – ACID COMPOUNDS															
1A. 2-Chlorophenol (95-57-8)				0	0					3	ug/l	kg			
2A. 2,4-Dichlorophenol (120-83-2)				0	0					3	ug/l	kg			
3A. 2,4-Dimethylphenol (105-67-9)				0	0					3	ug/l	kg			
4A. 4,6-Dinitro-O-Cresol (534-52-1)				0	0					3	ug/l	kg			
5A. 2,4-Dinitrophenol (51-28-5)				0	0					3	ug/l	kg			
6A. 2-Nitrophenol (88-75-5)				0	0					3	ug/l	kg			
7A. 4-Nitrophenol (100-02-7)				0	0					3	ug/l	kg			
8A. P-Chloro-M-Cresol (59-50-7)				0	0					3	ug/l	kg			
9A. Pentachlorophenol (87-86-5)				0	0					3	ug/l	kg			
10A. Phenol (108-95-2)				0	0					3	ug/l	kg			
11A. 2,4,6-Trichlorophenol (88-05-2)				0	0					3	ug/l	kg			

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CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER <i>(if available)</i>	2. MARK "X"			3. EFFLUENT				4. UNITS				5. INTAKE <i>(optional)</i>		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE		c. LONG TERM AVRG. VALUE		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE	b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS					
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS														
1B. Acenaphthene (83-32-9)				0	0					3	ug/l	kg		
2B. Acenaphthylene (208-96-8)				0	0					3	ug/l	kg		
3B. Anthracene (120-12-7)				0	0					3	ug/l	kg		
4B. Benzidine (92-87-5)				0	0					3	ug/l	kg		
5B. Benzo (a) Anthracene (56-55-3)				0	0					3	ug/l	kg		
6B. Benzo (a) Pyrene (50-32-8)				0	0					3	ug/l	kg		
7B. 3,4-Benzofluoranthene (205-99-2)				0	0					3	ug/l	kg		
8B. Benzo (ghi) Perylene (191-24-2)				0	0					3	ug/l	kg		
9B. Benzo (k) Fluoranthene (207-08-9)				0	0					3	ug/l	kg		
10B. Bis (2-Chloroethoxy) Methane (111-91-1)				0	0					3	ug/l	kg		
11B. Bis (2-Chloroethyl) Ether (111-44-4)				0	0					3	ug/l	kg		
12B. Bis (2-Chloroisopropyl) Ether (102-80-1)				0	0					3	ug/l	kg		
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)				0	0					3	ug/l	kg		
14B. 4-Bromophenyl Phenyl Ether (101-55-3)				0	0					3	ug/l	kg		
15B. Butyl Benzyl Phthalate (85-68-7)				0	0					3	ug/l	kg		
16B. 2-Chloronaphthalene (91-58-7)				0	0					3	ug/l	kg		
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)				0	0					3	ug/l	kg		
18B. Chrysene (218-01-9)				0	0					3	ug/l	kg		
19B. Dibenz (a,h) Anthracene (53-70-3)				0	0					3	ug/l	kg		
20B. 1,2-Dichlorobenzene (95-50-1)				0	0					3	ug/l	kg		
21B. 1,3-Di-chlorobenzene (541-73-1)				0	0					3	ug/l	kg		

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CONTINUED FROM PAGE V-6

1. POLLUTANT AND CAS NUMBER <i>(if available)</i>	2. MARK "X"			3. EFFLUENT				4. UNITS				5. INTAKE <i>(optional)</i>	
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	b. MAXIMUM 30 DAY VALUE <i>(if available)</i>		c. LONG TERM AVRG. VALUE <i>(if available)</i>		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS <i>(continued)</i>													
22B. 1,4-Dichlorobenzene (106-46-7)				0	0			3	ug/l	kg			
23B. 3,3-Dichlorobenzidine (91-94-1)				0	0			3	ug/l	kg			
24B. Diethyl Phthalate (84-66-2)				0	0			3	ug/l	kg			
25B. Dimethyl Phthalate (131-11-3)				0	0			3	ug/l	kg			
26B. Di-N-Butyl Phthalate (84-74-2)				0	0			3	ug/l	kg			
27B. 2,4-Dinitrotoluene (121-14-2)				0	0			3	ug/l	kg			
28B. 2,6-Dinitrotoluene (606-20-2)				0	0			3	ug/l	kg			
29B. Di-N-Octyl Phthalate (117-84-0)				0	0			3	ug/l	kg			
30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)				0	0			3	ug/l	kg			
31B. Fluoranthene (206-44-0)				0	0			3	ug/l	kg			
32B. Fluorene (96-73-7)				0	0			3	ug/l	kg			
33B. Hexachlorobenzene (118-74-1)				0	0			3	ug/l	kg			
34B. Hexachlorobutadiene (87-68-3)				0	0			3	ug/l	kg			
35B. Hexachlorocyclopentadiene (77-47-4)				0	0			3	ug/l	kg			
36B. Hexachloroethane (67-72-1)				0	0			3	ug/l	kg			
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)				0	0			3	ug/l	kg			
38B. Isophorone (78-59-1)				0	0			3	ug/l	kg			
39B. Naphthalene (91-20-3)				0	0			3	ug/l	kg			
40B. Nitrobenzene (98-95-3)				0	0			3	ug/l	kg			
41B. N-Nitrosodimethylamine (62-75-9)				0	0			3	ug/l	kg			
42B. N-Nitrosodi-N-Propylamine (62-164-7)				0	0			3	ug/l	kg			

001 Pond 4A

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT				4. UNITS				5. INTAKE (optional)	
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (continued)													
43B. N-Nitrosodiphenylamine (86-30-6)				0	0			3	ug/l	kg			
44B. Phenanthrene (85-01-8)				0	0			3	ug/l	kg			
45B. Pyrene (129-00-0)				0	0			3	ug/l	kg			
46B. 1,2,4-Tri-chlorobenzene (120-82-1)				0	0			3	ug/l	kg			
GC/MS FRACTION – PESTICIDES													
1P. Aldrin (309-00-2)				0	0			3	ug/l	kg			
2P. α-BHC (319-84-6)				0	0			3	ug/l	kg			
3P. β-BHC (319-85-7)				0	0			3	ug/l	kg			
4P. γ-BHC (68-89-9)				0	0			3	ug/l	kg			
5P. δ-BHC (319-86-8)				0	0			3	ug/l	kg			
6P. Chlordane (57-74-9)				0	0			3	ug/l	kg			
7P. 4,4'-DDT (50-29-3)				0	0			3	ug/l	kg			
8P. 4,4'-DDE (72-55-9)				0	0			3	ug/l	kg			
9P. 4,4'-DDD (72-54-8)				0	0			3	ug/l	kg			
10P. Dieldrin (60-57-1)				0	0			3	ug/l	kg			
11P. α-Endosulfan (115-29-7)				0	0			3	ug/l	kg			
12P. β-Endosulfan (115-29-7)				0	0			3	ug/l	kg			
13P. Endosulfan Sulfate (1031-07-8)				0	0			3	ug/l	kg			
14P. Endrin (72-20-8)				0	0			3	ug/l	kg			
15P. Endrin Aldehyde (7421-93-4)				0	0			3	ug/l	kg			
16P. Heptachlor (76-44-8)				0	0			3	ug/l	kg			

EPA I.D. NUMBER (copy from Item 1 of Form 1) **OUTFALL NUMBER**
 001 Pond 4A

CONTINUED FROM PAGE V-8

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT				4. UNITS				5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		a. CONCENTRATION	b. MASS	d. NO. OF ANALYSES	a. LONG TERM AVERAGE VALUE (1)	b. NO. OF ANALYSES		
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS							
GC/MS FRACTION – PESTICIDES (continued)														
17P. Heptachlor Epoxide (1024-57-3)				0	0					3	ug/l	kg		
18P. PCB-1242 (53469-21-9)				0	0					3	ug/l	kg		
19P. PCB-1254 (11097-69-1)				0	0					3	ug/l	kg		
20P. PCB-1221 (11104-28-2)				0	0					3	ug/l	kg		
21P. PCB-1232 (11141-16-5)				0	0					3	ug/l	kg		
22P. PCB-1248 (12672-29-6)				0	0					3	ug/l	kg		
23P. PCB-1260 (11096-82-5)				0	0					3	ug/l	kg		
24P. PCB-1016 (12674-11-2)				0	0					3	ug/l	kg		
25P. Toxaphene (8001-35-2)				0	0					3	ug/l	kg		

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (use the same format) instead of completing these pages.
SEE INSTRUCTIONS.

EPA I.D. NUMBER (copy from Item 1 of Form 1)

V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)		OUTFALL NO. 002 Pond 13A/13B
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PART A –You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT						3. UNITS (specify if blank)			4. INTAKE (optional)		
	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Biochemical Oxygen Demand (BOD)												
b. Chemical Oxygen Demand (COD)	NA	NA					NA	mg/l	kg			
c. Total Organic Carbon (TOC)	NA	NA					NA	mg/l	kg			
d. Total Suspended Solids (TSS)	NA	NA					NA	mg/l	kg			
e. Ammonia (as N)												
f. Flow	VALUE NA		VALUE		VALUE		NA			VALUE		
g. Temperature (winter)	VALUE NA		VALUE		VALUE		NA	°C		VALUE		
h. Temperature (summer)	VALUE		VALUE		VALUE			°C		VALUE		
i. pH	MINIMUM NA	MAXIMUM NA	MINIMUM NA	MAXIMUM			NA	STANDARD UNITS				

PART B – Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Bromide (24959-67-9)														
b. Chlorine, Total Residual		X												
c. Color														
d. Fecal Coliform		X												
e. Fluoride (16984-48-8)														
f. Nitrate-Nitrite (as N)														

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (use the same format) instead of completing these pages.
SEE INSTRUCTIONS.

EPA I.D. NUMBER (copy from Item 1 of Form 1)

V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)		OUTFALL NO. 003 Pond 9
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PART A – You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT						3. UNITS <i>(specify if blank)</i>			4. INTAKE <i>(optional)</i>		
	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE <i>(if available)</i>		c. LONG TERM AVRG. VALUE <i>(if available)</i>		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Biochemical Oxygen Demand (BOD)												
b. Chemical Oxygen Demand (COD)	20	75.8					1	mg/l	kg			
c. Total Organic Carbon (TOC)	3.45	13.1					1	mg/l	kg			
d. Total Suspended Solids (TSS)	26	98.5					1	mg/l	kg			
e. Ammonia (as N)												
f. Flow	VALUE 1.0 mgd		VALUE		VALUE		daily			VALUE		
g. Temperature (winter)	VALUE 11.6		VALUE		VALUE		2	°C		VALUE		
h. Temperature (summer)	VALUE		VALUE		VALUE			°C		VALUE		
i. pH	MINIMUM 7.3	MAXIMUM 8.4	MINIMUM 7.7	MAXIMUM			17	STANDARD UNITS				

PART B – Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. <i>(if available)</i>	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE <i>(optional)</i>			
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE <i>(if available)</i>		c. LONG TERM AVRG. VALUE <i>(if available)</i>		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Bromide (24959-67-9)														
b. Chlorine, Total Residual	X													
c. Color														
d. Fecal Coliform	X													
e. Fluoride (16984-48-8)														
f. Nitrate-Nitrite (as N)														

003 Pond 9

ITEM V-B CONTINUED FROM FRONT

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
g. Nitrogen, Total Organic (as N)														
h. Oil and Grease			0	0					1	mg/l	kg			
i. Phosphorus (as P), Total (7723-14-0)														
j. Radioactivity														
(1) Alpha, Total														
(2) Beta, Total														
(3) Radium, Total														
(4) Radium 226, Total														
k. Sulfate (as SO ₄) (14808-79-8)														
l. Sulfide (as S)														
m. Sulfite (as SO ₃) (14265-45-3)														
n. Surfactants														
o. Aluminum, Total (7429-90-5)														
p. Barium, Total (7440-39-3)														
q. Boron, Total (7440-42-8)														
r. Cobalt, Total (7440-48-4)														
s. Iron, Total (7439-89-6)														
t. Magnesium, Total (7439-95-4)			30	114					1	mg/l	kg			
u. Molybdenum, Total (7439-98-7)														
v. Manganese, Total (7439-96-5)														
w. Tin, Total (7440-31-5)														
x. Titanium, Total (7440-32-6)														

EPA I.D. NUMBER (copy from Item 1 of Form 1)	OUTFALL NUMBER
	003 Pond 9

CONTINUED FROM PAGE 3 OF FORM 2-C

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a (secondary industries, nonprocess wastewater outfalls, and nonrequired GC/MS fractions), mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one analysis for that pollutant if you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2b for acrolein, acrylonitrile, 2,4 dinitrophenol, or 2-methyl-4, 6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (all 7 pages) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, CYANIDE, AND TOTAL PHENOLS															
1M. Antimony, Total (7440-36-0)				0.66	0.003					1	ug/l	kg			
2M. Arsenic, Total (7440-38-2)				1.1	0.004					1	ug/l	kg			
3M. Beryllium, Total (7440-41-7)				0	0					1	ug/l	kg			
4M. Cadmium, Total (7440-43-9)				0	0					1	ug/l	kg			
5M. Chromium, Total (7440-47-3)				9.5	0.036					1	ug/l	kg			
6M. Copper, Total (7440-50-8)				3.7	0.014					1	ug/l	kg			
7M. Lead, Total (7439-92-1)				0	0					1	ug/l	kg			
8M. Mercury, Total (7439-97-6)				4.4	1.7e-5					1	ng/l	kg			
9M. Nickel, Total (7440-02-0)				3.8	0.014					1	ug/l	kg			
10M. Selenium, Total (7782-49-2)				9.8	0.037					1	ug/l	kg			
11M. Silver, Total (7440-22-4)				0	0					1	ug/l	kg			
12M. Thallium, Total (7440-28-0)				0.64	0.002					1	ug/l	kg			
13M. Zinc, Total (7440-66-6)				0	0					1	ug/l	kg			
14M. Cyanide, Total (57-12-5)				0	0					1	ug/l	kg			
15M. Phenols, Total				0	0					1	ug/l	kg			
DIOXIN															
2,3,7,8-Tetra-chlorodibenzo-P-Dioxin (1764-01-6)	X			DESCRIBE RESULTS											

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CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER <i>(if available)</i>	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE <i>(optional)</i>			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE <i>(if available)</i>		c. LONG TERM AVRG. VALUE <i>(if available)</i>		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – VOLATILE COMPOUNDS															
1V. Accrolein (107-02-8)				0	0					1	ug/l	kg			
2V. Acrylonitrile (107-13-1)				0	0					1	ug/l	kg			
3V. Benzene (71-43-2)				0	0					1	ug/l	kg			
4V. Bis (Chloromethyl) Ether (542-88-1)				0	0					1	ug/l	kg			
5V. Bromoform (75-25-2)				0	0					1	ug/l	kg			
6V. Carbon Tetrachloride (56-23-5)				0	0					1	ug/l	kg			
7V. Chlorobenzene (108-90-7)				0	0					1	ug/l	kg			
8V. Chlorodibromomethane (124-48-1)				0	0					1	ug/l	kg			
9V. Chloroethane (75-00-3)				0	0					1	ug/l	kg			
10V. 2-Chloroethylvinyl Ether (110-75-8)				0	0					1	ug/l	kg			
11V. Chloroform (67-66-3)				0	0					1	ug/l	kg			
12V. Dichlorobromomethane (75-27-4)				0	0					1	ug/l	kg			
13V. Dichlorodifluoromethane (75-71-8)				0	0					1	ug/l	kg			
14V. 1,1-Dichloroethane (75-34-3)				0	0					1	ug/l	kg			
15V. 1,2-Dichloroethane (107-06-2)				0	0					1	ug/l	kg			
16V. 1,1-Dichloroethylene (75-35-4)				0	0					1	ug/l	kg			
17V. 1,2-Dichloropropane (78-87-5)				0	0					1	ug/l	kg			
18V. 1,3-Dichloropropylene (542-75-6)				0	0					1	ug/l	kg			
19V. Ethylbenzene (100-41-4)				0	0					1	ug/l	kg			
20V. Methyl Bromide (74-83-9)				0	0					1	ug/l	kg			
21V. Methyl Chloride (74-87-3)				0	0					1	ug/l	kg			

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CONTINUED FROM PAGE V-4

1. POLLUTANT AND CAS NUMBER <i>(if available)</i>	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE <i>(optional)</i>			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE <i>(if available)</i>		c. LONG TERM AVRG. VALUE <i>(if available)</i>		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – VOLATILE COMPOUNDS <i>(continued)</i>															
22V. Methylene Chloride (75-09-2)				0	0					1	ug/l	kg			
23V. 1,1,2,2-Tetrachloroethane (79-34-5)				0	0					1	ug/l	kg			
24V. Tetrachloroethylene (127-18-4)				0	0					1	ug/l	kg			
25V. Toluene (108-88-3)				0	0					1	ug/l	kg			
26V. 1,2-Trans-Dichloroethylene (156-60-5)				0	0					1	ug/l	kg			
27V. 1,1,1-Trichloroethane (71-55-6)				0	0					1	ug/l	kg			
28V. 1,1,2-Trichloroethane (79-00-5)				0	0					1	ug/l	kg			
29V. Trichloroethylene (79-01-6)				0	0					1	ug/l	kg			
30V. Trichlorofluoromethane (75-69-4)				0	0					1	ug/l	kg			
31V. Vinyl Chloride (75-01-4)				0	0					1	ug/l	kg			
GC/MS FRACTION – ACID COMPOUNDS															
1A. 2-Chlorophenol (95-57-8)				0	0					1	ug/l	kg			
2A. 2,4-Dichlorophenol (120-83-2)				0	0					1	ug/l	kg			
3A. 2,4-Dimethylphenol (105-67-9)				0	0					1	ug/l	kg			
4A. 4,6-Dinitro-O-Cresol (534-52-1)				0	0					1	ug/l	kg			
5A. 2,4-Dinitrophenol (51-28-5)				0	0					1	ug/l	kg			
6A. 2-Nitrophenol (88-75-5)				0	0					1	ug/l	kg			
7A. 4-Nitrophenol (100-02-7)				0	0					1	ug/l	kg			
8A. P-Chloro-M-Cresol (59-50-7)				0	0					1	ug/l	kg			
9A. Pentachlorophenol (87-86-5)				0	0					1	ug/l	kg			
10A. Phenol (108-95-2)				0	0					1	ug/l	kg			
11A. 2,4,6-Trichlorophenol (88-05-2)				0	0					1	ug/l	kg			

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CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER <i>(if available)</i>	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE <i>(optional)</i>			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE <i>(if available)</i>		c. LONG TERM AVRG. VALUE <i>(if available)</i>		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
	GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS														
1B. Acenaphthene (83-32-9)				0	0					1	ug/l	kg			
2B. Acenaphthylene (208-96-8)				0	0					1	ug/l	kg			
3B. Anthracene (120-12-7)				0	0					1	ug/l	kg			
4B. Benzidine (92-87-5)				0	0					1	ug/l	kg			
5B. Benzo (a) Anthracene (56-55-3)				0	0					1	ug/l	kg			
6B. Benzo (a) Pyrene (50-32-8)				0	0					1	ug/l	kg			
7B. 3,4-Benzo-fluoranthene (205-99-2)				0	0					1	ug/l	kg			
8B. Benzo (ghi) Perylene (191-24-2)				0	0					1	ug/l	kg			
9B. Benzo (k) Fluoranthene (207-08-9)				0	0					1	ug/l	kg			
10B. Bis (2-Chloro-ethoxy) Methane (111-91-1)				0	0					1	ug/l	kg			
11B. Bis (2-Chloro-ethyl) Ether (111-44-4)				0	0					1	ug/l	kg			
12B. Bis (2-Chloroisopropyl) Ether (102-80-1)				0	0					1	ug/l	kg			
13B. Bis (2-Ethyl-hexyl) Phthalate (117-81-7)				0	0					1	ug/l	kg			
14B. 4-Bromophenyl Phenyl Ether (101-55-3)				0	0					1	ug/l	kg			
15B. Butyl Benzyl Phthalate (85-68-7)				0	0					1	ug/l	kg			
16B. 2-Chloro-naphthalene (91-58-7)				0	0					1	ug/l	kg			
17B. 4-Chloro-phenyl Phenyl Ether (7005-72-3)				0	0					1	ug/l	kg			
18B. Chrysene (218-01-9)				0	0					1	ug/l	kg			
19B. Dibenzo (a,h) Anthracene (53-70-3)				0	0					1	ug/l	kg			
20B. 1,2-Dichloro-benzene (95-50-1)				0	0					1	ug/l	kg			
21B. 1,3-Di-chloro-benzene (541-73-1)				0	0					1	ug/l	kg			

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CONTINUED FROM PAGE V-6

1. POLLUTANT AND CAS NUMBER <i>(if available)</i>	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE <i>(optional)</i>			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE <i>(if available)</i>		c. LONG TERM AVRG. VALUE <i>(if available)</i>		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS <i>(continued)</i>															
22B. 1,4-Dichlorobenzene (106-46-7)				0	0					1	ug/l	kg			
23B. 3,3-Dichlorobenzidine (91-94-1)				0	0					1	ug/l	kg			
24B. Diethyl Phthalate (84-66-2)				0	0					1	ug/l	kg			
25B. Dimethyl Phthalate (131-11-3)				0	0					1	ug/l	kg			
26B. Di-N-Butyl Phthalate (84-74-2)				0	0					1	ug/l	kg			
27B. 2,4-Dinitrotoluene (121-14-2)				0	0					1	ug/l	kg			
28B. 2,6-Dinitrotoluene (606-20-2)				0	0					1	ug/l	kg			
29B. Di-N-Octyl Phthalate (117-84-0)				0	0					1	ug/l	kg			
30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)				0	0					1	ug/l	kg			
31B. Fluoranthene (206-44-0)				0	0					1	ug/l	kg			
32B. Fluorene (86-73-7)				0	0					1	ug/l	kg			
33B. Hexachlorobenzene (118-74-1)				0	0					1	ug/l	kg			
34B. Hexachlorobutadiene (87-68-3)				0	0					1	ug/l	kg			
35B. Hexachlorocyclopentadiene (77-47-4)				0	0					1	ug/l	kg			
36B Hexachloroethane (67-72-1)				0	0					1	ug/l	kg			
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)				0	0					1	ug/l	kg			
38B. Isophorone (78-59-1)				0	0					1	ug/l	kg			
39B. Naphthalene (91-20-3)				0	0					1	ug/l	kg			
40B. Nitrobenzene (98-95-3)				0	0					1	ug/l	kg			
41B. N-Nitrosodimethylamine (62-75-9)				0	0					1	ug/l	kg			
42B. N-Nitrosodi-N-Propylamine (621-64-7)				0	0					1	ug/l	kg			

003 Pond 9

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER <i>(if available)</i>	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE <i>(optional)</i>			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE <i>(if available)</i>		c. LONG TERM AVRG. VALUE <i>(if available)</i>		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
													(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS <i>(continued)</i>															
43B. N-Nitrosodiphenylamine (86-30-6)				0	0					1	ug/l	kg			
44B. Phenanthrene (85-01-8)				0	0					1	ug/l	kg			
45B. Pyrene (129-00-0)				0	0					1	ug/l	kg			
46B. 1,2,4-Trichlorobenzene (120-82-1)				0	0					1	ug/l	kg			
GC/MS FRACTION – PESTICIDES															
1P. Aldrin (309-00-2)				0	0					1	ug/l	kg			
2P. α-BHC (319-84-6)				0	0					1	ug/l	kg			
3P. β-BHC (319-85-7)				0	0					1	ug/l	kg			
4P. γ-BHC (58-89-9)				0	0					1	ug/l	kg			
5P. δ-BHC (319-86-8)				0	0					1	ug/l	kg			
6P. Chlordane (57-74-9)				0	0					1	ug/l	kg			
7P. 4,4'-DDT (50-29-3)				0	0					1	ug/l	kg			
8P. 4,4'-DDE (72-55-9)				0	0					1	ug/l	kg			
9P. 4,4'-DDD (72-54-8)				0	0					1	ug/l	kg			
10P. Dieldrin (60-57-1)				0	0					1	ug/l	kg			
11P. α-Enosulfan (115-29-7)				0	0					1	ug/l	kg			
12P. β-Endosulfan (115-29-7)				0	0					1	ug/l	kg			
13P. Endosulfan Sulfate (1031-07-8)				0	0					1	ug/l	kg			
14P. Endrin (72-20-8)				0	0					1	ug/l	kg			
15P. Endrin Aldehyde (7421-93-4)				0	0					1	ug/l	kg			
16P. Heptachlor (76-44-8)				0	0					1	ug/l	kg			

EPA I.D. NUMBER <i>(copy from Item 1 of Form 1)</i>	OUTFALL NUMBER 003 Pond 9
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CONTINUED FROM PAGE V-8

1. POLLUTANT AND CAS NUMBER <i>(if available)</i>	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE <i>(optional)</i>			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE <i>(if available)</i>		c. LONG TERM AVRG. VALUE <i>(if available)</i>		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – PESTICIDES <i>(continued)</i>															
17P. Heptachlor Epoxide (1024-57-3)				0	0					1	ug/l	kg			
18P. PCB-1242 (53469-21-9)				0	0					1	ug/l	kg			
19P. PCB-1254 (11097-69-1)				0	0					1	ug/l	kg			
20P. PCB-1221 (11104-28-2)				0	0					1	ug/l	kg			
21P. PCB-1232 (11141-16-5)				0	0					1	ug/l	kg			
22P. PCB-1248 (12672-29-6)				0	0					1	ug/l	kg			
23P. PCB-1260 (11096-82-5)				0	0					1	ug/l	kg			
24P. PCB-1016 (12674-11-2)				0	0					1	ug/l	kg			
25P. Toxaphene (8001-35-2)				0	0					1	ug/l	kg			

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (use the same format) instead of completing these pages.
SEE INSTRUCTIONS.

EPA I.D. NUMBER (copy from Item 1 of Form 1)

V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)		OUTFALL NO. 004 Pond 17
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PART A –You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT						3. UNITS <i>(specify if blank)</i>			4. INTAKE <i>(optional)</i>		
	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE <i>(if available)</i>		c. LONG TERM AVRG. VALUE <i>(if available)</i>		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Biochemical Oxygen Demand (BOD)												
b. Chemical Oxygen Demand (COD)	24	13 . 1					3	mg/l	kg			
c. Total Organic Carbon (TOC)	NA	NA					NA	mg/l	kg			
d. Total Suspended Solids (TSS)	280	152 . 6					4	mg/l	kg			
e. Ammonia (as N)												
f. Flow	VALUE NA		VALUE		VALUE		NA			VALUE		
g. Temperature (winter)	VALUE 9 . 9		VALUE		VALUE		1	°C		VALUE		
h. Temperature (summer)	VALUE NA		VALUE		VALUE		NA	°C		VALUE		
i. pH	MINIMUM NA	MAXIMUM 7 . 8	MINIMUM NA	MAXIMUM NA			4	STANDARD UNITS				

PART B – Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. <i>(if available)</i>	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE <i>(optional)</i>			
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE <i>(if available)</i>		c. LONG TERM AVRG. VALUE <i>(if available)</i>		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Bromide (24959-67-9)														
b. Chlorine, Total Residual		X												
c. Color														
d. Fecal Coliform		X												
e. Fluoride (16984-48-8)														
f. Nitrate-Nitrite (as N)														

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (use the same format) instead of completing these pages.
SEE INSTRUCTIONS.

EPA I.D. NUMBER (copy from Item 1 of Form 1)

V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)		OUTFALL NO. 005 Pond 20
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PART A –You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT						3. UNITS (specify if blank)			4. INTAKE (optional)		
	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Biochemical Oxygen Demand (BOD)												
b. Chemical Oxygen Demand (COD)	NA	NA					NA	mg/l	kg			
c. Total Organic Carbon (TOC)	NA	NA					NA	mg/l	kg			
d. Total Suspended Solids (TSS)	NA	NA					NA	mg/l	kg			
e. Ammonia (as N)												
f. Flow	VALUE NA		VALUE		VALUE		NA			VALUE		
g. Temperature (winter)	VALUE NA		VALUE		VALUE		NA	°C		VALUE		
h. Temperature (summer)	VALUE		VALUE		VALUE			°C		VALUE		
i. pH	MINIMUM NA	MAXIMUM NA	MINIMUM NA	MAXIMUM			NA	STANDARD UNITS				

PART B – Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Bromide (24959-67-9)														
b. Chlorine, Total Residual		X												
c. Color														
d. Fecal Coliform		X												
e. Fluoride (16984-48-8)														
f. Nitrate-Nitrite (as N)														

Please print or type in the unshaded areas only.

FORM 2C NPDES		U.S. ENVIRONMENTAL PROTECTION AGENCY APPLICATION FOR PERMIT TO DISCHARGE WASTEWATER EXISTING MANUFACTURING, COMMERCIAL, MINING AND SILVICULTURE OPERATIONS <i>Consolidated Permits Program</i>
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I. OUTFALL LOCATION

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

A. OUTFALL NUMBER <i>(list)</i>	B. LATITUDE			C. LONGITUDE			D. RECEIVING WATER <i>(name)</i>
	1. DEG.	2. MIN.	3. SEC.	1. DEG.	2. MIN.	3. SEC.	
006 Dinky Sh	37.00	18.00	51.29	122.00	5.00	22.60	Permanente Creek
007 Rock Pl	37.00	18.00	46.25	122.00	5.00	26.65	Permanente Creek
008 Emer Disc	37.00	19.00	5.14	122.00	5.00	21.98	Permanente Creek

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfalls. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.

B. For each outfall, provide a description of: (1) All operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) The average flow contributed by each operation; and (3) The treatment received by the wastewater. Continue on additional sheets if necessary.

1. OUTFALL NO. <i>(list)</i>	2. OPERATION(S) CONTRIBUTING FLOW		3. TREATMENT	
	a. OPERATION <i>(list)</i>	b. AVERAGE FLOW <i>(include units)</i>	a. DESCRIPTION	b. LIST CODES FROM TABLE 2C-1
006	Stormwater from Rock Plant access rd	53 average peak monthly	Stormwater collects in Dinky Shed Basin. If pump fails during large storm overflow possible	1U
	Dinky Shed Basin overflow			
007	Rock Crushing	Unknown	Process water from rock crushing and washing and stormwater collect.	1U
	Stormwater	15 gpm average peak monthly	If pump fails during significant storm overflow is possible.	
008	Truck wash	0.084 mgd	The Reclaim water System has a finite capacity tht can be exceeded. Emergency discharge occurs to prevent flooding.	1U
	Cement plant process & cooling water	0.001		
	Stormwater	0.0064 mgd		
	Emergency Discharge		Discharge estimated at 200 gpm	

OFFICIAL USE ONLY (effluent guidelines sub-categories)

CONTINUED FROM THE FRONT

C. Except for storm runoff, leaks, or spills, are any of the discharges described in Items II-A or B intermittent or seasonal? <input type="checkbox"/> YES (complete the following table) <input checked="" type="checkbox"/> NO (go to Section III)								
1. OUTFALL NUMBER (list)	2. OPERATION(S) CONTRIBUTING FLOW (list)	3. FREQUENCY		4. FLOW				C. DURATION (in days)
		a. DAYS PER WEEK (specify average)	b. MONTHS PER YEAR (specify average)	a. FLOW RATE (in mgd)		B. TOTAL VOLUME (specify with units)		
				1. LONG TERM AVERAGE	2. MAXIMUM DAILY	1. LONG TERM AVERAGE	2. MAXIMUM DAILY	
008	Truck wash	7	12	0.084		2518000 gal per month		
	Process water	7	12	0.001		25000 gal per month		
	Stormwater			0.0064		191000 gal per month		
III. PRODUCTION								
A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility? <input checked="" type="checkbox"/> YES (complete Item III-B) <input type="checkbox"/> NO (go to Section IV)								
B. Are the limitations in the applicable effluent guideline expressed in terms of production (or other measure of operation)? <input checked="" type="checkbox"/> YES (complete Item III-C) <input type="checkbox"/> NO (go to Section IV)								
C. If you answered "yes" to Item III-B, list the quantity which represents an actual measurement of your level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls.								
1. AVERAGE DAILY PRODUCTION						2. AFFECTED OUTFALLS (list outfall numbers)		
a. QUANTITY PER DAY	b. UNITS OF MEASURE	c. OPERATION, PRODUCT, MATERIAL, ETC. (specify)						
10,340	thousands of pounds per day	Portland cement clinker				008		
11,520	thousands of pounds per day	Portland cement				008		
IV. IMPROVEMENTS								
A. Are you now required by any Federal, State or local authority to meet any implementation schedule for the construction, upgrading or operations of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions. <input type="checkbox"/> YES (complete the following table) <input checked="" type="checkbox"/> NO (go to Item IV-B)								
1. IDENTIFICATION OF CONDITION, AGREEMENT, ETC.	2. AFFECTED OUTFALLS		3. BRIEF DESCRIPTION OF PROJECT	4. FINAL COMPLIANCE DATE				
	a. NO.	b. SOURCE OF DISCHARGE		a. REQUIRED	b. PROJECTED			
B. OPTIONAL: You may attach additional sheets describing any additional water pollution control programs (or other environmental projects which may affect your discharges) you now have underway or which you plan. Indicate whether each program is now underway or planned, and indicate your actual or planned schedules for construction. <input type="checkbox"/> MARK "X" IF DESCRIPTION OF ADDITIONAL CONTROL PROGRAMS IS ATTACHED								

CONTINUED FROM PAGE 2

V. INTAKE AND EFFLUENT CHARACTERISTICS

A, B, & C: See instructions before proceeding – Complete one set of tables for each outfall – Annotate the outfall number in the space provided.
 NOTE: Tables V-A, V-B, and V-C are included on separate sheets numbered V-1 through V-9.

D. Use the space below to list any of the pollutants listed in Table 2c-3 of the instructions, which you know or have reason to believe is discharged or may be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

1. POLLUTANT	2. SOURCE	1. POLLUTANT	2. SOURCE

VI. POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

Is any pollutant listed in Item V-C a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?

YES (list all such pollutants below)

NO (go to Item VI-B)

Empty space for listing pollutants and providing details for the 'YES' response.

CONTINUED FROM THE FRONT

VII. BIOLOGICAL TOXICITY TESTING DATA

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

YES (identify the test(s) and describe their purposes below)

NO (go to Section VIII)

Acute toxicity analyzed on samples taken from Permanente Creek in the plant area. Results indicated no acute toxicity present.

VIII. CONTRACT ANALYSIS INFORMATION

Were any of the analyses reported in Item V performed by a contract laboratory or consulting firm?

YES (list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below)

NO (go to Section IX)

A. NAME	B. ADDRESS	C. TELEPHONE (area code & no.)	D. POLLUTANTS ANALYZED (list)
A11			

IX. CERTIFICATION

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

A. NAME & OFFICIAL TITLE (type or print)

Henrik Wesseling, Plant Manager

B. PHONE NO. (area code & no.)

(408) 996-4000

C. SIGNATURE



D. DATE SIGNED

11-28-2011

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (use the same format) instead of completing these pages.
SEE INSTRUCTIONS.

EPA I.D. NUMBER (copy from Item 1 of Form 1)

OUTFALL NO.
008 reclaim Emergency dis

V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT				3. UNITS (specify if blank)				4. INTAKE (optional)			
	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS						
a. Biochemical Oxygen Demand (BOD)	0	0					3	mg/l	kg			
b. Chemical Oxygen Demand (COD)								mg/l	kg			
c. Total Organic Carbon (TOC)								mg/l	kg			
d. Total Suspended Solids (TSS)	5.7	62.13			141.7		3	mg/l	kg			
e. Ammonia (as N)												
f. Flow	VALUE	0.288 mgd			VALUE					VALUE		
g. Temperature (winter)	VALUE				VALUE			°C		VALUE		
h. Temperature (summer)	VALUE				VALUE			°C		VALUE		
i. pH	MINIMUM 9.32	MAXIMUM 9.51		MAXIMUM			3	STANDARD UNITS				

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT				4. UNITS				5. INTAKE (optional)			
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS						
a. Bromide (24959-67-9)														
b. Chlorine, Total Residual			0	0					3	mg/l	kg			
c. Color														
d. Fecal Coliform			90						3	MPN/100m				
e. Fluoride (16984-48-8)														
f. Nitrate-Nitrite (as N)														

008 Emergency Discharge

ITEM V-B CONTINUED FROM FRONT

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT				4. UNITS			5. INTAKE (optional)		
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE (if available)		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)	d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE	
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS					(1) CONCENTRATION	(2) MASS
g. Nitrogen, Total Organic (as N)												
h. Oil and Grease								mg/l	kg			
i. Phosphorus (as P), Total (7723-14-0)												
j. Radioactivity												
(1) Alpha, Total												
(2) Beta, Total												
(3) Radium, Total												
(4) Radium 226, Total												
k. Sulfate (as SO ₄) (14808-79-8)												
l. Sulfide (as S)	0	0	0	0	0	0	0	mg/l	kg	3		
m. Sulfite (as SO ₃) (14265-45-3)												
n. Surfactants												
o. Aluminum, Total (7429-90-5)												
p. Barium, Total (7440-39-3)	0.11	0.12	0.082			0.082	3	mg/l	kg			
q. Boron, Total (7440-42-8)												
r. Cobalt, Total (7440-48-4)	0	0	0			0	3	mg/l	kg			
s. Iron, Total (7439-89-6)												
t. Magnesium, Total (7439-95-4)								mg/l	kg			
u. Molybdenum, Total (7439-98-7)	0	0	0			0	3	mg/l	kg			
v. Manganese, Total (7439-96-5)												
w. Tin, Total (7440-31-5)												
x. Titanium, Total (7440-32-6)												

CONTINUED FROM PAGE 3 OF FORM 2-C

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a (secondary industries, nonprocess wastewater outfalls, and nonrequired GC/MS fractions), mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe is present. If you mark column 2b for acrolein, acrylonitrile, 2,4 dinitrophenol, or 2-methyl-4, 6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (all 7 pages) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT				4. UNITS		5. INTAKE (optional)	
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE (1) CONCENTRATION	b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)	d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS
					(1) CONCENTRATION	(2) MASS				
1M. Antimony, Total (7440-36-0)				0			0	3	ug/l	kg
2M. Arsenic, Total (7440-38-2)				0			0	3	ug/l	kg
3M. Beryllium, Total (7440-41-7)				0			0	3	ug/l	kg
4M. Cadmium, Total (7440-43-9)				0			0	3	ug/l	kg
5M. Chromium, Total (7440-47-3)				0			0	3	ug/l	kg
6M. Copper, Total (7440-50-8)				0			0	3	ug/l	kg
7M. Lead, Total (7439-92-1)				0			0	3	ug/l	kg
8M. Mercury, Total (7439-97-6)									ng/l	kg
9M. Nickel, Total (7440-02-0)				0			0	3	ug/l	kg
10M. Selenium, Total (7782-49-2)				9.8			5.47	3	ug/l	kg
11M. Silver, Total (7440-22-4)				0			0	3	ug/l	kg
12M. Thallium, Total (7440-28-0)				0			0	3	ug/l	kg
13M. Zinc, Total (7440-66-6)				0			0	3	ug/l	kg
14M. Cyanide, Total (57-12-5)									ug/l	kg
15M. Phenols, Total									ug/l	kg
DIOXIN										
DESCRIBE RESULTS										

2,3,7,8-Tetra-chlorodibenzo-P-Dioxin (1764-01-6)

CONTINUED FROM THE FRONT

C. Except for storm runoff, leaks, or spills, are any of the discharges described in Items II-A or B intermittent or seasonal? <input type="checkbox"/> YES (complete the following table) <input checked="" type="checkbox"/> NO (go to Section III)								
1. OUTFALL NUMBER (list)	2. OPERATION(S) CONTRIBUTING FLOW (list)	3. FREQUENCY		4. FLOW				C. DURATION (in days)
		a. DAYS PER WEEK (specify average)	b. MONTHS PER YEAR (specify average)	a. FLOW RATE (in mgd)		B. TOTAL VOLUME (specify with units)		
				1. LONG TERM AVERAGE	2. MAXIMUM DAILY	1. LONG TERM AVERAGE	2. MAXIMUM DAILY	

III. PRODUCTION

A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility?
 YES (complete Item III-B) NO (go to Section IV)

B. Are the limitations in the applicable effluent guideline expressed in terms of production (or other measure of operation)?
 YES (complete Item III-C) NO (go to Section IV)

C. If you answered "yes" to Item III-B, list the quantity which represents an actual measurement of your level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls.

1. AVERAGE DAILY PRODUCTION			2. AFFECTED OUTFALLS (list outfall numbers)
a. QUANTITY PER DAY	b. UNITS OF MEASURE	c. OPERATION, PRODUCT, MATERIAL, ETC. (specify)	
10,340	thousands of pounds per day	Portland cement clinker	SW 1, SW 2, SW 4
11,520	thousands of pounds per day	Portland cement	SW 1, SW 2, SW 4

IV. IMPROVEMENTS

A. Are you now required by any Federal, State or local authority to meet any implementation schedule for the construction, upgrading or operations of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.
 YES (complete the following table) NO (go to Item IV-B)

1. IDENTIFICATION OF CONDITION, AGREEMENT, ETC.	2. AFFECTED OUTFALLS		3. BRIEF DESCRIPTION OF PROJECT	4. FINAL COMPLIANCE DATE	
	a. NO.	b. SOURCE OF DISCHARGE		a. REQUIRED	b. PROJECTED

B. OPTIONAL: You may attach additional sheets describing any additional water pollution control programs (or other environmental projects which may affect your discharges) you now have underway or which you plan. Indicate whether each program is now underway or planned, and indicate your actual or planned schedules for construction.
 MARK "X" IF DESCRIPTION OF ADDITIONAL CONTROL PROGRAMS IS ATTACHED

CONTINUED FROM PAGE 2

V. INTAKE AND EFFLUENT CHARACTERISTICS

A, B, & C: See instructions before proceeding – Complete one set of tables for each outfall – Annotate the outfall number in the space provided.
 NOTE: Tables V-A, V-B, and V-C are included on separate sheets numbered V-1 through V-9.

D. Use the space below to list any of the pollutants listed in Table 2c-3 of the instructions, which you know or have reason to believe is discharged or may be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

1. POLLUTANT	2. SOURCE	1. POLLUTANT	2. SOURCE

VI. POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

Is any pollutant listed in Item V-C a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?

YES (list all such pollutants below)

NO (go to Item VI-B)

Empty space for listing pollutants and providing details for the 'YES' response.

CONTINUED FROM THE FRONT

VII. BIOLOGICAL TOXICITY TESTING DATA

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

YES (identify the test(s) and describe their purposes below)

NO (go to Section VIII)

Acute toxicity analyzed on samples taken from Permanente Creek in the plant area. results indicated no acute toxicity present.

VIII. CONTRACT ANALYSIS INFORMATION

Were any of the analyses reported in Item V performed by a contract laboratory or consulting firm?

YES (list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below)

NO (go to Section IX)

A. NAME	B. ADDRESS	C. TELEPHONE (area code & no.)	D. POLLUTANTS ANALYZED (list)
A11			

IX. CERTIFICATION

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

A. NAME & OFFICIAL TITLE (type or print)

Henrik Wesseling, Plant Manager

B. PHONE NO. (area code & no.)

(408) 996-4000

C. SIGNATURE



D. DATE SIGNED

11-28-2011