CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

REVISED

COMPLAINT NO. R2-2008-0063

ADMINISTRATIVE CIVIL LIABILITY IN THE MATTER OF VULCAN MATERIALS COMPANY PLEASANTON ASPHALT, SAND, AND GRAVEL FACILITY

IN CITY OF PLEASANTON ALAMEDA COUNTY

The Assistant Executive Officer of the California Regional Water Quality Control Board, San Francisco Bay Region ("Water Board"), hereby gives notice that:

- 1. Vulcan Materials Company ("Discharger"), from its Pleasanton Asphalt, Sand, and Gravel Facility ("Facility"), has violated provisions of law for which the Water Board may impose civil liability pursuant to California Water Code ("CWC") Section 13385(h), Section 13385 (a) (2) and Section 13323. Based on the allegations and considerations described below, this Complaint proposes to assess \$190,000 in penalties for the violations cited, including \$9,000 in mandatory minimum penalties and \$111,000 in discretionary penalties. This Complaint amends and supersedes a previously issued complaint for the same amount on this matter. The deadline for comments on this Complaint is March 2, 2009, 5 p.m.
- 2. The Facility is an active sand and gravel quarry with a processing plant. It is located at 50 El Charro Road in Pleasanton, Alameda County.
- 3. On June 19, 2002, the Water Board adopted NPDES Permit No. CAG982001, Order No. R2-2002-0063, General Permit for Discharges from Aggregate Mining and Sand Washing Facilities to Surface Waters.
- 4. On August 8, 2003, the Discharger obtained coverage under Order No. R2-2002-0063.
- 5. Order No. 2002-0063 includes the following requirements:

A. DISCHARGE PROHIBITION

2. The discharge shall not contain silt, sand, clay or other earthen materials from any activity in quantities sufficient to cause deleterious bottom deposits, turbidity, or discolorations in surface waters or to unreasonably affect or threaten to affect beneficial uses

B. EFFLUENT LIMITATIONS

Constituents	Daily	30-day	7-day
	Max.	Arithmetic Mean	Arithmetic
			Mean
c. Total Suspended Solids		30	45
(TSS), mg/L			
d. Turbidity (Nephelometric	40		
Turbidity Unit, or NTU)			

- 6. On April 4, 2007, the Discharger violated the 7-day mean TSS effluent limitation of Order No. R2-2002-0063, measuring TSS at 100 mg/l.
- 7. On April 12, 2007, the Discharger violated the 7-day mean TSS effluent limitation of Order No. R2-2002-0063, measuring TSS at 51 mg/l.
- 8. On April 12, 2007, the Discharger violated the turbidity daily maximum effluent limitation of Order No. R2-2002-0063, measuring turbidity at 600 NTU.
- 9. For the month of April 2007, the Discharger violated the 30-day mean TSS effluent limitation of Order No. R2-2002-0063. The April 2007 30-day mean TSS monitored by the facility was 48 mg/l, based on the April 4 and 12 results described above, and measurements of 24 mg/l on April 19 and 20 mg/l on April 27, 2007.
- 10. On April 29, 2007, the Discharger released approximately 48,000 gallons of sediment-laden water to Arroyo Mocho thereby violating Discharge Prohibition A.2 of Order No. R2-2002-0063.
- 11. Unless waived, the Water Board will hold a hearing on this Complaint at its April 8, 2009, meeting, at the Elihu M. Harris State Building, First Floor Auditorium, 1515 Clay Street, Oakland. The Discharger or its representative will have an opportunity to be heard and contest the allegations in this Complaint and the imposition of the civil liability. An agenda for the meeting will be mailed to the Discharger not less than 10 days before the hearing date. The deadline to submit all written comments and evidence concerning this Complaint is specified in Finding 1.
- 12. At the hearing, the Water Board will consider whether to affirm, reject, or modify the proposed civil liability, to refer the matter to the Attorney General for recovery of judicial liability, or take other enforcement actions.

ALLEGATIONS

13. This complaint is based on the following:

Water treatment and discharge pump system

- a. At the Facility, the sand and gravel is mined and then washed to remove fine sediments. The wash water, along with storm water and ground water from the Facility, is routed to settling ponds. The water from the settling ponds is recycled for various uses (dust control, washing, etc.) around the Facility. The Facility is permitted to discharge any excess water from the settling ponds to Arroyo Mocho, which is a tributary of Alameda Creek.
- b. Retired quarry pits serve as settling ponds as mining operations progress at the Facility. At the time of the discharge, Basin No. 6 was the active settling pond (see Attachment 1, aerial photo). Most of the influent enters Basin No. 6 at the north end, and a smaller source of sediment (washwater from the Facility conveyor belt) enters Basin No. 6 at the south end, about 700 feet from the conveyor belt washwater source. Effluent discharges via a floating barge pump at the south end. That effluent is recycled for use in other areas of the Facility or is discharged to Arroyo Mocho. The Discharger controls the flow returning to the Facility and the flow discharging to Arroyo Mocho by a manually operated valve.
- c. In April 2007, Basin No. 6 had been in use for 5 years. A depth survey conducted 8 months prior showed roughly three quarters of the Basin had a depth of 20 feet. At the time of the survey, the Discharger estimated that Basin No. 6 had an additional 1.5-2 years settling capacity.
- d. As described by the Discharger in its July 20, 2007, letter, "the typical mode of operation is to pump water into the basin, including process water and dewatering effluent from the actively mined areas, 8 hours a day, 5 days a week. Because the flow into the basin is greater than the capacity of the discharge pump, the discharge pump is typically run 24 hours a day, 7 days a week at approximately 3,000 gallons per minute..."
- e. The Discharger has security staff at the Facility on the weekends. However, not until after the incident on April 29, 2007, was the weekend security staff instructed to inspect the discharge and trained in shutting down the discharge pumping system. At the time of the April 29, 2007, discharge, the Facility had a remote pump control system accessible via the Internet that allows the Facility manager and other employees to shut off the floating pump.

Effluent limitation violations in April 2007

f. The first two April 2007 weekly TSS sample results (collected on April 4, 2007, and April 12, 2007) indicate that the Discharger violated the 30-day mean TSS limitation. In addition, the April 4, 2007, and April 12, 2007, TSS samples are each in violation of the 7-day mean TSS effluent limitation. The April 19, 2007, and April 27, 2007, TSS sample results were below the 7-day mean TSS effluent limitation.

- g. The Permit has requirements that direct dischargers to identify and correct the cause of violations and prevent future similar violations. The Discharger did not take permit-required follow-up actions for the April 4, 2007, and April 12, 2007, TSS violations. Specifically, the Permit's Self Monitoring Program requires the following actions, which the Discharger did not complete:
 - Self Monitoring Program Section III.1.a: If two consecutive samples of a constituent monitored on a weekly or monthly basis in a 30-day period exceed the monthly or 30-day average effluent limit for any parameter, (or if the required sampling frequency is once per month and the monthly sample exceeds the monthly or 30-day average limit), the sampling frequency shall be increased to daily until the additional sampling shows that the most recent 30-day moving average is in compliance with the monthly or 30-day average limit.
 - Self Monitoring Program Section V.1.the Self Monitoring Report Letter of Transmittal shall include the following:
 - o b.1: Identification of all violations of effluent limits or other discharge requirements found during the monitoring period.
 - o b.3: The cause of the violations.
 - o b.4: Discussion of corrective actions taken or planned to resolve violations and prevent recurrence, and dates or time schedule of action implementation.
- h. On April 12, 2007, the Discharger also exceeded the daily maximum turbidity effluent limitation and violated Order No. 2002-0063. The Discharger has noted that the 600 NTU reading was anomalous and may not be accurate, in light of (a) a comparison to historical readings (for example, other readings during March and April ranged from 11.3 to 36 NTU), (b) the fact that visual inspections did not note turbidity, and (c) a general comparison to the TSS reading of 51 ug/l. The Discharger states that the reading can potentially be attributed to a lab error or a sampling error. The Discharger did report the turbidity violation in its Self Monitoring Report Transmittal Letter and the Discharger did not increase monitoring as required under the Permit's Self Monitoring Program. Self Monitoring Program Section III.1.b states, "If any maximum daily limit is exceeded, the sampling frequency shall be increased to daily until two samples collected on consecutive days show compliance with the maximum daily limit."

In the Self Monitoring Report Transmittal Letter, the Discharger did not discuss the cause of the turbidity violation or any corrective measures taken to address it.

i. Water Board staff discussed these omissions with the Discharger on August 12, 2008. During that conversation, the Discharger provided the following explanation: During the April 2007 time period Lab results would take 3 weeks to get to the Facility because they were mailed first to company head quarters and then to the Facility.

- The Discharger was unaware of the requirement to increase monitoring. In addition, the Discharger ceased discharge on April 29, 2007, so there was no opportunity to increase monitoring had it been aware of the requirement.
- Although he Discharger did report the April 12, 2007, turbidity violation, the Discharger accidentally overlooked the April 4 and April 12, 2007 TSS violations and did not report them in its Self-Monitoring Program transmittal letter.

Events on April 29, 2007

- j. On Sunday, April 29, 2007, Zone 7 Water Agency staff was collecting samples in Arroyo Las Positas (downstream from the confluence with Arroyo Mocho) when she noticed a plume of sediment-laden water coming from upstream. Zone 7 staff contacted the City of Pleasanton staff at 12:15 p.m. The City of Pleasanton staff drove to the area to investigate, and traced the plume of sediment-laden water to the Facility. When City staff reached the Facility around 1:00 p.m., the Facility discharge water was running clear. No one observed the exact time at which the discharge started to run clear.
- k. At approximately 10:30 am on April 29, 2007, an area resident independently reported to the Cal/EPA Environmental Complaint system that he observed sediment-laden water in Arroyo Mocho in the Staples Ranch area. In response to a subsequent Water Board inquiry, the area resident recalled the discharge starting around 8 a.m.
- 1. At 1:15 p.m., Discharger security staff called the Facility manager and alerted him to the presence of City of Pleasanton staff investigating the sediment-laden discharge.
- m. The Facility manager was in his car at time; he drove home so that he could turn off the floating pump by remote access at 1:35 p.m.

Effluent TSS concentration during April 29, 2007, discharge

- n. The Discharger did not take an effluent sample of the sediment-laden discharge on April 29, 2007 because by the time the Discharger became aware of the sediment-laden water release, the discharge pump was already drawing clear water. The Permit requires at a minimum weekly TSS sampling; the TSS sample for that week had been collected two days before.
- o. The April 29, 2007, release would have resulted in an additional 7-day mean TSS effluent violation and would have compounded the 30-day TSS violation from earlier that month. This is based on a receiving water sample taken at the confluence of Arroyo Mocho and Arroyo Las Positas by City of Pleasanton staff on April 29, 2007, that had 4,300 mg/L TSS. Arroyo Mocho is a seasonal drainage, and the only water in Arroyo Mocho on April 29, 2007, was the Facility's effluent. This receiving water sample was taken in the sediment basin at the confluence of Arroyo Mocho and Arroyo Las Positas, about 1.5 miles downstream of the Facility's discharge location.

Approximate volume of sediment-laden water discharged

p. There was no direct observation of the exact time and date that the discharge of sediment-laden water began and ended. Therefore, the approximate volume of sediment-laden discharge is based on the following calculation:

Period of discharge (hours) x Flow rate in (gallons/hour) = Volume of sediment-laden water discharged (gallons)

4 hours x 12,000 gallons/hour = 48,000 gallons

Approximate total time of discharge, in hours, based on the following:	4 hours
■ The approximate time the plume was first observed downstream	8 a.m.
by an area resident	
■ The approximate time at which City of Pleasanton staff arrived at	1:00 p.m. –
the Discharger's Facility to find the discharge water running clear,	60 min =
minus 60 minutes (a rough estimate)	12:00 p.m.
Approximate average flow rate (total gallons / total hours) based on	12,000
the following:	gallons/hour
■ The full volume of water discharged over the weekend based on	687,000
the following:	gallons
- The totalizer reading taken Friday, April 27, 2007, at 4:30 a.m.	294,466,000
	gallons
- The totalizer reading taken on Sunday, April 29, 2007, when the pump	301,336,000
was shut off at 1:35 p.m.	gallons
■ The time, in hours, between the totalizer readings	57 hours

Cause of discharge of sediment-laden water

q. The pump pulled sediment-laden water from the bottom of the pond instead of pulling clear water from the surface. The Discharger described the cause of the release of sediment-laden water in its August 23, 2007, letter:

"The apparent source of the silt laden water was silt in the Facility's settlement Basin 6. Water was decanted from this basin via a floating pump to be discharged into Arroyo Mocho. Although the exact mechanism that entrained the silt remains unknown, several possible scenarios were presented in the [earlier] August 13, 2007, letter [from Vulcan] and included:

Scenario 1: Because of normal drawdown of the water surface by pumping and greater than normal bank loss because of the dry winter, the level of the pump intake could have been lowered sufficiently to start pumping sediment off the bottom of the basin.

- Scenario 2: Because the floating discharge pump is somewhat free to move laterally, a temporary shift in wind direction and/or velocity could have blown the pump in closer to the bank than normal, causing the intake to suck up sediment from the bank.
- Scenario 3: There could have been a subsurface slump of the sediment built up in the southeast corner of the basin from conveyor belt washing. This slumping material could have encroached on the pump intake and been sucked in by the pump and then discharged to Arroyo Mocho.
- Scenario 4: Some combination of the above three scenarios may have occurred."

Extent of the impact of the April 29, 2007, discharge

r. There is an energy diffuser and sediment basin 1.5 miles downstream of the discharge point. These engineered structures trapped a large quantity of the discharged sediment.

Cleanup and response activities

s. The Discharger voluntarily ceased discharging on April 29, 2007, and continued to suspend discharges while Water Board and Department of Fish and Game staff conferred upon a cleanup plan. On May 8, 2007, Water Board staff informed the Discharger that it must not resume discharge until authorized by the Department of Fish and Game

The Department of Fish and Game determined that the 1.5 miles of Arroyo Mocho had to be cleaned up before the Discharger could be allowed to resume discharge. The Department of Fish and Game developed an Incident Action Plan for the cleanup, which had two phases: dry and wet. The following parties signed the Incident Action Plan on May 11, 2007:

- The Discharger and its consultant
- Water Board staff
- Department of Fish and game staff
- Zone 7 Water District staff.
- t. The dry cleanup phase, which the Discharger completed on June 14, 2007, involved the following consecutive steps:
 - 1) Removal of liquids and solids with vactor trucks
 - 2) Manual removal of remaining sediments by shovels and portable conveyors.
- u. The wet cleanup phase, which the Discharger completed on July 14, 2007, involved the following consecutive steps:
 - 1) Installation of water dams, pumps, and over ½ mile of pipe

- 2) Flushing of remaining sediments out of the streambed and pumping of sediments back to the settlement basin.
- v. In all, the Discharger removed approximately 520 cubic yards of sediment, in 110 days, working an average of 6 days a week. The Discharger spent approximately \$675,000 in cleanup-related costs.
- w. The Discharger adjusted equipment and weekend staff activities in order to prevent reoccurrences of sediment-laden discharge. The Discharger installed a surveillance camera that allows security staff to remotely monitor the discharge point 24 hours per day. Also, the Discharger has instructed its weekend security staff to drive by and visually inspect the pump at the settling pond and the discharge location once a day on weekends.

CIVIL LIABILITY

14. Violations of the TSS and turbidity effluent limitations during April 2007 are addressed by assessment of mandatory minimum penalties (MMPs) to the extent provided in California Water Code (CWC) Section 13385(h) and (i). The April 4, 2007, violation of the TSS 7-day mean effluent limitation, the April 12, 2007, violation of the turbidity daily maximum effluent limitation, and the April 2007 violation of the TSS 30-day mean effluent limitation are serious violations subject MMPs pursuant to CWC Section 13385(h), and are assessed civil penalties of \$9,000.

For violation of CWC Section 13385 (a) (2) on April 29, 2007, the Water Board is assessing discretionary penalties. The Water Board may impose civil liability administratively pursuant to CWC, Chapter 5, Article 2.5 (commencing at Section 13323) in an amount not to exceed the sum of the following:

\$10,000 for each day in which a violation occurred, and \$10 for each gallon of discharge that is not susceptible to cleanup or is not cleaned up in excess of 1,000 gallons.

If this matter is referred to the Attorney General for judicial enforcement, a higher liability of \$25,000 per day of violation and \$25 per each gallon of discharge that is not susceptible to cleanup or is not cleaned up in excess of 1,000 gallons may be imposed.

The maximum discretionary administrative civil liability for violating CWC Section 13385(a)(2) that the Water Board may impose for the April 29, 2007 violations is \$480,000 (see Table 1 for the calculation of this figure).

15. In determining the amount of civil liability to be assessed against the Discharger, the Water Board must take into consideration the factors described in CWC Section 13385 (e) as follows:

- The nature, circumstances, extent, and gravity of the violation or violations,
- Whether the discharge is susceptible to cleanup or abatement,
- The degree of toxicity of the discharge,
- With respect to the discharger, the ability to pay and the effect on ability to continue in business.
- Any voluntary cleanup efforts undertaken,
- Any prior history of violations,
- The degree of culpability,
- The economic savings, if any, resulting from the violation, and
- Other such matters as justice may require.

Nature, circumstances, extent, and gravity of the violation or violations **Nature**

The discharges were of sediment-laden water, which could impact several beneficial uses of Alameda Creek and the immediate vicinity of Arroyo Mocho and Arroyo Las Positas. The overall level of impact was low to moderate. For a full discussion, refer to Table 2.

Circumstances

2007 was a relatively dry year for the area. The Discharger states that Arroyo Mocho, which normally contains water other than the Facility discharge during the winter and spring, contained natural storm water run-off only two weeks of the entire year. The floating pump most likely started discharging sediment because the level of the pump intake was lowered due to the regional drop in groundwater level causing greater than normal bank loss of water.

Extent and Gravity

The quantity of sediment contained in the April 29 discharge was likely orders of magnitude above the discharge limits. The April 29 discharge resulted in deleterious sediment accumulation in a 1.5-mile stretch of Arroyo Mocho.

In regard to the four effluent limitation violations in April 2007, three of these resulted from two high TSS samples taken over two weeks. The following week the TSS measured below the effluent limitation without further action from Vulcan Materials. The fourth was a turbidity violation, which the Discharger believes was likely a lab error or a sampling error because it is extraordinarily disproportional to the TSS sample.

The Facility discharges a large volume of water (several hundred thousand to a few million gallons a day) to Arroyo Mocho, a canal that would be dry at this time of year but for the discharge. Because Arroyo Mocho is periodically a dry stream bed that feeds into in an energy diffuser and sediment basin, we conclude that the extent and gravity of these discharges are low to moderate.

Susceptibility to cleanup or abatement

The sediment that settled out in the 1.5 miles downstream of the discharge point on April 29, 2007, was susceptible to cleanup and was cleaned up by the Discharger. Settleable

sediments associated with the earlier April 2007 TSS violations may have also been susceptible to cleanup and were likely cleaned up along with cleanup of the April 29 incident. However, there was no practical method for cleaning up the finer sediments that may have remained suspended beyond 1.5 miles.

Degree of toxicity of the discharge

Any negative impact that the April 2007 violations may have had on wildlife in the receiving water body was not directly observed. The degree of toxicity cannot be fully evaluated. However, a small mosquito fish that Zone 7 staff captured in a water sample taken April 29, 2007, survived to be released to the waterway four days later. While the toxicity of TSS and turbidity is relatively low for fish, it is high for aquatic organisms that live in the creek bed (i.e., benthic macroinvertebrates). If any benthic macroinvertebrates lived in the first 1.5 miles of Arroyo Mocho, they would have been impacted by the April 29, 2007, discharge and/or the removal of sediments during cleanup. However, Arroyo Mocho was dry during the summer and fall months of 2006 because the Discharger did not discharge between July 2006 and December 2006 and stated that Zone 7 had not released any water that year. Therefore, any benthic macroinvertebrate populations must have established themselves in this section of Arroyo Mocho within the 5 months prior to April 29, 2007. In addition, Zone 7 performs sediment removal in its concrete sediment basins on a regular basis which regularly disturbs macroinvertebrate populations in the basins.

Ability to pay and ability to continue in business

The Discharger is a publicly traded company (NYSE symbol VMC). According to the official company website (www.vulcanmaterials.com), in 2007, the Discharger posted net annual sales of over \$3 Billion. Therefore, the penalty will not affect the Discharger's ability to pay and continue in business.

Voluntary cleanup efforts

After receiving permission and direction from the Water Board and Department of Fish and Game staff, the Discharger conducted a thorough, efficient, and well-executed cleanup. The Discharger's voluntary cleanup effort is a substantial mitigating factor and is reflected in the civil liability proposed below.

Prior history of violations

According to the Discharger's Self Monitoring Reports, the Discharger also violated its turbidity daily maximum effluent limitation twice in 2005 and attributed these exceedances to high winds and winter storms.

Degree of culpability

The Discharger is moderately culpable for the April 29, 2007, incident for the following reasons: its ability to improve management and control of the pond and its pumping apparatus, failure to properly monitor the quality of the pond's discharge, and failure to report some prior violations. These assertions are based on the following:

- The Discharger did not review discharge analytical data in a timely fashion, which handicapped the Discharger in being able to track and respond to discharge quality problems. Leading up to the incident, the Discharger received monitoring data from its contract laboratory via US mail, which traveled first to company headquarters before rerouting to the Facility. In all, the monitoring data would take up to 3 weeks to arrive at the Facility. It is not uncommon practice for other dischargers to require as part of their laboratory contracts to have analytical results faxed or emailed as soon as they are available (1 day to 1 week from date of sampling) so that a discharger can take more timely response actions if there is a violation.
- The Discharger's effluent exceeded TSS limitations on two occasions earlier the same month. The Discharger failed to take the permit-required follow up actions that are designed to have dischargers investigate the cause of violations so that corrective actions can be taken. The Discharger asserts that: (1) at the time such investigation would have taken place, the Discharger was at work cleaning up the April 29, 2007 discharge, and (2) it is unknown whether investigation would have caused actions by the Discharger that would have prevented the April 29 discharge, given the reduction in TSS encountered on April 19, and the fact that the conditions encountered on April 29 had not been previously encountered. The Discharger states that increasing sample frequency was not possible once the discharge was suspended.
- The Discharger did not log all of its daily inspections of the outfall. Early morning inspections were conducted using vehicle lights and portable flash lights during the inspections. This discharge point is also monitored routinely by site employees throughout the day, though these inspections were not logged.

For all these reasons, the Discharger is moderately culpable for the April 29, 2007, incident.

Economic benefit or savings

There was no significant economic benefit or savings on the part of the Discharger. At most, modest savings may have occurred by the Discharger not providing additional training to weekend staff.

Other matters as justice may require

The Discharger has been cooperative and responsive to concerns raised by Water Board staff about the incident and its investigation. It should be noted that, since the Permit reissuance in February 2008, the Discharger has changed its system for receiving data from its lab and responding to any violations. Specifically, the Discharger now receives monitoring data by e-mail (within a few days of sample analysis) and immediately evaluates the data for violations.

16. This action is an enforcement action and is, therefore, exempt from the California Environmental Quality Act, pursuant to Title 14, California Code of Regulations, Section

17. The Discharger can waive its right to a hearing and contest the allegations contained in this Complaint by paying the civil liability in full, all in accordance with the procedures and limitations set forth in the attached waiver.

January 29, 2009	
Date	
	Dyan C. Whyte, Assistant Executive Officer

Attachments:

Waiver

Table 1, Maximum Civil Liability

Table 2, Beneficial Use Impacts

Aerial Photo of Facility

Photo of Receiving Water at Energy Diffuser and Sediment Basin Downstream of Facility, August 29, 2007

WAIVER OF HEARING REQUIREMENT FOR ADMINISTRATIVE CIVIL LIABILITY COMPLAINT

If you waive your right to a hearing, the matter will be included on the agenda of a Water Board meeting but there will be no hearing on the matter, unless a) the Water Board staff receives significant public comments during the comment period, or b) the Water Board determines it will hold a hearing because it finds that new and significant information has been presented at the meeting that could not have been submitted during the public comment period. If you waive your right to a hearing but the Water Board holds a hearing under either of the above circumstances, you will have a right to testify at the hearing notwithstanding your waiver. **Your waiver is due no later than February 6, 2009**.

to the violations alleged in Revised C payment to the State Water Pollution Staff Counsel, Regional Water Qualit CA 94612, contemporaneously with to be heard, and to argue against the a Complaint, and against the imposition Water Board holds a hearing under eight	e my right to a hearing before the Water Board with recomplaint No. R2-2008-0063 and to remit the full penal Cleanup and Abatement Account, c/o Yuri Won, Senity Control Board at 1515 Clay Street, Suite 1400, Oak his signed waiver. I understand that I am giving up madely lilegations made by the Assistant Executive Officer in a of, or the amount of, the civil liability proposed unletter of the circumstances described above. If the Water sees a civil liability, such amount shall be due 30 days to	alty ior land, by right this ss the
Name (print)	Signature	
Date	Title/Organization	

Table 1 – Maximum Discretionary Civil Liability

Date	Requirement	\$10,000 per day	Gallons discharged	\$10 per gallons discharged and not cleaned up in excess of 1,000 gallons
April 29, 2007	Discharge Prohibition A.2.	\$10,000	48,000	\$480,000
Total Maximum Discretionary Civil Liability \$480,000			\$480,000	

Table 2

Beneficial Uses Within Alameda Creek Watershed	Affected by discharge?
Cold freshwater habitat	Not likely. Cold freshwater habitat primarily exists upstream of the Facility in Arroyo Mocho Canyon.
Groundwater recharge	Undetermined but unlikely. According to Zone 7 Water Agency staff, it is undetermined whether the discharge impacted Zone 7's recharge beds. Alameda County Water District determined that the discharge did not affect its recharge beds.
Fish migration	No. Alameda Creek historically was an anadromous fish run and there are known populations of anadromous fish up and down stream of the discharge location. The upper reaches of Arroyo Mocho are considered some of the most valuable spawning habitat in the Alameda Creek watershed. However, the BART weir downstream is a complete fish migration barrier.
Noncontact water recreation	Yes, the discharge impacted the aesthetic enjoyment of Arroyo Mocho and the downstream stretch of Arroyo Las Positas, but the impact was brief because the plume did not remain in the stream long.
Fish spawning	No. The portion of Alameda Creek Watershed below the discharge location is not suitable spawning habitat for anadromous fish.
Warm fresh water habitat	It is possible that sediments discharged and not cleaned up may have impacted warm fresh water habitat. Generally speaking, sediment deposition can reduce macroinvertebrate population density, thereby reducing food supplies for fish and altering ecosystem balance. While increased suspended solids may not be acutely toxic to fish, it can stress fish, inhibit their ability to find prey, and compromise fish immune systems.
Wildlife habitat	Not likely. As mentioned, Arroyo Mocho was dry prior to the discharge as recently as December 2006, and would have been dry on April 29, 2007, but for the Facility discharge. The impact to any wildlife living in the mile and a half of Arroyo Mocho downstream of the discharge, therefore, was not out of the normal seasonal variation associated with intermittent streams.



Photo of Receiving Water at Fish Ladder Structure Downstream of Facility, August 29, 2007