

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

CLEANUP AND ABATEMENT ORDER R5-2009-0071

FOR

JOSE M. LUCIENTES, JR.

THE ELGIN MERCURY MINE  
COLUSA COUNTY

This Order is issued to Jose M. Lucientes, Jr., (hereafter referred to as Discharger) based on provisions of California Water Code (CWC) section 13304, which authorizes the Central Valley Regional Water Quality Control Board (Central Valley Water Board or Board) to issue a Cleanup and Abatement Order (Order), and CWC section 13267, which authorizes the Central Valley Water Board to require the submittal of technical and monitoring reports.

The Central Valley Regional Water Quality Control Board (hereafter Central Valley Water Board) finds, with respect to the Discharger's acts, or failure to act, the following:

1. The Elgin Mercury Mine (hereafter "Mine") is an inactive mercury mine with mining waste that includes in part, small open mine cuts, waste rock, and mine tailings. Mercury-bearing material from open cuts, mine waste piles, and soils at the former retort site at the Elgin Mine erodes, or threatens to erode, into a Sulphur Creek tributary during storm runoff conditions. A hydrothermal spring discharges from a collapsed adit at the Mine. Sampling of the hydrothermal fluids before and after contact with mine wastes indicates that interaction between hydrothermal fluids and waste rock mobilizes mercury into the Sulphur Creek watershed. The Mine has discharged and continues to discharge mining waste into waters of the state, where it has created or threatens to create a condition of pollution or nuisance.
2. The Mine is located in the Sulphur Creek Mining District (District) of Colusa County, about three miles northwest of the Wilber Springs resort and about 23 miles west of Williams. The 62-acre property is described by Assessor's Parcel Numbers 018-100-002-000, 018-100-003-000, and 018-100-004-000 in Section 13, Township 14 North, Range 6 West, Mount Diablo Base and Meridian (MDBM), as shown in Attachment A, a part of this Order.
3. Mining waste has been discharged at the Mine since mining activities began in the 1870s. Mining waste has been discharged onto ground surface where it has eroded into Sulphur Creek, resulting in elevated concentrations of mercury in Sulphur Creek. Mining waste discharged onto ground surface has not been evaluated for its potential impact to ground water. The Discharger either owns, has owned, or has operated the mining site where the Mine is located and where mining waste has been discharged. In its current condition, mining waste is causing or threatens to cause a discharge of pollutants to waters of the state.
4. The Central Valley Water Board's *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, Fourth Edition* (hereafter Basin Plan) states: "By 6 February 2009, the Regional Water Board shall adopt cleanup and abatement orders or take other

appropriate actions to control discharges from the inactive mines (Table IV-6.4) in the Cache Creek watershed.”

5. The parties listed in Attachment B, which is incorporated herein and made part of this Order, are known landowners, operators, or leaseholders of the Mine site as determined by Central Valley Water Board staff's review of property records from the Colusa County Recorders Office. All the parties identified in this order either owned the site at the time when a discharge of mining waste into waters of the state took place, or operated the mine, thus facilitating the discharge of mining waste into waters of the state. The party named in this Order as Discharger is known to presently exist.
6. If information is obtained in the future that property adjacent to the Elgin Mine discharged mining waste that poses a potential threat to waters of the State, then this Order may be revised to include the known owners, operators, and leaseholders of that property as Dischargers in this Order.

### Mining History

7. Mercury was discovered in the District in the 1870's, and the Mine was developed at that time. The Mine was also known as the Elgin prospect or the New Elgin Mine. At least 52 flasks of mercury (one flask equals 76 pounds) were produced in 1875. Some development work and small production is also reported for the period 1892 to 1893, 1905, and 1916. Ore produced had an average grade of about 1.8 percent mercury. This information is described in the *CalFed-Cache Creek Study, Task 5C2: Final Report. Final Engineering Evaluation and Cost Analysis for the Sulphur Creek Mining District* prepared by Tetra Tech EM Inc., September 2003 (hereafter CalFed Report).
8. Bedrock at the Mine consists of shale of the Great Valley Sequence and serpentinite. The serpentinite trends northwest to southeast and the ore occurs in silicified, leached serpentinite along the upper contact with shale. The mineralized zone contains opal, aragonite, magnesite, chabazite and a bituminous mineral. The ore is concentrated along small faults that cut the serpentinite. Cinnabar is the only mercury mineral reported to occur. Pyrite and native sulfur have also been reported and it is reported that sulfur is so abundant that attempts were made to operate the mine for sulfur rather than mercury. A small amount of gold was also reported to have been produced (CalFed Report).
9. The workings of the Mine include three adits, about 500 feet of inaccessible underground workings, and two disturbed surface areas. Watts in 1893 reported one adit about 400 feet above the creek and 180-feet long and a second adit about 70-feet above the previous adit with a length of about 110 feet. High rock temperatures and hot water encountered during mining are reported to have made underground mining difficult (CalFed Report).
10. Ore processing prior to 1903 was performed with an 800 pound per day retort. Forstner (1903) indicated that a 10-pipe retort was in use on the property. Bradley (1916) reported that the mine was equipped with a retort furnace and used a Griffin mill and Colorado bumping tables to concentrate the cinnabar. Huguenin (1917) reported that one Fitzgerald

furnace and a one-ton per day mill, as well as a practically dismantled crusher and concentrator tables were on site (CalFed Report).

11. Three in place McFarland shaker or bumping tables are present and the remains of three others are in the drainage below the main adit and the remains of a retort are present in the bottom of the drainage on the west side of Sulphur Creek. The shaker tables may be of historical significance (CalFed Report).
12. Currently the main adit is collapsed and thermal waters flow from the collapsed adit into a man-made pool and then through a steep drainage to Sulphur Creek. Southeast of the main adit are two other adits, one of which is caved, and the other is open. No springs or drainage were observed flowing from these adits when the site was visited by Tetra Tech EM Inc. (Tetra Tech) in October 2002. Above the main adit, to the northwest and southeast are small open cuts that comprise about 1 acre (CalFed Report).
13. Numerous springs and seeps discharge from fractures on the steep slopes below the Mine workings. At least one of these has been intersected by the underground mine workings and is now emanating from the collapsed main adit described above. Flow from the collapsed main adit was reported to be about 28 gallons per minute (gpm) with a temperature of 138°F in 1916. Flow from the collapsed main adit into the pool was observed at about 20 gpm when the site was visited by Tetra Tech in October 2002. Considerable flour sulfur is being deposited along the edges of the stream. Overland flow from these springs appears to infiltrate the alluvial valley fill at the base of the slope below the mine (CalFed Report).
14. The Elgin mine was relatively small compared to other Sulphur Creek district mines. Available production records indicate at least 52 flasks of mercury were produced from the Mine in 1875, and smaller production occurred in the 1890s and early 1900s. Sulfur was also produced at the Mine. The total disturbed surface area for the Elgin mine is estimated at 5 acres (CalFed Report).

### **Mining Waste Description and Characterization**

15. Mining waste at the Mine includes mercury-bearing material from open cuts, mine waste piles, tailings, and soils at the former retort site that erodes or threatens to erode into a Sulphur Creek tributary with stormwater runoff. Hydrothermal springs discharge from the site, releasing naturally elevated mercury concentrations into the Sulphur Creek watershed. Under current site conditions, spring discharge flows through mercury-bearing mining wastes, where it may mobilize additional quantities of mercury (CalFed Report).
16. Waste rock piles still exist below and around the open cuts. The total volume of waste rock at the Elgin has been estimated to be between 1,000 and 4,100 cubic yards (CY). The hot spring pool outside of the collapsed main adit is likely constructed on top of mine waste. The mine waste extends down the drainage for a distance of about 200 feet below the pool. There are very small, vegetated hummocky piles associated with the adits to the southeast of the main adit that may contain up to 500 CY of mining waste. A small volume of tailings (less than 100 CY) is present near the remnants of a brick furnace on the west side of

Sulphur Creek. The volume of tailings remaining at the Mine comprises only 0.06 percent of the tailings remaining in the District (CalFed Report).

17. In 2002, Churchill and Clinkenbeard sampled solid materials at the Mine. Mercury concentrations were measured at nine locations at the Mine. Results showed mercury concentrations of less than 20 to 3,030 parts per million (ppm) in soil and waste materials near ore processing units, 7 to 290 ppm in waste rock, and 5 to 330 ppm in background soil, sediment, and hydrothermal spring deposits. The mercury mass estimated in two mine waste piles was 320 to 1,400 kilograms (kg), almost entirely within the larger waste rock pile (CalFed Report).
18. In 2002, Tetra Tech analyzed three solid matrix samples from the Mine, including waste rock from the upper portion of the mine, tailings beneath the retort on the flood plain, and colluvium and mine waste on the flood plain below the upper part of the mine. Analysis of waste extraction test (WET) leachates from the three samples showed that antimony, arsenic, chromium, mercury, and nickel concentrations were all below the soluble threshold limit concentrations (STLCs), with the exception of the mercury concentration in the leachate from the upper waste rock sample. The Mine waste rock sample exceeded the STLC (CalFed Report). Complete characterization of background soils and mining waste at the site has not been performed
19. Water rock interactions likely mobilize mercury from mine wastes based on detection of 252 µg/L mercury in a WET extract from waste rock from the upper mine, 25.4 µg/L mercury in a WET extract from tailings at the retort, 3.3 µg/L mercury in a WET extract from sediments including waste rock from the channel below the upper mine (CalFed Report).
20. In 2002, Tetra Tech collected water samples from Elgin Spring at the spring pool discharge point, below the mine waste, and downstream from the mine below the road along the west fork of Sulphur Creek. Metals and anion concentrations in the three water samples were among the highest measured in the District. Concentrations generally increased in the downstream direction, suggesting that contaminants were mobilized through contact with solid materials at the Mine site (CalFed Report).
21. Mercury is a toxic substance, which can cause damage to the brain, kidneys and to a developing fetus. Young children are particularly sensitive to mercury exposure. Methylmercury, the organic form of mercury that has entered the biological food chain, is of particular concern, as it accumulates in fish tissue and in wildlife and people that eat the fish. Mine waste present at this Mine may also pose a threat to human health due to exposure (dermal, ingestion, and inhalation) through recreation (hiking, camping, fishing, and hunting) or work at the site.

### **Regulatory Considerations**

22. Section 303(d) of the Federal Clean Water Act requires states to identify waters not attaining water quality standards (referred to as the 303(d) list). Since 1990, Sulphur Creek has been identified by the Central Valley Water Board as an impaired water body because of high aqueous concentrations of mercury since.

23. The Basin Plan designates beneficial uses of the waters of the state, establishes Water Quality Objectives (WQOs) to protect these uses, and establishes implementation policies to achieve WQOs.
24. Beneficial uses for Sulphur Creek, a tributary of Cache Creek, are: municipal and domestic supply; agricultural supply; industrial service supply; industrial process supply; water contact recreation and non-contact water recreation; warm freshwater habitat; cold fresh water habitat; spawning, reproduction, and/or early development; and wildlife habitat. In accordance with the Sources of Drinking Water Policy (State Water Resources Control Board Resolution No 88-63), the municipal and domestic supply designation (MUN) also applies to Sulphur Creek.
25. The beneficial uses of underlying groundwater, as stated in the Basin Plan, are municipal and domestic supply, agricultural supply, industrial service supply, and industrial process supply.
26. The WQOs listed in the Basin Plan include numeric objectives, e.g., State drinking water Maximum Contaminant Levels (MCLs) that are incorporated by reference, and narrative objectives, including toxicity and taste and odor objectives for surface water and groundwater. Chapter IV of the Basin Plan contains the *Policy for Application of Water Quality Objectives*, which provides that "[w]here compliance with narrative objectives is required (i.e., where the objectives are applicable to protect specified beneficial uses), the Regional Board will, on a case-by-case basis, adopt numerical limitations in Orders which will implement the narrative objectives." The numerical limits for the constituents of concern listed in the following table implement the Basin Plan objectives for mercury and methylmercury in Sulphur Creek.

Constituent	Limits	Type of WQO	Reference
Methyl Mercury (organic)	0.07 µg/L	Narrative Toxicity	USEPA IRIS Reference Dose (RfD) as a drinking water standard
Methyl Mercury (organic)	0.3 µg/L	Narrative Toxicity	USEPA National Ambient Water Quality Criteria (fish tissue)
Mercury (total)	0.050 µg/L	Narrative Toxicity	California Toxics Rule Human Health Protection
Mercury (inorganic)	1.2 µg/L	Narrative Toxicity	Public Health Goal

µg/L = micrograms/liter

27. The Cache Creek Watershed Mercury Program, included in the Basin Plan, requires responsible parties to develop plans to reduce existing loads of mercury from mining or other anthropogenic activities by 95% in the Cache Creek watershed (i.e., Cache Creek and its tributaries).

28. The Basin Plan, Chapter IV, page 33.05 states that,

Responsible parties shall develop and submit for Executive Officer approval plans, including a time schedule, to reduce loads of mercury from mining or other anthropogenic activities by 95%

of existing loads consistent with State Water Resources Control Board Resolution 92-49. The goal of the cleanup is to restore the mines to premining conditions with respect to the discharge of mercury. Mercury and methylmercury loads produced by interaction of thermal springs with mine wastes from the Turkey Run and Elgin mines are considered to be anthropogenic loading.

29. The Discharger shall be deemed in compliance with Finding No. 28 if cleanup actions and maintenance activities are conducted in accordance with the approved plans.
30. Under CWC section 13050, subdivision (q)(1), "mining waste" means all solid, semisolid, and liquid waste materials from the extraction, beneficiation, and processing of ores and minerals. Mining waste includes, but is not limited to, soil, waste rock, and overburden, as defined in Public Resources Code section 2732, and tailings, slag, and other processed waste materials...." The constituents listed in Findings No.15 and 16 are mining wastes as defined in CWC section 13050, subdivision (q)(1).
31. Because the site contains mining waste as described in CWC sections 13050, closure of Mining Unit(s) must comply with the requirements of California Code of Regulations, title 27, sections 22470 through 22510 and with such provisions of the other portions of California Code of Regulations, title 27 that are specifically referenced in that article.
32. Affecting the beneficial uses of waters of the state by exceeding applicable WQOs constitutes a condition of pollution as defined in CWC section 13050, subdivision (1). The Dischargers have caused or permitted waste to be discharged or deposited where it has discharged to waters of the state and has created, and continues to threaten to create, a condition of pollution or nuisance.
33. CWC section 13304(a) states that:

Any person who has discharged or discharges waste into the waters of this state in violation of any waste discharge requirement or other order or prohibition issued by a Regional Water Board or the state board, or who has caused or permitted, causes or permits, or threatens to cause or permit any waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the state and creates, or threatens to create, a condition of pollution or nuisance, shall upon order of the Regional Water Board, clean up the waste or abate the effects of the waste, or, in the case of threatened pollution or nuisance, take other necessary remedial action, including, but not limited to, overseeing cleanup and abatement efforts. A cleanup and abatement order issued by the state board or a Regional Water Board may require the provision of, or payment for, uninterrupted replacement water service, which may include wellhead treatment, to each affected public water supplier or private well owner. Upon failure of any person to comply with the cleanup or abatement order, the Attorney General, at the request of the board, shall petition the superior court for that county for the issuance of an injunction requiring the person to comply with the order. In the suit, the court shall have jurisdiction to grant a prohibitory or mandatory injunction, either preliminary or permanent, as the facts may warrant.
34. The State Water Resources Control Board (State Board) has adopted Resolution No. 92-49, the *Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under CWC Section 13304*. This Resolution sets forth the policies and procedures to be used during an investigation or cleanup of a polluted site and requires that cleanup levels be consistent with State Board Resolution No. 68-16, the *Statement of Policy With Respect to*

*Maintaining High Quality of Waters in California.* Resolution No. 92-49 and the Basin Plan establish cleanup levels to be achieved. Resolution No. 92-49 requires waste to be cleaned up to background, or if that is not reasonable, to an alternative level that is the most stringent level that is economically and technologically feasible in accordance with California Code of Regulations, title 23, section 2550.4. Any alternative cleanup level to background must: (1) be consistent with the maximum benefit to the people of the state; (2) not unreasonably affect present and anticipated beneficial use of such water; and (3) not result in water quality less than that prescribed in the Basin Plan and applicable Water Quality Control Plans and Policies of the State Board.

35. Chapter IV of the Basin Plan contains the *Policy for Investigation and Cleanup of Contaminated Sites*, which describes the Central Valley Water Board's policy for managing contaminated sites. This policy is based on CWC sections 13000 and 13304, California Code of Regulations, title 23, division 3, chapter 15; California Code of Regulations, title 23, division 2, subdivision 1; and State Water Board Resolution Nos. 68-16 and 92-49. The policy addresses site investigation, source removal or containment, information required to be submitted for consideration in establishing cleanup levels, and the basis for establishment of soil and groundwater cleanup levels.

36. The State Board's *Water Quality Enforcement Policy* states in part:

At a minimum, cleanup levels must be sufficiently stringent to fully support beneficial uses, unless the Central Valley Water Board allows a containment zone. In the interim, and if restoration of background water quality cannot be achieved, the Order should require the discharger(s) to abate the effects of the discharge (Water Quality Enforcement Policy, p. 19).

37. CWC section 13267(b)(1) states that:

In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.

38. The technical reports required by this Order are necessary to ensure compliance with this Cleanup and Abatement Order, and to ensure the protection of the waters of the state. The Discharger either owns, has owned, or has operated the mining site subject to this Order.

39. The issuance of this Order is an enforcement action taken by a regulatory agency and is exempt from the provisions of the California Environmental Quality Act (CEQA) (Pub. Resources Code, section 21000 et seq.), pursuant to California Code of Regulations, title 14, section 15321(a)(2). The implementation of this Order is also an action to assure the restoration of natural resources and/or the environment and is exempt from the provisions of

the CEQA, in accordance with California Code of Regulations, title 14 sections 15307 and 15308. This Order may also be classified as a minor action to prevent, minimize, stabilize, mitigate or eliminate the release or threat of release of hazardous waste or substances, and is exempt from the provisions of CEQA in accordance with California Code of Regulations, title 14 section 15330.

40. Any person aggrieved by this action of the Regional Water Board may petition the State Water Board to review the action in accordance with CWC section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of the Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at:

[http://www.waterboards.ca.gov/public\\_notices/petitions/water\\_quality](http://www.waterboards.ca.gov/public_notices/petitions/water_quality)

or will be provided upon request.

**IT IS HEREBY ORDERED** that, the Discharger, and his agents, assigns and successors, in order to meet the provisions contained in Division 7 of the California Water Code and regulations, plans and policies adopted thereunder, shall cleanup and abate, forthwith, the effects of the discharges.

"Forthwith" means as soon as is reasonably possible. Compliance with this requirement shall include, but not be limited to, completing the tasks listed below.

The Discharger shall:

1. Conduct all work in conformance with State Board Resolution No. 92-49 Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304 and with the Regional Board's Water Quality Control Plan for the Sacramento River and San Joaquin River Basins (in particular the Policies and Plans listed within the Control Action Considerations portion of Chapter IV).

#### **Waste Characterization**

2. By **15 October 2009**, submit a *Mining Waste Characterization Work Plan* (hereafter *Characterization Plan*) for the Mine site. The Characterization Plan shall assess the nature and extent of mining waste discharged at the site and the potential threat to water quality and/or human health. The Characterization Plan shall describe the methods that will be used to establish background levels for soil, surface water, and ground water at the site, and the means and methods for determining the vertical and lateral extent of the mining waste.

The Characterization Plan shall also address slope stability of the site and assess the need for slope design and slope stability measures to minimize the transport of mining waste-laden soils to surface water and ephemeral streams. The Characterization Plan shall adopt the time schedule as described below in items 3 through 13 below for implementation of the proposed work.



3. Within **30 days** of staff concurrence with the Characterization Plan, but no later than **15 December 2009**, begin implementing the Characterization Plan in accordance with the approved time schedule, which shall become part of this Order.
4. By **15 April 2010**, submit a *Mining Waste Characterization Report* (hereafter *Characterization Report*) for the Mine. The Characterization Report shall include:
  - a. A narrative summary of the field investigation;
  - b. A section describing background soil concentrations, mining waste concentrations, and the vertical and lateral extent of the mining waste;
  - c. Surface water and ground water sampling results;
  - d. A section describing slope stability and erosion potential and recommendations for slope stabilization;
  - e. An evaluation of risks to human health from site conditions, and;
  - f. A work plan for additional investigation, if needed, as determined by staff. If no additional investigation is needed, this report shall be the Final Characterization Report.
5. By **15 April 2010**, submit a *Surface and Ground Water Monitoring Plan* (hereafter *Monitoring Plan*) for the Mine. The Monitoring Plan shall describe the methods and rationale that will be used to establish background levels for surface water and ground water at the site. The Monitoring Plan shall also address long-term monitoring necessary to confirm the effectiveness of the remedies.

### **Water Supply Well Survey**

6. By **15 December 2009**, submit the results of a water supply well survey within one-half mile of the site and a sampling plan to sample any water supply well(s) threatened to be polluted by mining waste originating from the site. The sampling plan shall include specific actions and a commitment by the Discharger to implement the sampling plans, including obtaining any necessary access agreements.
6. Within **30 days** of staff concurrence with the water supply well sampling plan, the Discharger shall implement the sampling plan and submit the sampling results in accordance with the approved time schedule, which shall become part of this Order.
7. Within **30 days** of staff notifying the Discharger that an alternate water supply is necessary, submit a work plan and schedule to provide an in-kind replacement for any impacted water supply well. The Discharger shall implement the work plan in accordance with an approved time schedule, which shall become part of this Order.

### **Site Remediation**

8. Within **90 days** of staff concurrence with the *Characterization Report*, submit a *Site Remediation Work Plan* (hereafter *Remediation Plan*) for the site. The Remediation Plan shall describe remediation activities to clean up or remediate the mining waste to

background concentrations, or to the lowest level that is technically and economically achievable to reduce the movement of mining waste to ground water and Sulphur Creek. The Remediation Plan shall also address long-term maintenance and monitoring necessary to confirm and preserve the long-term effectiveness of the remedies. The potential remediation activities shall comply with all applicable WQOs and mercury TMDLs of the Basin Plan and promulgated water quality criteria for Sulphur Creek. The Remediation Plan shall also include:

- a. An evaluation of water quality risk assessment:
  - b. A human health risk assessment:
  - c. A time schedule to conduct the remediation activities.
9. Within **60 days** of staff concurrence with the *Remediation Plan*, submit a *Site Implementation Plan (hereafter Implementation Plan)*, which describes the preferred remediation activity for site remediation. The Implementation Plan and the approved time schedule shall become a part of this Order.
10. Within **30 days** of staff concurrence of the *Implementation Plan* for site cleanup of the mining waste, the Discharger shall commence remedial activities of the mining waste. The Discharger shall notify staff a minimum of 72 hours prior to beginning fieldwork.
11. By **31 December 2011**, clean up and abate the effects, including threats to human health and waters of the state, of mining waste discharged from past mining activities at the Elgin Mine.
12. Within **60 days** of completion of the remedial activities described in the Implementation Plan, the Discharger shall submit a Completion Report describing the remediation and results of the cleanup work. The Completion Report shall clearly describe the installation of any containment structures, covers and/or stabilization efforts, and any required post closure maintenance of the Mining Unit(s) described in Finding No. 31 above.

### General Requirements

The Discharger shall:

13. Reimburse the Central Valley Water Board for reasonable costs associated with oversight of the investigation and remediation of the site. Within **30 days** of the effective date of this Order, the Discharger shall provide the name and address where the invoices shall be sent. Failure to provide a name and address for invoices and/or failure to reimburse the Central Valley Water Board's oversight costs in a timely manner shall be considered a violation of this Order. If the Central Valley Water Board adopts Waste Discharge Requirements (WDRs), review of reports related to writing of the WDRs and all compliance measures thereafter would be subject to the fees required by issuance of the Order and the reimbursement under this requirement would no longer apply.

14. Submit all reports with a cover letter signed by the Discharger. In the cover letter, the Discharger shall express their concurrence or non-concurrence with the contents of all reports and work plans.
15. Notify staff at least three working days prior to any onsite work, testing, or sampling that pertains to environmental remediation and investigation and is not routine monitoring, maintenance, or inspection.
16. Obtain all local and state permits and access agreements necessary to fulfill the requirements of this Order prior to beginning work.
17. Continue any remediation or monitoring activities until such time as the Executive Officer determines that sufficient cleanup has been accomplished to fully comply with this Order and this Order has been rescinded.

Any person signing a document submitted under this Order must make the following certification:

*"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my knowledge and on my inquiry of those individuals immediately responsible for obtaining the information, 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."*

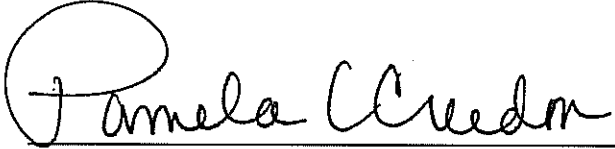
In accordance with California Business and Professions Code sections 6735, 7835, and 7835.1, engineering and geologic evaluations and judgments must be performed by or under the direction of registered professionals competent and proficient in the fields pertinent to the required activities. All technical reports specified herein that contain work plans for, that describe the conduct of investigations and studies, or that contain technical conclusions and recommendations concerning engineering and geology must be prepared by or under the direction of appropriately qualified professional(s), even if not explicitly stated. Each technical report submitted by the Discharger must contain the professional's signature and, where necessary, his stamp or seal.

The Executive Officer may extend the deadlines contained in this Order if the Discharger demonstrates that unforeseeable contingencies have created delays, provided that the Discharger continue to undertake all appropriate measures to meet the deadlines and make the extension request in advance of the expiration of the deadline. The Discharger shall make any deadline extension request in writing prior to the compliance date. An extension may be denied in writing or granted by revision of this Order or by a letter from the Executive Officer. Any request for an extension not responded to in writing by the Board shall be deemed denied.

If, in the opinion of the Executive Officer, the Discharger fails to comply with the provisions of this Order, the Executive Officer may refer this matter to the Attorney General for judicial enforcement or may issue a complaint for administrative civil liability. Failure to comply with this Order may result in the assessment of an Administrative Civil Liability of up to \$10,000 per

violation per day pursuant to the California Water Code sections 13268, 13350 and/or 13385. The Central Valley Water Board reserves its right to take any enforcement actions authorized by law.

I, Pamela C. Creedon, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on 13 August 2009.

  
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PAMELA C. CREEDON, Executive Officer  
August 13, 2009  
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(Date)