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GUADALUPE RUBBISH DISPOSAL
7 COMPANY, INC.

8 CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

9
10 IN THE MATTER OF:

11 CALIFORNIA REGIONAL WATER
QUALITY CONTROL BOARD,
12 SAN FRANCISCO BAY REGION
13 SITE CLEANUP REQUIREMENTS FOR
GUADALUPE MINE
14 ORDER NO. R2-2013-0024
15

PETITION FOR REVIEW

California Water Code § 13320;
California Code of Regulations, title 23, § 2050

1 Guadalupe Rubbish Disposal Company, Inc. (“GRDC” or “Petitioner”) hereby petitions the
2 California State Water Resources Control Board (“State Board”) to review the June 12, 2013, action
3 of the California Regional Water Quality Control Board, San Francisco Bay Region (“Regional
4 Board”) adopting Site Cleanup Requirements Order No. R2-2013-0024 (“Order”). GRDC files this
5 Petition pursuant to Section 13320 of the California Water Code and the State Board’s implementing
6 regulations at Section 2050 of Title 27 of the California Code of Regulations.

7 GRDC files this Petition to protect its right of appeal and requests that the State Board hold
8 this Petition in abeyance while negotiations with the Regional Board continue, pursuant to the State
9 Board’s implementing regulations at Section 2050.5(d).

10 In accordance with the State Board’s implementing regulations at Section 2050(a), GRDC
11 submits the following information in support of its Petition.

12 **1. Name, Address, Telephone Number, and E-mail Address of the Petitioner**

13 The Petitioner is Guadalupe Rubbish Disposal Company, Inc., and the contact information is:

14 Guadalupe Rubbish Disposal Company, Inc.
15 Attn: Mike Rivera, District Manager
16 P.O. Box 20957
17 San Jose, California 95160
18 Phone: (408) 268-1670
19 E-mail: mrivera2@wm.com

20 Petitioner requests that copies of all communications relating to this Petition also be sent to:

21 Catherine Riegle Finley, Esq.
22 Waste Management
23 1001 Fannin, Suite 4000
24 Houston, Texas 77002
25 Phone: (713) 394-5330
26 E-mail: criegle@wm.com

27 Todd O. Maiden, Esq.
28 Reed Smith LLP
 101 Second Street, Suite 1800
 San Francisco, California 94105
 Phone: (415) 659-5918
 E-mail: tmaiden@reedsmith.com

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2. The Action of the Regional Board Being Petitioned

GRDC requests that the State Board review the Regional Board’s approval of the Site Cleanup Requirements Order for Guadalupe Mine, Order No. R2-2013-0024 (“Order”), issued by the Regional Board pursuant to Section 13304 of the Water Code. A copy of the Order is attached as Exhibit 1.

Because GRDC continues to negotiate with the Regional Board regarding the scope of work to be performed under the Order, GRDC files this Petition to protect its right of appeal and requests that the State Board hold this Petition in abeyance while negotiations with the Regional Board continue, pursuant to the State Board’s implementing regulations at Section 2050.5(d).

3. The Date on which the Regional Board Adopted the Order

On June 12, 2013, the Regional Board adopted the Site Cleanup Requirements Order for Guadalupe Mine, Order No. R2-2013-0024 (“Order”), pursuant to Section 13304 of the Water Code.

4. The Reasons the Regional Board’s Adoption of the Order Was Improper

The Regional Board’s adoption of the Order was improper because there is no legal basis for the Order, the Regional Board did not provide a sufficient factual basis for the Order, and the Order treats GRDC inconsistently and unfairly compared to other responsible parties, as set forth in more detail below.

GRDC has worked cooperatively with the Regional Board, its staff, and other responsible parties for several years to investigate, monitor, and report on mercury contamination in the Guadalupe River watershed resulting in part from historic mercury mining in the area. Although it is not considered to be one of the major contributors to methylmercury contamination in the Guadalupe River watershed, GRDC has also worked to implement erosion-control measures to address and reduce any significant contamination from the Guadalupe Mine. Despite GRDC’s ongoing work with the Regional Board in investigating mercury contamination and controlling erosion at Guadalupe Mine, the Regional Board adopted an Order imposing new site cleanup requirements (“SCRs”) under a new and administratively burdensome regulatory process.

1 GRDC is committed to continue working cooperatively with the Regional Board and it staff
2 to conduct further monitoring and investigation within the established regulatory framework under
3 Water Code Section 13267, but GRDC objects to the unjustified shift to a different regulatory
4 structure under Section 13304. The use of Section 13304 at this point in the process is the wrong
5 approach at the wrong time and is counter-productive to accomplishing the mutual goals of the
6 Regional Board and GRDC, which can occur within the ongoing Section 13267 framework.
7 Because of GRDC's history of cooperation with the Regional Board and its commitment to continue
8 working with the Regional Board and its staff on effective erosion control measures, GRDC objects
9 to the Regional Board's shift to a site cleanup process under Section 13304 of the Water Code, and
10 petitions the State Board for review of the Order, for reasons including but not limited to the
11 following:

12 First, there is no legal basis for the tentative Order. The Order is inconsistent with the State
13 Water Resources Control Board's ("State Board") Resolution 92-49 because it relies on Section
14 13304 for investigative work, fails to name other responsible parties, and fails to consider the burden
15 and costs of the required work. The Order also does not meet the requirements of Section 13304
16 because the Order does not provide adequate findings regarding a threatened discharge of mercury
17 from erosion at Guadalupe Mine. Additionally, the work required in the Order is not site cleanup.
18 The stated purposes of the Regional Board's draft tentative order were to "clarify" erosion control
19 requirements, "implement" the TMDL, and determine "whether" erosion is occurring at all, none of
20 which meet the requirements of the statute. Although the Regional Board's staff revised the
21 language of the final Order in response to GRDC's comments on the draft tentative order, those
22 revisions were merely cosmetic and did not address the legal insufficiencies of the Order.

23 Second, the Regional Board has not provided a sufficient factual basis for the Order. The
24 Order does not provide a sufficient basis for the required work because it provides no findings by the
25 Regional Board with respect to a threatened discharge of mercury from actual erosion at the former
26 Guadalupe Mine site. The Order also does not find that GRDC's previous or currently ongoing
27 investigation, monitoring, reporting, and erosion-control efforts at the site are insufficient to address
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1 potential contamination from the former mine. Moreover, many of the measures required in the
2 Order are not site cleanup or discharge prevention, but rather require further investigation and
3 monitoring related to already-completed or ongoing investigations, reporting, and best management
4 practices.

5 Third, the Order treats GRDC inconsistently and unfairly compared to other responsible
6 parties. The Regional Board's staff continues to work with other property owners of former mine
7 sites in the Guadalupe River watershed, and the Regional Board has not issued SCRs or other
8 Section 13304 orders to other responsible parties. The Order does not provide a sufficient reason for
9 focusing on the Guadalupe Mine or for excluding other responsible parties. This inconsistent
10 treatment seems especially unfair considering the Regional Board's past findings that the reservoirs
11 in the watershed are the major contributors to methylmercury contamination and that the Regional
12 Board likely can accomplish the goals of the Guadalupe River Mercury TMDL by reducing
13 methylmercury from reservoirs. Issuing a Section 13304 order to GRDC while working with other
14 responsible parties under less administratively burdensome regulatory processes is not justified. The
15 inconsistent treatment also conflicts with the phased strategy of the mercury TMDL implementation
16 plan, which requires that mercury mining waste control actions be implemented in a phased manner
17 to eliminate discharges from the reservoirs and at upstream mines before undertaking projects at
18 downstream mines such as Guadalupe Mine.

19 For these reasons, the Regional Board's adoption of the Order was improper. GRDC
20 requests that the State Board review and either set aside the Order or direct the Regional Board to
21 rescind the Order.

22 **5. How Petitioner Is Aggrieved**

23 GRDC is aggrieved by the Regional Board's improper Order because the Order is overly
24 broad, not justified by information or data currently available to the Regional Board, fails to consider
25 work already performed by GRDC pursuant to existing orders and work plans under the Regional
26 Board's jurisdiction, lacks sufficient legal and factual basis, and treats GRDC inconsistently and
27 unfairly compared with other responsible parties. The Order requires that GRDC prepare a work
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1 plan and perform work pursuant to that plan, which will be extremely burdensome and costly to
2 develop and prepare. Because the Order is improper, this constitutes an unreasonable expense.
3 Additionally, imposing site cleanup requirements at this time, while investigation and monitoring are
4 continuing, risks mandating cleanup actions that are unnecessary and, consequently, wastes
5 resources. Finally, subjecting GRDC to an order under Section 13304 at a time when no other
6 responsible party has received such an order creates the false perception that: (1) GRDC is
7 uncooperative; and/or (2) runoff from the Guadalupe Mine presents a more significant threat to the
8 watershed compared to threats posed by other sites. These false perceptions would damage GRDC's
9 standing in the community and its ability to continue to work cooperatively with other responsible
10 parties.

11 **6. Requested Action**

12 GRDC requests by this Petition that the State Board find the Regional Board's adoption of
13 the Order improper and, on that basis, either vacate the Order or direct the Regional Board to rescind
14 the Order. As set forth above, however, GRDC continues to negotiate with the Regional Board
15 regarding the scope of work to be performed under the Order. For that reason, GRDC files this
16 Petition to protect its right of appeal and requests that the State Board hold this Petition in abeyance
17 while negotiations with the Regional Board continue, pursuant to the State Board's implementing
18 regulations at Section 2050.5(d). Provided that GRDC and the Regional Board reach a resolution,
19 consideration of this Petition may be unnecessary.

20 **7. Statement of Points and Authorities**

21 GRDC's initial statement of points and authorities is set forth in Section 4 above. GRDC
22 reserves the right to supplement this statement and file additional points and authorities at a future
23 date upon receipt of the administrative record and as additional information and evidence is
24 developed.

25 **8. Notice to the Regional Board**

26 A copy of this Petition has been sent to the Regional Board, as required by Section
27 2050(a)(8) of the State Board's implementing regulations. *See* Cal. Code Regs., tit. 23, § 2050(a)(8).
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9. Exhaustion of Administrative Remedies

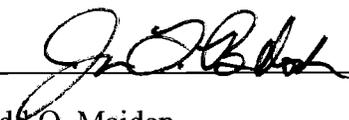
GRDC presented the issues raised in this Petition to the Regional Board before the Regional Board adopted the Order, as required by Sections 2050(a)(9) and 2050(c) of the State Board's implementing regulations. *See* Cal. Code Regs., tit. 23, § 2050(a)(9), (c). GRDC's letter to the Regional Board setting forth GRDC's arguments in opposition to the Regional Board's adoption of the Order is attached as Exhibit 2. GRDC also met with Regional Board staff to express concerns regarding the Order and provided additional comments on the Order. Finally, GRDC appeared to oppose the Order at the public meeting during which the Regional Board approved the Order.

10. Request to Hold the Petition in Abeyance

At the meeting of the Regional Board on June 12, 2013, during which the Regional Board adopted the Order, both the members of the Regional Board and its staff indicated a willingness to work with GRDC to reach resolution regarding the scope of work required by the Order. Because GRDC continues to negotiate with the Regional Board and its staff, GRDC requests that the State Board hold this petition in abeyance, pursuant to the State Board's implementing regulations at Section 2050.5(d). Provided that GRDC and the Regional Board reach mutual agreement, the State Board's consideration of this Petition may be unnecessary.

DATED: July 11, 2013

REED SMITH LLP

By 

Todd O. Maiden
Jamon L. Bollock
Attorneys for Petitioner
GUADALUPE RUBBISH DISPOSAL
COMPANY, INC.

Exhibit 1

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION**

ORDER No. R2-2013-0024

SITE CLEANUP REQUIREMENTS for:

GUADALUPE MINE
GUADALUPE RUBBISH DISPOSAL COMPANY, INC.
SAN JOSE, SANTA CLARA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter called the Water Board), finds that:

NAMED PARTIES AND LOCATION

1. **Owner, operator, and discharger named:** Guadalupe Rubbish Disposal Company, Inc., (hereinafter called the Discharger) is named as a discharger because it is the current owner of 411 acres located approximately at 15999 Guadalupe Mines Road (Site) (Figure 1) from which there is an ongoing discharge of pollutants. The Discharger has knowledge of the discharge or the activities that caused the discharge, and it has the legal ability to control the discharge, in accordance with California Water Code (Water Code) section 13304. If additional information is submitted indicating that other parties caused or permitted any waste to be discharged on the Site where it entered or could have entered waters of the State, the Water Board will consider adding those parties to this Order.
2. **Location:** The Guadalupe Mine (Mine) is located at 15999 Guadalupe Mines Road, in south San Jose, approximately four miles southeast of the City of Los Gatos. The Mine is located on Los Capitancillos Ridge, contiguous with the New Almaden Mining District, but because of separate ownership, it has retained a distinct name. The Mine is located along Guadalupe Creek.

PURPOSE OF ORDER

3. The objective of this Order is to abate discharges of mercury mining waste. This Order implements the Guadalupe River Watershed Mercury TMDL, adopted October 8, 2009 (see findings 16, 16, 17, and 18). The TMDL and its associated Staff Report describe the threat to water quality posed by mercury in general and discharges from the Discharger's property (see Finding 17). Mercury mining waste is present on the Discharger's property and is discharging, or threatening to discharge, to waters of the State. On October 18, 2007, Water Board staff inspected the Mine and observed mercury mining waste piles with steep, unvegetated, raveling slopes above Guadalupe Creek. In April 2008, GRDC submitted a *Work Plan for Stormwater Best Management Practices* to the Water Board that includes photographs of these actively eroding slopes.

The Discharger has been working with the Water Board to minimize the discharge of mining wastes from the Site into the creek. However, these Site Cleanup Requirements are necessary to clarify the cleanup process and applicable Title 27 requirements.

This Order does not preclude the possibility that the Water Board may determine that the Discharger must take additional mercury cleanup actions as necessary to protect water quality.

SITE DESCRIPTION

4. The Discharger owns and operates the Guadalupe Recycling and Disposal Facility (the Landfill) on the 411-acre site, 115 acres of which is permitted for waste disposal of Class III municipal refuse. The Mine is located on the southeastern portion of the Site and bounded by Guadalupe Creek to the southwest (Figures 2 and 3).
5. Numerous mine-related facilities are present on the Site, primarily on the southeastern portion of the Site, including standing buildings and structures; mining shafts, tunnels, and roads; a concrete flume (also known as the U-frame channel); and piles of mercury mining wastes (i.e., processed ore, unprocessed ore, overburden, and other wastes), including extensive piles along the eastern bank of Guadalupe Creek. According to Bailey & Everhart (USGS Professional Paper 360, 1964), dewatering began at the Mine after 1889. In 1917, mining operators lined Guadalupe Creek with “a concrete flume 740 feet long and 55 feet wide, and with side walls 9 feet high.” This flume, and some additional concrete walls and newly-installed fish passage improvements in the flume bottom, are still present. Nearly all of the Mine is located at the Site (see Finding 7).
6. The Mine operated between the mid-1800s and mid-1900s with possible intermittent, sporadic operations until approximately 1975. Mining waste at the Site has a potential to erode and discharge potentially mercury-laden sediment to Guadalupe Creek and its tributary streams. Mining wastes have eroded from the Site and been transported by stormwater and creek flow downstream. Some of these mining wastes are visually apparent in the creek bed and banks for 300 feet downstream of the U-frame channel in Guadalupe Creek and may extend to the southwest on property owned by Midpeninsula Regional Open Space District. The Discharger has taken interim remedial actions to minimize the discharge of mining wastes. These Site Cleanup Requirements are necessary to clarify the cleanup process and schedule. In the future, revisions to these Site Cleanup Requirements may be necessary to address mining wastes in Guadalupe Creek and other surface waters.

SURROUNDING SITES

7. The Site is surrounded by residential properties to the north, commercial properties to the west, open space (owned by the Midpeninsula Open Space District) to the southwest, and park land (Santa Clara County New Almaden Quicksilver Park) to the south and east (Figure 1). A portion of the Midpeninsula Regional Open Space District’s property is located adjacent to Guadalupe Creek. A few Guadalupe Mine-related facilities are located on the western side of Guadalupe Creek on property owned by the Midpeninsula Regional Open Space District. These facilities include Hicks Flat, Engine Shaft, and Lamb Shaft. Erosion of mining wastes from these facilities has been or is being addressed by separate Water Board actions. The New Almaden Mining District, upstream of the Mine, was the largest-producing mercury mine in North America; a

portion of this mining district drains to Guadalupe Creek and Guadalupe Reservoir. Guadalupe dam, which forms Guadalupe Reservoir, was built in 1935, about 25 years after mercury mining had peaked.

SURFACE WATERS AND PRECIPITATION

8. The Site straddles the Los Capitancillos Ridge and hence drains both to the west and to the east. Guadalupe Creek and an ephemeral, unnamed tributary are the principal drainages of the western side of the Site, while the eastern side of the Site drains into McAbee Creek and an ephemeral, unnamed tributary in New Almaden Quicksilver Park. Runoff from the Landfill collects in ponds and discharges intermittently to these creeks through channels and pipes (sedimentation ponds on Figure 2). Runoff flow patterns have been mapped for most of the Mine area. Most upland Mine areas lie within three drainage basins that flow to ponds constructed in the mining era and that flow intermittently overland to Guadalupe Creek (ponds A through F on Figure 2). Ponds constructed in the mining era provide important habitat to wildlife species but are a potential source of mercury discharges to Guadalupe Creek. Creekside areas containing mining waste drain directly to Guadalupe Creek and are also a potential source of mercury.

Approximately a mile and a half downstream from the Site, percolation ponds along Guadalupe Creek upstream of its confluence with Alamitos Creek facilitate recharge of the region's groundwater. As such, mercury discharges pose a threat to municipal drinking water.

9. The mean annual precipitation for the Site is about 25 inches. The 2-year, 10-year, 25-year, and 100-year 24-hour storm events are estimated to be 3.0, 5.1, 6.1, and 7.6 inches respectively.

BENEFICIAL USES OF SURFACE WATER

10. The surface water on or near the Site includes Guadalupe Creek and ponds constructed in the mining era. The beneficial uses of these water bodies include: Cold Freshwater Habitat (COLD); Freshwater Replenishment (FRSH); Groundwater Recharge (GWR); Fish Migration (MIGR); Municipal and Domestic Supply (MUN); preservation of Rare and Endangered Species (RARE); Water Contact Recreation (REC1); Noncontact Water Recreation (REC2); Fish Spawning (SPWN); Warm Freshwater Habitat (WARM); and Wildlife Habitat (WILD). Of the many beneficial uses listed above, only human consumption of fish (REC1) and wildlife consumption of fish (RARE and WILD) are impaired by mercury.

REGULATORY HISTORY

11. In 2007, the Water Board issued a Water Code section 13267 order requiring submittal of a technical report addressing stormwater management associated with the Mine.

In 2009, the Water Board issued a Water Code section 13267 order that superseded the 2007 order and required the Discharger to inventory and evaluate erosion of mercury mining wastes. The Discharger provided quarterly progress reports in accordance with

the 2007 order through December 2012. The Discharger has largely complied with the 2009 order by submitting reports in December 2010, April 2011, and July 2011. These reports inventoried mining waste sites on the Site. An outstanding question is whether or not the Mine, i.e., mining shafts and tunnels, extend over the top of Los Capitancillos Ridge down to the northeastern portion of the Site (p. 34, 2011 archeological survey).

12. The Discharger is covered under Waste Discharge Requirements and Self-Monitoring Program Order No. R2-2011-0037 for the Landfill and its related industrial operations.
13. The Discharger is covered under the State Water Resources Control Board's (State Water Board's) most recent General Permit for Storm Water Discharges Associated with Industrial Activities (General Permit), having filed a notice of intent in 1991. The facility's waste discharge identification (WDID) number is 243S007368.
14. Pursuant to the General Permit, the Discharger conducts visual site inspections during both the wet and dry seasons to ensure stormwater BMPs in the Mine area function effectively. During the wet season (October–May), the Discharger undertakes visual inspections of the stormwater discharge locations during at least one storm event per month, provided the visual inspections occur (1) during the first hour of discharge at all discharge locations, (2) during daylight hours that are preceded by at least three (3) working days without stormwater discharges, and (3) during scheduled facility operating hours. The Discharger undertakes additional visual inspections of discharges from the Mine area if rainfall exceeds 3 inches in 24 hours. If erosion occurs in the Mine area, the Discharger will evaluate and implement additional BMPs, as appropriate. The Discharger reports on this work in its annual report submitted pursuant to the General Permit. In 2008, in response to an October 2007 site inspection by Water Board staff, the Discharger prepared a *Workplan for Storm Water Best Management Practices, Guadalupe Recycling and Disposal Facility (Workplan)*; revised September 2010). The 2010 *Workplan* identified ten sites of concern and proposed BMP implementation to occur in two phases: first at five sites that do not require permits because the work can be completed by hand methods and ground crews without the need for heavy equipment, and later at five sites where the work will require permits. The *Workplan* does not include the entire footprint of the Mine area. The first phase of this work has been implemented and, in late 2010, the Discharger installed interim erosion control BMPs at the Phase 2 sites.

BASIN PLAN

15. The Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) is the Water Board's master water quality control planning document. It designates beneficial uses and water quality objectives for waters of the State, including surface waters and groundwater. It also includes programs of implementation to achieve water quality objectives. The Basin Plan was duly adopted by the Water Board and approved by the State Water Board, U.S. EPA, and the Office of Administrative Law where required.
16. Basin Plan Section 7.7.1 presents *Total Maximum Daily Loads for Mercury in Waters of the Guadalupe River Watershed* (TMDL). The TMDL is designed to attain mercury water quality objectives.

- 17.** The TMDL implementation plan (Basin Plan Section 7.7.1.6) “establishes requirements for responsible parties to reduce or control mercury loads using available technology.” The Plan states that “mercury mining waste control actions are phased so that mercury discharges from upstream will be eliminated or significantly reduced before downstream projects are undertaken. Erosion control actions at mercury mines shall be completed within the first 10 years (Phase 1).” Stormwater erosion control BMPs are appropriate, available and cost effective technology used to reduce or control mercury loads from mining waste. Further, stormwater erosion control BMPs comply with the TMDL goal “to prevent excessive erosion of mercury mining waste by stabilizing and vegetating slopes” (TMDL Staff Report, p. 9-7). Additional remedial actions may be necessary in some cases, such as “excavate, stockpile, haul, and consolidate mercury mining waste in engineered, onsite capped/covered waste management units” (TMDL Staff Report, Table 9.2, p. 9-12). The Water Board will work with the Discharger to evaluate the effectiveness, feasibility, and relative costs of alternative methods of cleaning up the mining waste.

Mercury transport, methylation, biological uptake, and bioaccumulation into fish are described in the TMDL Staff Report (Section 7). For mercury to be methylated, it must first be available in its dissolved form. For dissolution to occur, mercury must first be transported to the aquatic environment, i.e., “discharged”. Keeping mercury mining waste on the landscape and out of the aquatic environment prevents methylation, biological uptake, and bioaccumulation.

Calcines [i.e., heat processed ores] present a greater threat to water quality than other mining wastes. Researchers have found that some mercury invariably remains in the calcines, and impurities incorporated during roasting can enhance mercury solubility compared to non-roasted mining wastes. (Ganguli et al., Mercury Speciation in Drainage from the New Idria Mercury Mine, California, *Environmental Science and Technology*, 2000, 34, 4773-4779). Calcines are present at the Site and pose a threat to the beneficial uses of Guadalupe Creek.

- 18.** The TMDL incorporates adaptive implementation to achieve the goals of (a) reducing risk to human health and to ecological receptors, and (b) restoring the beneficial uses of surface water on, adjacent, and downstream of the Site. If, in the future, evidence indicates that implemented remedial actions are not sufficiently effective in reducing or controlling mercury loads from the Site, then the Water Board may determine that further cleanup actions should be taken. Conversely, if full restoration of beneficial uses is not technologically or economically achievable within a reasonable period of time, the Discharger may request that the Water Board re-evaluate the TMDL and associated implementation plan.
- 19.** The TMDL directs the Water Board to require water quality monitoring (Basin Plan Section 7.7.1.6). Parties responsible for discharges from mercury mines are required to monitor to evaluate the following:
- (a) effectiveness of erosion control measures;
 - (b) mercury loads discharged annually to waters of the State at the points of discharge;

- (c) fish bioaccumulation of mercury in waters downstream of the discharge;
- (d) mercury loads discharged annually to San Francisco Bay; and
- (e) factors that contribute to methylmercury production and bioaccumulation in creeks and rivers.

The responsible parties may alternatively participate in a coordinated watershed monitoring program to address monitoring requirements (c, d, and e, above); and the Water Board may consider waiving or reducing monitoring requirement (b), on an individual basis, based on progress on abating discharges of mining waste and participation in an approved coordinated watershed monitoring program.

MONITORING

- 20.** The Discharger is a member of the Guadalupe River Coordinated Mercury Monitoring Program (Program). In 2011, the Water Board issued a Water Code section 13267 order to Program participants requiring submittal of a technical report addressing monitoring for requirements (c) and (d), through the year 2016. The Santa Clara Valley Water District is addressing special study requirement (e). Thus the TMDL requirements for monitoring identified in Finding 19 (b) through (e) may be satisfied through 2016 by participation in a coordinated monitoring program. After 2016, or sooner if the coordinated monitoring program ceases, the Water Board may reconsider the scope of water quality mercury monitoring, and revise monitoring required of the Discharger. This Order addresses the TMDL monitoring requirements identified in Finding 19 (a).

WATER BOARD POLICIES

- 21. Water Board Policies:** Water Board Resolution No. 89-39, "Sources of Drinking Water," defines potential sources of drinking water to include all groundwater in the region, with limited exceptions for areas of high TDS, low yield, or naturally-high contaminant levels.
- 22. State Water Board Policies:** State Water Board Resolution No. 68-16, "Statement of Policy with Respect to Maintaining High Quality of Waters in California," applies to this discharge and requires attainment of background levels of water quality, or the highest level of water quality which is reasonable if background levels of water quality cannot be restored. Cleanup levels other than background must be consistent with the maximum benefit to the people of the State, not unreasonably affect present and anticipated beneficial uses of such water, and not result in exceedance of applicable water quality objectives. This Order and its requirements are consistent with Resolution No. 68-16.

State Water Board Resolution No. 92-49, "Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304," applies to this discharge. This Order and its requirements are consistent with the provisions of Resolution No. 92-49, as amended.

- 23.** It is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and

sanitary purposes. The mercury discharges from this Site shall not cause drinking water to exceed maximum contaminant levels (0.002 mg/L) designed to protect human health and ensure that water is safe for domestic use. This Order promotes the policy by requiring the Discharger to take actions that will further improve the condition of the adjacent creeks, reducing erosion and transport of mercury-containing sediment to sources of drinking water.

REGULATORY AUTHORITY

- 24. Basis for Water Code section 13304 Order:** Water Code section 13304 authorizes the Water Board to issue orders requiring a discharger to clean up and abate waste where the discharger has caused or permitted waste to be discharged or deposited where it is or probably will be discharged into waters of the State and creates or threatens to create a condition of pollution or nuisance.
- 25. Cost Recovery:** Pursuant to Water Code section 13304, the Discharger is hereby notified that the Water Board is entitled to, and may seek reimbursement for, all reasonable costs actually incurred by the Water Board to investigate unauthorized discharges of waste and to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action, required by this order. These costs include the costs incurred by the Water Board to prepare this Order.
- 26.** Hazardous waste is regulated by the federal Resource Conservation and Recovery Act (RCRA). In October 1980, RCRA was amended by adding section 3001(b)(3)(A)(ii), known as the Bevill exclusion, to exclude “solid waste from the extraction, beneficiation, and processing of ores and minerals” from regulation as hazardous waste under Subtitle C of RCRA.” Mining waste is nonetheless considered a “Non-RCRA Hazardous Waste” under state law if it exhibits hazardous waste characteristics, including the characteristic of toxicity under Article 3 of Chapter 11 of Title 22 of the California Code of Regulations. (Cal. Code Regs., tit 22, § 66261.101(b)(2).)
- 27.** In California, discharges of mining wastes are subject to the requirements of Title 27 of the California Code of Regulations, section 22470 *et seq.* For some provisions, the Water Board has discretion in determining site-specific requirements. The following will be considered in approving remedial actions and cleanup plans for this Site (Cal. Code Regs., tit. 27, § 22470 *et seq.*).
- (a) Engineered alternatives to prescriptive closure design requirements are described in Title 27 section 20080(b) (as referenced in section 22470(a)). Erosion Control and Stormwater BMPs are engineered alternatives used at other mercury mine sites that may be appropriate if the prescriptive closure design requirements for final cover over mining waste are not necessary to achieve compliance with the Basin Plan (Cal. Code Regs., tit. 27, § 20080(b)(1)) or are impractical and will not promote attainment of applicable performance standards (Cal. Code Regs., tit. 27, § 21090). Performance standards for this Site are identified in the TMDL (see Finding 17) (Cal. Code Regs., tit. 27, § 20080(c)(2)). Any proposed engineered alternative must be consistent with the performance goal addressed by the prescriptive design standard.

- (b) Mining waste at the Site may be classified as Group B mining waste because it contains mercury at hazardous waste levels and has no acid-generating potential. (Cal. Code Regs., tit. 27, § 22480(b)(2).) This classification would be consistent with geologic interpretations of the surrounding area but needs to be verified. In the New Almaden Mining District, the mercuric-sulfide mercury ore is found in silica-carbonate host rock. The host rock provides buffering capacity for the sulfur in the ore and pH creek water samples generally ranges from 7 to 9. Because of these intrinsic properties, mining waste is readily containable by less stringent measures. (Cal. Code Regs, tit. 27, § 22480(c).)
- (c) Title 27 siting requirements require that remedial actions be designed to protect from 100-year peak stream flow to the extent feasible (Cal. Code Regs., tit. 27, § 22470(a), Table 1.1, Table 1.2, § 22490(b), and § 20090(d).)
- (d) Title 27 construction requirements state that remedial actions shall be designed to provide precipitation and drainage controls for one 10-year, 24-hour storm to the extent feasible. (Cal. Code Regs., tit. 27, § 22470(a), Table 1.1, § 22490(h), and § 20090(d).)
- (e) Title 27 requirements concerning registered professionals require that the stormwater BMPs shall be designed by a registered civil engineer and construction shall be supervised and certified by a registered civil engineer or a certified engineering geologist. (Cal. Code Regs., tit. 27, § 22490(d).)
- (f) The Water Board retains its authority to re-consider imposing additional requirements and/or prescriptive closure design standards at a future date if evidence indicates a need for additional protective measures. Waste pile closure standards referenced herein are specified in the Title 27 section 22510(j), and include prescriptive final cover requirements in section 21090(a).

CALIFORNIA ENVIRONMENTAL QUALITY ACT

- 28.** This action is to enforce the laws and regulations administered by the Water Board. As such, this action is categorically exempt from the provisions of the California Environmental Quality Act (CEQA) pursuant to Title 14 of the California Code of Regulations, section 15321.
- 29.** In addition, the City of San Jose Planning Department prepared and certified a Mitigated Negative Declaration (State Clearinghouse Number 201211037) on March 29, 2013 , for the Discharger's Guadalupe Mines Landfill Creek Bank Stabilization Project (City project No. PDA93-018-02). This SCR requires construction of remedial actions necessary to minimize the discharge of mercury mining wastes into surface water. These construction activities are subject to San Jose permits and have been evaluated in the Mitigated Negative Declaration. The Water Board, as a responsible agency under CEQA, finds that all environmental effects have been identified for project activities that it is required to approve, and that the Project will not have significant adverse impacts on

water quality provided that the activities in this SCR and associated monitoring is carried out as conditioned in this Order.

30. The actions taken in response to this Order will contribute to the restoration and enhancement of a natural resource and protection of the environment. (Cal. Code Regs., tit. 14, §§ 15307 and 15308.)

NOTIFICATION AND PUBLIC MEETING

31. The Water Board has notified the Discharger and interested agencies and persons of its intent to issue Site Cleanup Requirements (SCRs) and has provided them with an opportunity to submit their written comments and recommendations.

IT IS HEREBY ORDERED pursuant to the authority in Water Code section 13304 that the Discharger, its agents, successors, and/or assigns shall clean up and abate the effects described in the above findings as follows:

A. PROHIBITIONS

1. The discharge of wastes or hazardous substances in a manner that will degrade water quality or adversely affect beneficial uses of waters of the State is prohibited.
2. Significant transport of mercury mining wastes via stormwater or mass wasting to waters of the State is prohibited.
3. Activities associated with investigation and cleanup that cause or contribute to a discharge of wastes or hazardous substances are prohibited.

B. TASKS

1. **WORKPLAN TO EVALUATE SITE SOURCES OF MERCURY TO SURFACE WATERS**

COMPLIANCE DATE: December 30, 2013

The Discharger shall develop a Mercury Sources Workplan, acceptable to the Executive Officer, to evaluate the sources of mercury from mining waste, in particular from calcines, to surface waters. The Mercury Sources Workplan shall supplement the previous investigations and reports (see Finding 11). The purpose of the mercury sources evaluation work is to inform the *Workplan for Storm Water Best Management Practices* (*Workplan*, see Finding 13). The Mercury Sources Workplan must include, but shall not be limited to:

- (a) A plan to map sources of mercury to surface waters, including site drainage paths and potential transport of sediment from mining waste. The plan must include the scope for preparing:
 - (i) A map of (a) surface water flow paths, including those with the potential to erode mercury mining wastes on the Site, (b) all eroding or potentially eroding mercury mining wastes on the Site, with background graphics of former mining operations, waste piles, and facilities similar to Figure 3 from Stantec 2010. The

map of surface runoff should be prepared using current topography with subsequent field verification of the identified flow paths, and all stormwater control measures and BMPs. The map should also include the existing system of sedimentation and infiltration ponds and identify drainage pathways (i.e., channelized flow) to discharge points into surface waters (see Finding 8). The surface drainage map would be overlain with the existing geologic maps showing the location of mining wastes, and cultural mapping of former mining operations, waste piles, and facilities. This task should also include updated field inspection and mapping of identified areas of excessive erosion, or potential areas of erosion, in areas of mapped mining waste and calcines in particular. The map must also provide an associated narrative sufficient to describe and support the map. Additionally, the map and associated narrative should resolve whether the Mine extends over the top of Los Capitancillos Ridge down to the northeastern portion of the Site (see Finding 11). The map and associated narrative must also include evaluation of former mining areas within the landfill footprint, describe current site conditions, and discuss whether there is cause for concern that mercury mining wastes are eroding or have potential to erode and be transported by stormwater to surface waters;

- (ii) A map of streambank materials on the eastern bank of Guadalupe Creek, from upstream to downstream, and from the center line of the Creek to the top of the eastern bank on or contiguous to the Site. Segments must be denoted each time there is a change in material along the creek or up the bank. Within each segment, the percentage of native stream terrace deposits and/or mining waste must be estimated, and if mining waste is identified, then the approximate percentage of calcines [i.e., heat processed ores] in the waste must be estimated (see Finding 17). Also within each segment, the potential for mercury mining wastes to erode (e.g., gullies and surface erosion from stormwater, discharge from seeps, slumps, or landslides) into surface waters must be evaluated. If there is cause for concern that mercury mining wastes located within the landfill footprint may be eroding or have potential to erode, then the plan must characterize these materials using similar procedures as for streambank materials;
 - (iii) Collect grab samples of mercury mining wastes on the Site and analyze for total mercury concentration. In addition, characterize a subset of samples to verify that Group B mining waste classification is appropriate;
- (b) An evaluation of whether ponds are a source of mercury to downstream waters (see Finding 8). This must include, but should not be limited to:
- (i) Characterization of the mercury concentration(s) of sediments in ponds A – F. Collect surface grab samples of sediment and analyze fines less than 63 microns in diameter for total mercury concentration; and
- (c) A schedule for implementation of the Mercury Sources Workplan.

2. REPORT RESULTS OF EVALUATION AND REVISE WORKPLAN FOR STORM WATER BEST MANAGEMENT PRACTICES

COMPLIANCE DATE: December 30, 2014

Submit a report, which details the results of Task 1 and proposes as needed revisions to the *Workplan* to control the discharge of mining waste to surface waters, and address any additional sites identified in Task 1. The revised *Workplan* must include, but should not be limited to:

- (a) Revised or new designs for remedial actions, as appropriate, for control of mercury mining waste discharges and, if needed, to control discharges of mercury from ponds.
 - (i) Protect mining waste from peak streamflow in Guadalupe Creek, as specified in Finding 27(c);
 - (ii) Stormwater BMPs shall provide precipitation and drainage controls as specified in Finding 27(d);
 - (iii) Minimize discharges of mercury from ponds and retain habitat for wildlife (see Finding 8); and
 - (iv) Describe disposal plans for cut mining wastes;
- (b) Specify a performance goal for plants and soil bioengineering systems of no less than 85 percent plant survival (percentage as compared to the as-built plans) within 5 years of planting, or equivalent measure (see Finding 17). Further, plants that do not survive to thrive within a three year period following their planting must be replaced; and
- (c) Revised figures of Stormwater Collection and Flow to Creeks (Figure 2 herein) and Former Mining Operations, Waste Piles, and Facilities Map (Figure 3 herein).
 - (i) Figure 2 must be revised to indicate (a) drainage conveyances and pathways for the entire property, including the northwest portion of the Site, and (b) 300- foot-long stretch of mining waste in Guadalupe Creek downstream of U-frame channel (refer to *Mercury Mine Waste Erosion Inventory: Rancho De Guadalupe Area Sierra Azul Open Space Preserve*, Revised, April 2011 available at http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/TMDLs/guadalupe_river_mercury_tmdl.shtml); and
 - (ii) Figure 3 must be revised to indicate (a) U-frame channel, (b) 300- foot-long stretch of mining waste from 2(c)(i)(b), and (c) furnace yards (refer to Slide 15 in Michael Cox's letter dated 29Aug2012).

The revised *Workplan*, acceptable to the Executive Officer, shall be submitted by the compliance date.

3. IMPLEMENT REVISED WORKPLAN

COMPLIANCE DATE: December 31, 2015

The Discharger shall implement the revised *Workplan*, acceptable to the Executive Officer, by the compliance date.

4. REPORT ON COMPLETION OF REMEDIAL ACTIONS

COMPLIANCE DATE: March 30, 2016

The Discharger shall complete a report that documents the completion of necessary tasks identified in the revised *Workplan* described above. The report shall include at least the following components, as follows:

- (a) Description of construction and any variance(s) from revised *Workplan*;
- (b) Site map with the photo survey points clearly shown;
- (c) Immediate post-construction photo documentation for each area where erosion control BMPs have been implemented; and
- (d) As-built plans illustrating at a minimum, the following components for each area where erosion control BMPs are implemented:
 - (i) Final topography and limits of construction;
 - (ii) Permanent photo points;

Additionally, the as-built plans must show at least the following components for each area where erosion control BMPs are implemented below ordinary high water in Guadalupe Creek, as follows:

- (iii) Survey monument points located not less than 10 channel widths apart on Guadalupe creek; and
- (iv) Cross-sections and profiles of the channel, floodplain, and terraces.

The report, acceptable to the Executive Officer, shall be submitted by the compliance date.

5. DEVELOP AND IMPLEMENT MONITORING PLAN

COMPLIANCE DATE: June 30, 2014

The Discharger shall propose and fully implement a monitoring plan, acceptable to the Executive Officer, that includes at least the following components. The purpose of this monitoring is to ensure that the measures employed to reduce and control erosion of mercury mining waste are performing effectively, and if not, to determine why not, and to fix the problem.

- (a) A schedule for conducting annual dry season visual site inspection(s) of all mining waste impacted areas for erosion and threatened erosion of mercury mining wastes;

- (b) Monthly visual site inspections during the wet season (October–May) of all mining waste impacted areas for erosion and threatened erosion of mercury mining wastes. At least two of these inspections during each wet season shall be conducted during storms that generate runoff. When conditions permit, conduct at least one of these inspections each year during a storm that yields at least one inch of precipitation in 24 hours;
- (c) Photo documentation of (1) site conditions during both dry (June–September) and wet season (October–May) inspections from permanent photo points for each area where erosion control BMPs are implemented, and wet season inspection locations, and measurements of (2) the turbidity of stormwater runoff flowing across and discharging from the Mine area, and Guadalupe Creek at fixed sampling locations upstream and downstream of the Mine area;
- (d) Photo documentation of failed BMPs prior to any fixes;
- (e) Documentation that operations and performance of irrigation systems were routinely checked when in use to assure their effectiveness;
- (f) Analyses of changes in creek profiles and cross-sections surveyed at monument points at time intervals of no less than three years, for ten years after construction;
- (g) Documentation that the Discharger is and shall continue to be an active member in good standing of the Guadalupe River Coordinated Mercury Monitoring Program through the year 2016;
- (h) Quarterly and Annual Monitoring Reports: The Discharger shall submit quarterly monitoring reports to the Water Board no later than 30 days following the end of the quarter (e.g., the report for first quarter of the calendar year shall be due not later than April 30 of that year). The reporting frequency may be reduced to annual upon receipt of the Executive Officer's written acceptance of the Report on Completion of Remedial Actions. The first quarterly monitoring report shall be due on July 30, 2014. Each report shall include:
 - (i) A transmittal letter: The transmittal letter shall discuss, for the Mine area, any violations and/or failures of remedial actions during the reporting period and actions taken or planned to correct the problem. The letter shall be signed by the Discharger's principal executive officer or his/her duly authorized representative, and shall include a statement by the official, under penalty of perjury, that the accompanying report is true and correct to the best of the official's knowledge;
 - (ii) Report Result of Inspections and Surveys: The quarterly report will summarize visual observations, provide photo documentation from permanent photo points, and provide surveyed maps, in accordance with the Monitoring Plan;
 - (iii) Status Report: The quarterly report shall describe relevant work completed during the reporting period (e.g., site investigation, interim remedial actions) and work planned for the following quarter. The report shall describe any new or

proposed remedial actions, any significant changes to remedial actions. The report shall describe any proposed (or recently completed) activities that will (or did) change surface water drainage from areas outside the Mine onto the Mine area. If additional measures are needed to increase the stability of floodplain, creek bank, or creek bed areas or improve vegetation survival, the Discharger will propose additional measures in its annual reports; construction of these additional measures is subject to Water Board review and approval in addition to other agency applicable permits and approvals;

- (i) Periodic Inspection Reports: The Discharger shall submit inspection reports to the Water Board by December 31 in years 2020 and 2025. The reports shall cover July 1, 2013 – June 30, 2020, and July 1, 2020 – June 30, 2025, respectively. The Water Board will evaluate the findings of these and other reports with respect to the TMDL goals to attain the watershed fish tissue targets and the San Francisco Bay mercury TMDL allocations to urban stormwater runoff and legacy mercury sources in the Guadalupe River watershed by December 31, 2028. As necessary, the Water Board will modify the TMDL, including cleanup goals for mercury mining wastes.

Each periodic inspection report shall evaluate whether the remedial actions are meeting the TMDL goals to prevent excessive erosion resulting from anthropogenic alterations to the land surface and to restore the landscape to nearly natural erosion rates (see Prohibition 3). Each report shall include a narrative summary of field inspections, copies of field notes, and provide photo documentation. Each report shall include a signature page for the stamp and dated signature of an appropriate registered professional, certifying the accuracy of the inspection and report;

- (j) Violation Reports: If the Discharger violates requirements in the Site Cleanup Requirements, then the Discharger shall notify the Water Board by telephone as soon as practicable once the Discharger has knowledge of the violation. At a minimum, the Discharger shall leave a voicemail message at the Water Board's Spill Hotline (510-622-2369) and shall contact or leave a message with the case manager(s) for its site. Water Board staff may, depending on violation severity, require the Discharger to submit a separate technical report on the violation within five working days of telephone notification; and
- (k) Record Keeping: The Discharger or his/her agent shall retain the above reports, all data generated for the above reports, including lab results and QA/QC data, through December 31, 2030, and shall make them available to the Water Board upon request.

A monitoring plan, acceptable to the Executive Officer, shall be submitted by the compliance date. The plan must be implemented upon concurrence from Water Board staff. Quarterly and Annual Monitoring Reports, and Periodic Inspection Reports, acceptable to the Executive Officer, shall be submitted by the due dates herein.

6. DELAYED COMPLIANCE

If the Discharger is delayed, interrupted, or prevented from meeting one or more of the completion dates specified for the above tasks, the Discharger shall promptly notify the

Executive Officer, and the Water Board or Executive Officer may revise the deadlines imposed by this Order.

C. PROVISIONS

1. **No Nuisance:** The storage, handling, treatment, or disposal of polluted soil or mining wastes shall not create a nuisance as defined in Water Code section 13050(m).
2. **Good Operation and Maintenance (O&M):** The Discharger shall maintain in good working order and operate as efficiently as possible any remedial actions (e.g., BMP, facility, or control system) installed to achieve compliance with the requirements of this Order.
3. **Cost Recovery:** The Discharger shall be liable, pursuant to Water Code section 13304, to the Water Board for all reasonable costs actually incurred by the Water Board to investigate unauthorized discharges of waste and to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action, required by this Order. This includes the costs incurred by the Water Board to prepare this Order. If the site addressed by this Order is enrolled in a State Water Board-managed reimbursement program, reimbursement shall be made pursuant to this Order and according to the procedures established in that program. Any disputes raised by the Discharger over reimbursement amounts or methods used in that program shall be consistent with the dispute resolution procedures for that program.
4. **Access to Site and Records:** In accordance with Water Code section 13267(c), the Discharger shall permit the Water Board or its authorized representative:
 - (a) Entry upon premises in which any pollution source exists, or may potentially exist, or in which any required records are kept, which are relevant to this Order.
 - (b) Access to copy any records required to be kept under the requirements of this Order.
 - (c) To inspect any monitoring or remediation facilities installed in response to this Order.
 - (d) To sample any water or soil which is accessible, or may become accessible, as part of any investigation or remedial action program undertaken by the Discharger.
5. **Contractor / Consultant Qualifications:** All technical documents shall be signed by and stamped with the seal of a California registered geologist, a California certified engineering geologist, or a California registered civil engineer.
6. **Lab Qualifications:** All samples shall be analyzed by State-certified laboratories or laboratories accepted by the Water Board using approved U.S. EPA methods for the type of analysis to be performed. All laboratories shall maintain quality assurance/quality control (QA/QC) records for Water Board review. This provision does not apply to analyses that can only reasonably be performed onsite (e.g., temperature).

7. Periodic SCR Review: The Water Board will review this Order periodically and may revise it when necessary. The Discharger may request revisions and upon review the Executive Officer may recommend that the Water Board revise these requirements.

I, Bruce H. Wolfe, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on June 12, 2013.

Bruce H. Wolfe
Executive Officer

=====
FAILURE TO COMPLY WITH THE REQUIREMENTS OF THIS ORDER MAY SUBJECT
YOU TO ENFORCEMENT ACTION, INCLUDING BUT NOT LIMITED TO: IMPOSITION OF
ADMINISTRATIVE CIVIL LIABILITY UNDER WATER CODE SECTIONS 13268 OR 13350,
OR REFERRAL TO THE ATTORNEY GENERAL FOR INJUNCTIVE RELIEF OR CIVIL OR
CRIMINAL LIABILITY
=====

Attachments:

- Figure 1. Site Location Map
- Figure 2. Stormwater Collection and Flow to Creeks
- Figure 3. Former Mining Operations, Waste Piles, and Facilities Map

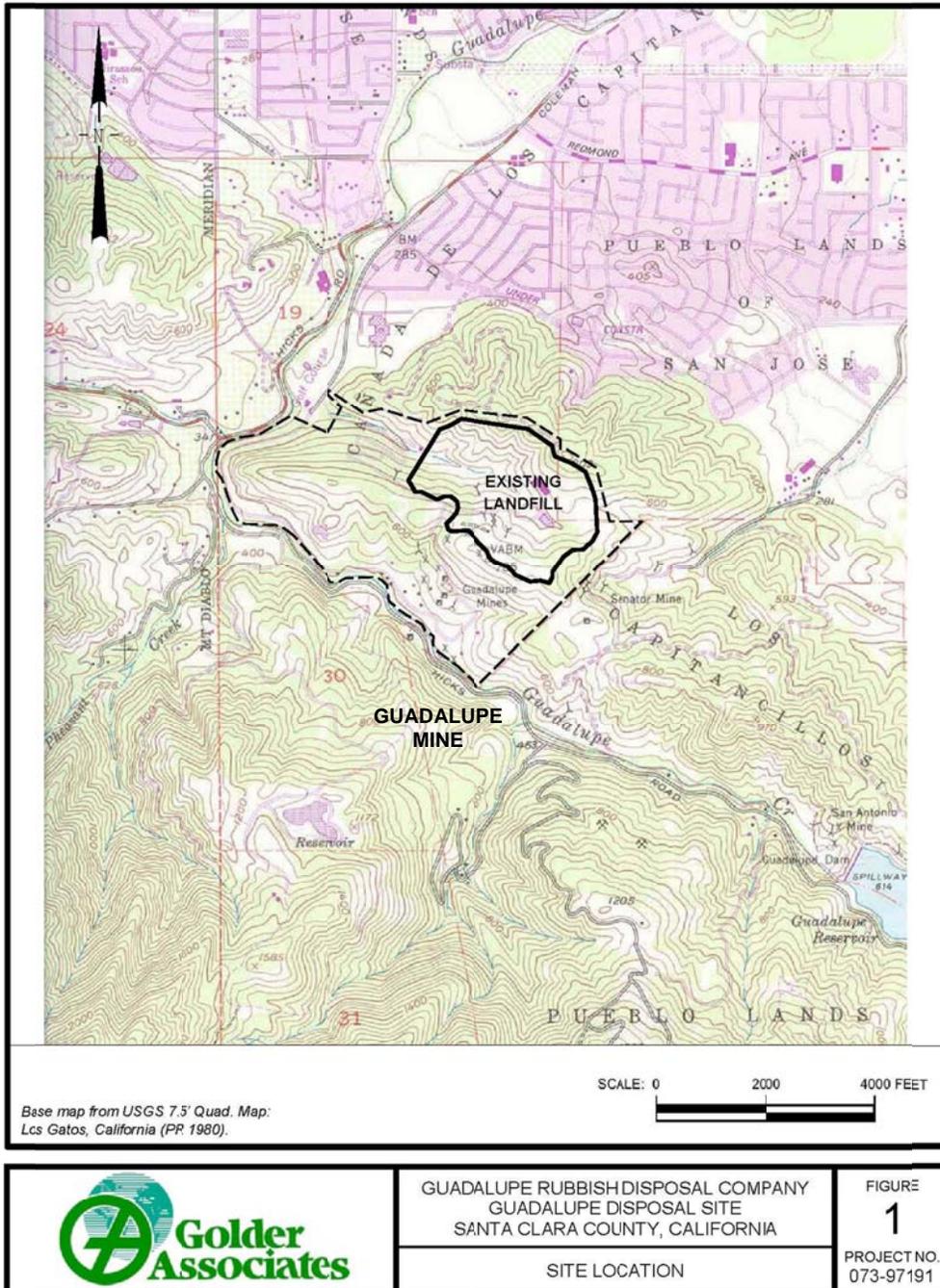


Figure 1. Site Location Map

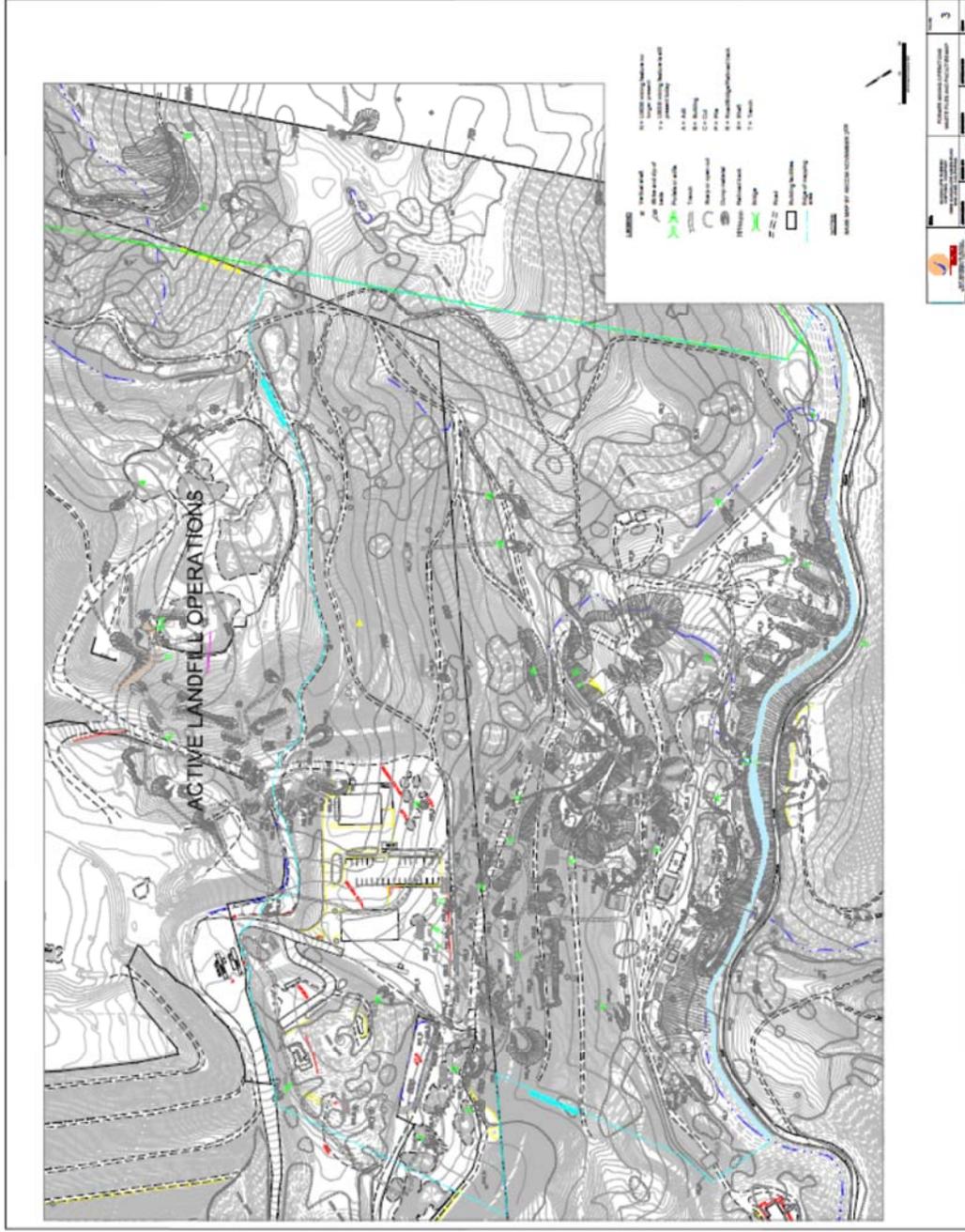


Figure 3. Former Mining Operations, Waste Piles, and Facilities Map

Exhibit 2

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May 13, 2013

Via Email and Courier

John Muller
Board Chair
San Francisco Bay Regional Water
Quality Control Board
1515 Clay Street, Suite 1400
Oakland, California 94612

**RE: Guadalupe Rubbish Disposal Company, Inc.'s Comments on and Objections to
Tentative Order for New Site Cleanup Requirements for Guadalupe Mine
15999 Guadalupe Mines Road, San Jose, California
C1WQS Place No. 717685
Hearing: June 12, 2013, 9:00 a.m.**

Dear Chairman Muller and Members of the Hearing Board:

On behalf of Guadalupe Rubbish Disposal Company, Inc. ("GRDC"), we submit the following comments and objections in response to the California Regional Water Quality Control Board, San Francisco Bay Region's ("RWQCB" or "Board") Tentative Order for Site Cleanup Requirements ("Order") for 15999 Guadalupe Mines Road, San Jose, California (the "Property"), pursuant to California Water Code Section 13304. We provide an executive summary of the comments and objections, followed by a more detailed analysis and explanation of these main points.

EXECUTIVE SUMMARY

GRDC has worked cooperatively with the RWQCB, its Staff, and other responsible parties for several years to investigate, monitor, and report on mercury contamination in the Guadalupe River watershed resulting in part from historic mercury mining in the area. Although it is *not* considered to be one of the major contributors to methylmercury contamination, GRDC has also worked to implement erosion-control measures to address and reduce any significant contamination from the Property. Despite GRDC's ongoing work with the RWQCB in investigating mercury contamination and controlling erosion at the Property, the RWQCB has issued a tentative Order proposing new site cleanup requirements ("SCRs") under a new and administratively burdensome regulatory process.

GRDC is committed to continue working cooperatively with RWQCB Staff to conduct further monitoring and investigation within the established regulatory framework under Water Code Section 13267, but GRDC objects to the unjustified shift to a different regulatory structure under Section 13304. GRDC is also willing to agree to voluntary reimbursement of reasonable costs associated with the

RWQCB's oversight of this work under Section 13267. The use of Section 13304 at this point in the process, however, is the wrong approach at the wrong time and would be counter-productive to accomplishing the mutual goals of the Board and GRDC, which can occur within the ongoing Section 13267 framework.

Because of GRDC's history of cooperation with the RWQCB and its commitment to continue working with the Board and its Staff on effective control measures, GRDC feels that it is necessary to object to the RWQCB's shift to a site cleanup process under Section 13304 of the Water Code, for three reasons:

- **First, there is no legal basis for the tentative Order.** The tentative Order is inconsistent with the State Water Resources Control Board's ("State Board") Resolution 92-49 because it relies on Section 13304 for investigative work, fails to name other responsible parties, and fails to consider the costs of the required work. The tentative Order also does not meet the requirements of Section 13304 because the Order does not provide adequate findings regarding a threatened discharge of mercury from erosion at the Property. Additionally, most of the work required in the tentative Order is unrelated to site cleanup. The stated purposes of the Order are to "clarify" erosion control requirements, "implement" the TMDL, and determine "whether" erosion is occurring at all, none of which meet the requirements of the statute.
- **Second, the RWQCB has not provided a sufficient factual basis for the tentative Order.** The tentative Order does not provide a sufficient basis for the required work because the Order provides no findings by the Board with respect to a threatened discharge of mercury from actual erosion at the former Guadalupe Mine site. The Order also does not find that GRDC's previous or currently ongoing investigation, monitoring, reporting, and erosion-control efforts at the Property are insufficient to address contamination from the Property. Moreover, many of the measures required in the tentative Order are unrelated to site cleanup or preventing discharges, but rather require conducting further investigation and monitoring related to already-completed or ongoing investigations, reporting, and best management practices. Much of the required work has already been completed.
- **Third, the tentative Order treats GRDC inconsistently and unfairly compared to other responsible parties.** RWQCB Staff continue to work with other property owners of former mine sites in the Guadalupe River watershed and have not issued SCRs or other Section 13304 orders to other responsible parties. Only GRDC is subject to SCRs at this time, but the tentative Order does not provide a sufficient reason for focusing on the Guadalupe Mine or for excluding other responsible parties. This inconsistent treatment seems especially unfair considering the RWQCB's past findings that the *reservoirs* in the watershed are the major contributors to methylmercury contamination and that the RWQCB likely can accomplish the goals of the Guadalupe River Mercury TMDL by reducing methylmercury from reservoirs. Issuing a Section 13304 order to GRDC while working with other responsible parties under less administratively burdensome regulatory processes is not justified. The inconsistent treatment also conflicts with the phased strategy of the mercury TMDL implementation plan, which requires that mercury mining waste control actions to be implemented in a phased manner to eliminate discharges from the reservoirs and at *upstream* mines before undertaking projects at *downstream* mines such as Guadalupe Mine.

For these reasons, GRDC requests that:

1. The Board *deny* the Staff's request for a Section 13304 order and instruct Staff to work with GRDC through the ongoing regulatory process under Section 13267. GRDC is proposing revisions to the tentative Order, enclosed with this letter, which would allow GRDC to continue working with RWQCB Staff in the context of the established, ongoing regulatory framework. GRDC would be willing to agree to voluntary cost recovery for reasonable oversight work within this framework.
2. Alternatively, GRDC requests that the Board stay its decision on the Staff's request for a Section 13304 order pending the outcome of ongoing investigatory and monitoring work, currently scheduled for completion in March 2017.

BACKGROUND

The Property consists of approximately 411 acres of land in the Los Capitancillos Range, approximately 11 miles south of San Jose. Of this, roughly 115 acres of the property is used by GRDC for municipal waste disposal. Unrelated to the waste disposal area, the south side of the Property is a sloped area, extending down to Guadalupe Creek. A small section of this slope was once known as the Guadalupe Mine and was used for mercury mining.

GRDC purchased the Property in 1999 for use as a Class III landfill (*i.e.*, no hazardous waste) and uses only a section of the Property for solid waste disposal activities. GRDC has never engaged in any mining activities or profited from any mining activities at the Property.

I. Site History

Beginning in the mid-1800s, the general area in which the Property is located was determined to contain significant cinnabar ore reserves. Cinnabar is the base ore used to produce mercury. At that time, mercury was produced by "roasting" the cinnabar ore to generate mercury vapors, then condensing the vapors to collect mercury from the vapor. The leftover cinnabar ore (after roasting) is called "calcine." It was typical for miners to generate "calcine piles" from the ore-roasting activities.

The Guadalupe Mine first began prospecting operations in or about 1846. The vast majority of mining operations (measured by ore extracted) occurred from approximately 1851 to 1875. Other spikes in mining activity occurred during World Wars I and II.

Significant mining operations at the Property ceased at the end of World War II. However, subsequent to World War II, some exploratory work continued on the Property, as well as some "re-working" of existing calcine piles. This re-working of the calcine piles resulted in further reduction of any residual amounts of mercury in the calcine piles, reducing the risk of mercury-laden sediments migrating from the calcine piles towards Guadalupe Creek, which runs along the bottom of the hill. To the best of GRDC's knowledge, no mining activities have occurred on the Property since the early 1970s.

What distinguishes Guadalupe Mine from virtually all other mines in this area is the u-shaped “concrete flume” built into Guadalupe Creek. In 1873, the mine operators began construction of a “watertight flume” to prevent water from seeping down into the underground mine shafts. The flume is about 500 feet long with an average width of about 25 feet and an average height of about 15 feet. It literally lines the creek through a portion of the area where the most active mining activities would have occurred. Although the flume was built to prevent water from passing from the creek into the mining areas, the walls of the flume also minimize sediments in stormwater from the mining areas from entering Guadalupe Creek.

II. Regulatory History

GRDC has a long history of cooperating with RWQCB Staff in investigating potential mercury problems related to former mining activities at the Property, as noted in the tentative Order. For example, GRDC has complied with similar previous orders issued by the RWQCB pursuant to Section 13267 of the Water Code. In 2007, the Board issued an order for a technical report regarding storm water management at the former Guadalupe Mine site. And in 2009, the Board issued another Technical Report Order, again pursuant to Section 13267, which required GRDC to inventory and evaluate erosion of mercury mining wastes. As noted in the tentative Order, GRDC has complied with the 2009 order by submitting all of the required reports, including the latest Erosion Study Technical Report submitted on July 11, 2011, and quarterly reports on the storm water management best management practices, the most recent of which was submitted on March 31, 2013. GRDC and its consultants have worked with Staff to ensure that each report satisfied the RWQCB’s expectations. GRDC is not aware of any remaining issues with any of these reports or that the Board Staff has found any of them lacking. Through this work, GRDC has accomplished the objective of inventorying mining wastes at the Property.

GRDC also conducts monitoring and investigation activities at the Property pursuant to its storm water discharge permit. As noted in the tentative Order, GRDC is covered under the State Board’s most recent General Permit for Storm Water Discharges Associated with Industrial Activities (“General Permit”). In accordance with the General Permit, GRDC conducts site inspections at the Property to ensure the proper functioning of installed storm water management best management practices (“BMPs”) and to determine whether erosion has occurred. GRDC reports the results of its inspection and erosion control efforts in an annual report. GRDC has also prepared a *Workplan for Storm Water Best Management Practices* (“BMP Workplan”), most recently revised in 2010, that identified ten areas of concern and proposed additional BMP implementation. The first phase of this work has been completed, and interim erosion control BMPs were installed at the remaining areas in 2010.

GRDC has also participated in watershed-wide monitoring and investigation activities as a member of the Guadalupe River Coordinated Mercury Monitoring Program (“Program”). In 2011, the RWQCB approved the Program’s Guadalupe River Coordinated Monitoring Plan, and GRDC continues to fund and fully participate in the Program’s monitoring and investigatory activities. The RWQCB also issued an order in 2011, pursuant to Water Code Section 13267, which requires the Program to prepare a technical report addressing mercury loads discharged annually to San Francisco Bay and factors that contribute to methylmercury production and bioaccumulation in creeks and rivers. The Program has

submitted progress and interim monitoring reports, as required by the order, and will continue to submit reports through 2016 and a final report in March 2017.

GRDC's investigation, monitoring, reporting, and erosion-control activities at the Property demonstrate that the company is committed to addressing problems associated with past mining activities. To that end, GRDC has strived to work cooperatively with RWQCB Staff and to prevent discharges from the property. Indeed, the tentative Order acknowledges that GRDC "has been working with the Water Board to *minimize the discharge of mining wastes* from the Site into the creek."¹

Nevertheless, the RWQCB has proposed new SCRs in a tentative Order issued on April 12, 2013, pursuant to Section 13304 of the Water Code. The tentative Order is essentially an extension of the orders issued by the RWQCB, however, and is meant to require additional investigation and inventory work that was purportedly not included within the scope of earlier orders. GRDC is committed to continuing to work with RWQCB and its Staff within the established, ongoing regulatory framework, and is willing to agree to voluntary cost reimbursement, but it opposes the shift to a new and administratively burdensome and counter-productive regulatory process.

OBJECTIONS TO THE ORDER

GRDC objects to the RWQCB's tentative Order, for three primary reasons. First, relying on Section 13304 as authority for the new SCRs lacks legal foundation because the tentative Order is inconsistent with State Board's Resolution 92-49 and does not meet the requirements of the statute. Second, the RWQCB has not provided an adequate basis for the tentative Order. GRDC opposes shifting to the more burdensome Section 13304 regulatory process given that substantially similar work may be accomplished using the same authorities and processes already in place for currently ongoing work. Third, the tentative Order treats GRDC inconsistently compared to other responsible parties, without a reasonable justification. For these reasons, GRDC opposes the tentative Order and requests that the Board deny Staff's request for its approval.

I. There Is No Legal Basis for Issuing a Section 13304 Order.

The work outlined in the tentative Order has been or could be performed as part of the ongoing investigation and monitoring that is being conducted pursuant to Section 13267, which is the appropriate mechanism for the additional work requested in the Order. The proposed shift to the Section 13304 administrative process, however, lacks legal foundation because the tentative Order is inconsistent with the State Board's Resolution 92-49 and does not meet the requirements of the statute.

A. The Use of a Section 13304 Order Is Inconsistent with State Water Resources Control Board Resolution 92-49.

There is no legal basis for the tentative Order because the use of Section 13304 for investigatory work is inconsistent with the State Board's *Resolution No. 92-49: Policies and Procedures for Investigation and*

¹ Tentative Order for New Site Cleanup Requirements for Guadalupe Mine ("Tentative Order"), California Regional Water Quality Control Board, San Francisco Bay Region (April 12, 2013), Finding 3, at 2; *id.* Finding 6, at 2 (emphasis added).

Cleanup and Abatement of Discharges Under Water Code Section 13304 (“Resolution 92-49”). The State Board issued Resolution 92-49, which was cited in the tentative Order,² to establish policies that regional water boards must follow for the oversight of investigations and cleanup and abatement activities resulting from discharges of hazardous substances.

The terms of Resolution 92-49 establish a system under which regional water boards are to issue Section 13267 orders for investigation work and Section 13304 orders for cleanup work. Specifically, Policy I of the Resolution clarifies that investigations are to be performed under Section 13267, not 13304. Policy I states: “The Regional Water Board shall apply the following procedures in determining whether a person shall be required to investigate a discharge under WC Section 13267, *or* to clean up waste and abate the effects of a discharge or a threat of a discharge under WC Section 13304.”³ The State Board clearly drew a distinction between the type of work that regional water boards should require under Section 13267 as compared to Section 13304 and, in doing so, explicitly provided for investigatory work in a Section 13267 order while reserving Section 13304 orders for cleanup work. Because the tentative Order requires investigatory work under Section 13304 instead of Section 13267, it is inconsistent with Resolution 92-49.

The tentative Order is also inconsistent with Resolution 92-49 because other responsible parties are not named in the Order. Policy II of the Resolution states that regional boards should include other dischargers in their orders.⁴ But the RWQCB failed to name any other dischargers in its tentative Order, which violates this Policy. This departure from the State Board’s policies is especially concerning because, as explained below, the RWQCB has found that *reservoirs* controlled by other responsible parties are the primary contributors to methylmercury contamination and that reducing contamination from those reservoirs likely will accomplish the goals of the TMDL.

Furthermore, the tentative Order is also inconsistent with Resolution 92-49 because the RWQCB did not consider the burden and costs of the requirements. The State Board stated in Policy III of the Resolution that regional boards shall: “Consider whether the burden, including costs, of reports required of the discharger during the investigation and cleanup and abatement of a discharge bears a reasonable relationship to the need for the reports and the benefits to be obtained from the reports.”⁵ In the tentative order, however, the RWQCB did not provide any consideration of the costs associated with the required work or the benefit that the RWQCB expects to achieve by requiring GRDC to carry out the requirements of the Order. This failure is especially problematic given that much of the required work has already been completed by GRDC in earlier stages of its investigation of the Property, as explained

² *Id.* at 8.

³ State Water Resources Control Board, *Resolution No. 92-49: Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304* (“Res. No. 92-49”) (June 18, 1992, and as amended April 21, 1994, and October 2, 1996), Policy I, at 4 (emphasis added), http://www.waterboards.ca.gov/water_issues/programs/land_disposal/resolution_92_49.shtml.

⁴ Resolution 92-49, Policy II.A.4, states: “Where necessary to protect water quality, name other persons as dischargers, to the extent permitted by law.” *Id.* at 5.

⁵ *Id.*, Policy III.B, at 6.

in detail in the technical comments on the tentative Order, which are enclosed with this letter.⁶ Consequently, the tentative Order does not comply with the requirements of Resolution 92-49.

B. The Order Does Not Satisfy the Requirements of Section 13304.

The proposed shift to a Section 13304 regulatory process is inappropriate because the tentative Order does not meet the requirements of the statute. The RWQCB relies on Section 13304 of the Water Code as the legal basis for the tentative Order.⁷ By its terms, Section 13304 requires a finding of a discharge or threat of discharge.⁸ Thus, the tentative Order must provide findings that there is a threat of discharge from the Guadalupe Mine and that the measures required in the Order will prevent that threatened discharge.

The tentative Order does not comply with the requirements of Section 13304 because it does not find that there is currently a material threat of a discharge of mercury via erosion from the Guadalupe Mine or from GRDC's stormwater BMPs. Rather, the Order merely cross-references general findings in the TMDL, findings that would be equally applicable to most other properties in the area. Specifically, Finding 3 of the Order states only that: "The TMDL and its associated Staff Report describe the threat to water quality and beneficial uses posed by mercury, such as discharges of mercury from the Discharger's property."⁹ But the TMDL merely states generally, with regard to all of the mines in the area, that: "Because mining waste was not contained on these mine sites, the wastes continue to erode and discharge large quantities of mercury-laden sediments to streams in the watershed."¹⁰ The TMDL makes no specific findings regarding current or threatened discharges from the Guadalupe Mine. The Order itself provides no other information regarding discharges or threatened discharges of mercury from the Guadalupe Mine. The tentative Order also acknowledges that GRDC "has been working with the Water Board to minimize the discharge of mining wastes from the Site into the creek. However, these Site Cleanup Requirements are necessary to *clarify* erosion control requirements for mining

⁶ See Review and Comments on Tentative Order for New Site Cleanup Requirements for Guadalupe Mine, Letter from William L. Fowler, Golder Assoc., Inc. to Todd O. Maiden, Reed Smith LLP (May 13, 2013), at 3-4, 6.

⁷ See Tentative Order, Finding 25, at 8.

⁸ Section 13304(a) states, in relevant part:

Any person who has discharged or discharges waste into the waters of this state ... 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 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.

Cal. Water Code § 13304(a).

⁹ Tentative Order, Finding 3, at 1-2.

¹⁰ California Regional Water Quality Control Board, San Francisco Bay Region, *Water Quality Control Plan for the San Francisco Bay Basin*, Section 7.7.1: Total Maximum Daily Loads for Mercury in Waters of the Guadalupe River Watershed ("TMDL") at 7-79; see also *Basin Plan Amendment* ("BPA") (Oct. 8, 2008) at 8.

waste.”¹¹ The Order does not explain, however, why GRDC’s current efforts are insufficient or why clarification is “necessary.” Therefore, the RWQCB has not satisfied the requirements of Section 13304.

Without a specific finding regarding a current threat of a discharge from the Mine, the type of work mandated by the tentative Order is also inconsistent with Section 13304. The tentative Order requires the development of an investigative Workplan to evaluate site sources of mercury into surface waters, reporting of results, and a revision of the existing Workplan. By its terms, Section 13304 does not provide authority for the Board to order the development of an investigative workplan. The tentative Order also does not find that the current, existing Workplan would not prevent discharges. And the Order does not provide a basis for expanding the scope of the existing Workplan under Section 13304 when that work could be conducted more efficiently in the course of the existing regulatory process under Section 13267.

Furthermore, the terms of the tentative Order itself demonstrate that it does not meet the requirements of Section 13304. For example, the section titled “Purpose of Order” states: “This order *implements* the Guadalupe River Watershed Mercury TMDL, adopted October 8, 200[8]”¹² Section 13304 does not provide the RWQCB with authority to implement TMDLs through site cleanup orders. Rather, TMDLs are implemented through NPDES permits and other mechanisms. In fact, GRDC is unaware of any other situation in which the RWQCB has used a Section 13304 order to implement a TMDL.

Next, the section titled “Purpose of Order” also states: “these Site Cleanup Requirements are necessary to *clarify* erosion control requirements for mining waste.”¹³ Section 13304 does not provide the Board with authority to issue orders to “clarify” existing erosion-control efforts, especially when those current actions are already being undertaken pursuant to other authorities. In this case, GRDC’s current work at the site is currently conducted pursuant to the Section 13267 process and its storm water General Permit. Any clarification related to ongoing work, which is unnecessary at this time, can occur within the existing framework. Invoking Section 13304 is unnecessary to “clarify” current requirements and will, in fact, only create additional administrative burdens.

The language used in the Tasks further demonstrates that the Order is not intended to prevent a threatened release. Rather, the language of the Tasks demonstrates that the Board does not know whether there is currently a threat of a discharge.

- Task 1(a)(i) requires GRDC to provide a detailed map and narrative that will “discuss *whether* there is a cause for concern that these mercury mining wastes are eroding or have potential to erode and be transported by stormwater to surface waters.”¹⁴

¹¹ Tentative Order, Finding 3, at 2 (emphasis added).

¹² *Id.*, Finding 3, at 1 (emphasis added).

¹³ *Id.*, Finding 3, at 2 (emphasis added).

¹⁴ Tentative Order, Section B, Task 1, at 11 (emphasis added).

- Task 1(a)(ii) requires GRDC to discuss streambank materials and “within each segment, the *potential* for mercury mining wastes to erode (*e.g.*, gullies and surface erosion from stormwater, discharge from seeps, slumps, or landslides) into surface waters must be evaluated. *If there is cause for concern* that mercury mining wastes located within the landfill footprint *may be eroding* or have *potential* to erode, then the plan must characterize these materials using similar procedures as for streambank materials.”¹⁵
- Task 1(b) requires an “evaluation of *whether* Ponds are a source of mercury to downstream waters.”¹⁶

Accordingly, the terms of the Order itself demonstrate that the RWQCB is requiring further investigatory work to determine *if* there is a potential threat of a release. Therefore, the tentative Order does not comply with the requirements of Section 13304.¹⁷

II. The RWQCB Not Provided an Adequate Basis for the Order.

As discussed above, GRDC is committed to working with the RWQCB to conduct reasonable investigation and monitoring and to implement control measures related to alleged problems associated with past mercury mining at the Property. Given the ongoing monitoring and implementation of control measures discussed above, there is an insufficient basis to support issuing a Site Cleanup Requirements Order under Section 13304 of the Water Code.

The tentative Order issued by the RWQCB is a solution in search of a problem. Section 13304 orders must contain findings that support the mandated actions, but this tentative Order provides no findings by the Board with respect to a threatened discharge of mercury from erosion at the former Guadalupe Mine. The Order also does not find that GRDC’s previous or ongoing efforts at the Property are insufficient to investigate and control any possible erosion-related contamination. Specifically, the Order does not explain why GRDC’s ongoing participation in the Guadalupe River Coordinated Mercury Monitoring Program, compliance with the 2009 Technical Report Order, and implementation of additional erosion-control measures pursuant to the BMP Workplan are deficient. The tentative Order states only that there is an “outstanding question” regarding whether mine shafts extend to the other side of the ridge,¹⁸ that the BMP Workplan does not include the entire footprint of the Mine area,¹⁹ and that the Board is seeking

¹⁵ *Id.*, Section B, Task 1, at 12 (emphasis added).

¹⁶ *Id.*, Section B, Task 1, at 12 (emphasis added).

¹⁷ Not only does the tentative Order not satisfy the requirements of Section 13304, the Title 27 regulations governing discharges of mining wastes also do not support the use of a Site Cleanup Requirements Order in investigating and monitoring potential discharges of mining waste. *See* Cal. Code Regs., tit. 27, § 22470(a), cited by the Tentative Order, Finding 28, at 8.

¹⁸ Tentative Order, Finding 12, at 4.

¹⁹ *Id.*, Finding 15, at 5.

to “clarify erosion control requirements.”²⁰ These explanations do not justify issuing an order for Site Cleanup Requirements under Section 13304 of the Water Code.

Moreover, GRDC disagrees with findings related to the scope of previous work because the requested work has largely already been completed during the course of GRDC’s ongoing efforts at the Property, as explained in detail in the attached technical comments on the tentative Order (enclosed with this letter). Regarding the extension of mining shafts and air tunnels to the northeast side of Los Capitancillos Ridge, this was previously assessed in response to prior RWQCB reporting requirements.²¹ The RWQCB has previously considered GRDC’s assessment complete in a prior order. And regarding the geographic scope of the BMP Workplan, GRDC has completed a series of extensive historical and field research efforts, working in cooperation with RWQCB Staff, and the footprint of the Mine area has been effectively established.²² The BMP Workplan is based upon that established footprint. Therefore, GRDC believes that these findings are inaccurate and do not provide an adequate basis for issuing a Section 13304 order.

Thus, the tentative Order requires conducting further investigation and monitoring related to already-completed or ongoing investigations, reporting, and implementation of erosion-control measures. The RWQCB could more efficiently request the same work and accomplish the same objectives by utilizing the regulatory oversight processes already in place – namely, issuing another monitoring and investigation order under Section 13267 or requesting additional work in the BMP Workplan. GRDC and the RWQCB have been working together successfully for several years using these authorities, and the findings in the tentative Order do not provide a basis for now shifting to a new regulatory process by issuing a Site Cleanup Requirements Order.

Section 13304 orders should only be issued when appropriate and should not be considered an inevitable part of the process. Given the history of cooperation with RWQCB Staff, the comparatively small contribution to mercury contamination in the watershed from erosion at the Property, the lack of findings of contamination from the Property after GRDC implemented its erosion-control measures, and the success of the current, ongoing framework, a Section 13304 order is unnecessary and counter-productive.

III. There Is No Adequate Basis for Treating GRDC Inconsistently Compared to Other Responsible Parties.

Moreover, the tentative Order does not provide an adequate basis for the RWQCB’s inconsistent treatment of GRDC compared to other responsible parties. If the Board adopts the tentative Order, GRDC would be the only responsible party subject to a Site Cleanup Requirements Order resulting from mercury contamination in the Guadalupe River watershed, even though GRDC is *not* a major contributor to contamination in Guadalupe Creek, Guadalupe River, or the wider watershed compared to

²⁰ *Id.*, Finding 3, at 1.

²¹ See enclosed Review and Comments on Tentative Order for New Site Cleanup Requirements for Guadalupe Mine, Letter from William L. Fowler, Golder Assoc., Inc. to Todd O. Maiden, Reed Smith LLP (May 13, 2013), at 3-4, 6.

²² See *id.* at 4, 6.

the reservoirs. Given GRDC's history of cooperation with the RWQCB and the existence of major contributors to the contamination, we do not understand why the RWQCB chose to issue its first Site Cleanup Requirements Order to GRDC, nor why the RWQCB failed to issue a similar order to major contributors.

This disparate treatment is made more concerning by the RWQCB's findings that area reservoirs are the largest contributors to methylmercury contamination in the watershed and that cleanup efforts should focus on reservoirs. For example, in the Staff Report for the Guadalupe River Mercury TMDL, the RWQCB made the following findings:

- “Although there may be sites for methylation in the stream and river channels, it appears that their total contribution to methylmercury production and bioaccumulation is much smaller than the reservoir exports during the dry season.”²³
- “Although there may be sites for methylation in the stream and river channels, ... their total contribution to methylmercury production is much smaller than the exports from the reservoirs and Lake Almaden during the dry season. This suggests that that reducing methylmercury production to attain TMDL targets in reservoirs in the mining district and Lake Almaden will likely also attain targets in downstream waters.”²⁴
- “In other words, staff is optimistic that targets will be met in Guadalupe and Alamitos creeks, and in the Guadalupe River, *by reducing methylmercury production in the deep impoundments (reservoirs and lakes) alone.*”²⁵
- “Reducing methylmercury production in, and methylmercury releases from, these deep impoundments [*i.e.*, reservoirs] should also reduce methylmercury levels in downstream waters.”²⁶

Given the RWQCB's findings that reservoirs are the largest sources of methylmercury contamination and that reducing methylmercury from reservoirs would achieve the objectives of the TMDL, we do not understand why the RWQCB would issue a Site Cleanup Requirements Order to GRDC only.

Excluding major contributors also conflicts with the phased strategy of the mercury TMDL implementation plan, which requires that mercury mining waste control actions to be implemented in a “phased” manner “so that mercury discharges from upstream will be eliminated or significantly reduced

²³ California Regional Water Quality Control Board, San Francisco Bay Region, *Staff Report for Proposed Basin Plan Amendment* (Sept. 2008) (“TMDL Staff Report”), at 7-9.

²⁴ *Id.* at 7-14.

²⁵ *Id.* at 8-13 (emphasis added).

²⁶ *Id.* at 9-9 (citing Table 9.3).

before downstream projects are undertaken.”²⁷ The GRDC Property is downstream from virtually all of the other mines in the New Almaden Mining District, including larger mines that have also been shown to have contributed to mercury contamination in Guadalupe Creek.²⁸ Based on the TMDL implementation plan, those mines should have been subject to SCRs or other Section 13304 orders before the Guadalupe Mine, yet only GRDC has received a SCR Order. As a result, this unfair treatment is inconsistent with the TMDL.

The tentative Order itself is silent with respect to the RWQCB’s reasons for excluding other responsible parties. To the extent that the RWQCB may be focused on the Guadalupe Mine due to the existence of calcine piles at the Property, that is an insufficient justification. Calcine piles do not provide an adequate basis for inconsistent treatment, for three reasons. First, there is no reason the RWQCB could not issue a Site Cleanup Requirements Order to address contamination from a reservoir or a mine site without calcine piles. Second, RWQCB Staff have not explained why calcine piles justify inconsistent treatment when they currently are not demonstrated to be major contributors to quantities of methylmercury in the watershed.²⁹ Third, other mine sites have calcine piles. Therefore, the RWQCB does not have a valid basis for treating GRDC differently compared to other parties.

CONCLUSION AND REQUESTED RELIEF

GRDC objects to the RWQCB’s use of a Site Cleanup Requirements Order issued pursuant to Section 13304. As explained above, GRDC has cooperated with the RWQCB in conducting investigation, monitoring, reporting, and erosion-control work at the Property. GRDC is also committed to working with the RWQCB to perform additional work to address problems associated with past mining activities at the former Guadalupe Mine. However, there is no adequate basis for shifting to the burdensome Section 13304 regulatory process for the continuation of work that is currently ongoing pursuant to other authorities. Doing so treats GRDC inconsistently compared to other responsible parties, without a reasonable justification. Moreover, issuing a Site Cleanup Requirements Order under Section 13304 lacks legal foundation, as the tentative Order does not meet the requirements of the statute and is inconsistent with the State Board’s Resolution 92-49. For these reasons, a Section 13304 Order is inappropriate at this time.

GRDC respectfully requests that the Board deny the tentative Order and instruct Staff to work with GRDC to develop an investigation, monitoring, and reporting program that builds on previous and currently ongoing work, treats GRDC consistently compared to other responsible parties, and considers the comparative costs and benefits of the required work. GRDC proposes working with RWQCB Staff to develop a reasonable and cost-effective investigation, monitoring, and reporting plan to determine if mercury-laden sediments are migrating from calcine piles or other former mining areas into Guadalupe

²⁷ TMDL at 7-83; BPA at 12.

²⁸ See TMDL Staff Report at 3-25 (Figure 3.7).

²⁹ Statements in Finding 18 of the tentative Order regarding calcines do not provide an adequate basis for such a finding. The conclusions summarized in Finding 18 are general, not specific to Guadalupe Mine, and do not discuss the level of contribution to contamination from the calcine piles at Guadalupe Mine compared to contamination from reservoirs.

John Muller
May 13, 2013
Page 13

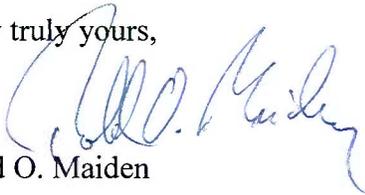
Creek. GRDC also requests that future orders be issued pursuant to the same authorities as currently ongoing work, and is willing to agree to voluntary reimbursement of reasonable costs associated with the RWQCB Staff's oversight of GRDC's work.³⁰ To that end, GRDC requests that any future order issued by the RWQCB incorporate each of GRDC's specific comments on the tentative Order, as set forth in detail in the technical comments enclosed with this letter.

Alternatively, GRDC requests that the Board stay its consideration of the tentative Order to provide GRDC time to work with Staff to complete the ongoing investigation, monitoring, and reporting program. In that case, GRDC requests a stay of the tentative Order until submission of the Guadalupe River Coordinated Mercury Monitoring Program's final report due in March 2017.

In closing, GRDC welcomes this opportunity to comment on the tentative Order, and we look forward to discussing these comments with the Board at its hearing on June 12, 2013. GRDC also looks forward to continuing to work cooperatively with RWQCB Staff on the development and implementation of additional monitoring, investigation, reporting, and control measures.

If you or any members of the Board or RWQCB Staff have any questions regarding any of the comments set forth in this letter, please do not hesitate to contact me. Thank you.

Very truly yours,



Todd O. Maiden

Enclosure

cc: Terry Young, Ph.D., Vice-Chair, San Francisco Bay RWQCB
Jim McGrath, Board Member, San Francisco Bay RWQCB
Margaret Abe-Koga, Board Member, San Francisco Bay RWQCB
William Kissinger, Board Member, San Francisco Bay RWQCB
Carrie M. Austin, Water Resource Control Engineer, San Francisco Bay RWQCB

³⁰ GRDC disagrees with the RWQCB Staff's position that the agency may recover costs associated with oversight of investigation, monitoring, and reporting pursuant to Section 13304 and/or Section 13365 of the Water Code. Rather, according to Section 13304, an agency may obtain cost-recovery only for conducting a cleanup, supervising cleanup activities, or taking remedial action. *See* Cal. Water Code § 13304(c)(1). Nevertheless, GRDC is willing to reimburse the RWQCB for reasonable oversight costs incurred within the Section 13267 process.

May 13, 2013

Project No. 133-97684

Mr. Todd O. Maiden
Reed Smith LLP
101 Second Street, Suite 1800
San Francisco, CA 94105-3659

**RE: REVIEW AND COMMENTS ON TENTATIVE ORDER FOR NEW SITE CLEANUP
REQUIREMENTS FOR GUADALUPE MINE, GUADALUPE RUBBISH DISPOSAL COMPANY,
INC., 15999 GUADALUPE MINES ROAD, SAN JOSE, CALIFORNIA**

Dear Mr. Maiden:

In accordance with your request, Golder Associates Inc. (Golder) in conjunction with GRDC staff, has reviewed the Tentative Order for Site Cleanup Requirements (Tentative Order) for the Guadalupe Mine, and we submit the following comments for your consideration.

The following comments are organized by the Order page number and Section number (#), with the referenced text provided in *italics*, followed by Golder's comments.

Page 1, Section #1:

Guadalupe Rubbish Disposal Company, Inc. (hereinafter called the Discharger) is named as a discharger because it is the current owner of the property and there is an ongoing discharge of pollutants, it has knowledge of the discharge or the activities that caused the discharge, and it has the legal ability to control the discharge, in accordance with California Water Code (Water Code) section 13304.

Comment:

At this time, there is insufficient data to support the finding in the Tentative Order that "there is an ongoing discharge of pollutants." For that reason, GRDC disagrees with that statement and also disagrees with the finding that "it has knowledge of the discharge or the activities that caused the discharge." Therefore, we suggest that this text be re-worded as follows:

"Guadalupe Rubbish Disposal Company, Inc. (hereinafter called the Discharger) is named as a discharger because it is a current property owner at the Guadalupe Mercury Mine and there is mercury mining waste on the property."

Page 1, Section #2:

Location: The Guadalupe Mine (the Mine) is located at 15999 Guadalupe Mines Road, in south San Jose, approximately four miles southeast of the City of Los Gatos.

Comment:

Portions of "Guadalupe Mine" are located to the south of Guadalupe Creek, and therefore this is not a correct statement. Suggest re-wording to state that:

"Portions of the Guadalupe Mine are located at...."



Page 1, Section #3:

The objective of this Order is to address discharges of mercury mining waste, specifically to clarify erosion control requirements for mining waste on the Discharger's property.

Comment:

As explained above, there is insufficient data at this time to support the finding in the Tentative Order that discharges are currently occurring. Rather, the purpose of the order is to conduct additional work aimed at determining whether discharges are occurring. Therefore, we suggest that the word "potential" be inserted before "discharges of mercury mining waste..." in order to make this text factually accurate and more consistent with other portions of Tentative Order (see #6 and #9).

Page 2, Section #3:

The TMDL and its associated Staff Report describe the threat to water quality and beneficial uses posed by mercury, such as discharges of mercury from the Discharger's property (see Finding 18).

Comment:

We suggest the word "potential" be inserted before "discharges of mercury from" for the reasons stated above.

Page 2, Section #3:

The Discharger has been working with the Water Board to minimize the discharge of mining wastes from the Site into the creek.

Comment:

We suggest the word "potential" be inserted before "discharge of mining waste" for the reasons stated above.

Page 2, Section #5:

Numerous mine-related facilities are present on the 411-acre Site, including, but not limited to, standing buildings and structures....

Comment:

We suggest that this text be reworded as follows to make it more accurate, and consistent with prior sentence at the end of Section 4:

"Numerous mine-related facilities are present on the southeastern portion of the Site, including, but not limited to, standing buildings and structures...."

Page 4, Section #11:

The surface water at the Site includes Guadalupe Creek and ponds constructed in the mining era. The beneficial uses of these water bodies include....

Comment:

The remainder of this paragraph describes beneficial uses which do not appear to be applicable to the small ponds in the mining area, including Fish Migration (MIGR), Municipal and Domestic Supply (MUN), Water Contact Recreation (REC1), etc. Hence, we recommend that these sentences be revised to state:

“The primary surface water at the Site is Guadalupe Creek. The beneficial uses of this water body include....”

Page 4, Section #12:

There is only one outstanding question as to whether or not the Mine, i.e., mining shafts and tunnels, extend over the top of Los Capitancillos Ridge down to the northeastern portion of the Site (p. 34, 2011 archeological survey).

Comment #1:

We disagree with this statement and suggest that the statement be removed. Mining shafts and air tunnels on the northeast side of Los Capitancillos Ridge were previously assessed in response to prior Water Board requirements regarding this issue (Provision C.9. of WDR Order No. 90-139). The primary focus of that work was to ensure that suitable mitigation measures were taken to address stability concerns related to remnant mine workings in the vicinity of the landfill. In subsequent WDR Order 01-050, the Water Board noted that “the discharger has now completed mitigation for all mine workings that might have posed a threat to the integrity of the landfill” (Finding #19). The Water Board further noted in Finding #20 that “Some mining tunnels and shafts might extend beneath the southern ridge into areas proposed for future landfill development. However, most of the mine workings lie beneath an area that has been developed as a maintenance yard that is not part of the landfill development.”

Comment #2:

Finding #12 documents GRDC’s compliance providing Technical Reports pursuant to prior requirements under Water Code §13267. Specifically, this finding notes that the Discharger was required to inventory and evaluate erosion of mercury mining wastes, and that the Discharger has largely complied. The finding concludes that there is only one outstanding issue, and that this concerns whether or not mining shafts and tunnels extend over the top of Los Capitancillos Ridge (discussed in our prior comment).

In the context of prior work completed and Water Board acknowledgment of such, GRDC believes the scope of work requested in Section B, Task 1 is redundant and therefore overly burdensome. Much of the work identified represents complete duplication of prior efforts and goes well beyond the “one” outstanding issue identified by the Water Board regarding the east side of Los Capitancillos Ridge. Consistent with the prior §13267 Order, Task 1 again requests a plan to map all eroding or potentially eroding mercury mining wastes at the Site, with great emphasis placed on the eastern bank of Guadalupe Creek. GRDC completed a significant amount of work in this area, as documented in our Technical Report for Erosion of Mercury Mining Wastes (Stantec 2010).

Specifically, Figures 4 through 6 in that Technical Report (Stantec 2010) provide detailed maps showing areas of mine wastes, erosion potential for mine waste, and bioavailability of mine wastes with respect to heat-processed wastes including calcines. In correspondence dated 2 February 2011, the Water Board Staff noted that they found the work performed in the study area to be complete. GRDC recommends that the discussion of prior work completed in Finding #12 be augmented to reflect the substantial amount of prior mapping completed, and that this information be accounted for in developing any further work scope identified in Task 1. We also recommend removing work

requested in Task 1 that has already been completed and is, therefore, redundant (as discussed in our comments on Task 1, below).

Page 5, Section #15:

The Workplan does not include the entire footprint of the Mine area.

Comment:

We disagree with this statement and suggest that this finding be removed because it is inaccurate, for the reasons discussed below.

The footprint of the Mine area addressed in the September 2010 Workplan was based primarily upon the U.S. Geological Survey Professional Paper 360, Plate 14 (Plate 14) which illustrates the principal mining features on the site. However, the Water Board also noted in correspondence dated 2 February 2011 that mining activities may have occurred on the property subsequent to U.S. Geological Survey mapping in 1946-47, and the Water Board requested a thorough search of historical records to identify potential areas of more recent mine activity.

In response to that request, GRDC researched a variety of different sources to seek information on potential mine related activity outside of the Plate 14 boundary. GRDC also engaged a third party archaeological consultant, Holman & Associates, to review historical mining activities on GRDC's property. Holman & Associates' work included researching: (a) records at the Northwest Information Center of the California Historical Resources Information System located at Sonoma State University; (b) Historic American Buildings Survey Photos at the Library of Congress; (c) collections at the Bancroft Library at University of California, Berkeley; (d) historical mining and topographic maps; and (e) online publications from Archive.org and Google books. Holman & Associates also visited research facilities in connection with this project, including the: (i) Bancroft Library at University of California, Berkeley; (ii) California Room at San Jose Public Library; and (iii) Department of Special Collections and University Archives at Stanford University Libraries.

The findings of the additional research regarding potential mining areas outside the Plate 14 area were documented in a 28 April 2011 Technical Report. In summary, three additional areas of potential mining activity were identified on GRDC property: mine shafts and tunnels that may extend to the northeast of Los Capitancillos Ridge [discussed in comments above]; and two additional locations referred to as Locus 36 and 43. GRDC subsequently retained Stantec to investigate for potential mining waste and assess erodibility concerns at Locus 36 and 43. Stantec's evaluation of these two features confirmed that one of the two – Locus 36, which consists of two adits and a vegetated waste pile – is related to historic mercury mining operations. However, Stantec's evaluation determined that no evidence of erosion or stormwater drainage towards Guadalupe Creek existed in the area of Locus 36. With respect to Locus 43, Stantec confirmed that a borrow pit exists at this location. The borrow pit was not associated with mercury mining operations, but may be related to aggregate mining for use in former asphalt production.

In summary, GRDC has completed a series of extensive historical and field research efforts working in cooperation with the Water Board, and the footprint of the Mine area has been effectively established. The September 2010 BMP Work Plan is based upon that established footprint. Therefore, the statement in Finding #15 is inaccurate and, for that reason, we recommend that it be removed.

Page 8, Section #25:

Basis for 13304 Order: Water Code section 13304 authorizes the Water Board to issue orders requiring a discharger to clean up and abate waste where the Discharger has caused or permitted waste to be discharged or deposited where it is or probably will be discharged into waters of the State and creates or threatens to create a condition of pollution or nuisance.

Comment:

Consistent with the comments in the response letter regarding legal authority for the Order, we suggest revising this paragraph to provide §13267 as the legal authority for the Order. Accordingly, we recommend revising this paragraph as follows:

“Basis for 13267 Order: Water Code section 13267 authorizes the Water Board to issue orders requiring a discharger to furnish technical or monitoring program reports which the regional board requires.”

Page 9, Section #28(c):

Title 27 siting requirements require that the stormwater BMPs shall be designed to protect from 100-year peak streamflow in Guadalupe Creek. (Cal. Code Regs., tit. 27, § 22470(a), Table 1.1, Table 1.2, and § 22490(b).)

Comment:

Providing BMPs designed to protect from 100-year peak streamflow in the creek is overly burdensome and likely infeasible. The impact to the creek and surrounding habitat would likely exceed any benefit gained from implementation of such measures (if such measures exist). It is also unlikely that BMPs that would achieve the stated goal could even be permitted due to the resulting loss of existing habitat. In addition, this Finding conflicts with Prohibition 3, which states “Activities associated with investigation and cleanup that will cause significant adverse migration of wastes or hazardous substances are prohibited.”

Page 10, Section #30:

The Regional Water Board, as a responsible agency under CEQA, finds that all environmental effects have been identified for project activities that it is required to approve, and that the Project will not have significant adverse impacts on water quality provided that the activities in this SCR and associated monitoring is carried out as conditioned in this Order.

Comment:

The City of San Jose Planning Department prepared and certified a Mitigated Negative Declaration on March 29, 2013, based upon information provided by GRDC. The Mitigated Negative Declaration did not contemplate yet-determined future orders from the Water Board.

Page 10, Order:

IT IS HEREBY ORDERED pursuant to the authority in Water Code section 13304 that the Discharger, its agents, successors, and/or assigns shall clean up and abate the effects described in the above findings as follows:

Comment:

For the reasons discussed previously, and for consistency with the comments in the response letter regarding legal authority, we recommend replacing the discussion of §13304 with a reference to §13267, as follows:

“IT IS HEREBY ORDERED pursuant to the authority in Water Code section 13267 that the Discharger, its agents, successors, and/or assigns shall undertake the following measures:”

Page 11, Section A, Prohibition 1.

The discharge of wastes or hazardous substances in a manner that will degrade water quality or adversely affect beneficial uses of waters of the State is prohibited.

Comment:

We suggest that this statement be removed. The Water Board has already determined that there is historical impairment of water quality in the Guadalupe River Watershed.

Page 11, Section B, Task 1:

Comment #1:

As discussed in our previous comments, the requirements of Task 1 do not seem to follow from Finding 12, which states: "The discharger has largely complied with the 2009 Order.....There is only one outstanding question as to whether or not the Mine, i.e., mining shafts and tunnels, extend over the top of Los Capintancillos Ridge..."

Based on GRDC's compliance with previous orders, as acknowledged in this statement, it is unclear how the requirements of Task 1(a) were developed or why they are being imposed. As explained above, much of the extensive data collection requirements described in Task 1(a) have already been performed and submitted as part of §13267 Technical Reports submitted by GRDC in December 2010, April 2011 and July 2011. The distribution of mining wastes and, in particular, calcines has been documented in the December 2010 report (Figures 4 through 6).

Specifically, the December 2010 report provided the following information in compliance with the requirements of the 2009 Technical Report Order:

- Review of historic maps and aerial photographs documenting locations of mining activities and wastes
- Field evaluation and validation of the extent of mining waste as previously mapped by others
- Classification of the types of mapped mining wastes and particularly location of calcines
- Evaluation of the potential for erosion based on criteria defined by the Order
- Evaluation of the bioavailability of mercury in the mining wastes
- Preparation of a series of maps documenting the above

Because this work has already been completed during the §13267 process, Task 1 requests duplicative work that would be burdensome and unnecessary.

Comment #2:

As discussed previously, the issue of whether mining activities extend over the top of Los Capintancillos Ridge has previously been addressed by GRDC in response to WDR Order No. 90-139, and also by the Holman & Associates 2011 archeological survey, which states that: "Mining shafts and tunnels have been covered for safety reasons; sometimes this has obliterated most mining indications."

Further, because of the extensive development of the landfill and associated support facilities northeast of the ridge, there is no reason to suspect that there are extensive areas of mining waste subject to erosion. To the contrary, the extensive development of the Site including buildings, paved surfaces, drainage management, stormwater management BMPs, and the site SWPPP, provide

adequate controls and protection against excessive erosion and sediment transport in this area of the site.

Comment #3:

The requirement in Task 1(a)(ii) to map the percentage of native stream terrace deposits, mining waste and calcines is unrealistic and not feasible in any meaningful fashion given the heavy vegetation and past erosion control activities which have obscured exposures of earth materials along the eastern creek bank. Extensive subsurface exploration would be necessary to accomplish this objective, which would directly contradict Prohibition 3, which prohibits activities that could cause significant adverse migration of wastes. Further, it is unclear how this exercise would provide useful data to further the objective of minimizing erosion in the Mine area via BMPs. We would recommend that additional mapping efforts be directed at identifying areas of erosion, or potential erosion, and focusing on BMPs for those areas.

Comment #4:

Based on the RWQCB's statements regarding the purpose of the Order, specifically Finding 3, which states: "The Objective of this Order is to address discharges of mercury mining waste, specifically to clarify erosion control requirements for mining waste on the Discharger's property," we recommend that Task 1 focus on stormwater management and erosion control in the mining area. In addition, the Order states that potential erosion of heat-processed ore or calcine deposits is of particular concern.

Based on the stated purpose of the order, we would recommend that Task 1 be directed toward preparation of a detailed map of surface runoff, and the existing system of BMPs including the sedimentation and infiltration ponds. The task would include a detailed characterization of the site topography with field verification of the identified flow paths, and all stormwater control measures and BMPs. The surface drainage map would be overlain with the existing geologic maps showing the location of mine wastes, and cultural mapping of former mining operations, waste piles, and facilities. This task would also include updated field inspection and mapping of any identified areas of excessive erosion, or potential areas of erosion, in areas of mapped waste and calcines in particular. The resulting map would provide the basis for a revision to the *Workplan for Storm Water Best Management Practices* which is the stated purpose of Task 1. Recommended language along with a modified schedule for Task 1 is provided below:

WORKPLAN TO EVALUATE SITE DRAINAGE AND SEDIMENT TRANSPORT TO GUADALUPE CREEK

COMPLIANCE DATE: December 31, 2013

The Discharger shall develop a Site Drainage and Sediment Transport Workplan, acceptable to the Executive Officer, to evaluate site drainage and potential erosion of mercury-bearing sediment from mining wastes, in particular from calcines, to surface waters. The Workplan shall supplement the previous investigations and reports (see Finding 12). The purpose of the Site Drainage and Sediment Transport Workplan is to update and revise (as necessary) the *Workplan for Storm Water Best Management Practices* (Workplan, see Finding 14). The Site Drainage and Sediment Transport Workplan must include, but shall not be limited to:

- (a) A plan to map site drainage paths and potential transport of sediment from mine waste to surface waters. The plan must include the scope for preparing:
 - (i) A map of surface water flow paths with the potential to erode mercury mining wastes on the Site, with background graphics of former mining operations, waste piles, and facilities similar to Figure 3 from Stantec 2010. The map of surface runoff should be prepared using current topography with subsequent field verification of the identified flow paths, and all stormwater control measures and BMPs. The map should also include the existing system of sedimentation and infiltration ponds and identify drainage pathways (i.e., channelized flow)

from surface water contact with mining waste to discharge points along Guadalupe Creek. The surface drainage map would be overlain with the existing geologic maps showing the location of mine wastes, and cultural mapping of former mining operations, waste piles, and facilities. This task should also include updated field inspection and mapping of identified areas of excessive erosion, or potential areas of erosion, in areas of mapped mine waste and calcines in particular. The map must also provide an associated narrative sufficient to describe and support the map. Additionally, the map and associated narrative must describe current site conditions, and discuss whether there is cause for concern that mercury mining wastes are eroding or have potential to erode and be transported by stormwater to surface waters.

- (b) An evaluation of whether Ponds are a source of mercury to downstream waters (see Finding 9). This must include, but should not be limited to:
 - (i) Characterization of the mercury concentration(s) of sediments in Ponds A – F. Collect surface grab samples of sediment and analyze fines less than 63 microns in diameter for total mercury concentration;
- (c) A schedule for implementation of the Site Drainage and Sediment Transport Workplan.

Page 12, Section B, Task 2:

COMPLIANCE DATE: September 30, 2014

Comment:

We suggest that the compliance date be changed to December 30, 2014.

Page 12, Section B, Task 2(a):

(a) Revised or new designs for stormwater BMPs for erosion control of mercury mining wastes and, if needed, to minimize discharges of mercury from Ponds as follows:

Comment:

We suggest that this sentence be reworded as follows:

“(a) Revised or new designs for stormwater BMPs, if needed, for erosion control of mercury mining wastes and, if needed, to minimize discharges of mercury from Ponds as follows:”

Page 12, Section B, Task 2(a)(i) & 2(ii):

Protect mining waste from flows up to and including the peak 100-year streamflow in Guadalupe Creek, as specified in Finding 28(c);

Stormwater BMPs shall provide precipitation and drainage controls for the 10-year, 24-hour design storm, as specified in Finding 28(d); and

Comment:

We suggest that these statements be removed. Designing stormwater BMPs for 100-year peak streamflow on the banks of Guadalupe Creek may not be technically feasible, would be economically burdensome if feasible, may result in greater harm than good to the environment, and may not be permissible given sensitive biological resources, existing habitat, and the number of stakeholders involved.

Page 13, Section B, Task 2(b):

Specify a performance goal for plants and soil bioengineering systems of no less than 85 percent plant survival (percentage as compared to the as-built plans) within 5 years of planting (see Finding 18). Further, plants that do not survive to thrive within a three year period following their planting must be replaced;

Comment:

We suggest that this item be removed, or that clarification be provided with regard to the regulatory authority for requiring a "performance goal" for plants and soil bioengineering systems.

Page 13, Section B, Task 3:

COMPLIANCE DATE: December 31, 2015

Comment:

GRDC is very concerned about a rigid completion date for projects that are yet undefined and that could include permitting through other government agencies before the work can be implemented. To account for this significant uncertainty, we recommend that the due date be extended to December 31, 2016. This extension would also be more consistent with the timelines established in the TMDL Basin Plan Amendment: "Cleanup and abate discharges of mercury mining waste within the 10-year duration of Phase 1. Submit a cleanup report for review and approval by the Executive Officer no later than **December 31, 2018.**"

Page 13, Section B, Task 4:

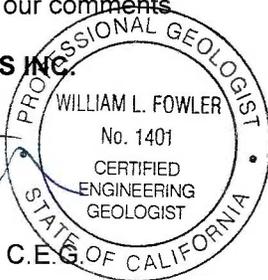
COMPLIANCE DATE: March 30, 2016

Comment:

We suggest that this due date be extended to March 30, 2017, for the reasons described above.

Thank you for the opportunity to assist GRDC with this project and please call if you have any questions or would like to discuss our comments

GOLDER ASSOCIATES INC.



William L. Fowler, P.G., C.E.G.
Principal

cc: Mr. Jim Obereiner