

Appendix B

COMMENTS RECEIVED

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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.

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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.

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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.

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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.

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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

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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).

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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.

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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.

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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).

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- 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.

18

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.

19

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.

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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

21

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:

22

- “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

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

ReedSmith

26
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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.

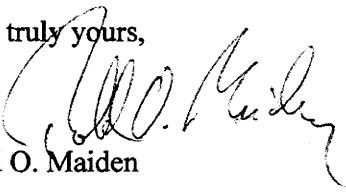
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In closing, GRDC welcomes this opportunity to comment on the tentative Order, and we look forward to discussing these comments with the Board at its hearing on June 12, 2013. GRDC also looks forward to continuing to work cooperatively with RWQCB Staff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

28

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:

29

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:

30

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..."

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Page 1, Section #3:

31

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).

31

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.

31

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....

32

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....

33

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."

34

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).

34

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:

35

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:

36

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:”

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Page 11, Section A, Prohibition 1.

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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:

41

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."

41

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.

42

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.

43

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:

44

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):

45

(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):

46

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):

47

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:

44

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:

44

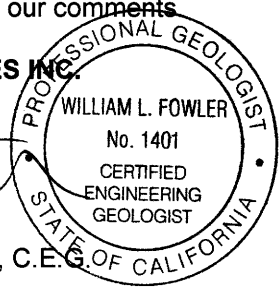
COMPLIANCE DATE: March 30, 2016

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