CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

ORDER NO. R5-2002-0138-01

WASTE DISCHARGE REQUIREMENTS FOR TEICHERT AGGREGATES HALLWOOD FACILITY YUBA COUNTY

The California Regional Water Quality Control Board, Central Valley Region, (hereafter Regional Board) finds that:

- 1. Teichert Aggregates (hereafter Discharger) submitted a Report of Waste Discharge (ROWD) dated 7 March 2001, and previously submitted a *Reclamation Plan for Hallwood Site* (Facility) dated 28 October 1988 for an existing facility that extracts and processes aggregate and manufactures asphalt concrete.
- 2. The Discharger owns and operates the Facility on real property identified by Assessor's Parcel Numbers: 006-100-072; 006-100-073; 006-100-074; 006-100-075; 006-150-004; 006-150-007; 006-160-027; and 006-160-029.
- 3. The property is in Sections 24, 25, and 26 T16N, R5E, MDB&M, as shown on Attachment A, which is attached hereto and made part of this Order by reference. The Facility is approximately three miles east northeast of Marysville and south off Brown's Valley Road. The physical street address is 3311 Walnut Avenue.
- 4. The property has been mined since 1953. The Discharger has operated aggregate wash water settling basins in the past. In May 1999, the Discharger notified staff that the Facility was a dry process Facility. However, in April 2000 a ROWD was submitted, which described operations that generate wastewater. Subsequently WDRs Order No. 5-00-105 was adopted at the 15 June 2000, Regional Board meeting. In March of 2001 the Discharger determined that revisions to the WDRs were necessary and submitted another ROWD on 19 March 2001.
- 5. The Discharger has requested that revisions be made to the Waste Discharge Requirements Order No. 5-00-105 to accommodate desired operational changes. Total finished product sales will remain the same at 850,000 tons per year.
- 6. Two revisions have been requested. One increases the daily average flow from 1.2 to 3.0 million gallons per day (mgd). The second increases the designated disposal area from 0.5 to approximately 15 acres. The designated disposal area is described as having a maximum size of 15-acres of pond surface plus a 100-foot wide continuous land buffer surrounding the 15- acres. The designated disposal area is stationary limited in size and must maintain a minimum 100-foot separation between the designated disposal area and the Yuba River. Annual aggregate extraction, finished product production, and all other aspects of the operation previously reported and described herein will remain unchanged.

Facility and Discharge

- 7. The Discharger's aggregate extraction and processing operation covers approximately 720-acres. Extraction operations consist of excavation and transport of site alluvial deposits. The site's aggregate was previously mined for gold leaving behind dredger tailings called windrows.
- 8. Aggregate extraction operations will be conducted both above and below site groundwater levels. A dragline will be used to excavate up to 40-feet below the water table.
- 9. A conveyor transports excavated material to temporary aggregate stockpiles. Aggregate stockpiles allow a continuous feed of sand and gravel to the classifying/processing (washing) Facility during the operational hours. Stackers place the various sand and aggregate products into their respective stockpiles prior to sale. Expended wash water from the plant is pumped to the 15-acre settling pond contained in the designated disposal area.
- 10. The Discharger will produce approximately 850,000 tons of aggregate products of which 400,000 tons more or less will be washed products based on market demand. The Discharger proposes to use chemical additives in the wash water to help settle colloidal material. Since issues regarding chemical additives on water quality cannot be addressed without specific chemical information, chemical processing may commence at this site only after chemical additive details are provided and their use is approved in writing by the Executive Officer.
- 11. Portland Cement Concrete (PCC) will not be manufactured at this Facility. Wastes generated during the manufacture and transportation of PCC have the potential to be classified as designated waste and pose a threat to water quality. The Discharger has not submitted plans for construction or operation of a PCC plant; therefore this Order does not address the manufacture of PCC.
- 12. The Facility discharges 3.0 million gallons per day (mgd) of wastewater from sand and gravel washing operations to an on-site unlined settling/infiltration pond. The pond is approximately 15-acres in surface area as shown in Attachment A and B, which is attached hereto and made part of this Order by reference. The pond can be located anywhere on the facility that complies with the setback requirement and the requirements of this Order. The facility boundary is shown in Attachment A and B. A nearby water pond will be used as an industrial water supply pond. It is anticipated that most of the expended process water discharged to the wastewater pond will be recycled through near surface infiltration to the supply pond. Water from the industrial supply pond may also be used for dust control on the site roadways.
- 13. The Facility has limited operational staff and they use bottled water for domestic use.

14. Hazardous materials stored at the site are Ar-4000 asphaltic oil, motor oil, hydraulic fluid, transmission fluid, lube grease, gear lube, and similar products associated with a aggregate processing Facility and listed below. Best Management Practices will be followed in handling these substances. There is no bulk storage of fuel on site. Asphalt cement oil is stored in one or more aboveground storage tank(s). Major equipment repair work is performed off site.

Material	Amount
Acetylene	834 f ³
Oxygen	1,491 f ³
Propane	30,000 gal
Diesel	None Stored
Asphaltic Cement	90,000 gal
Lubricating Oils and Grease	1,500 gal
Gasoline	None Stored
Antifreeze	110 gal
Waste Oil	110 gal
Waste Antifreeze	55 gal
Solvent	110 gal

Site-Specific Conditions

- 15. Historic dredging for gold in this area has significantly disturbed and redistributed the river sediments in a non-uniform manner. The Discharger has not requested on-site domestic wastewater disposal and the soil may not meet the consistency normally expected to support on-site systems, therefore this Order does not address on-site domestic wastewater disposal. The Discharger has a contract service provider to maintain portable self-contained domestic waste units on site.
- 16. The Facility is at an elevation of approximately 100 feet Mean Sea Level (msl). Surface water drainage is to the Yuba River. The Facility site is in the Lower Yuba River Hydrologic Subarea within the Marysville Hydrologic Unit (No. 515.30), as depicted on interagency hydrologic maps prepared by the Department of Water Resources in August 1986.

Groundwater Considerations

17. The Discharger operates within the area known as the Yuba Gold Fields. The Gold Fields surface sediments' ability to store and transmit groundwater has been significantly changed with the historic mining activity. The present day mining activity and disturbed sediments are separated from the well-established channel of the Yuba River. The U.S. Army Corps of Engineers identified the ephemeral ponds and channels created by the gold dredge activity as being away from the Yuba River Channel and above the high water mark. The Corps, on behalf of the United States,

subsequently determined that the ponds and channels within the Yuba Gold Fields were not jurisdictional waters of the U.S. under the Clean Water Act (March, July, and November 1995 Corps letters to Cal Sierra, Western, and Teichert respectively and December 1998 letter to LASER).

- 18. The Corps exempts Goldfields ponds and channels from Clean Water Act jurisdiction under its industrial process exemption. Under this exemption, the Corps has interpreted the term "waters of the U.S." to not include artificial lakes or ponds created by excavating dry land (51 Fed. Reg. 41217). The Regional Board has concurred with the Corps determination and has made a historical practice of issuing WDRs instead of NPDES permits for mining activities in the Yuba Gold Fields.
- 19. Gold Fields ponds and channels are man made and percolate to the groundwater. Under 40 CFR 122.2, EPA has drawn a distinction between natural and artificial ponds. As artificial, manmade ponds, the ponds within the designated disposal and excavation areas described in Finding Nos. 5, 6, 8, and 12; and Specification B. 5 and B. 6 are not waters of the U.S. Additionally, under the waste treatment system exclusion of 40 CFR 122.2, the ponds within the designated disposal and excavation areas are not waters of the U.S.
- 20. USEPA has reviewed the Goldfields gold dredging operation and concluded that this operation does not involve a point source discharge to waters of the U.S. (Development Document for Proposed Effluent Limitations for Placer Mining, EPA 440/1-85/061-B, October 1985). Although this Discharger does not dredge for gold, it discharges into the same type of manmade dredger ponds as a gold dredge, and the Board finds that this discharge is not to waters of the U.S.
- 21. A majority of federal courts have concluded that groundwaters, even if hydraulically connected to surface waters, are not waters of the U.S. The Board finds that the underground waters within the Yuba Goldfields qualify as such groundwaters and are not waters of the U.S.

Groundwater Degradation

22. The conditional discharge as permitted herein is consistent with the antidegradation provisions of State Water Resources Control Board Resolution No. 68-16. Some degradation of groundwater immediately beneath the site is appropriate provided that no degradation occurs beyond the designated disposal or excavation areas, and that best practicable treatment and control is implemented, and that allowed degradation shall not result in an exceedance of applicable water quality objectives or unreasonably impact beneficial uses. Limited degradation of groundwater underlying the site within the designated disposal area is consistent with maximum benefit to the people of the State, because aggregate mining contributes to the economic benefit of Yuba County and the surrounding area. Assimilative capacity is available in the underlying groundwater, considering limited dilution, to allow for some degradation

and not unreasonably threaten present and anticipated beneficial use of such water or result in groundwater that exceeds or threatens to exceed water quality objectives set forth in the Basin Plan. Such degradation will be limited to only the groundwater underlying the designated disposal and excavation areas, and monitoring is required to assure protection of water quality outside of these areas.

Treatment and Control Practices

- 23. The site described in Finding Nos. 1 through 13 provides best practicable treatment and control for the subject wastewater, and will assure that the discharge does not create a condition of pollution or of nuisance and that the highest water quality will be maintained. Settling ponds are used throughout the mining industry to treat turbidity and discoloration.
- 24. The materials used in the Discharger's operation are inert natural materials being subjected to a classification and separation process using site groundwater without any chemical addition. The unlined ponds allow for settling and filtering; therefore groundwater monitoring is not necessary.
- 25. In the period before the Discharger began operations, historic mining activities within the Yuba River watershed used mercury to amalgamate gold. Significant amounts of mercury were lost during this process, resulting in residual mercury within the Yuba River sediments. This Order requires mercury monitoring within the excavation and designated disposal areas.

Basin Plan, Beneficial Uses, and Regulatory Considerations

- 26. The Regional Board adopted a *Water Quality Control Plan, Fourth Edition, for the Sacramento and San Joaquin River Basins* (hereafter Basin Plan), which designates beneficial uses, establishes narrative and numerical water quality objectives, and contains implementation plans and policies for protecting all waters of the Basin. The Basin Plan includes plans and policies of the State Water Resources Control Board incorporated by reference, including the Antidegradation Policy, Resolution 68-16. Pursuant to the California Water Code (CWC), §13263(a), waste discharge requirements must implement the Basin Plan.
- 27. Surface water drainage and groundwater flow for the area is to numerous unnamed drainage ways and the Yuba River. The existing beneficial uses of the Yuba River are municipal, domestic, and agricultural supply; recreation; esthetic enjoyment; navigation; ground water recharge; contact recreation, canoeing and rafting, other non-contact recreation, warm and cold freshwater habitat, warm and cold water migration, warm and cold water spawning, and wildlife habitat.
- 28. The beneficial uses of the underlying groundwater are municipal and domestic water supply, agricultural supply, industrial service supply, and industrial process supply

- 29. The Basin Plan encourages reclamation.
- 30. This discharge is exempt from the requirements of *Consolidated Regulations for Treatment, Storage, Processing, or Disposal of Solid Waste*, as set forth in Title 27, CCR, Division 2, Subdivision 1, Section 20005, et seq., (hereinafter Title 27). The exemption, pursuant to Section 20090(b), is based on the following:
 - a. The Board is issuing waste discharge requirements, and
 - b. The discharge complies with the Basin Plan, and
 - c. The wastewater does not need to be managed according to Chapter 11, Division 4.5, Title 22, CCR as a designated or hazardous waste.

California Environmental Quality Act Considerations

- 31. On 19 July 2002, the Regional Board heard comments from the general public on a duly noticed Mitigated Negative Declaration regarding the modifying changes to the operation of the Hallwood Facility. After hearing comments the Regional Board adopted the Mitigated Negative Declaration.
- 32. Mitigation measures employed were changes in the monitoring program to accommodate the increased size in designated disposal area and the facility will use best available waste treatment technology, provide protection from 100-year flood, maintain 2-foot freeboard on all wastewater ponds and excavation areas, and provide 100-foot buffer for all wastewater ponds and excavation areas. Waste Discharge Requirements call for a monitoring program to monitor these measures and potentially affected water bodies to provide first line detection of any the effects of the mining activity and if needed for possible cleanup and/or final reclamation as determined by monitoring data, the formation of a financial assurance account may be required. In addition, existing interim and final site reclamation activities are designed mitigate the potential for mercury to become bioavailable to fish and wildlife. Final reclamation will require that the reclaimed sediment disposal or reuse site(s) be protected from the 1 in 100-year flood events to insure that sediments that may contain small amounts of mercury are not reintroduced into the surface water bodies or surface drainage courses.
- 33. The action to adopt waste discharge requirements for this project is exempt from the provisions of the California Environmental Quality Act (CEQA, Public Resources Code Section 21000, et. seq.) in accordance with Section 15301, Title 14, California Code of Regulations, Existing Facilities.

Public Notice

- 34. The Board considered all the above and the supplemental information and details in the attached Information Sheet, which is incorporated by reference herein, in establishing the following conditions of discharge.
- 35. The Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for this discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
- 36. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that Order No. 5-00-105 is rescinded and pursuant to California Water Code (CWC) sections 13263 and 13267, Teichert Aggregates, its agents, successors, and assigns, in order to meet the provisions contained in Division 7 of the CWC and regulations adopted thereunder, shall comply with the following:

[Note: Other prohibitions, conditions, definitions, and some methods of determining compliance are contained in the attached "Standard Provisions and Reporting Requirements for Waste Discharge Requirements" dated 1 March 1991, which are part of this Order. This attachment and its individual paragraphs are referred to as "Standard Provisions".]

A. Discharge Prohibitions:

- 1. As defined in the Clean Water Act (33 U.S.C. 1251 et seq.) and implementing regulations, the direct, point source discharge of pollutants or wastes to surface waters or surface water drainage courses outside the designated disposal area described in Discharge Specification B.5 and the excavation area described in Discharge Specification B.6 is prohibited.
- 2. By-pass around, or overflow from, the designated disposal area as described in Discharge Specification B.5 and the excavation area described in Discharge Specification B.6 of untreated or partially treated waste is prohibited.
- 3. Discharge of waste classified as 'hazardous,' as defined in Chapter 15, Sections 2521(a) of Title 23, CCR, Section 2510, et seq., (hereinafter Chapter 15), or 'designated,' as defined in Section 13173 of the California Water Code, is prohibited.
- 4. Discharge of domestic waste at the Hallwood Facility is prohibited.

- The addition of chemicals to the wash water used for gravel processing is 5. prohibited.
- The manufacturing of concrete using Portland cement at the facility is 6. prohibited.
- 7. The discharge or deposit of waste at this site from sources other than from the sand and gravel or asphalt concrete operations is prohibited. **Processing**¹ recycled materials such as cured concrete or asphalt pavement, which can be used to produce saleable materials consistent with the existing activities at the site is acceptable.

B. **Discharge Specifications:**

- 1. The monthly average discharge flow to the pond shall not exceed 3.0 mgd.
- Objectionable odors originating at this facility shall not be perceivable beyond 2. the limits of the activity area.
- 3. The discharge shall not cause any surface water to have a pH less than 6.5 or greater than 8.5, including surface water within the designated disposal and excavation areas.
- 4. All wash water ponds shall be managed to prevent breeding of mosquitoes. In particular:
 - a. An erosion control program should assure that small coves and irregularities are not created around the perimeter of the water surface.
 - b. Weeds shall be minimized through control of water depth, harvesting, or herbicides.
 - Dead algae, vegetation, and debris shall not accumulate on the water C. surface.
- 5. The designated disposal area is limited to a maximum size of 15 acres of pond surface plus a 100-foot wide continuous land buffer surrounding the 15 acres. The designated disposal area is stationary and can be located as anywhere on the facility that complies with the setback requirement and the requirements of this Order. The facility boundary is shown in Attachment A

Processing includes receiving, storage, and the physical manipulation required to manufacture saleable products. Physical manipulation may include crushing, washing to remove fines, grinding, heating, etc. Processing does not include accepting uncured Portland cement or concrete, or washout from uncured Portland cement or concrete handling equipment (includes delivery trucks, pumps, concrete molds, etc.).

and B. The land buffer shall not have any channels, swales, or culverts that could possibly, under 100 year storm weather conditions, convey surface water to the Yuba River, surrounding channels, lakes, or ponds. The point of compliance for all Prohibitions, Specifications, and Limitations shall be at the outer edge of the designated disposal area.

As described in Provision F.6, the Discharger may implement an alternative engineering measure for a portion of the 100 foot land buffer, if the Discharger has proposed to the Regional Board, and the Executive Officer has approved in writing, other alternative engineering measures whose ability to filter and contain sediments associated with the Discharger's permitted operations can comply with this Order and are protective of water quality. If the alternate engineering measure is approved, the point of compliance is at the outer edge of the alternate engineering measure

- 6. "Excavation Areas" are defined as any area in which the Discharger is extracting aggregate from a depth of greater than three feet below the water table surface plus a 100 foot wide continuous land buffer surrounding each pond. The land buffer shall not have any channels, swales, or culverts that could possibly, under 100 year storm weather conditions, convey surface water to the Yuba River, surrounding channels, lakes, or ponds The point of compliance for all Discharge Prohibitions, Specifications, and Limitations is at the outer edge of the excavation area.
- 7. All stockpiled products shall be managed to prevent erosion of sediment to surface water drainage courses.
- Newly constructed or rehabilitated berms or levees (excluding filter barriers between ponds within the designated disposal area) shall be designed and constructed under the direct supervision of a California Registered Civil Engineer or Engineering Geologist.
- 9. All wastewater ponds, including the excavation area ponds, shall be designed, constructed, operated and maintained to prevent inundation or washout due to floods with a return period of 100 years.
- 10. Pond system shall have sufficient capacity to accommodate allowable wastewater flow design seasonal precipitation, and ancillary inflow and infiltration to prevent inundation or washout during floods, storms or a wet season using a return period of 100 years.
- 11. Freeboard shall never be less than two feet in any pond, as measured vertically from the water surface to the lowest point of overflow.

- 12. On or about October 1 of each year, available pond storage capacity shall at least equal the volume necessary to comply with Discharge Specifications B. 10 and 11.
- 13. The use of process wastewater for dust control shall not cause a discharge of wastewater to surface water or surface water drainage courses.
- 14. The discharge shall not alter the apparent color of the Yuba River or any waterbody (ponds and/or channels) outside of the designated disposal or excavation areas.
- 15. The discharge shall not cause an increase in turbidity above background levels in any waterbody (ponds and/or channels) outside of the designated disposal or excavation areas or the Yuba River.
- All berms or levees shall be so constructed and maintained to prevent sloughing that causes turbidity in excess of Discharge Specification Nos. 14 and 15.
- 17. The discharge shall not cause concentrations of any materials that are deleterious to animal, aquatic, human or plant life in any waterbody (ponds and/or channels) outside of the designated disposal or excavation areas or the Yuba River.
- 18. The discharge shall remain within the designated disposal and excavation areas at all times.
- 19. The Discharger shall comply with all applicable sections of the Aboveground Petroleum Storage Tank Regulations (Section 25270, Health and Safety Code).

C. Solids Disposal:

Collected solids removed from liquid wastes shall be disposed of or reclaimed in a manner that is consistent with Title 27 of the CCR and approved by the Executive Officer.

D. Groundwater Limitations:

The discharge, in combination with other sources, shall not cause groundwater passing beyond the outer edge of the designated disposal or excavation areas to contain waste constituents in concentrations statistically greater than background water quality.

E. Surface Water Limitations:

- 1. The discharge, in combination with other sources, shall not cause surface water beyond the outer edge of the designated disposal or excavation areas to contain waste constituents in concentrations statistically greater than background water quality.
- 2. Using the Nephelometric Turbidity Unit as a standard of measurement, no aspect of the Facility shall cause turbidity increases of surrounding waterbodies or tributaries to Yuba River to be in excess of the following:
 - a. One (1.0) NTU if background turbidity is between 0 and 5 NTU;
 - b. Twenty (20.0) percent if background turbidity is between 5 and 50 NTU;
 - c. Ten (10.0) NTU if background turbidity is between 50 and 100 NTU; and
 - d. Ten (10.0) percent if background turbidity is greater than 100 NTU.

F. Provisions:

All Discharger reports specified below shall be submitted pursuant to Section 13267 of the California Water Code. Technical reports submitted by or for the Discharger shall be prepared and stamped by the appropriate registered professional required by the California Business and Professions Code. The Discharger shall certify all reports required by this Order per the *Standard Provisions* General Reporting Requirements B.3.

- 1. By **1 August 2002**, the Discharger shall submit a report and map defining all sampling locations required by Monitoring and Reporting Program No. R5-2002-0138.
- 2. By **1 September 2002**, the Discharger shall submit a technical report showing the asphalt plant construction details. The operations and materials management plan for the plant and any site modifications necessary to protect water quality from the asphalt concrete manufacturing operations shall be included.
- 3. By **15 August 2002**, the Discharger shall submit a copy of its most recent Site Reclamation/Restoration Plan if different from the 28 October 1988 *TEICHERT AGGREGATES*, *Reclamation Plan for Hallwood Site Yuba, California*. As the reclamation plan is updated or revised, the Discharger shall immediately forward such plan to this office.
- 4. The Discharger shall submit a technical report for approval prior to commencement of chemical addition to the wash water. The technical report

shall describe the chemical to be added, how the chemical will be added, monitoring necessary to determine residual, and evaluate possible water quality impacts. The Executive Officer must approve the technical report in writing prior to introducing the chemical into the wash water.

If, as a result of the monitoring conducted by MRP No. R5-2002-0138, mercury is detected at concentrations equal to or greater than 50 nanograms per liter (ng/l) in the pond water, and then within 90 days the Discharger shall submit a workplan to characterize mercury in the water and sediment within the designated disposal area and/or excavation area. Within 120 days of approval by the Executive Officer of the workplan the Discharger shall submit a report describing the results. If such report demonstrates the presence of mercury at concentrations that may adversely affect the Yuba River or may cause bioaccumulation as a result of the final reclamation of the site, then within 120 days, the Discharger shall submit a report evaluating alternatives to reduce mercury to acceptable levels. Upon request of the Executive Officer, the Discharger shall create a financial assurance account (as described in Title 27 of the CCR) to mitigate bioaccumulation effects of the available mercury.

If a water quality objective different than 50 ng/l is promulgated, then this permit may be reopened and the Board may reevaluate the need for additional characterization of mercury concentrations in the water and sediment within the designated disposal areas and excavation areas and control measures.

- 6. The Discharger shall, **120 days** prior to proposed implementation of control measures to be substituted for the 100 foot buffer, outlined in Discharge Specification B. 5 and B. 6, submit a report on the proposed alternative engineering measure. The alternative measure is not acceptable or implemented until the Executive Officer approves the alternative measure in writing.
- 7. By **1 October 2002**, the Discharger shall submit a technical report, which describes the freeboard measurement locations for all ponds. The freeboard measurement location shall be consistent with Discharge Specification B.11.
- 8. By **1 October 2002**, the Discharger shall submit a Soluble Metals Technical Report, which determines the concentration of soluble metals in the Marysville Plant wastewater ponds. The sample data must be of sufficient quality to determine if the waste is a designated waste. The report shall specify if the wastewater in the ponds should be classified as a designated waste and must include the rationale for the classification. If the concentration of soluble metals exceeds water quality standards, then the Discharger shall submit a technical report proposing a groundwater-monitoring network for the ponds.

By 1 October 2002, the Discharger shall submit a Waste Classification Technical Report that shows the waste characterization for the waste ore from gold separation, waste concrete stockpile, and waste asphalt stockpile. The Waste Classification Technical Report shall contain (a) a description of the waste pile sampling methods, equipment, and procedures, (b) a description of analytical methods and detection limits, (c) locations of all proposed background soil monitoring sites, (d) rationale for the selection of proposed stockpile monitoring sites, and (e) a chemical characterization of each waste stockpile.

And the chemical characterization shall at a minimum include total dissolved solids, pH, petroleum oil (asphalt stockpiles), standard minerals, Title 22 metals, and Title 22 WET test for metals using de-ionized water extract procedure. The sample data must be of sufficient quality to determine if the waste is a designated waste. The technical report shall specify if the waste piles should be classified as a designated waste and must include the rationale for the classification.

9. If the Waste Classification Technical Report shows that the waste piles have the potential to impact groundwater, with in 120 days, the Discharger shall submit and immediately implement a Waste Stockpile Workplan showing facility modifications necessary to prevent any pollutants generated from the waste piles from adversely impacting groundwater or surface water. The workplan shall clearly demonstrate how the proposed facility modifications will meet compliance with all Discharge Prohibitions, Specifications, and Limitations of this Order.

The Waste Stockpile Workplan must contain a schedule with specific dates for completing the project. The schedule must include proposed dates for each step of the process (e.g., hiring an engineer, completing preliminary plans, completing final plans, executing contract for major components, complying with CEQA, commencing construction, completing construction, etc.) All construction described in the Waste Stockpile Workplan shall be completed within 60 days.

10. By 1 October 2002, the Discharger shall submit an Operations and Maintenance Plan, including notification procedures and actions to be taken when (a) the wastewater in the ponds fail to meet specified requirements for freeboard, pH, or creates a condition of pollution or nuisance, (b) weed abatement measures and vector control practices, and (c) a berm inspection and maintenance program. This plan shall also include the procedures that will be followed during the event of an unauthorized discharge to surface water, surface water drainage courses or wetlands.

- 11. The Hallwood Reclamation Plan 2003 required investigation of the potential for mercury methylation to occur (Mitigation Measure No. 4.4-2 (b)). To address that mitigation measure, the following technical reports are required:
 - a. By 25 May 2010, the Discharger shall submit a Long Term Mine Reclamation Mercury Fate and Transport Workplan. The Workplan shall evaluate mercury fate and transport in sediment at a location where fines are placed and emergent marsh habitat is established. The Workplan shall address the EIR Hallwood Reclamation Plan 2003 Mitigation Measure 4.4-2 (b).
 - b. By 30 September 2011, the Discharger shall submit a Mercury Fate and Transport Report, which summarizes the data collected, determines the potential for methylation to occur, and evaluates the potential for migration of mercury compounds from the facility.
- 12. Prior to allowing Central Valley Regional Water Quality Control Board rescission of this WDRs Order as part of site closure activities, the Discharger shall submit a monitoring plan that complies with the monitoring plan presented in the Hallwood Reclamation Plan 2003 Table 4.4.1.
- 13. The Discharger shall comply with the Monitoring and Reporting Program No. R5-2002-0138, which is part of this Order, and any revisions thereto as ordered by the Executive Officer.
- 14. The Discharger shall comply with the "Standard Provisions and Reporting Requirements for Waste Discharge Requirements", dated 1 March 1991, which are attached hereto and by reference a part of this Order. This attachment and its individual paragraphs are commonly referenced as "Standard Provision(s)."
- 15. In the event of any change in control or ownership of land or waste discharge facilities described herein, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to this office.
- 16. The Discharger shall immediately notify the Board by telephone whenever (a) a violation of this Order occurs or (b) whenever there is an adverse water quality condition resulting from the mining operations; written confirmation shall follow within two (2) weeks.
- 17. The Discharger shall report promptly to the Board any material change or proposed change in the character, location, or volume of the discharge.

- 18. The Discharger shall comply with all conditions of this Order, including timely submittal of technical and monitoring reports as directed by the Executive Officer. Violations may result in enforcement action, including Regional Board or court orders requiring corrective action or imposing civil monetary liability or in revision or rescission of this Order.
- 19. The Discharger shall keep a copy of this Order, monitoring records, and operator observation logs at the discharge facility for reference by operating personnel. Key operating personnel shall be familiar with its contents.
- 20. The Board will review this Order periodically and will revise requirements when necessary.

I, THOMAS R. PINKOS, Acting, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on 19 July 2002, and amended on 29 January 2010.

Original signed by Thomas R. Pinkos

THOMAS R. PINKOS, Acting Executive Officer

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