

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

ORDER NO. R5-2010- XXXX

WASTE DISCHARGE REQUIREMENTS  
FOR  
BUENA VISTA BIOMASS POWER, LLC  
BUENA VISTA BIOMASS POWER PROJECT  
CLASS II SURFACE IMPOUNDMENT  
AMADOR COUNTY

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

1. Buena Vista Biomass Power, LLC (hereafter "Discharger"), submitted a Report of Waste Discharge (RWD) on 23 July 2009 for the permitting of an existing class II surface impoundment at the Buena Vista Biomass Power facility (formerly known as the Jackson Valley Energy Partners facility). The RWD has been submitted pursuant to Title 27 of the California Code of Regulations (Title 27).
2. The Discharger owns and operates the facility located on a 40.22-acre site comprised of Assessor's Parcel Numbers: 012-010-039 and 012-010-003. The site is located approximately one mile south of the community of Buena Vista on Parcel 1 and a portion of Parcel 2, (Latitude 38.2783, Longitude -120.9170) shown on record of survey for American Lignite Project Company, Inc., as being a portion Section 19, T5N, R10E, MDB&M, as shown in Attachment A, which is attached hereto and incorporated by reference. The Discharger has control of the site pursuant to a ground lease and a grant of easement.
3. Waste management unit (WMU) at this site is an existing class II surface impoundment, which was previously regulated by WDR Order No. 98-052. The location of this class II surface Impoundment is shown in Attachment B, which is attached hereto and incorporated by reference. The class II surface impoundment historically received boiler blow down water and waste brine from the cogeneration system.
4. The site was first developed in 1946, when a small plant was constructed to produce Montan wax from local lignite ore sources. In 1950, the plant was reconfigured to employ a solvent extraction process. In 1986, a cogeneration plant was constructed adjacent to the wax extraction plant. The cogeneration facility employed a circulating fluidized bed to produce superheated steam to power turbines for electricity generation. An evaporation unit demineralized boiler feed water for use in the plant. The cogeneration project was in operation until July 1999, when due to bankruptcy, the wax plant was dismantled and removed from the site. Since that time the facility has not been in operation.

5. The existing co-generation facility and the accompanying class II surface impoundment are being re-engineered and refurbished on the site adjacent to the property historically used for past lignite mining and processing. The Discharger has access to the class II surface impoundment and the impoundment's monitoring well system. The Discharger does not have access or responsibility for the reclaimed lignite mining area north of the facility.
6. The Discharger proposes the discharge of industrial process wastewater to land, specifically into the existing double-lined class II surface impoundment, that will receive "blow down" water used to backwash scale for boilers and cooling towers.
7. The surface impoundment is expected to receive significant discharge only when the plant's brine evaporator is out of service, an estimated 15 % of runtime hours per year, or 1,156 hours, due primarily to evaporator servicing events. During each servicing event of approximately 72 hours, the surface impoundment will receive discharge at a rate of 40 gallons per minute (gpm) totaling approximately 0.17 million gallons, or approximately 5% of the surface impoundment capacity. This discharge will be recycled back to the evaporator, once online, at a rate of 17 gpm. The total discharge from each 72 hr servicing event will be removed from the surface impoundment and recycled back to the facility evaporator within 11 days.
8. During the normal plant operations, with the brine evaporator online, all plant process water will be routed through the evaporator for evaporation, reducing the discharge to the surface impoundment to approximately 6.2 gpm. This water will be rerouted back to the cooling towers at a rate of 4 gpm, resulting in a net discharge of approximately 2.2 gpm to the surface impoundment. With an area of the surface impoundment over 65,000 square feet, the depth of this discharge in the impoundment will accumulate at a maximum rate of approximately 2.3 inches per month. The average annual evaporation rates measured 3 miles southeast of the site by the Western Regional Climate Center indicate monthly pan evaporation rates ranging between 0.72 inches in December and January, to 11.17 inches in July. Design specifications, provided by the Discharger, using a pan evaporation coefficient of 0.75, estimate an average evaporation rate of 3.6 inches per month over an annual basis, or 3.4 gpm. Therefore, except for estimated accumulation of less than 2 inches per month during December and January, no net accumulation of discharge water is expected to accrue in the surface impoundment under normal operating conditions.
9. The estimated 1,000 year, 24-hour duration storm event, with 13 inches of total rainfall, would result in an estimated accumulation of 530,000 gallons of water into the surface impoundment. This rainfall event, coinciding with the maximum discharge to the impoundment from a three-day brine evaporator servicing event

during Dec/Jan, would result in an estimated volume in the surface impoundment of less than 28% of design capacity, with two feet of freeboard.

### WASTE AND UNIT CLASSIFICATION

10. The wastewater discharged to the surface impoundment consists of concentrated brine. Estimated concentrations reported by the Discharger in the Report of Waste Discharge are shown below in Table 1.

**Table 1.**  
**Feed Water, Predicted Wastewater, and Baseline Groundwater Analytical Results with Municipal and Agricultural Water Quality Objectives (Concentrations in mg/l, except where noted)**

Constituent	Source Water	Predicted Wastewater <sup>§</sup>	Baseline Groundwater <sup>**</sup>	Water Quality Goals	
				Municipal	Agricultural
Arsenic	<0.002 - 0.002	<0.05	0.002-0.005	0.01 <sup>†</sup>	0.1 <sup>*</sup>
Aluminum	<0.050	0.46	0.0036-15.4	1 <sup>∞</sup>	–
Alkalinity	64-120	No data	19-130	–	–
Boron	No data	13	1.4-3.2	1 <sup>‡</sup>	0.7 <sup>*</sup>
Calcium	16-36	No data	13-185	–	–
Chloride	6.8-38	No data	20-750	250 <sup>¥</sup>	106 <sup>*</sup>
Copper	<0.003	0.009	0.009-0.22	1	0.2
Electrical Conductivity	200-837	492	297-2800	900 µohms/cm	700 µohms/cm
Fluoride	0.13-0.22	Believed absent	<0.1-0.26	1 <sup>^</sup>	1 <sup>*</sup>
Iron	0.068-0.112	0.64	0.05-9.6	0.3 <sup>¥</sup>	5 <sup>*</sup>
Magnesium	8.8-53	75	12-189	–	–
Manganese	0.019-0.215	0.78	0.025-1.13	0.05 <sup>¥</sup>	0.2 <sup>*</sup>
Nitrate (as Nitrogen)	<0.05-0.68	0.02	0.015-6.2	10 <sup>∞</sup>	–
pH	7.0-8.7	6.5-7.1	5.2-6.5	6.5-8.5	6.5-8.4
Potassium	1.7-2.1	No data	4.8-9.5	–	–
Selenium	<0.002	<0.2	<0.002-0.013	0.05 <sup>∞</sup>	0.02 <sup>*</sup>
Sodium	8.9-60	No data	24-250	20 <sup>°</sup>	69 <sup>*</sup>
Sulfate	19-250	1635	46-1400	500 <sup>¥</sup>	–
TDS	131-580	2000	255-2600	500 <sup>¥</sup>	450 <sup>*</sup>

<sup>\*\*</sup> Data from monitoring wells MW1, 2, 3 and 4 – January 1991 to October 2009

<sup>§</sup> Data from Jackson Valley Energy March 10, 1989 Form 2-C

<sup>†</sup> USEPA Primary MCL

<sup>\*</sup> Water Quality for Agriculture

<sup>∞</sup> California Primary MCL

<sup>‡</sup> California DHS Notification Level for Drinking Water

<sup>¥</sup> California Secondary MCL

<sup>^</sup> California Public Health Goal for Drinking Water

<sup>°</sup> USEPA Drinking Water Advisory - Restricted Sodium Diets

11. Designated waste is defined in Section 13173(b) of the California Water Code, as a nonhazardous waste that consists of, or contains, pollutants that, under ambient environmental conditions at the waste management unit, could be released at concentrations exceeding applicable water quality objectives or that could reasonably be expected to affect beneficial uses of the waters of the state as contained in the appropriate state water quality control plan.
12. As the predicted wastewater concentrations of several constituents of concern (Table 1) exceed municipal or agricultural water quality goals, and greatly exceed the lower range of the baseline background groundwater data, the discharge is properly classified as a designated waste and, as such, must be discharged to a class II surface impoundment as required by Title 27, and is subject to the requirements of Title 27.

### **SITE DESCRIPTION**

13. The site is situated in the low foothills of the Sierra Nevada, between Mokelumne River to the south, and Jackson Creek to the north. Surface elevations at the site range from approximately 150 above mean sea level (MSL) at Jackson creek, to over 400 ft MSL near the power plant structure.
14. The cogeneration facility is located within the alluvial lone Basin, consisting of marine and lacustrine sedimentary deposits. Specifically, the facility is underlain by the lone formation which consists of intermittent lenticular beds of sandstone and claystone intermixed with lenses of brown, carbonaceous claystone and lignite. The clays in the lone formation generally impart a low to very low permeability with shallow groundwater being limited to more permeable sand and gravel lenses. The lone formation in the project area attains a maximum thickness of approximately 450 feet and overlies Jurassic aged greenstone.
15. There are no known Holocene faults within 1000 feet of the facility. The closest fault is the Bear Mountains Fault Zone which is approximately 5 miles east of the facility and considered inactive. Probabilistic seismic hazard analysis conducted by the California Geological Survey for these soft rock conditions suggests a 10 percent probability of exceedance in 50 years peak ground acceleration of 0.112 g.
16. The first water bearing zone is near the northeastern corner of the facility, approximately five feet below ground surface. Groundwater elevations in the vicinity of the class II surface impoundment typically range from 254 to 265 feet above MSL (approximately 20 feet below the bottom of the surface impoundment).
17. Groundwater flows in a general westerly direction, however groundwater flow conditions appear to be controlled by various sand, gravel and lignite coal seams,

and historical groundwater data suggest there may be more than one groundwater flow direction in the area of the impoundment. Several of the groundwater monitoring wells appear to be screened within clay and silty clay deposits, and may be screened in separate and/or perched water bearing zones.

18. The site receives an average of 21.36 inches of precipitation per year, as measured by the California Department of Water Resources (DWR) at Camp Pardee, located approximately 4 miles southwest of the site at an elevation of 658 MSL. The mean class "A" pan evaporation rate for the facility is 57.9 inches, as measured at Camp Pardee.
19. The 100-year, 24-hour precipitation event for this site is estimated to be 4.32 inches, based on DWR's Rainfall Depth-Duration-Frequency data for Lone, updated in 2000. As identified by the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) of Amador County (May 5, 2010), the facility and surface impoundment are bordered closely on the north by a 100-year floodplain, but are not within the 100-year floodplain boundary.

#### **SURFACE AND GROUNDWATER CONDITIONS**

20. The *Water Quality Control Plan for Sacramento and San Joaquin River Basins, Fourth Edition* (hereafter Basin Plan), designates beneficial uses, establishes water quality objectives, and contains implementation plans and policies for all waters of the Basin, and incorporates by reference plans and policies adopted by the State Water Resources Control Board (State Board). Pursuant to Section 13263(a) of the California Water Code, waste discharge requirements must implement the Basin Plan.
21. Surface drainage is toward the Jackson Valley Slough located approximately 500 feet to the north. The Jackson Valley Slough flows west-northwesterly joining Jackson Creek over four air miles from the project site. Jackson Creek is tributary to Dry Creek, which is tributary to the Cosumnes River.
22. The beneficial uses of the Cosumnes River, as specified in the Basin Plan are: municipal and domestic supply; agricultural supply; water contact recreation; non-contact water recreation; warm freshwater habitat; cold freshwater habitat; migration of aquatic organism; spawning, reproduction, and/or early development; and wildlife habitat.
23. The designated beneficial uses of the groundwater, as specified in the Basin Plan are: domestic and municipal supply, agricultural supply, industrial service supply, and industrial process supply.

24. Four groundwater monitoring wells (MW-1, MW-2, MW-3, and MW-4) will be used to monitor groundwater underlying the surface impoundment, as shown in Attachment B.

### **WASTE MANAGEMENT UNIT DESIGN**

25. Section 13360(a)(1) of the California Water Code allows the Central Valley Water Board to specify the design, type of construction, and/or particular manner in which compliance must be met in waste discharge requirement orders for the discharge of waste at solid waste disposal facilities.
26. The double liner specification for class II surface impoundments given in Title 27 requires both liners to have a hydraulic conductivity of  $1 \times 10^{-6}$  cm/s or less. The inner liner may be either clay or a Flexible Membrane Liner (FML) used in combination with either an outer clay liner or a substantial thickness of qualifying natural geologic materials to serve as an outer liner. The FML or synthetic liner must have a minimum thickness of 40 mil and clay liners a thickness of at least two feet and a required relative compaction of 90%. A blanket type leachate collection and recovery system (LCRS) is required between the liners in a double liner system.
27. The existing class II surface impoundment, as currently constructed, meets the Title 27 prescriptive standards for a double lined system consisting of the following components, from the top down:
  - a. A primary 60-mil-thick high density polyethylene (HDPE) liner
  - b. A 45-mil-thick goetextile blanket-type LCRS with 3/4 to 6 inches of washed drain rock
  - c. An 10-mil-thick polyvinyl chloride geomembrane
  - d. A minimum 30 inches of compacted clay liner
  - e. Lysimeters placed in borings through the clay liner and 6 inches into the underlying material, composed of compacted native soils and clay.
28. The existing 10,000 gallon concrete lined siltation box will be replaced by a 15,000 gallon above-ground clarifier unit to enhance solids removal of waste water prior to discharge to the surface impoundment.
29. The surface impoundment LCRS will have a design action leakage rate (ALR) of 1,070 gallons per day. The LCRS secondary containment tank will have a minimum capacity of 2,000 gallons. Two pump systems will be in place, the first pumps will switch on when the liquid level in the containment tank approaches 18 inches depth. The second pump system will switch on when the liquid level

30. The Discharger proposes use of the existing liner system, which will be maintained and operated to prevent migration of wastes from the Unit to adjacent natural geologic materials, groundwater, or surface water, in accordance with the criteria set forth in Title 27 for a class II waste management unit.
31. The existing class II surface impoundment has a capacity of approximately 3.3 million gallons. The impoundment capacity is based on the previous operating capacity of the plant prior to reconfiguration, and will be far in excess of the planned discharge from the reconfigured plant operation which is estimated to be no more than 6% of impoundment capacity. Since the discharge to the impoundment will be only 6 % of capacity, a significant portion of the impoundment surface will be exposed to weathering and the elements, especially in the summer months. At the time of installation, the impoundment's 60 mil HDPE liner met or exceeded Geosynthetic Research Institute (GRI) standard GM13 which includes UV testing. The projected lifetime of the liner is estimated to be 73 years at 40° C under exposed conditions (GRI white paper #6, <http://www.geosyntheticinstitute.org/papers/paper6.pdf>). Prior to reuse, a professional geosynthetic membrane installer will test the existing liner to ensure that it meets the aforementioned industry standard.
32. Ash and particulate matter from the facility's boiler will be removed from the flue gas before filtered air is discharged to the atmosphere. Ash will be removed from the filters periodically by reverse air flow and collected in hoppers. The collected ash will be transported via enclosed conveyor to an existing 550 ton capacity ash silo. It is estimated that only a small fraction of the silo capacity will be used before ash is removed and disposed. There will be no other ash storage on site.

### **CEQA AND OTHER CONSIDERATIONS**

33. Under the provisions of the California Environmental Water Quality Act (CEQA) an Environmental Impact Report has been prepared and certified by Amador County, the lead agency on 30 November 2010. Amador County Board of Supervisors filed a Notice of Determination on 5 January 2011, in accordance with the California Environmental Quality Act (Public Resources Code Section 21000 et seq.) and CEQA guidelines (14 CCR Section 15000 et seq.). The Regional Board considered the environmental impact report and incorporated mitigation measures from the environmental impact report into these waste discharge requirements designed to prevent potentially significant impacts to design facilities and to water quality.

34. This order implements:
- a. The Water Quality control Plan for the Sacramento River and San Joaquin River Basins, Fourth Edition; and
  - b. The prescription standards and performance goals of Chapters 1 through 7, subdivision 1, Division 2, Title 27 of the California Code of Regulations, effective 18 July 1997, and subsequent revisions.
35. Section 13267(b) of California Water Code provides that: "In conducting an investigation specified in subdivision (a), the Central Valley Water Board may require that any person who has discharged, discharges, or is suspected of discharging, or who proposed to discharge within its region, or any citizen or domiciliary, or political agency or entity of this state who had discharged, discharges, or is suspected of discharging, or who proposed to discharge waste outside of its region that could affect the quality of the waters of the state within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the board requires. The burden, including costs of these reports, shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports.
36. The technical reports required by this Order and the attached Monitoring and Reporting Program are necessary to assure compliance with these waste discharge requirements. Buena Vista Biomass Power, LLC is responsible for the discharges of waste at the facility subject to this Order and is, therefore, subject to CWC Section 13267(b).

### **PROCEDURAL REQUIREMENTS**

37. All local agencies with jurisdiction to regulate land use, solid waste disposal, air pollution, and to protect public health have approved the use of this site for the discharges of waste to land stated herein.
38. The Central Valley Water Board 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.
39. The Central Valley Water Board, in a public meeting, heard and considered all comments pertaining to the discharge.
40. Any person adversely affected by this action of the Central Valley Water Board may petition the State Water Resources Control Board to review the action. The

petition must be received by the State Board within 30 days of the date of issuance of this Order. Copies of the law and regulations applicable to filing the petition will be provided on request.

**IT IS HEREBY ORDERED** pursuant to Sections 13263 and 13267 of the California Water Code, that Order No. 98-052 is rescinded, and that Buena Vista Biomass Power, LLC, its agents, successors, and assigns, in order to meet the provisions of Division 7 of the California Water Code and the regulations adopted thereunder, shall comply with the following:

**A. PROHIBITIONS**

1. The discharge of 'hazardous waste' at this facility is prohibited. For the purposes of this Order, the terms 'hazardous waste' and 'designated waste' are as defined in Division 2 of Title 27 of the CCR.
2. The discharge of waste to the surface impoundment is prohibited until all required reports are submitted and the Executive Officer provides written approval to begin discharge.
3. The discharge of solid waste or liquid waste to surface waters, surface water drainage courses, or groundwater is prohibited.
4. The discharge of wastes outside of a waste management unit or portions of a waste management unit specifically designed for their containment is prohibited.
5. The discharge of wastes into the class II surface impoundment to a point where evapoconcentration causes wastes to exceed the criteria for hazardous wastes is prohibited.
6. The discharge of waste within 100 feet of surface waters, excluding any storm water diversion structures around the waste management units, is prohibited.
7. The discharge of wastes, which have the potential to reduce or impair the integrity of containment structures or which, if commingled with other wastes in the unit, could produce violent reaction, heat or pressure, fire or explosion, toxic by-products, or reaction products which in turn,
  - a. require a higher level of containment than provided by the unit,
  - b. are 'restricted' hazardous wastes, or
  - c. impair the integrity of containment structures,is prohibited.

8. The disposal of ash and any other waste material associated with combustion of feed material for this project is prohibited without the concurrence from Executive Officer.

## **B. DISCHARGE SPECIFICATIONS**

### **General Specifications**

1. Wastes shall only be discharged into, and shall be confined to, the waste management units (WMUs) specifically designed for their containment.
2. Prior to the discharge of waste to a WMU, all wells within 500 feet of the unit shall have sanitary seals or shall be properly abandoned. A record of the sealing and/or abandonment of such wells shall be sent to the Central Valley Water Board and to the State Department of Water Resources.

### **Protection from Storm Events**

3. Precipitation and drainage control systems shall be designed, constructed, and maintained to accommodate the anticipated volume of precipitation and peak flows from surface runoff under 1,000-year, 24-hour precipitation conditions.
4. Surface drainage from tributary areas and internal site drainage from surface or subsurface sources shall not contact or percolate through wastes.
5. Annually, prior to the anticipated rainy season but no later than **31 October**, any necessary erosion control measures shall be implemented, and any necessary construction, maintenance, or repairs of precipitation and drainage control facilities shall be completed to prevent erosion or flooding of the facility.

### **Class II Surface Impoundment Construction and Operation**

6. The surface impoundment consists of, from the top down:
  - a. A primary 60-mil-thick high density polyethylene (HDPE) liner
  - b. A 45-mil-thick geotextile blanket-type LCRS with 3/4 to 6 inches of washed drain rock
  - c. An 10-mil-thick polyvinyl chloride geomembrane
  - d. A minimum 30 inches of compacted clay liner
  - e. Lysimeters placed in borings through the clay liner and 6 inches into the underlying material, composed of compacted native soils and clay.

7. The unsaturated zone monitoring system shall be capable of measuring both saturated and unsaturated flows that may occur as a result of a release from the waste management unit.
8. Surface impoundments and related containment structures shall be constructed and maintained to prevent, to the greatest extent possible, inundation, erosion, slope failure, washout, and overtopping under 1,000-year, 24-hour precipitation conditions, and shall be designed to contain the 100-year wet season precipitation without using the required 2 feet of freeboard.
9. Materials used to construct liners shall have appropriate physical and chemical properties to ensure containment of discharged wastes over the operating life, closure, and post-closure maintenance period of the surface impoundments.
10. Materials used in the construction of the LCRS shall have appropriate physical and chemical properties to ensure the required transmission of leachate over the life of the surface impoundments and the post-closure maintenance period. The FML shall be capable of withstanding expected UV radiation for the planned life of the Unit. Alternatively a sacrificial cover may be used.
11. LCRS shall be designed, constructed, and maintained to collect twice the anticipated daily volume of leachate generated by each surface impoundment and to prevent the buildup of hydraulic head on the underlying liner at any time. The depth of the fluid in any LCRS sump shall be kept at the minimum needed for safe pump operation.
12. Any direct-line discharge to a surface impoundment shall have fail-safe equipment or operating procedures to prevent overfilling.
13. The surface impoundment shall be designed, constructed and maintained to prevent scouring and/or erosion of the liners and other containment features at points of discharge to the impoundments and by wave action at the waterline.
14. Leachate removed from a surface impoundment's primary LCRS shall be discharged to the impoundment from which it originated.
15. If leachate is detected in the vadose zone monitoring system of a surface impoundment indicating a leak in the containment structures the Discharger shall:
  - a. Immediately cease discharge of waste until the leaks can be found and repaired,
  - b. Report to the RWQCB within 72 hours that the containment structures have failed,

- c. Submit written notification of the release to the RWQCB within seven days. The notification should include a time schedule to repair the containment structures, and
  - d. Not resume discharge of wastes to the surface impoundment until the RWQCB has determined that repairs to the liner are complete and there is no further threat to water quality.
16. Solids that accumulate in the surface impoundments shall be periodically removed to maintain minimum freeboard requirements and to maintain sufficient capacity for surface impoundment leachate and for the discharge of wastes. Prior to removal of these solids, sufficient samples shall be taken for their characterization and classification pursuant to Article 2, Subchapter 2, Chapter 3, Division 2 of Title 27. The rationale for the sampling protocol used, the results of this sampling, a rationale for classification of the solids, and a proposed disposal method shall be submitted to Central Valley Water Board staff for review.
17. Leachate generation by a waste containment unit LCRS shall not exceed 85% of the design capacity of (a) the LCRS, or (b) the sump pump. If leachate generation exceeds this value and/or if the depth of the fluid in an LCRS exceeds the minimum needed for safe pump operation, then the Discharger shall immediately cease the discharge of waste, excluding leachate, to the waste management unit and shall notify the Central Valley Water Board in writing within **seven days**. Notification shall include a timetable for a remedial action to repair the containment structures or other action necessary to reduce leachate production.

### **Class II Surface Impoundment Closure**

18. The Discharger shall submit a Report of Waste Discharge prior to closure of the class II surface impoundment.
19. The closure of each surface impoundment shall be under the direct supervision of a California registered civil engineer or certified engineering geologist.
20. At closure of surface impoundment, all residual wastes, including liquids, sludges, precipitates, settled solids, and liner materials and adjacent natural geologic materials contaminated by wastes, shall be completely removed and discharged to a waste management unit approved by Central Valley Water Board staff. If after reasonable attempts, the Discharger demonstrates the removal of all remaining contamination is infeasible, the impoundment shall be closed as a landfill.

## C. RECEIVING WATER LIMITATIONS

### Water Quality Protection Standards

The concentrations of Constituents of Concern in waters passing through the Point of Compliance shall not exceed the Concentration Limits established pursuant to Monitoring and Reporting Program No. R5-2010-XXXX, which is attached to, and made part of, this Order.

## D. FINANCIAL ASSURANCE

1. The Discharger shall demonstrate financial responsibility for initiating and completing corrective action of all known or reasonably foreseeable releases, and shall submit a report for financial assurances by **April 30th each year** to the Executive Officer review and approval. The assurances of financial responsibility shall name the Central Valley Water Board as beneficiary and shall provide that funds for corrective action shall be available to the Central Valley Water Board upon the issuance of any order under California Water Code, Division 7, Chapter 5. The Discharger shall adjust the cost annually to account for inflation and any changes in facility design, construction, or operation.
2. The Discharger shall, by **30 April of each year**, submit for approval by the Executive Officer, plans with detailed cost estimates and a demonstration of assurances of financial responsibility for initiating and completing corrective action for all known or reasonably foreseeable releases from the waste management unit. The Discharger shall provide the assurances of financial responsibility to the Central Valley Water Board as required by Title 27 CCR, Division 2, Subdivision 1, Chapter 6. **The financial assurance fund for corrective action shall be established, and evidence thereof shall be made available to the Central Valley Water Board, prior to discharging waste to the surface impoundment.** The Discharger shall adjust the cost annually to account for inflation and any changes in facility design, construction, or operation.
3. The Discharger shall, by **30 April of each year**, submit for approval by the Executive Officer, plans with detailed cost estimates and a demonstration of assurances of financial responsibility to ensure closure and post-closure maintenance of each waste management unit in accordance with its approved closure and post-closure maintenance plans. The Discharger shall provide the assurances of financial responsibility to the Central Valley Water Board as required by Title 27 CCR, Division 2, Subdivision 1, Chapter 6. **The financial assurance fund for closure and post-closure maintenance shall be established, and evidence thereof shall be made available to the Central Valley Water Board, prior to discharging waste to the surface impoundment.** The Discharger shall adjust the cost annually to account for inflation and any changes in facility design, construction, or operation.

## E. PROVISIONS

1. The Discharger shall comply with the Standard Provisions and Reporting Requirements, dated September 2003, which are hereby incorporated into this Order. The Standard Provisions and Reporting Requirements contain important provisions and requirements with which the Discharger must comply. A violation of any of the Standard Provisions and Reporting Requirements is a violation of these waste discharge requirements.
2. The Discharger shall comply with Monitoring and Reporting Program No. R5-2010-XXXX, which is attached to and made part of this Order. This compliance includes, but is not limited to, maintenance of waste containment facilities and precipitation and drainage controls and monitoring groundwater, the unsaturated zone, and surface waters throughout the active life of the waste management units and the post-closure maintenance period. A violation of Monitoring and Reporting Program No. No. R5-2010-XXXX, is a violation of these waste discharge requirements.
3. **The Discharger shall not discharge waste to the class II surface impoundment until the following tasks are completed and approved by Central Valley Water Board staff:**
  - a. install background groundwater monitoring points to comply with Title 27 Section 20415(b)
  - b. establish background groundwater quality through at least one year of monitoring (a minimum of eight samples are required to develop statistical values for inorganic constituents of concern) per Title 27 Section 20400.
  - c. submit a report proposing a Water Quality Protection Standard (Water Standard) per Title 27 Section 20390,
  - d. submit a plan for approval by the RWQCB for a groundwater quality monitoring system per Title 27 Section 20415, and
  - e. install an approved groundwater quality monitoring system.
4. **Prior to discharging waste to the class II surface impoundment the Discharger shall** establish Financial Assurance funds for corrective action, unit closure and post-closure maintenance.
5. The Discharger shall maintain legible records of the volume and type of waste discharged to the surface impoundments and the manner and location of the discharge. Such records shall be maintained at the facility until the beginning of the post-closure maintenance period. These records shall be available for review by representatives of the Board and of the State Water Resources Control Board, copies of these records shall be sent to the Central Valley Water Board.

6. In the event that the Discharger's clean-closure of the site is unsuccessful, and the Unit is subsequently closed as a landfill, the Discharger shall provide proof to the Central Valley Water Board **within sixty days after completing final closure** that the deed to the surface impoundment facility property, or some other instrument that is normally examined during title search, has been modified to include, in perpetuity, a notation to any potential purchaser of the property stating that:
  - a. the parcel has been used for disposal of liquid wastes;
  - b. land use options for the parcel are restricted in accordance with the post-closure land uses set forth in the post-closure plan and in WDRs for the surface impoundment; and
  - c. in the event that the Discharger defaults on carrying out either the post-closure maintenance plan or any corrective action needed to address a release, then the responsibility for carrying out such work falls to the property owner.
  
7. In the event of any change in control or ownership of the facility or disposal areas, the Discharger must 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. To assume operation as Discharger under this Order, the succeeding owner or operator must apply in writing to the Executive Officer requesting transfer of the Order. The request must contain the requesting entity's full legal name, the state of incorporation if a corporation, the name and address and telephone number of the persons responsible for contact with the Central Valley Water Board, and a statement. The statement shall comply with the signatory paragraph of Standard Provision VIII.A.5 and state that the new owner or operator assumes full responsibility for compliance with this Order. Failure to submit the request shall be considered a discharge without requirements, a violation of the California Water Code. Transfer shall be approved or disapproved by the Executive Officer.

## F. REPORTING REQUIREMENTS

1. The Discharger shall comply with the reporting requirements specified in this Order, in Monitoring and Reporting Program Order No. R5-2010-XXXX, and in the Standard Provisions and Reporting Requirements dated September 2003.
  
2. The Discharger shall complete the tasks outlined in these WDRs and the attached Monitoring and Reporting Program No. R5-2010-XXXX, in accordance

with the following time schedule:

<b><u>Task</u></b>	<b><u>Compliance Date</u></b>
a. Establish the groundwater background and monitoring system. (See E.3)	Prior to discharging waste to the surface impoundment
b. Submit a report characterizing background water quality conditions and establishing water quality protection standards. (See E.3)	Prior to discharging waste to the surface impoundment
c. Submit a plan for approval by the Central Valley Water Board for a groundwater quality monitoring system. (See E.3)	Prior to discharging waste to the surface impoundment
d. Install the approved groundwater quality system. (See E.3)	Prior to discharging waste to the surface impoundment
e. Submit Construction Quality Assurance Report for the class II surface impoundment.	60 days after completion of construction of the Impoundment
f. Submit Financial Assurances for closure and post-closure maintenance, and all known or reasonably foreseeable releases. (See D.1, 2 and 3)	Prior to discharging waste to the surface impoundment
g. A report describing the characteristics of the ash and any other waste material associated with combustion of the feed material, the expected quantities to be disposed of, and the method and location of the disposal. (See A.8)	Prior to the disposal
3. In the event of any change in ownership of this waste management facility, the Discharger shall notify the succeeding owner or operator in writing of the existence of this Order. A copy of that notification shall be sent to the Central Valley Water Board.	

The Central Valley Water Board will review this Order periodically and may revise requirements when necessary.

I, PAMELA C. CREEDON, Executive Officer, do hereby certify the foregoing is a full,

true and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on \_\_\_\_\_.

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PAMELA C. CREEDON, Executive Officer