

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

ORDER NO. \_\_\_\_\_

WASTE DISCHARGE REQUIREMENTS  
FOR  
OROVILLE LANDFILL PROPERTIES, OROVILLE LANDFILL PROPERTIES LLC,  
JACK M. STEEBLES LLC,  
CAROL ANN SEIDENGLANZ LLC, AND STEVEN CONN SEIDENGLANZ LLC  
FOR  
CLEAN-CLOSURE OF  
OROVILLE LANDFILL PROPERTIES CLASS III WOOD WASTE LANDFILL  
BUTTE COUNTY

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

1. Oroville Landfill Properties, Oroville Landfill Properties LLC, Jack M. Steebles LLC, Carol Ann Seidenglanz LLC, and Steven Conn Seidenglanz LLC (hereafter Discharger) own a Class III landfill located about three miles south of Oroville, in the southwest  $\frac{1}{4}$  of Section 29 and the southeast  $\frac{1}{4}$  of Section 30, T19N, R4E, MDB&M, as shown in Attachment A, which is incorporated herein and made part of this Order.
2. The 105 acre facility consists of three existing unlined waste management units (Unit) covering approximately 27.5 acres, as shown in Attachment B, which is incorporated herein and made part of this Order. The facility is comprised of Assessor Parcel Numbers (APNs) 078-100-015, 078-100-046, and 078-090-014. APNs 078-100-047 and 035-470-012 were also included as being part of the facility in previous waste discharge requirements. However, the Discharger has shown that no waste disposal activities occurred on the latter two parcels, so they have been removed from the requirements in this Order.
3. APNs 078-100-015 and 078-090-014 are owned by Oroville Landfill Properties, Jack M. Steebles LLC, Carol Ann Seidenglanz LLC, and Steven Conn Seidenglanz LLC. APN 078-100-046 is owned by Oroville Landfill Properties LLC, Jack M. Steebles LLC, Carol Ann Seidenglanz LLC, and Steven Conn Seidenglanz LLC.
4. On 28 September 1990, the Regional Board issued Order No. 90-266, in which the facility was classified as a Class III waste disposal site for the discharge of wood wastes and ash in accordance with the regulations in effect when the Order was issued. Waste Discharge Requirements Order No. R5-2005-0027 was issued on 27 January 2005 and required the Discharger to close (cap wastes in place) or clean-close (excavate and remove all residual wastes) the three existing Units. This Order supercedes all previous Orders and allows for clean-closure of the three existing Units.

5. Section 21090(f) of Title 27 California Code of Regulations (hereafter Title 27 or 27 CCR) states in part, "The purpose of clean-closure is to render the landfill (including all surrounding environs contaminated by waste released from the landfill) no longer capable of posing a threat to water quality."

### **SITE DESCRIPTION**

6. The landfill is located along the eastern margin of the Sacramento Valley approximately one mile east of the Feather River. The area is characterized by rolling foothills grading eastward into the steeper flanks of the Sierra Nevada Mountains and westward toward the flat expanse of the valley floor.
7. The previous site owner, Louisiana-Pacific Corporation, planted eucalyptus trees and spread sawdust from their mill operations along the south and east sides of the landfill property on parcel numbers APN 078-100-015, APN 078-100-046, and APN 078-090-014. After initial placement of the sawdust mulch, leachate consisting primarily of tannins and lignins was generated from the decomposing wood wastes and had the potential to enter storm water drainage courses. The Discharger constructed Pond 7 in the southeast corner of APN 078-090-014 to capture leachate laden storm water. The Discharger has requested to remove APN 078-090-014 from these waste discharge requirements. However, before APN 078-090-014 is removed from the waste discharge requirements, the Discharger will need to demonstrate that residual wastes, which may be present on the parcel, pose no threat to water quality.
8. Four major geologic units have been identified beneath the site. The units that have been identified from the top of the meta-volcanic bedrock to the ground surface are the Lone Formation, the Merhten Formation, the Nomlaki Tuff, and the Laguna Formation. With the exception of the volcanic Nomlaki Tuff, the units are composed of Cenozoic flood deposits from the current and ancestral Feather River System. The Laguna and Merhten Formations contain water bearing sands and gravels that are commonly separated by interbedded clayey aquitards.
9. The closest Holocene fault is the Cleveland Hill Fault located approximately seven miles southeast of the facility. The maximum credible earthquake is estimated to be a  $M_L = 6$ . The peak horizontal acceleration at the site, considering the maximum credible earthquake, is approximately 0.3g.
10. Land uses within 1,000 feet of the facility are zoned industrial.
11. The climate in the Oroville area is dry with hot summers and mild winters. The facility receives a mean annual rainfall of 29 inches with nearly 90 percent occurring between November and April. The average annual evaporation is approximately 68 inches.

12. The 100-year, 24-hour precipitation event is estimated to be 5.51 inches, based on Department of Water Resources' Bulletin No. 195 entitled *Rainfall Analysis for Drainage Design Volume II Long-Duration Precipitation Frequency Data*, dated October 1976.
13. The waste management facility is not within a 100-year flood plain.

### **WASTE AND SITE CLASSIFICATION**

14. The Discharger purchased the site in September 2002. The previous owner, Louisiana-Pacific Corporation, discharged wood wastes to Units 1 and 2, and ash from a wood-fired cogeneration facility to Unit 4. Unit 3 was sited, but never received waste. Unit 1 stopped receiving wastes in 1988 and Unit 2 stopped receiving wastes in 2001.
15. Chemical constituents found in the wood waste at the facility that have the potential to affect the quality of waters of the State include pentachlorophenol (PCP), formaldehyde, polynuclear aromatic hydrocarbons (PAHs), tannins, and lignins. Formaldehyde in the waste originated from the Louisiana-Pacific Corporation hardboard facility, which used a urea-formaldehyde glue. PAH compounds encountered in the waste may be from water flowing from the adjacent Koppers wood-treating facility or associated with ash that was previously disposed in the landfill. Tannins and lignins are normal decomposition products of wood waste. None of the above constituents have been detected in groundwater beneath the site in concentrations that affect beneficial uses.

### **SURFACE AND GROUND WATER CONDITIONS**

16. The *Water Quality Control Plan for the Sacramento River 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.
17. Surface drainage is to intermittent drainage courses north and west of the facility, which are tributary to the Feather River in the Lower Feather River Hydrologic Area (515.40) of the Sacramento Hydrologic Basin. The Feather River is located approximately one mile west of the site.
18. The designated beneficial uses of the Feather River, as specified in the Basin Plan, are municipal and agricultural supply, water contact and non-water contact recreation, warm and cold fresh water habitat, warm and cold freshwater fish migration, warm and cold freshwater fish spawning habitat, wildlife habitat, and groundwater recharge.
19. The first encountered groundwater is about 75 to 140 feet below the native ground surface. Groundwater elevations range from 126 feet MSL to 177 feet MSL.
20. Monitoring data indicates background groundwater quality has an electrical conductivity (EC) ranging between 325 and 525 micromhos/cm and a total dissolved solids (TDS) concentration ranging between 163 and 300 mg/l.

21. The direction of groundwater flow is toward the southwest. The groundwater gradient measured during first quarter 2004 was 0.01 feet per foot.
22. 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.

### **SURFACE AND GROUND WATER MONITORING**

23. The current groundwater monitoring system includes four monitoring wells, LF-1A, LF-2, LF-4, and LF-5. Three additional monitoring wells (LF-1, LF-3, and W-2) have previously been included in the groundwater monitoring network. However, these wells are no longer used in the current monitoring system. Monitoring well LF-1 was replaced by monitoring well LF-1A in August 2000 due to an improper screen interval and low groundwater yield. It has been reported that monitoring well LF-3 was abandoned after Unit 1 ceased accepting wastes. Monitoring well W-2 was installed in June 1988 by the United States Environmental Protection Agency as part of the soil and groundwater investigation at the Koppers Superfund Site located adjacent to the former Louisiana-Pacific Corporation mill. It has been reported that monitoring well W-2 was abandoned after the site investigation was completed, but data demonstrating proper destruction of the well has not been provided. All remaining monitoring wells will be abandoned at the completion of the clean-closure project after the Discharger demonstrates that residual wastes left at the site pose no threat to water quality.
24. Monitoring well LF-1A was installed in August 2000 and is located north and hydraulically upgradient of Unit 1. The total depth of well LF-1A is 138 feet with a screen interval between 115 and 135 feet below ground surface (bgs). Monitoring well LF-2 was installed in June 1987 and is located near the southwest corner and hydraulically downgradient of Unit 2. The total depth of well LF-2 is 162 feet with a screen interval between 138 and 158 feet bgs. Monitoring well LF-4 was installed in June 1987 and is located just south and hydraulically down or cross gradient of Unit 1. The total depth of well LF-4 is 160 feet with a screen interval between 129 and 159 feet bgs. Monitoring well LF-5 was installed in June 1987 and is located just south and hydraulically downgradient of Unit 2. The total depth of well LF-5 is 169 feet with a screen interval between 138 and 168 feet bgs.
25. Three unlined storm water detention basins exist at the site. Pond 1 is located at the northwest corner of Unit 1, Pond 5 is located at the western edge of Unit 2, and Pond 7 is located at the southeast corner of the facility. Surface drainage from the site and Units drains toward these three ponds. Once the storm water level in the ponds reaches a specific depth, water discharges off site to surface drainage courses and toward the Feather River. A leachate seep has occasionally appeared at the northwest corner of Unit 1, just above Pond 1. Surface water quality monitoring is required pursuant to this Order and the Surface Water Detection Monitoring Program satisfies the requirements of Title 27.

26. Volatile organic compounds (VOCs) are often detected in a release from a landfill. Since volatile organic compounds are not naturally occurring and thus have no background value, they are not amenable to the statistical analysis procedures contained in Title 27 CCR for the determination of a release of wastes from a Unit.
27. Title 27 CCR Sections 20415(e)(8) and (9) provide for the non-statistical evaluation of monitoring data that will provide the best assurance of the earliest possible detection of a release from a Unit in accordance with Title 27 CCR Section 20415(b)(1)(B)2.-4. However, Title 27 CCR does not specify a specific method for non-statistical evaluation of monitoring data.
28. The Regional Board may specify a non-statistical data analysis method pursuant to Title 27 CCR Section 20080(a)(1). Section 13360(a)(1) of the California Water Code allows the Regional Board to specify requirements to protect underground or surface waters from leakage from a solid waste site, which includes a method to provide the best assurance of determining the earliest possible detection of a release.
29. In order to provide the best assurance of the earliest possible detection of a release of non-naturally occurring waste constituents from a Unit, this Order specifies a non-statistical method for the evaluation of monitoring data.
30. The specified non-statistical method for evaluation of monitoring data provides two criteria (or triggers) for making the determination that there has been a release of non-naturally occurring waste constituents from a Unit. The presence of two non-naturally occurring waste constituents above their respective method detection limit (MDL), or one non-naturally occurring waste constituent detected above its practical quantitation limit (PQL), indicates that a release of waste from a Unit has occurred. Following an indication of a release, verification testing will be conducted to determine whether there has been a release from the Unit, or there is a source of the detected constituents other than the landfill, or the detection was a false detection. Although the detection of one non-naturally occurring waste constituent above its MDL is sufficient to provide for the earliest possible detection of a release, the detection of two non-naturally occurring waste constituents above the MDL as a trigger is appropriate due to the higher risk of false-positive analytical results and the corresponding increase in sampling and analytical expenses from the use of one non-naturally occurring waste constituent above its MDL as a trigger.

### **FINANCIAL ASSURANCES**

31. The Discharger submitted updated Closure and Post-Closure Maintenance Cost Estimates dated 13 July 2006. Costs for closure were estimated to be \$1,602,376.00 and costs for 30 years of post-closure maintenance were estimated to be \$1,427,218.00. The cost estimates included a *Professional Certification for Initial Closure and Post-Closure Maintenance Costs* dated 13 July 2006, which was signed and stamped by the Discharger's consultant, a Registered Professional Engineer. The Discharger and the Regional Water Board are currently engaged in negotiations regarding the amount of

financial assurances described herein. These negotiations may result in the financial assurances being adjusted accordingly.

32. The Discharger established a Letter of Credit dated 29 September 2006 in the amount of \$3,133,494.00 to cover closure and post-closure maintenance costs.
33. The Discharger submitted an 8 April 2004 cost estimate for initiating and completing corrective action for all known or reasonably foreseeable releases from the landfill. The foreseeable release scenario that was used to develop the cost estimate involves corrective action associated with leachate seeps at the landfill surface and potential assessment of groundwater impacts. The 8 April 2004 corrective action cost estimate is \$103,900.00. This estimate has not been increased to reflect inflation factors since its initial development. Additionally, the Discharger has not demonstrated financial assurances for initiating and completing corrective action in the amount of the approved cost estimate, pursuant to Section 22221 of Title 27.
34. Section 22236 of Title 27 requires the Discharger to submit a report **by 1 June of each year** calculating the increase in the cost estimates for closure and/or post-closure maintenance and/or corrective action due to the inflation factor for the previous calendar year. The Discharger must increase the monetary amount of the financial mechanism(s) based upon the inflation factor.

### LANDFILL CLOSURE

35. This landfill is not yet closed. The current Discharger has never disposed wastes at the site. The last receipt of waste at the site was to Unit 2 during second quarter of 2001. Several leachate seeps at the northwest corner of Unit 1 have been observed during previous wet weather seasons. Low concentrations of pentachlorophenol and formaldehyde were detected in storm water ponds at the site, including Pond 1 located below the leachate seep locations, during 2003 and 2004.
36. In accordance with Title 27 CCR Section 20950(a)(2)(A)(1), the goal of closure Performance Standards includes, but is not limited to, installation of a final cover to minimize water infiltration into the waste, thereby minimizing the production of leachate and gas.
37. In accordance with Title 27 CCR Section 20950(a)(2)(B), the goal of closure Performance Standards for Units that are clean-closed is to physically remove all waste and contaminated materials from the Unit and from its underlying and surrounding environs, such that the waste in the Unit no longer poses a threat to water quality. Successful completion of clean-closure eliminates the need for any post-closure maintenance period.
38. The Discharger submitted a revised Report of Waste Discharge (ROWD) for Clean-Closure of the Oroville Landfill Properties Class III Wood Waste Landfill dated 20 December 2006. In the ROWD, the Discharger proposes to excavate wood wastes from Units 1 and 2,

process and separate the wastes from cover soils on-site, and then haul the recovered wood waste to a facility approved by the Executive Officer for re-use or disposal. The Discharger also proposes to excavate wood ash from Unit 4 and haul the materials to agricultural lands for use as a soil amendment.

39. This Order allows the Discharger to proceed with clean-closure actions in accordance with Section 21090(f) of Title 27, the 20 December 2006 revised ROWD, and the requirements of these waste discharge requirements and the attached monitoring and reporting program.

### **CEQA AND OTHER CONSIDERATIONS**

40. The action to revise waste discharge requirements for this existing facility is exempt from the provisions of the California Environmental Quality Act (CEQA), Public Resource Code Section 21000, et seq., and the CEQA guidelines, in accordance with Title 14 CCR, Section 15301.
41. This Order implements:
- a. *The Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, Fourth Edition* (and subsequent revisions);
  - b. The prescriptive standards and performance goals of Chapters 1 through 7, Subdivision 1, Division 2, Title 27 CCR, effective 18 July 1997, and subsequent revisions;
  - c. *The Porter-Cologne Water Quality Control Act* (as amended 1 January 2004 and subsequent revisions); and
  - d. State Water Resources Control Board Resolution No. 68-16, *Statement of Policy With Respect to Maintaining High Quality of Waters in California*.
42. Section 13267(b) of California Water Code provides that: "In conducting an investigation specified in subdivision (a), the Regional Board may require that any person who has discharged, discharges, or is suspected of 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. The monitoring and reporting program required by this Order and the attached "Monitoring and Reporting Program No. \_\_\_\_\_" are necessary to assure compliance with these waste discharge requirements. The Discharger owns and operates the facility that discharges the waste subject to this Order.

### PROCEDURAL REQUIREMENTS

43. 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. No local agency has expressed any concern regarding clean-closure of the Units at the landfill.
44. The Regional Board notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the clean-closure project, and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
45. The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharge.
46. Any person affected by this action of the Regional Board may petition the State Water Resources Control Board to review the action in accordance with Sections 2050 through 2068, Title 23, California Code of Regulations. The petition must be received by the State Water Resources Control Board, Office of Chief Counsel, P.O. Box 100, Sacramento, California 95812, within 30 days of the date of issuance of this Order. Copies of the laws and regulations applicable to the filing of a petition are available on the Internet at [http://www.swrcb.ca.gov/water\\_laws/index.html](http://www.swrcb.ca.gov/water_laws/index.html) and will be provided on request.

IT IS HEREBY ORDERED, pursuant to Sections 13263 and 13267 of the California Water Code, that Order No. R5-2005-0027 is rescinded, and Oroville Landfill Properties, Oroville Landfill Properties LLC, Jack M. Steebles LLC, Carol Ann Seidenglanz LLC, and Steven Conn Seidenglanz 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' or 'designated waste' to any part of this facility is prohibited. For the purposes of this Order, the term 'hazardous waste' is as defined in Title 23 CCR, Section 2510 et seq., and 'designated waste' is as defined in Title 27 CCR.
2. The discharge of waste to any Unit is prohibited, with the exception of temporary storage of materials recovered during clean-closure activities at Units 1, 2, and 4.
3. The discharge of wastes outside of a Unit or portions of a Unit specifically designed for their containment is prohibited.

4. Any waste that has been discharged at this site or recovered as part of the landfill clean-closure activities shall not cause a release of pollutants, or waste constituents in a manner that could cause a condition of nuisance, degradation, contamination, or pollution of groundwater or surface water to occur, as indicated by the most appropriate statistical or nonstatistical data analysis method and retest method listed in this Order, the Monitoring and Reporting Program, or the Standard Provisions and Reporting Requirements.
5. The discharge of solid or liquid waste or leachate to surface waters, surface water drainage courses, or groundwater is prohibited.
6. Waste that has been discharged at this site shall not cause an increase in the concentration of waste constituents in soil-pore gas, soil-pore liquid, soil, or other geologic materials outside of the Unit if such waste constituents could migrate to waters of the State — in either the liquid or the gaseous phase — and cause a condition of nuisance, degradation, contamination, or pollution.
7. Clean-closure operations shall be managed so that nuisance conditions, including offensive odors, off-site noise impacts, off-site lighting impacts, fugitive dust, traffic congestion, etc., are not created. Complaints regarding nuisance conditions may require modification of clean-closure site operation activities.

## **B. FACILITY SPECIFICATIONS**

1. The Discharger shall, in a timely manner, remove and relocate any waste discharged at this facility in violation of this Order.
2. The Discharger shall immediately notify the Regional Board of any flooding, unpermitted discharge of waste off-site, equipment failure, slope failure, or other change in site conditions that could impair the integrity of waste or leachate containment facilities or precipitation and drainage control structures.
3. Water used for facility maintenance shall be limited to the minimum amount necessary for dust control and construction.
4. The Discharger shall maintain in good working order any facility, control system, or monitoring device installed to achieve compliance with the waste discharge requirements.
5. Methane and other landfill gases shall be adequately vented, removed from the Unit, or otherwise controlled to prevent the danger of adverse health effects, nuisance conditions, or the impairment of beneficial uses of surface water or groundwater due to migration through the unsaturated zone.

6. Surface drainage within the waste management facility shall be directed to one of three storm water detention basins. Additional surface water detention or retention basins may be necessary as clean-closure activities proceed. Each detention basin shall be operated and maintained to minimize vectors and odors. A freeboard of at least two feet shall be maintained in each detention basin at all times.
7. The Discharger shall maintain a *Storm Water Pollution Prevention Plan and Monitoring Program and Reporting Requirements* that is site specific and addresses clean-closure of landfill Units in accordance with State Water Resources Control Board Order No. 97-03-DWQ and subsequent replacement Orders. Any storm water discharge off site shall be done in accordance with applicable storm water regulations and Monitoring and Reporting Program No. \_\_\_\_\_.
8. The Discharger shall submit for Executive Officer review and approval **by 1 October annually for the life of the clean-closure project and the post-clean-closure monitoring period** a Winterization Plan. The Winterization Plan should describe specific erosion and sediment control best management practices (BMPs) to be implemented for each upcoming wet weather season and include a discussion regarding any proposed clean-closure work activities during the wet weather season. The Winterization Plan shall also include a site map showing anticipated storm water drainage patterns and locations of major BMPs. The Winterization Plan shall be implemented **by 1 November annually**.

### C. CLEAN-CLOSURE SPECIFICATIONS

1. The Discharger shall submit at least **30 days prior to beginning clean-closure excavation activities and no later than 15 June 2007**, a detailed clean-closure construction schedule. The schedule shall describe specific activities and the Unit they are proposed to occur in, anticipated installation of appurtenant structures such as additional detention/retention ponds to assist with storm water management, and anticipated installation of nuisance controls that may be necessary to maintain compliance with this Order. The schedule shall be updated at least quarterly in the Facility Clean-Closure Monitoring Reports.
2. Materials recovered from Units 1 and 2 shall be segregated from materials recovered in Unit 4 at all times.
3. Ash recovered from Unit 4 and hauled off-site for use as a soil amendment shall be applied at appropriate agronomic rates.
4. Wood ash may only be applied to agricultural lands in a manner that does not cause pollution or nuisances. Ash applied to agricultural lands as a soil amendment shall be disked or tilled into the native ground by the landowner within seven days after being discharged. If the ash is not disked or tilled into the ground surface within seven days after discharge, then appropriate wind/water erosion and sediment

control BMPs shall be installed by the landowner around the stockpile to prevent nuisances and discharges of ash to surface water drainage courses.

5. The following minimum setback distances shall be required for ash discharged to agricultural lands:

To Prevent Nuisance Conditions

From Occupied Dwelling	300 feet
From Businesses, Schools, Hospitals, or Churches	300 feet

To Protect Water Quality

From Ponds, Lakes, Streams, Wetlands	100 feet
From Natural and Man Made Drainages	100 feet
From Wells or Springs	100 feet

6. The Discharger shall ensure its compliance with this Order for all off-site discharges of wood ash excavated from Unit 4. The Discharger shall notify the property owner where ash is applied of the ash management requirements of this Order.
7. The Discharger shall submit for Executive Officer review and approval **prior to beginning clean-closure activities and no later than 15 June 2007** a work plan proposing to assess wood waste applications on the south and eastern portion of APN 078-100-046, the southeastern section of APN 078-100-015, and the eastern majority of APN 078-090-014. The work plan should include a sampling program and discuss specific ways to determine whether residual wood waste that may be on the parcels poses a threat to surface water quality, groundwater quality, or public health and the environment.
8. With the exception of rock that may be recovered during waste processing operations, materials (soil/rock/residual waste – spoils piles) separated from recovered wood waste in Units 1 and 2 shall be sampled and analyzed for the constituents and at the frequencies listed in Monitoring and Reporting Program No. \_\_\_\_\_. These sample results shall be reviewed and approved by the Executive Officer prior to discharging the spoils back to land on-site. Recovered rock shall be stored on-site and used by the Discharger at their discretion. Any proposal to haul spoils (including rock) off-site shall be reviewed and approved by the Executive Officer.
9. Wastes in each Unit that become exposed due to clean-closure activities and stockpiled recovered materials shall be covered with canvas tarps, plastic tarps, or six inches of soil at the end of each workday. Wastes or stockpiled recovered materials that will be left undisturbed for more than 90 days shall be covered with

12 inches of soil. Appropriate erosion and sediment control BMPs shall be installed as needed.

10. Leachate that may be encountered during clean-closure activities shall be collected, quantified, and stored on-site until necessary characterization is completed in accordance with Monitoring and Reporting Program No. \_\_\_\_\_ and off-site disposal is arranged, as approved by the Executive Officer.
11. Decommissioned groundwater monitoring wells that may be encountered in Units 1 or 2 during clean-closure excavation activities shall be properly destroyed under permit from Butte County Environmental Health Division. Any well that is not completely removed from a Unit during clean-closure activities shall be marked on a final site map to be included with the Final Clean-Closure Report.
12. The Discharger shall submit **by 1 August 2007** a Confirmation Sampling Plan that is acceptable to the Executive Officer. The Confirmation Sampling Plan should involve visual inspections and include laboratory analyses of native subgrade soils below each Unit and each sediment detention basin. Sideslope sampling may also be necessary to demonstrate wastes no longer pose a threat to water quality. Typical confirmation sampling programs include use of numbered grids and random number generators to establish sampling locations. Guidance documents such as the U.S.E.P.A. SW 846 Manual (Chapter 9) should be useful with helping develop a site and Unit specific confirmation sampling program.
13. The Discharger shall monitor groundwater beneath the facility and perform the Standard Observations listed in Monitoring and Reporting Program No. \_\_\_\_\_ for two consecutive years following completion of clean-closure excavation activities. Upon completion of the two-year post-clean-closure maintenance period, the Discharger may request termination of all monitoring requirements.
14. The Discharger shall submit a work plan for destruction of each Detection Monitoring Program groundwater monitoring well upon completion of the two-year post-clean-closure maintenance period. All wells shall be destroyed under permit from Butte County Environmental Health Division.
15. Within 60 days after completing clean-closure of Units 1, 2, and 4 and the sawdust application areas on APNs 078-100-046, 078-100-015, and 078-090-014, the Discharger shall submit a Final Clean-Closure Report that documents all investigation and waste removal activities undertaken during the project. The Final Clean-Closure Report shall also include a site map indicating final topography, all laboratory data (excluding Detection Monitoring Program groundwater, surface water, and leachate monitoring results), volumes/tonnages of wastes hauled off-site, and final end-use locations of recovered materials.

16. If the Discharger's attempt to clean-close the landfill does not succeed or fails to meet the requirements or purpose stated within Section 21090(f) of Title 27 or fails to comply with the requirement of this Order, then the Discharger shall close the landfill in accordance with the Closure and Post-Closure Standards listed in Chapter 1, Subchapter 5, of Title 27 beginning with Section 20950, and carry out post-closure maintenance in the same manner as though the Discharger had not attempted clean-closure.
17. If the Discharger fails to excavate and remove wastes from the site and/or fails to proceed with clean-closure activities for a period of 12 consecutive months, then the clean-closure project shall be deemed incomplete and the Discharger shall close the landfill in accordance with the Closure and Post-Closure Standards listed in Chapter 1, Subchapter 5, of Title 27 beginning with Section 20950, and carry out post-closure maintenance in the same manner as though the Discharger had not attempted clean-closure.

#### D. DETECTION MONITORING SPECIFICATIONS

1. The Discharger shall comply with the detection monitoring program provisions of Title 27 CCR for groundwater and surface water.
2. The Discharger shall conduct groundwater, surface water, and leachate monitoring as specified in Monitoring and Reporting Program No. \_\_\_\_\_.
3. The Discharger shall provide Regional Board staff a minimum of **one week** notification prior to commencing any field activities related to the installation, repair, or abandonment of monitoring devices, and a minimum 48 hour notification prior to the collection of samples associated with a detection monitoring program, evaluation monitoring program, or corrective action program.
4. The Discharger shall submit for Executive Officer review and approval **by 15 June 2007** a Water Quality Protection Standard Report in accordance with applicable provisions of Title 27 and Monitoring and Reporting Program No. \_\_\_\_\_.
5. The Discharger shall comply with the Water Quality Protection Standard as required in this Order, Monitoring and Reporting Program No. \_\_\_\_\_, and the Standard Provisions and Reporting Requirements, dated April 2000.
6. The Water Quality Protection Standard for organic compounds that are not naturally occurring and not detected in background groundwater samples shall be taken as the detection limit of the analytical method used (i.e., US-EPA methods 8260 and 8270). The repeated detection of one or more non-naturally occurring organic compounds in samples above the Water Quality Protection Standard from detection monitoring wells is evidence of a release from the Unit.

7. The concentrations of the constituents of concern in waters passing the Point of Compliance shall not exceed the concentration limits established in the Water Quality Protection Standard Report.
8. For each monitoring event, the Discharger shall determine whether the landfill is in compliance with the Water Quality Protection Standard using procedures specified in Monitoring and Reporting Program No. \_\_\_\_\_ and Title 27 CCR Section 20415(e).
9. The Discharger shall submit **by 15 June 2007** for Executive Officer review and approval a Sample Collection and Analysis Plan. The Sample Collection and Analysis Plan shall at a minimum include:
  - a. Sample collection procedures describing purging techniques, sampling equipment, and decontamination of sampling equipment;
  - b. Sample preservation information and shipment procedures;
  - c. Sample analytical methods and procedures;
  - d. Sample quality assurance/quality control (QA/QC) procedures; and
  - e. Chain of Custody control.
10. For any given monitored medium, the samples taken from all monitoring points and background monitoring points to satisfy the data analysis requirements for a given reporting period shall all be taken **within a span not to exceed 30 days**, unless the Executive Officer approves a longer time period, and shall be taken in a manner that ensures sample independence to the greatest extent feasible. Specific methods of collection and analysis must be identified. Sample collection, storage, and analysis shall be performed according to the most recent version of USEPA Methods, such as the latest editions, as applicable, of: (1) Methods for the Analysis of Organics in Water and Wastewater (USEPA 600 Series), (2) Test Methods for Evaluating Solid Waste (SW-846, latest edition), and (3) Methods for Chemical Analysis of Water and Wastes (USEPA 600/4-79-020), and in accordance with the approved Sample Collection and Analysis Plan.
11. If methods other than USEPA-approved methods or Standard Methods are used, the exact methodology shall be submitted for review and approval by the Executive Officer prior to use.
12. The **methods of analysis and the detection limits** used must be appropriate for the expected concentrations. The analytical method having the lowest method detection limit (MDL) shall be selected from among those methods, which would provide valid results in light of any matrix effects or interferences.

13. **“Trace” results** - results falling between the MDL and the practical quantitation limit (PQL) - shall be reported as such, and shall be accompanied both by the estimated MDL and PQL values for that analytical run.
14. **MDLs and PQLs** shall be derived by the laboratory for each analytical procedure, according to State of California laboratory accreditation procedures. These MDLs and PQLs shall reflect the detection and quantitation capabilities of the specific analytical procedure and equipment used by the lab, rather than simply being quoted from USEPA analytical method manuals. In relatively interference-free water, laboratory-derived MDLs and PQLs are expected to closely agree with published USEPA MDLs and PQLs.
15. If the laboratory suspects that, due to a change in matrix or other effects, the true detection limit or quantitation limit for a particular analytical run differs significantly from the laboratory-derived MDL/PQL values, the results shall be flagged accordingly, along with estimates of the detection limit and quantitation limit actually achieved. The **MDL shall always be calculated such that it represents the lowest achievable concentration associated with a 99% reliability of a nonzero result**. The PQL shall always be calculated such that it represents the lowest constituent concentration at which a numerical value can be assigned with reasonable certainty that it represents the constituent’s actual concentration in the sample. Normally, PQLs should be set equal to the concentration of the lowest standard used to calibrate the analytical procedure.
16. All **QA/QC data** shall be reported, along with the sample results to which they apply, including the method, equipment, analytical detection and quantitation limits, the percent recovery, an explanation for any recovery that falls outside the QC limits, the results of equipment and method blanks, the results of spiked and surrogate samples, the frequency of quality control analysis, and the name of the person(s) performing the analyses. Sample results shall be reported unadjusted for blank results or spike recoveries. In cases where contaminants are detected in QA/QC samples (i.e., field, trip, or lab blanks), the accompanying sample results shall be appropriately flagged.
17. Unknown chromatographic peaks shall be reported, flagged, and tracked for potential comparison to subsequent unknown peaks that may be observed in future sampling events. Identification of unknown chromatographic peaks that recur in subsequent sampling events may be required.
18. The statistical method shall account for data below the practical quantitation limit (PQL) with one or more statistical procedures that are protective of human health and the environment. Any PQL validated pursuant to Title 27 CCR Section 20415(e)(7) that is used in the statistical method shall be **the lowest concentration (or value) that can be reliably achieved** within limits of precision and accuracy

specified in the WDRs for routine laboratory operating conditions that are available to the facility. The Discharger's technical report, pursuant to Title 27 CCR Section 20415(e)(7), shall consider the PQLs listed in Appendix IX to Chapter 14 of Division 4.5 of Title 22, CCR, for guidance when specifying limits of precision and accuracy. For any given constituent monitored at a background or downgradient monitoring point, an indication that falls between the MDL and the PQL for that constituent (hereinafter called a "trace" detection) shall be identified and used in appropriate statistical or nonstatistical tests. Nevertheless, for a statistical method that is compatible with the proportion of censored data (trace and ND indications) in the data set, the Discharger can use the laboratory's concentration estimates in the trace range (if available) for statistical analysis, in order to increase the statistical power by decreasing the number of "ties".

19. Background for water samples shall be represented by the data from all samples taken from applicable background monitoring points during that reporting period (at least one sample from each background monitoring point).
20. The Discharger may propose an alternate statistical method [to the methods listed under Title 27 CCR Section 20415(e)(8)(A-D)] in accordance with Title 27 CCR Section 20415(e)(8)(E), for review and approval by the Executive Officer. Upon receiving written approval from the Executive Officer, alternate statistical procedures may be used for determining the significance of analytical results for common laboratory contaminants (i.e., methylene chloride, acetone, diethylhexyl phthalate, and di-n-octyl phthalate). Nevertheless, analytical results involving detection of these analytes in any background or downgradient sample shall be reported and flagged for easy reference by Regional Board staff.
21. The Discharger shall use the following non-statistical method for all analytes that are detected in less than 10% of the background samples. The non-statistical method shall be implemented as follows:
  - a. From the constituent of concern or monitoring parameter list, identify each analyte in the **current** sample that exceeds either its respective MDL or PQL. The Discharger shall conclude that the exceedance provides a preliminary indication of a release or a change in the nature or extent of the release, at that monitoring point, if **either**:
    - 1) The data contains two or more analytes that are detected in less than 10% of background samples that equal or exceed their respective MDLs; or
    - 2) The data contains one or more analyte that equals or exceeds its PQL.

b. **Discrete Retest** [Title 27 CCR Section 20415(e)(8)(E)]:

- 1) In the event that the Discharger concludes that there is a preliminary indication of a release, then the Discharger shall immediately notify Regional Board staff by phone or e-mail and, within 30 days of such indication, shall collect two new (retest) samples from the monitoring point where the release is preliminarily indicated.
- 2) For any given retest sample, the Discharger shall include, in the retest analysis, **only the laboratory analytical results for those analytes detected in the original sample**. As soon as the retest data are available, the Discharger shall conclude that there is measurably significant evidence of a release if two or more analytes equal or exceed their respective MDLs or if one or more analyte equals or exceeds its PQL and shall:
  - a) **Immediately** notify the Regional Board about any constituent or constituents verified to be present at the monitoring point, and follow up with written notification submitted by certified mail **within seven days** of validation; and
  - b) Comply with ¶22, below if any constituent or constituents were verified to be present.
- 3) Any analyte that triggers a discrete retest per this method shall be added to the monitoring parameter list such that it is monitored during each regular monitoring event.

22. If the Discharger determines that there is measurably significant evidence of a release from the Unit at any monitoring point, the Discharger shall **immediately** implement the requirements of **XI. Response To A Release, C. Release Has Been Verified**, contained in the Standard Provisions and Reporting Requirements.

**E. PROVISIONS**

1. The Discharger shall maintain a copy of this Order at the facility and make it available at all times to facility operating personnel, who shall be familiar with its contents, and to regulatory agency personnel.
2. The Discharger shall comply with all applicable provisions of Title 27 CCR that are not specifically referred to in this Order.
3. The Discharger shall comply with Monitoring and Reporting Program No. \_\_\_\_\_, which is incorporated into and made part of this Order.

4. The Discharger shall comply with the applicable portions of the *Standard Provisions and Reporting Requirements for Chapter 15 (23 CCR 2510, et seq.) and Part 258 (40 CFR 258)*, dated September 1993, which are hereby incorporated into this Order.
5. All reports and transmittal letters shall be signed by persons identified below:
  - a. For a corporation: by a principal executive officer of at least the level of senior vice-president.
  - b. For a partnership or sole proprietorship: by a general partner or the proprietor.
  - c. For a municipality, state, federal or other public agency: by either a principal executive officer or ranking elected or appointed official.
  - d. A duly authorized representative of a person designated in a, b, or c above if:
    - 1) The authorization is made in writing by a person described in a, b, or c of this provision;
    - 2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a Unit, superintendent, or position of equivalent responsibility. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and
    - 3) The written authorization is submitted to the Regional Board.
  - e. Any person signing a document under this Section shall make the following certification:

“I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.”
6. The Discharger shall take all reasonable steps to minimize any adverse impact to the waters of the State resulting from noncompliance with this Order. Such steps shall include accelerated or additional monitoring as necessary to determine the nature, extent, and impact of the noncompliance.

7. The owner of the waste management facility shall have the continuing responsibility to assure protection of waters of the state from discharged wastes and from gases and leachate generated by discharged waste during the active life, clean-closure, and post-clean-closure maintenance period of the Unit(s) and until the clean-closure project is completed and the waste discharge requirements are rescinded.
8. The fact that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with this Order shall not be regarded as a defense for the Discharger's violations of the Order.
9. To assume ownership or operation under this Order, the succeeding owner or operator must apply in writing to the Regional Board requesting transfer of the Order within 14 days of assuming ownership or operation of this facility. 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 Regional Board, and a statement. The statement shall comply with the signatory requirements contained in Provision E.5. above 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 of this Order shall be approved or disapproved by the Regional Board.
10. The Discharger shall submit for Executive Officer review and approval **by 15 June 2007** updated cost estimates for initiating and completing corrective action for all known or reasonably foreseeable releases from the landfill in accordance with Section 22221 of Title 27. The Discharger shall demonstrate adequate financial resources for initiating and completing corrective action for all known or reasonably foreseeable releases in the amount of the approved cost estimate using one of the approved mechanisms in Title 27 **by 1 August 2007**.
11. The Discharger shall maintain financial assurance mechanisms for closure, post-closure maintenance, and corrective action costs in amounts approved by the Executive Officer and as specified in Chapter 6 of Title 27 until the post-clean-closure maintenance period is completed and approved by the Executive Officer.
12. The Discharger shall submit for Executive Officer review and approval **by 1 June annually**, a report calculating the increase in the cost estimates for closure and/or post-closure maintenance and/or corrective action due to the inflation factor for the previous calendar year in accordance with Section 22236 of Title 27. Once the inflation factor adjusted cost estimates are approved, the Discharger shall increase the monetary amount of the financial mechanisms for closure and/or post-closure maintenance and/or corrective action based upon the inflation factor calculation and provide proof of the financial assurance increase **by 1 August annually**.

13. Upon completion of the clean-closure project and the post-clean-closure maintenance period and with the approval of the Executive Officer, all financial assurances shall be released to the Discharger.
14. The Discharger shall complete the tasks contained in these waste discharge requirements in accordance with the following time schedule:

<u>TASK</u>	<u>COMPLIANCE DATE</u>
<b>A. Clean Closure</b>	
1. Submit a detailed clean-closure construction schedule. <i>(see Clean-Closure Specification C.1)</i>	<b>By 15 June 2007</b>
2. Submit a work plan proposing to assess wood waste application activities on the south and eastern portion of APN 078-100-046, the southeastern section of APN 078-100-015, and the eastern majority of APN 078-090-014. <i>(see Clean-Closure Specification C.7)</i>	<b>By 15 June 2007</b>
3. Submit a Confirmation Sampling Plan that is acceptable to the Executive Officer. <i>(see Clean-Closure Specification C.12)</i>	<b>By 1 August 2007</b>
4. Submit a work plan proposing destruction of all groundwater detection monitoring wells. <i>(see Clean-Closure Specification C.14)</i>	<b>Before Project Completion</b>
5. Submit a Final Clean-Closure Report that documents all investigation and waste removal activities undertaken during the project. <i>(see Clean-Closure Specification C.15)</i>	<b>60 Days After Project Completion</b>
<b>B. Facility Monitoring</b>	
1. Submit a Winterization Plan. <i>(see Facility Specification B.8)</i>	<b>By 1 October Annually</b>
2. Submit a Water Quality Protection Standard Report. <i>(see Detection Monitoring Specification D.4)</i>	<b>By 15 June 2007</b>
3. Submit a Sample collection and Analysis Plan. <i>(see Detection Monitoring Specification D.9)</i>	<b>By 15 June 2007</b>

<u>TASK</u>	<u>COMPLIANCE DATE</u>
<b>C. Financial Assurances</b>	
1. Submit updated cost estimates for initiating and completing corrective action for all known or reasonably foreseeable releases. <i>(see Provision E. 10)</i>	<b>By 15 June 2007</b>
2. Provide proof of adequate financial assurances in the amount of the approved cost estimate for known or reasonably foreseeable releases. <i>(see Provision E. 10)</i>	<b>By 1 August 2007</b>
3. Provide a report calculating the increase in the cost estimates for closure and/or post-closure maintenance and/or corrective action due to the inflation factor for the previous calendar year. <i>(see Provision E. 12)</i>	<b>By 1 June Annually</b>
4. Provide proof that the financial mechanisms for closure and/or post-closure maintenance and/or corrective action have been increased based upon the annual inflation factor calculation. <i>(see Provision E. 12)</i>	<b>By 1 August Annually</b>

I, PAMELA C. CREEDON, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on \_\_\_\_\_.

\_\_\_\_\_  
PAMELA C. CREEDON, Executive Officer