

California Regional Water Quality Control Board
North Coast Region

ORDER NO. R1-2002-0055
ID NO. 1A770100SIS

WASTE DISCHARGE REQUIREMENTS

FOR

CLOSURE OF
SISKIYOU COUNTY DEPARTMENT OF PUBLIC WORKS
HAPPY CAMP LANDFILL
CLASS III SOLID WASTE DISPOSAL SITE

Siskiyou County

The California Regional Water Quality Control Board, North Coast Region, (hereinafter the Regional Water Board) finds that:

1. The Siskiyou County Department of Public Works, (hereinafter Discharger) operates the Happy Camp Landfill (Site), a Class III Solid Waste Disposal Site (SWDS) on 40 acres of leased land, owned by George M. Chambers, P.O. Box 789, Happy Camp, California 96039. The disposal site has been in operation since 1976. The Discharger submitted a Final Closure and Post Closure Maintenance Plan dated September 1998, for the closure of the existing landfill. Previous Waste Discharge Requirements (WDRs) do not cover the proposed closure.
2. The existing disposal facility is located two miles southwest of Happy Camp in the NW quarter of Section 15, Township 16 North, Range 7 East, of the Humboldt Base Meridian in Siskiyou County as shown on Attachments "A" and "B" incorporated herein and made part of this order. It is composed of Assessors Parcel Number 16-080-070. The property is on a ridge bordering the south side of Little Grider Creek, a tributary of the Klamath River.
3. Waste Discharge Requirements Order No. 77-10 was adopted by the Regional Water Board on January 27, 1977, designating the Happy Camp site as a Class II-2 landfill. The landfill classification system was later modified and Class II-2 landfills became Class III landfills under the revised nomenclature. The Regional Water Board adopted Order No. 93-83, General Waste Discharge Requirements for Municipal Solid Waste Landfills on September 27, 1993, which amended existing requirements for the Happy Camp SWDS. The discharge is presently governed by Waste Discharge Requirements Order Nos. 77-10 and 93-83.
4. The Site had been operated as an existing landfill since 1976. The landfill ceased to accept solid waste August 30, 1996, and a transfer station has been constructed on the Site immediately south of the landfill's waste footprint. When in

operation, the landfill accepted residential and commercial non-hazardous and inert solid waste. It is estimated that the landfill received an average of four tons per day during operation, based on annual tonnage of 1,460. Final contours for the Site are described in the report by Siskiyou County Department of Public Works titled *Happy Camp Landfill Closure*, dated January 2000.

5. The total Site area is 40 acres with approximately five acres used for waste disposal.
6. The disposal site as delineated in Attachment "B" meets the criteria contained in Title 27 California Code of Regulations (CCR) as a Class III landfill for non-hazardous solid wastes.
7. Leachate, which is generated by infiltration of rainfall, seepage of perched water, and waste decomposition, is a designated waste as defined in Section 20164 of Title 27 CCR, and shall be collected and managed to prevent pollution and nuisance. Leachate will be hauled for treatment to the Cade Mountain Sewage Ponds.
8. The existing on-site support facilities include a leachate collection and recovery system (LCRS) with two 500-gallon tanks. The tanks and support lines are still on-site, but it has been determined that the leachate collection drain line in the fill was removed during closure. The Compliance Time Schedule under **D. PROVISIONS** addresses development and implementation of a leachate management plan.
9. Postclosure land use for the landfill Site is undeveloped, non-irrigated open space. A nonhazardous solid waste transfer station has been constructed south of the landfill footprint. Public, private, or county use of the Site is not planned. The existing onsite operations include a transfer station are shown in Attachment "B".
10. On October 9, 1991, the United States Environmental Protection Agency (USEPA) promulgated federal municipal solid waste (MSW) regulations under the Resource Conservation and Recovery Act (RCRA), Subtitle D (Title 40, Code of Federal Regulations (CFR), Parts 257 and 258), hereinafter referred to as "Subtitle D." These regulations apply to all California Class III landfills accepting MSW, including the Happy Camp SWDS.
11. Effective July 18, 1997, the Water Quality Regulations for Class II and Class III disposal facilities formerly contained in Chapter 15, Title 23 California Code of Regulations (CCR), and the Solid Waste Regulations formerly in Title 14 CCR, were re-codified into Chapters 1 through 7, Subdivision 1, Division 2, Title 27 CCR. Chapter 15 is therefore no longer applicable to this facility.

SITE DESCRIPTION

12. A 2,000-foot-long asphalt paved road, which intersects Highway 96, accesses the Site. A locked gate secures the Site during non-operating hours. Land use within

one mile of the Happy Camp Landfill is primarily rural residential and timber production with both private and government ownership. The nearest permanent structure is a house located approximately 1,000 feet from the Site. The Happy Camp Airport is located approximately one-half mile from the Site.

SURFACE WATER

13. The Site is within one-quarter mile of the nearest watercourse. Little Grider Creek lies approximately one-quarter mile north, the Klamath River lies approximately one-quarter mile east on the other side of Highway 96, and Benjamin Creek lies approximately 1 mile south of the Site. Surface drainage from the Site either flows to the Highway 96 road drainage and to the Klamath River or flows to the Little Grider Creek, a tributary to the Klamath River.
14. The Site is within the Little Grider Creek watershed of the Happy Camp Hydrologic Subarea of the Middle Klamath River Hydrologic Area within the Klamath River Hydrologic Unit. The Klamath River discharges directly into the Pacific Ocean.
15. The beneficial uses of the Klamath River include:
 - a. municipal and domestic supply
 - b. agricultural supply
 - c. industrial service supply
 - d. industrial process supply
 - e. groundwater recharge
 - f. freshwater replenishment
 - g. hydropower generation
 - h. water contact recreation
 - i. noncontact water recreation
 - j. commercial and sport fishing
 - k. warm freshwater habitat
 - l. cold freshwater habitat
 - m. wildlife habitat
 - n. preservation of rare, threatened or endangered species
 - o. migration of aquatic organisms
 - p. spawning, reproduction, and/or early development
 - q. aquaculture
16. The Klamath River is listed as an impaired water body for nutrients, dissolved oxygen, and temperature pursuant to Section 303(d) of the CWA. A Total Maximum Daily Load has not been established to address nutrients, dissolved oxygen, and temperature loadings. Given that these Waste Discharge Requirements prohibit the Site from discharging, they will not allow the Permittee to discharge at levels which will cause, have the reasonable potential to cause, or contribute to increases in nutrients, dissolved oxygen, and temperature levels in the Klamath River.
17. The Site is not located within a 100-year floodplain.

STORM WATER

18. This Order does not replace a future need for a National Pollutant Discharge Elimination System (NPDES) storm water permit as required by provisions of the Clean Water Act. Happy Camp SWDS's NPDES Permit No. 1S147S005361 was terminated on June 27, 2000.
19. Storm water from the Site is controlled by a series of drainage structures that direct storm water away from the landfill surface. Storm water flows either into Little Grider Creek or to the Highway 96 drainage, which is diverted to the Klamath River.
20. The mean annual precipitation for the area is approximately 53.43 inches per year. The 100-year, 24-hour precipitation event intensity-duration frequency curves is 7.48 inches. This information is based on regional weather station information from the National Weather Service's Climatological Station Number 3761-Happy Camp Ranger Station.

SITE GEOLOGY

21. The geologic units within the property boundaries include Quaternary alluvium, with the exception of the western most margin of the Site, which was mapped as part of the Galice Formation. The Galice Formation is also thought to underlie the alluvial deposits. The Galice Formation is described as Jurassic-Age slate, metagraywacke and greenstone derived from marine deposition. Surface soils indicate that onsite sediments are generally classified as silty, clayey sand with some gravel. Thickness of the alluvium ranges from 4.5 to 28 feet at the Site. No fractures were noted in the bedrock during the groundwater monitoring well installation.
22. There are no known Holocene faults at or in the vicinity of the Happy Camp Landfill. The Site is not within an Alquist-Priolo Special Studies Zone. A thrust fault occurs to the east of the Site following the Klamath River east of the Site. The thrust fault is not a Holocene fault and is not thought to be active. The nearest potentially active fault is the Mendocino Fault, located off the California coast.

GROUNDWATER

23. On June 20, 1991 the Discharger submitted a Solid Waste Assessment Test (SWAT) report describing a groundwater monitoring network installed at the landfill in 1989. Five wells were installed from depths of 13 to 35 feet below ground surface. Four wells, MW-1, MW-2, MW-3, and MW-4 were installed at the bedrock-alluvium contact. MW-2D was installed approximately 30 feet into the underlying bedrock. Only wells MW-3 and MW-2D have produced groundwater. It was determined that there is not an established shallow groundwater aquifer beneath the Site, only a localized shallow perched seasonal water-bearing zone. Flow in the perched zone is expected to move downgradient across the bedrock surface, which is to the northeast of the Site.
24. Based on the expected groundwater movement, Wells MW-1, MW-2S, and MW-2D are located upgradient and Wells MW-3 and MW-4 are located downgradient of the landfill. MW-1 was located east of the landfill and was 30 feet deep. Wells MW-2S and MW-2D are located near the southern edge of the landfill and are 13 feet and 35 feet deep, respectively. Well MW-3 is located north of the landfill and is 14 feet deep. Well MW-4 is located to the northeast of the landfill and is 21 feet deep.

25. Well MW-1 was destroyed in August 2000 to allow for the excavation of cap material.
26. No groundwater drinking wells exist within 1,000 feet of the Site. One groundwater well was confirmed to be within one mile of the Site. Four more wells are potentially within one mile of the Site, but could not be confirmed from the Water Well Drillers Reports. These five wells were listed as either domestic supply wells or test wells.
27. One spring, east of the Site, was located and sampled during SWAT.
28. Beneficial uses of areal groundwaters include:
 - a. domestic water supply
 - b. agricultural water supply

CLOSURE AND FINANCIAL ASSURANCES

29. Since the Happy Camp SWDS was not closed prior to the federal deadline (October 9, 1991), the closure requirements of Subtitle D apply.
30. Sections 20950(f) and 20380(b), Title 27 CCR require that the Discharger establish a formal financial mechanism to fund Site closure and known or reasonably foreseeable release from the facility. Siskiyou County established a Pledge of Revenue to assure adequate funds are available for Postclosure Maintenance and/or Corrective Action at the Happy Camp SWDS. This agreement was signed by Siskiyou County on December 8, 1998, and California Integrated Waste Management Board on January 26, 1999.
31. The Discharger is required to update approved cost estimates annually to account for inflation.
32. Final closure activities occurred from August through October 2000. Final closure activities are described in the report titled *Happy Camp Landfill Closure*, dated January 2000 prepared by Siskiyou County Department of Public Works.
33. Soil cover was excavated from on-site borrow areas and nearby property for the foundation, barrier, and vegetation layers. The landfill cap was compacted in lifts, drainage and erosion control measures were established in accordance with the September 1998 *Closure Plan* prepared by CH2M Hill and SHN Engineering.
34. The landfill cap consists of a two foot minimum thickness foundation layer, overlaid by a one foot minimum thickness barrier layer, overlaid by a one foot minimum thickness vegetation layer. The foundation and barrier layers were compacted to 90 percent relative compaction. The barrier layer permeability was determined by remolded laboratory permeability tests. All five laboratory permeability tests had permeability results greater than 1×10^{-6} centimeter per second.

35. The final cap surface is sloped to promote drainage away from the waste footprint. Slopes are no steeper than three to one nor flatter than three percent. Drainage ditches and contours were constructed to drain surface water away from the landfill cap. Erosion control consisted of seeding disturbed areas and constructing silt fences to prevent sediment runoff from the construction from reaching watercourses.
36. Portions of the southeast slope exceed the maximum of 50 vertical feet without a bench as required in Section 21090 of Title 27 CCR. The Compliance Time Schedule under **D. PROVISIONS** addresses determination by the Discharger of slope stability.
37. Closure construction included the installation of gas collection trenches and a passive vent system. Three survey control points were established off of the waste footprint and three settlement monuments were established on the waste footprint to monitor settlement. The gas system and surveying monuments are shown on Attachment "B".

CORRECTIVE ACTION

38. A release of waste constituents from the landfill to groundwater was discovered in 1992. Volatile organic compounds have been detected in the downgradient well MW-3. Chloroethane, 1,2-dichloroethene, vinyl chloride, 1,1-dichloroethene, and dichlorodifluoromethane have all been detected in MW-3 at various times.
39. General minerals in MW-3 may also be elevated, but the Site lacks an upgradient well capable of producing enough water to sample to provide background data for comparison. General minerals in MW-3 show a seasonal variance in response to recharge with highest values in the summer.
40. At any given time, each monitoring parameter for a given groundwater monitoring well will be in one of two compliance status states. Prior to a monitoring parameter at a given well exhibiting a measurably significant exceedence it will be in Detection Mode. Once a monitoring parameter in a given well exhibits a measurably significant exceedence it will change to Tracking Mode. Finding 38 lists the monitoring parameters currently in Tracking Mode for Monitoring Well MW-3.
41. Landfill closure and final cover was the chosen corrective action.
42. A gas collection and passive vent system was installed during the landfill final cover installation.
43. The Discharger proposed concentration limits higher than background for the volatile organic compounds that have been detected at the Site. This proposal was based on the limited groundwater at the Site (seasonal perched zone). However, not enough data to support the infeasibility of clean up to background

concentrations is available at this time. Concentration limits for all man-made compounds will remain the laboratory detection limit.

44. Concentration limits for the general minerals and other naturally occurring compounds still need to be established for MW-3.
45. The LCRS was disconnected during closure without Regional Water Board approval. Discharger will need to establish a leachate monitoring point to determine whether the LCRS will require reinstallation.

PROCEDURAL REQUIREMENTS AND OTHER CONSIDERATIONS

46. As an existing facility, this project is exempt from the California Environmental Quality Act (CEQA), Public Resources Code Section 21000, et seq., pursuant to Title 14, California Code of Regulations, Section 15301.
47. The Regional Water Board Water Quality Control Plan for the North Coast Region includes water quality objectives and receiving water limitations.
48. This order implements:
 - a. *The Water Quality Control Plan for the North Coast Region (Basin Plan);* and
 - b. The prescriptive standards and performance goals of Chapters 1 through 7, Subdivision 1, Division 2, Title 27, of the CCR, effective July 18, 1997, and subsequent revisions.
 - c. The prescriptive standards and performance criteria of the RCRA regulations in Title 40, Subtitle D, CFR Part 258.
 - d. State Water Resources Control Board Resolution No. 93-62, *Policy for Regulation of Discharges of Municipal Solid Waste*, adopted June 17, 1993.
49. The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe Waste Discharge Requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations.
50. The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge.
51. The permitted discharge is consistent with the provisions of State Water Board Resolution No. 68-16, *Statement of Policy with Respect to Maintaining High Quality of Waters in California*. The impact on existing water quality will be insignificant.

THEREFORE, IT IS HEREBY ORDERED that Waste Discharge Requirements Order No. 77-10 are rescinded and General Order No. 93-83 is amended to delete Happy Camp Solid Waste Disposal Site, Class III Waste Management Unit. It is further ordered that the Discharger, in

order to meet the provisions contained in Division 7 of the California Water Code (CWC) and regulations adopted thereunder, shall comply with the following:

A. DISCHARGE PROHIBITIONS

1. The discharge of any waste not specifically regulated by this Order is prohibited.
2. The discharge of solid and liquid wastes at this landfill is prohibited. Water may be discharged in amounts reasonably necessary for dust control, compaction, tire control, and the establishment and maintenance of vegetation.
3. The Discharger shall not cause the concentration of any Constituents of Concern (COC) to exceed its respective concentration limit in any monitored medium. The concentration limit for each monitoring parameter shall be set at the background concentration. Data analysis shall be performed in accordance with the approved Monitoring & Reporting Program.
4. The discharge of “hazardous wastes” and “designated wastes” at this facility as defined in Title 27 CCR is prohibited. The discharge of leachate from the landfill and LCRS at this facility is prohibited. For the purposes of this Order, the terms “hazardous wastes” and “designated wastes” are as defined in Title 27 CCR.
5. The discharge of wastes, including leachate, solid, or waste derived gas to surface waters, surface water drainage systems, or groundwater is prohibited.
6. The discharge of waste to surface waters or within 50 feet of surface waters is prohibited.
7. The discharge of wastes into ponded water from any source is prohibited.
8. Ponding of liquids, including rainfall runoff and leachate, over solid waste disposal cells is prohibited.
9. The discharge of wastes to any storm water sedimentation basin is prohibited.
10. The discharge of any waste in any manner not specifically described or quantified in the findings and regulated by this Order is prohibited.
11. Creation of a pollution, contamination, or nuisance, as defined by Section 13050 of the CWC, is prohibited

B. GENERAL SPECIFICATIONS

1. The discharge of wastes shall not cause water quality degradation by allowing a statistically or non-statistically significant increase over background or baseline concentrations as determined in accordance with Monitoring and Reporting Program No. R1-2002-0055.
2. Leachate generated and collected at the Site is defined as a designated waste and shall be managed as described in Finding 7 of this Order. Any change to the legal point of disposal for leachate requires the approval of the Executive Officer of the Regional Water Board (Executive Officer).
3. Materials used to construct or repair leachate collection and removal systems shall have appropriate physical and chemical properties to ensure the required transmission of leachate through the systems over the closure and post-closure maintenance period. Materials shall have sufficient strength and thickness to prevent collapse under the pressures exerted by overlying wastes, waste cover materials and equipment used on the landfill.
4. Surface drainage from tributary areas or internal site drainage shall not contact or percolate through wastes discharged at the Site.
5. Precipitation and drainage control systems for storm water run-off shall be designed and constructed to limit, to the greatest extent possible, ponding, inundation, erosion, slope failure, washout and overtopping from precipitation conditions of a 100-year, 24-hour storm event and for the peak from a 25-year, 24-hour storm event.
6. Precipitation and drainage control systems for storm water run-on shall be designed and constructed to limit, to the greatest extent possible, ponding, inundation, erosion, slope failure, washout and overtopping from precipitation conditions of a 25-year, 10-minute storm event.
7. Surface drainage from tributary areas and internal Site drainage from surface or subsurface sources shall not contact or percolate through wastes discharged at this Site. Drainage ditches shall be located, to the maximum extent practicable, such that they do not cross over the landfill. Site drainage over the landfill shall be contained in man-made drainage conveyance structures such as corrugated metal pipe or in drainage ditches which are lined with at least one foot of compacted soil having an in-place permeability of 1×10^{-6} cm/sec or less.
8. Prior to the anticipated rainy season, but no later than October 1st, annually, 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 and to prevent surface drainage from contacting or percolating through wastes. By November 1, annually, the Discharger shall submit a report to the Executive Officer describing measures taken to comply with this specification.

C. CLOSURE SPECIFICATIONS

1. Waste Management Unit (WMU) containment structures shall be designed, constructed, and operated to prevent inundation or washout due to floods with a 100-year return period. WMU containment structures shall be constructed and maintained to prevent, to the greatest extent possible, ponding, infiltration, inundation, erosion, slope failure, washout, and overtopping under 100-year, 24-hour precipitation conditions.
2. All WMU containment structures and erosion and drainage control systems shall be designed and constructed under the direct supervision of a California registered professional civil engineer, or a certified engineering geologist, and shall be certified by that individual as meeting the prescriptive standards and performance goals of Title 27 CCR. Designs shall include a Construction Quality Assurance Plan, the purpose of which is to:
 - a. Demonstrate that the structures have been constructed according to the specifications and plans approved by the Regional Water Board, and
 - b. provide quality control on the material and construction practices used to construct the structures and prevent the use of inferior products and/or materials that do not meet the approved design plans and specifications.
3. Materials used to construct final cover or repair shall have appropriate physical and chemical properties to ensure containment of wastes over the closure and post-closure maintenance period. Construction quality assurance and as-built drawings shall be submitted to the Regional Water Board within 60 days of final cover construction or repair.
4. Final cover shall consist of at least two feet of compacted foundation materials, overlain by at least one foot of compacted clay at a hydraulic conductivity less than 1×10^{-6} centimeters per second, overlain by one foot of vegetative layer. Permeability of final cover shall be determined in the field and in the laboratory using techniques approved by the Executive Officer. Construction methods and quality assurance procedures shall be sufficient to ensure that all parts of the final cover meet the permeability and stability requirements. Final cover materials shall be designed and constructed to function with a minimum of maintenance. Installation of final cover shall be under the direct supervision of a California registered professional civil engineer or certified engineering geologist. Materials and construction techniques shall meet the specifications and requirements in the final closure plan.
5. Vegetation shall be established immediately upon completion of the final cover. Vegetation shall be selected to require a minimum of irrigation and maintenance. Rooting depth shall not be in excess of the vegetative soil thickness.

6. Closed landfill units shall be graded to at least a three-percent grade and maintained to prevent ponding and infiltration.
7. Final cover shall conform to criteria specified in Construction Specifications contained in this Order. The Discharger shall install a sufficient number of permanent survey monuments on and near the landfill from which elevation of the disposal cells can be determined. Such monuments shall be installed by a California licensed surveyor or registered professional civil engineer.
8. Closure of each WMU shall be performed under the direct supervision of a California registered professional civil engineer or certified engineering geologist.
9. All containment structures shall meet the general criteria set forth in Section 20320, Title 27 CCR.
10. All containment structures shall meet the requirements of Sections 20310 through 20370, Title 27 CCR.

D. PROVISIONS

1. A copy of this Order shall be maintained at the discharge facility and be available at all times to operating personnel. Key operating personnel shall be familiar with its contents.
2. The Discharger shall comply with these WDRs and the attached Monitoring and Reporting Program No. R1-2002-0055, incorporated herein by this reference. A violation of the Monitoring and Reporting Program is a violation of these waste discharge requirements.
3. The Discharger shall comply with the attached General Monitoring and Reporting Provisions, which are hereby incorporated into this Order. A violation of any of the standard provisions and reporting requirements is a violation of these waste discharge requirements.
4. The Discharger may file a written request, including appropriate supporting documents, with the Executive Officer proposing modifications to Monitoring and Reporting Program No. R1-2002-0055. The Discharger shall implement any changes in the revised Monitoring and Reporting Program upon receipt of a signed copy of the revised Monitoring and Reporting Program.
5. The Discharger shall further comply with all applicable provisions of Title 27 and Subtitle D not specifically referred to in this Order.

6. Leachate collection and removal systems shall be operated to prevent the buildup of leachate in the landfill and minimize conditions of saturated garbage. Leachate removed from the landfill shall be discharged into above ground structurally sound storage tanks. Storage tanks shall have a berm or other revetment of adequate size and integrity to contain the largest potential discharge of leachate from the storage tanks.
7. The Discharger shall report as a part of each regularly scheduled monitoring report the volume of leachate collected each month since the previous monitoring report in accordance with Section 20340(h), Title 27 CCR.
8. In accordance with Section 20340(d), Title 27 CCR, the leachate collection and removal system shall be tested annually to demonstrate proper operation. Results shall be compared with earlier tests made under comparable conditions. The results shall be submitted with the following regularly scheduled monitoring report.
9. By October 1 annually, any necessary erosion control measures shall be implemented and any necessary construction, maintenance, or repairs of drainage control facilities shall be completed to minimize erosion and prevent flooding at the Site. All disturbed areas shall be seeded with an appropriate vegetation mixture to minimize sedimentation. Rainfall runoff from disturbed areas shall be channeled through sedimentation basins or other appropriate structures to minimize sedimentation in surface drainage courses downgradient of the Site. Sedimentation basins and other appropriate structures shall be cleaned out during the rainy season as necessary to maintain adequate sedimentation capacity. The Executive Officer may delete the requirement of submitting annual erosion control reports upon finding that no erosion control work is necessary prior to the return of winter rains.
10. Prior to any construction the Discharger shall obtain any and all permits required under federal, state, or local laws.
11. By November 2005, November 2010, and at least every five years after, the Discharger shall produce and submit to the Regional Water Board an iso-settlement map accurately depicting the estimated total change in elevation of the final cover's low-hydraulic-conductivity layer. For each portion of the landfill, this map shall show the total lowering of the surface elevation of the final cover, relative to the baseline topographic map submitted in the January 2001 Closure Report, and shall indicate all areas where visually noticeable differential settlement may have been obscured by grading operations. The map shall be drawn to the same scale and contour interval as the topographic map under in the January 2001 Closure Report, but showing the current topography of the final cover and featuring overprinted isopleths indicating the total settlement to-date. [Section 21090 (e) (2), Title 27 CCR]
12. The Discharger shall note on a map of the landfill the approximate location and outline of any areas where differential settlement is visually obvious prior to conducting periodic grading operations on the closed landfill. [Section 21090(e)(4), Title 27 CCR]

This information shall be included in the Annual Monitoring Report as well as each five-year iteration of the iso-settlement map. The map shall show all areas where differential settlement has been noted since the previous map submittal, and shall highlight areas of repeated or severe differential settlement. Map notations and delineations made pursuant to this paragraph need not be surveyed, so long as all areas where differential settlement was visually identifiable prior to regrading can be relocated. Such notation and delineation shall be made by, or under the supervision of, a California registered professional civil engineer or registered geologist.

13. Throughout the post closure maintenance period, the Discharger shall [Section 21090 (c), Title 27 CCR]:
 - a. Maintain the structural integrity and effectiveness of all containment structures, and maintain the final cover as necessary to correct the effects of settlement or other adverse factors;
 - b. continue to operate the leachate collection and removal system as long as leachate is generated and detected;
 - c. maintain monitoring systems and monitor the ground water, surface water, and the unsaturated zone in accordance with applicable requirements of Article 1, Chapter 3, Subchapter 3, Subdivision 1 (Section 20380 et seq.);
 - d. prevent erosion and related damage of the final cover due to drainage; and
 - e. protect and maintain surveyed monuments.
14. The Discharger shall provide proof to the Board within sixty days after completing final closure that the deed to the landfill 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 as a municipal solid waste landfill;
 - 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 landfill; 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.
15. The Discharger shall obtain and maintain adequate assurances of financial responsibility for closure and corrective action for all known and reasonably foreseeable releases from a WMU at the facility in accordance with Sections 20380(b), 20950, 22210, 22211, 22212, 22220, 22221, and 22222 of Title 27 CCR.
16. By July 1, 2004, 2009, and every five years thereafter, for the term of this permit, the Discharger shall provide as part of the Annual Monitoring Report an updated post-

closure costs and corrective action cost estimate to the Regional Water Board for review. The Discharger shall demonstrate to the CIWMB and report to the Regional Water Board that it has established an acceptable financial assurance mechanism described in Section 22228, Title 27 CCR in at least the amount of the cost estimate approved by the Executive Officer. The Executive Officer may delete the requirement of submitting updated costs estimates, with the exception of inflation adjustments, upon finding that further corrective action is unlikely and post-closure costs are likely remain constant.

17. The Discharger is required to update approved cost estimates annually to account for inflation in accordance with Section 22236, Title 27 CCR.
18. In the event the Regional Water Board determines that Siskiyou County has failed to pay or is failing to perform corrective action as required by law, the California Integrated Waste Management Board may direct Siskiyou County to pay from the pledged revenue such amounts as necessary to ensure sufficient corrective action. Siskiyou County shall be obligated to use such funds for corrective action in accordance with the directive of the Regional Water Board.
19. The Discharger shall maintain waste containment facilities and precipitation and drainage control systems throughout the post-closure maintenance period. The Discharger shall immediately notify the Regional Water Board of any flooding, equipment failure, slope failure, or other change in Site conditions that could impair the integrity of waste or leachate containment facilities or of precipitation and drainage control structures.
20. The Discharger shall continue to monitor each WMU, surface drainage, and underlying media throughout the post-closure maintenance period per Monitoring and Reporting Program No. R1-2002-0055. Monitoring shall continue until the Regional Water Board determines that the Site no longer threatens water quality.
21. The Discharger or persons employed by the Discharger shall comply with all notice and reporting requirements of the State Department of Water Resources with regard to the construction, alteration, destruction, or abandonment of all monitoring wells used for compliance with this Order or with Monitoring and Reporting Program No. R1-2002-0055, as required by Sections 13750 through 13755 of the CWC.
22. Monitoring points and Points of Compliance for surface water and groundwater shall be as listed in the Monitoring and Reporting Program No. R1-2002-0055 for the Site.
23. By December 2002, December 2007, December 2012, and by December every five years thereafter, the Discharger shall sample and test leachate from the leachate monitoring well, or MW-3 in the event a leachate sample cannot be obtained, for all Subtitle D Appendix II constituents. The Discharger shall submit to the Regional Water Board, by the next Annual Monitoring Report following the leachate sampling, an

evaluation of existing data, proposed background concentrations for each compound in each media monitored and proposed revision to the self monitoring program, if necessary.

24. Monitoring parameters at any given compliance well that are in Detection Mode shall require statistical or nonstatistical data analysis. Monitoring parameters at any given compliance well that are in Tracking Mode shall require concentration versus time plots. [Sections 258.55 and 258.57, Title 40 CFR and Section 20425, Title 27 CCR]
25. The Discharger shall report, in writing, to the Regional Water Board any changes in compliance status of monitoring parameters within 14 days of verification.
26. The Discharger shall report, in writing, to the Regional Water Board on the effectiveness of the corrective action program. The Discharger shall submit these reports at least semi annually. More frequent reporting shall be required by the Regional Water Board as necessary to ensure the protection of human health or the environment. [Section 20430(h), Title 27 CCR]
27. If the Discharger determines that the corrective action program does not satisfy the requirements of Section 20430, Title 27 CCR, the Discharger shall within 90 days of such a determination, submit an amended ROWD to the Regional Water Board to make any appropriate changes to the program.
28. Any time the Regional Water Board determines the corrective action program does not satisfy the requirements of Section 20430, Title 27 CCR the Regional Water Board shall send written notification of such a determination to the Discharger by certified mail, return receipt requested. The Discharger shall within 90 days after receipt of notification by the Regional Water Board, submit an amended ROWD to make any appropriate changes to the program.

Compliance Time Schedule

29. Pursuant to Section 13267(b) of the CWC, The Discharger shall complete the tasks outlined in these waste discharge requirements and the attached monitoring and Reporting Program No. R1-2002-0055 in accordance with the following time schedule:

Action	Compliance Date
The Discharger shall submit a work plan for leachate monitoring and well installation for review and approved by the Regional Water Board prior to installation.	August 12, 2002
The Discharger shall record a detailed description of the Site at the Siskiyou County Recorder's Office in accordance with the Site's Closure Plan. The description shall include the date of closure completion; the boundary of the closure site; location of the closure site; post-closure maintenance Plans; deed restrictions	August 30, 2002

regarding future use of the Site (per PROVISION D. 13); a map of the closed fill. Copies of the recorded documents shall be submitted to the Regional Water Board.	
The Discharger shall install a minimum of one leachate detection well. The well placement and depth shall be selected to monitor the deepest portion of the waste prism. The well shall use a minimum four-inch diameter casing to allow interim leachate extraction, if required to maintain less than one-foot of head in the WMU.	September 30, 2002
The Discharger shall submit a slope stability analysis to the Regional Water Board performed in accordance with Section 21750(f)(5), Title 27 CCR.	December 31, 2002
The Discharger shall submit a report proposing the data analysis method to be used for naturally occurring COCs. The proposed method shall meet the requirements of Section 20415(e)(7), Title 27 CCR.	December 31, 2002
The Discharger shall submit a leachate management plan. The plan shall provide justification as to its recommendations for status of the LCRS. If any construction is proposed, the leachate management plan shall include construction plans and a schedule for approval by the Executive Officer.	May 5, 2003

30. The Discharger shall notify the Regional Water Board in writing of any proposed change of ownership or responsibility for construction, operation, closure or post-closure maintenance of the WMU. This notification shall be given prior to the effective date of the change and shall include a statement by the new Discharger that construction, operation, closure, and post-closure maintenance will be in compliance with any existing waste discharge requirements and any revisions thereof. The Regional Water Board shall amend the existing Waste Discharge Requirements to name the new Discharger.
31. After notice and opportunity for hearing, this Order may be terminated or modified for cause, including but not limited to:
 - a. Violation of any term or condition in this Order;
 - b. obtaining this Order by misrepresentation, or failure to disclose fully all relevant facts; and
 - c. a change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
32. The Discharger shall remove and relocate any wastes discharged at this Site in violation of this Order.

33. Severability

Provisions of these waste discharge requirements are severable. If any provision of these requirements is found invalid, the remainder of these requirements shall not be affected.

34. Operation and Maintenance

The Discharger shall maintain in good working order and operate as efficiently as possible any facility or control system installed by the Discharger to achieve compliance with the waste discharge requirements.

35. Change in Discharge

The Discharger shall promptly report to the Regional Water Board any material change in the character, location, or volume of the discharge.

36. Signatory Requirements

- a. All applications, reports, or information submitted to the Regional Water Board Executive Officer shall be signed by either a principal executive officer, ranking elected official, or a responsible corporate officer. For purposes of this provision, a responsible corporate officer means:
 - i. a president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation; or
 - ii. the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- b. Reports required by this Order, other information requested by the Regional Water Board, and Permit applications submitted for Group II storm water discharges under 40 CFR 122.26(b)(3) may be signed by a duly authorized representative provided:
 - i. The authorization is made in writing by a person described in paragraph (a) of this provision;
 - ii. 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 well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company; and

iii. the written authorization is submitted to the Regional Water Board prior to or together with any reports, information, or applications signed by the authorized representative. [40 CFR 122.22(b)(c)]

c. Any person signing a document under paragraph (a) or (b) of this provision shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted, is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations." [40 CFR 122.22(d)]

37. Change in Ownership

In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the Discharger, the Discharger shall notify the succeeding owner or operator of the following items by letter, a copy of which shall be forwarded to the Regional Water Board:

- a. existence of this Order, and
- b. the status of the Dischargers' annual fee account.

38. Vested Rights

This Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, nor protect the Discharger from his liability under federal, state, or local laws, nor create a vested right for the Discharger to continue the waste discharge.

39. Inspections

The Discharger shall permit authorized staff of the Regional Water Board:

- a. Entry upon premises in which a waste source is located or in which any required records are kept;
- b. access to copy any records required to be kept under terms and conditions of this Order;
- c. inspection of monitoring equipment or records; and
- d. sampling of any discharge.

40. Noncompliance

In the event the Discharger is unable to comply with any of the conditions of this Order due to:

- a. breakdown of waste treatment equipment;
- b. accidents caused by human error or negligence; or
- c. other causes such as acts of nature;

the Discharger shall notify the Executive Officer by telephone as soon as it or its agents have knowledge of the incident and confirm this notification in writing within two weeks of the telephone notification. The written notification shall include pertinent information explaining reasons for the noncompliance and shall indicate the steps taken to correct the problem and the dates thereof, and the steps being taken to prevent the problem from recurring.

41. Accidental Spills, Incident Reporting and Monitoring

The Discharger shall comply with the Contingency Planning and Notification Requirements Order No. 74-151 and the Monitoring and Reporting Program No. R1-2002-0055 and any modifications to these documents as specified by the Executive Officer. Such documents are attached to this Order and incorporated herein. Chemical, bacteriological, and bioassay analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health Services.

- a. Order No. 74-151 requires immediate incident reporting of unintentional or accidental spills (including Emergency Response actions) and diligent action to abate the effects of the discharge. Written confirmation of the incident is required within two weeks of notification.
- b. General Monitoring and Reporting Provisions require sampling and analysis performance criteria in addition to compliance reporting criteria and timeframes.

42. Revision of Requirements

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

43. This Regional Water Board requires the Discharger to file a report of waste discharge at least 120 days before making any material change or proposed change in the character, location, or volume of the discharge.

Certification

I, Susan A. Warner, 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, North Coast Region, on June 27, 2002.

Susan A. Warner
Executive Officer

(hcswdswdr2002)