

California Regional Water Quality Control Board
North Coast Region

ORDER NO. R1-2004-0032
ID NO. 1A74141OSIS

WASTE DISCHARGE REQUIREMENTS

FOR

CLOSURE OF
CITY OF TULELAKE, SISKIYOU COUNTY DEPARTMENT OF PUBLIC WORKS
SHEEPY RIDGE 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 City of Tulelake and Siskiyou County Department of Public Works, (hereinafter Discharger) operated the Sheepy Ridge Landfill (Site), a Class III Solid Waste Disposal Site (SWDS) on approximately 15 acres of a 150 acre parcel, owned by the City of Tulelake. Siskiyou County Department of Public Works has been operating the Site since 1986. The disposal site has been in operation since 1974 and was operated as a trench fill.
2. The Discharger submitted the Joint Technical Document (JTD) package dated February 10, 2004 including the *Final Closure and Post Closure Maintenance Plan* (Closure Plan) by CH2MHill dated December 2003 for the closure of the post-1986 landfill footprint. An updated JTD index and closure plan amendments were submitted on May 10, 2004. A site plan showing historic waste footprints was submitted electronically on April 27, 2004 and a workplan addendum for updating groundwater and landfill gas monitoring was submitted on May 28, 2004. The Closure Plan addresses closure of 9.18 acres that received waste between 1986 and 2000, while operated by Siskiyou County.
3. The remaining waste management units (WMU) stopped receiving waste in 1986 and the trenches have been covered with native soil. This Order does not address those areas, but does not preclude the Regional Water Board from requiring further closure activities on these older WMUs, per current standards, at a later date.
4. The Site is located one-half mile south of State Line Road (State Route 161), approximately six miles west of Tulelake, California, in the West ½ of Section 23 and Southeast ¼ of Section 22, Township 48 North, Range 3 East, of the Mount Diablo Base Meridian in Siskiyou County, as shown on Attachments "A", "B", "C", and "D," incorporated herein and made part of this order. The Site latitude and longitude are 41° 59' 33" North and 121° 35' 47" West, respectively. The Site comprises Siskiyou County Assessor's Parcel Number 001-010-110.

5. The Regional Water Board first regulated the City of Tulelake Sheepy Ridge Solid Waste Disposal Site by adopting Waste Discharge Requirements (WDRs) under Order No. 74-141, on July 19, 1974. The Order classified the northeast portion of the Site as a Class II-1 disposal area, suitable for special wastes such as triple-rinsed pesticide containers, and the remainder of the Site as a Class II-2, suitable for municipal refuse under the prevailing regulations of the time. The landfill classification system was later modified and Class II-1 and II-2 landfills became Class III landfills under the revised nomenclature.

Information in the 1988 Solid Waste Assessment Test (SWAT) report, Discharger monitoring reports, and Regional Water Board staff observations indicated that portions of the Site may not conform to the siting criteria for five feet of separation between the waste and groundwater. Thus, in 1989, Regional Water Board staff drafted and the Regional Water Board adopted Order No. 89-74, rescinding Order No. 74-141 and limiting the Class III waste disposal to portions of the Site where the trench bottom would be a minimum of five feet above groundwater.

On September 27, 1993, the Regional Water Board adopted Order No. 93-83, General WDRs for Municipal Solid Waste Landfills, which amended existing requirements for municipal solid waste landfills throughout the Region, including those for the City of Tulelake Sheepy Ridge SWDS. Thus, discharges at the site are presently governed both by Order No. 89-74 and by General WDRs Order No. 93-83.

6. The Site has been operated as a landfill under WDRs since 1974. The City of Tulelake's waste disposal prior to 1974 occurred on a parcel located directly north of the present Site, and currently owned by Siskiyou County, as documented in the 1974 Report on Proposed City of Tulelake Solid Waste Disposal Area. Between 1974 and 1986, two WMU areas on the landfill property were used for waste trenches. After 1986, the WMU area was limited to an area on the east of the Site, based on the groundwater elevation data. These various waste footprints are shown on Attachment B.
7. The landfill ceased accepting solid waste June 30, 2000, and the Discharger has constructed a transfer station on the Site to the northwest of the post-1986 landfill waste footprint. When in operation, the landfill accepted residential and commercial non-hazardous and inert solid waste. Between 1974 and 1989, the landfill had received an estimated 143,000 cubic yards of waste, and was receiving approximately nine tons of waste per day. In 1993, it was estimated that the landfill received an average of 2,372 tons annually (*Report of Waste Discharge*, CH2MHill, September 1993). Final closure contours for the Site are described in the *Final Closure and Post-closure Maintenance Plan* by CH2MHill, dated December 2003, as shown on Attachment D.
8. The total Site area is 150 acres, with approximately 15 acres used for waste disposal.
9. The post-1986 disposal WMU area, as delineated in Attachments B and D, meets the criteria contained in Title 27, California Code of Regulations (CCR), for a Class III landfill for non-hazardous solid wastes.

10. The landfill is not lined and does not have a leachate collection and recovery system (LCRS). To date, leachate seeps have not been detected downgradient of the landfill.
11. Postclosure land use for the Site is undeveloped, non-irrigated open space. A nonhazardous solid waste transfer station has been constructed northwest of the post-1986 landfill footprint. Other public, private, or County use of the Site is not planned. The existing WMUs and on-site transfer station facilities are shown in Attachments B and C. Transfer station operations will not occur over closed WMUs.
12. 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 City of Tulelake Sheepy Ridge SWDS.
13. Effective July 18, 1997, the Water Quality Regulations for Class II and Class III disposal facilities formerly contained in Chapter 15, Title 23, 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.

SITE DESCRIPTION

14. The Site is accessed by a gravel road one-half mile south of State Line Road (State Route 161), off of Lower Klamath Lake Road. The property is on a slightly sloping area of the valley west of Sheepy Ridge, approximately one mile from the east shore of White Lake. Surface elevations at the Site range from 4,080 to 4,120 feet above mean sea level.
15. A locked gate secures the Site during non-operating hours. Land use in the vicinity of the City of Tulelake Sheepy Ridge Landfill is primarily open space, range, wildlife refuge, and irrigated agriculture, with both private and government ownership. There is also a campground/recreational vehicle facility approximately one-half mile northeast of the Site. There are no permanent structures onsite, and no permanent structures offsite, for approximately one mile.

SURFACE WATER

16. The Site is located at least a quarter mile from the nearest surface water. There is an irrigation canal approximately one quarter mile to the west of the Site, White Lake is approximately one mile to the west of the Site, and the Van Brimmer Canal is approximately one mile to the northeast of the Site. There are no established surface drainage patterns across the Site, and perimeter drainage ditches provide run-on control.
17. The Site is located within the Lower Klamath Lake watershed of the Mt. Dome Hydrologic Subarea of the Lost River Hydrologic Area, within the Klamath River Hydrologic Unit. The Klamath River discharges directly into the Pacific Ocean.

18. The beneficial uses of the Lower Klamath Lake watershed include:
 - a. agricultural supply
 - b. freshwater replenishment
 - c. water contact recreation
 - d. noncontact water recreation
 - e. commercial and sport fishing
 - f. warm freshwater habitat
 - g. wildlife habitat
 - h. preservation of rare, threatened or endangered species
 - i. aquaculture

19. The Mt. Dome Hydrologic Subarea of the Lost River Hydrologic Area, within the Klamath River Hydrologic Unit, is listed as an impaired water body for nutrients and temperature, pursuant to Section 303(d) of the Clean Water Act. At this time, Total Maximum Daily Loads have not been established to address nutrients and temperature loadings. Given that these WDRs prohibit the Site from discharging waste, 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 and temperature levels in the Lower Klamath Lake watershed.

20. The Site is not located within a 100-year floodplain.

STORM WATER

21. 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. The City of Tulelake Sheepy Ridge SWDS's NPDES Permit No. 1A47S005360 was terminated on May 15, 1995.

22. Storm water from the Site is controlled by a series of drainage trenches that direct storm water away from the Site. There are no established surface drainage patterns across the Site and the arid climate results in little or no runoff. Storm water flows would be west towards the irrigation ditch or White Lake.

23. The mean annual precipitation for the area is approximately 10.76 inches per year. The 100-year, 24-hour precipitation event, based on intensity-duration frequency curves, is 2.04 inches. The 25-year, 10 minute precipitation event, based on intensity-duration frequency curves, is 0.37 inches. This information is based on regional weather station information from the National Weather Service's Climatological Station Number 9053-Tulelake.

SITE GEOLOGY

24. The geologic units within the Site are Quaternary lake deposits, bordered to the east by undivided Pliocene nonmarine deposits, with the Tertiary volcanic deposits of Sheepy Ridge east of the Site. The Site is located on the east edge of a fault-bound large basin dominated by the Lower Klamath Lake. The Site lies on a fault block of Pliocene lake beds that have received colluvial sediments from Sheepy Ridge. Sediments underlying the landfill are generally classified as light brown silty sands with clays.
25. There are no known Holocene faults at or in the vicinity of the City of Tulelake Sheepy Ridge Landfill. The Site is not within an Alquist-Priolo Special Studies Zone. A fault runs nearly adjacent to the eastern Site boundary but is not a Holocene fault and is not thought to be active. The nearest potentially active fault is the Likely Fault, located approximately 42 miles southeast of the Site.

GROUNDWATER

26. On June 5, 1988 the Discharger submitted a Solid Waste Assessment Test (SWAT) report describing a groundwater monitoring network installed at the landfill in 1987. Three wells, MW 87-1, MW 87-2, and MW 87-3, were installed from depths of 24 to 65 feet below ground surface in the first encountered unconfined groundwater. Test Boring 87-1 was installed near the Site entrance, but was not completed as a well, because no water was encountered prior to reaching basalt bedrock at 19.5 feet below ground surface. Two other wells, the Upper Well and Lower Well, were thought to be installed in the mid- 1970s. The only information known about these wells are the total depths, 40 and 19 feet below ground surface, respectively.
27. The Upper Well will be destroyed to allow cap construction, Well MW 87-2 was found to be damaged in December 2003 and will be destroyed, and the Lower Well does not meet current monitoring well construction standards. These three wells will be replaced by new wells, and the two wells will be destroyed during the 2004 construction season. The Lower Well will continue to be used as a piezometer to monitor groundwater elevation.
28. Groundwater movement is in an east or north to northwesterly direction with directions changing seasonally, and the volcanic formations of Sheepy Ridge are thought to form a groundwater divide. Horizontal gradients appear to be approximately 0.002. Based on the expected groundwater movement, Wells MW 87-1, MW 87-2, and the Upper Well are in a downgradient direction and the Lower Well and MW 87-3 are in an upgradient direction. Proposed Wells MW-4, MW-5, and MW-6 will be in a downgradient direction. The locations of these wells are shown on Attachment C.

29. In addition to the Site's monitoring wells, there are four water wells within one mile of the Site: the Conway Well, the Sheepy Ridge Campground Well, the Kitiwkat Irrigation Well, and a well at an abandoned house one-half mile north of the site. The Conway and Sheepy Ridge Campground Wells are thought to be on the other side of the Sheepy Ridge groundwater divide. The other two wells were thought to be upgradient of the waste. The Discharger has not had any of these wells tested.
30. There are no springs on the Site or within one mile of the Site perimeter.
31. Beneficial uses of areal groundwaters include:
 - a. domestic water supply
 - b. agricultural water supply

LANDFILL GAS

32. Landfill gas was monitored using an on-site gas instrument at four probes along the property boundaries. No gas had been detected at these probes since 1994. Attempts to find these probe locations after grading for interim cover failed. Five new gas monitoring wells will be installed during the 2004 construction season. Gas wells GM-1 and GM-5 will have probes screened at 5 to 10 and 25 to 30 feet below ground surface; GM-2 will have probes screened at 5 to 10 and 15 to 20 feet below ground surface; and GM-3 and GM-4 will have a probe screened from 5 to 10 feet below ground surface. The proposed well locations are shown on Attachment C.
33. A gas collection and passive vent system will be installed during the landfill final cover installation.

CLOSURE AND FINANCIAL ASSURANCES

34. Since the City of Tulelake Sheepy Ridge SWDS was not closed prior to the federal deadline (October 9, 1991), the closure requirements of Subtitle D apply.
35. Sections 20950(f) and 20380(b), Title 27, CCR require that the Discharger establish a formal financial mechanism to fund Site closure and remediation of the known or reasonably foreseeable release from the facility. Siskiyou County has a fully funded Trust Fund with the California Integrated Waste Management Board for Closure and Postclosure Maintenance at the City of Tulelake Sheepy Ridge SWDS. The Site does not currently have an established financial assurance mechanism for remediation of known or reasonably foreseeable releases. The Compliance Time Schedule under **D. PROVISIONS** requires Siskiyou County to prepare a cost estimate for remediation of the known or reasonably foreseeable release, for Regional Water Board approval, and to obtain an approved financial assurance mechanism, per Sections 20380(b), 20950, 22210, 22211, 22212, 22220, 22221, and 22222 of Title 27, CCR.

36. The Discharger is required to update approved cost estimates annually to account for inflation.
37. Plans for final closure activities are described in the report entitled *Final Closure and Post-closure Maintenance Plan, Tulelake Landfill*, dated December 2003, with a May 10, 2004 addendum prepared by CH2MHill. Closure will be conducted in accordance with the Construction Quality Assurance Plan contained in the Closure Plan.
38. The landfill cap consists of a two foot minimum thickness foundation layer, overlain by a 60-mil textured high-density polyethylene (HDPE) geomembrane barrier layer, overlain by a two foot minimum thickness vegetation layer. The foundation and vegetation layers will be excavated from on-site borrow areas. The foundation layer will be compacted to 90 percent relative compaction.
39. The barrier layer of HDPE geomembrane is an alternative to the barrier layer required by Section 21090(a) of Title 27, CCR. The proposed engineered alternative cover meets the performance demonstration in Section 20080(b) of Title 27, CCR. There is no suitable clay source at or near the Site and the arid environment would leave the prescriptive barrier layer at risk of desiccation damage. The geomembrane will also discourage burrowing animals from breaching the cap. The proposed alternative barrier layer is expected to meet or exceed the performance of the minimum prescriptive standard barrier layer, and to minimize the amount of necessary long-term cap maintenance. The closure grades for the cap are shown in Attachment D.
40. The final cap surface is sloped to promote drainage away from the waste footprint. The cap surface has been designed to have a minimum of three percent and a maximum of ten percent slope within the limit of waste and to maintain a minimum of one percent slope outside of the waste limits. The Discharger will make improvements on a drainage swale on the east side of the waste in order to provide run-on control. Erosion control efforts consisting of seeding the vegetative layer will occur at the end of construction.
41. Closure construction will include the installation of gas collection trenches and a passive vent system. Two survey monument control points will be established off of the waste footprint, and two settlement monuments will be established on the waste footprint to monitor settlement. The gas system and settlement monuments are shown on Attachment D.
42. A closure report prepared and certified by the Construction Quality Assurance (CQA) Officer must be submitted under penalty of perjury to the Regional Water Board and other appropriate agencies. The report, at a minimum, will include the certificate of closure; daily summary reports; material acceptance reports; final CQA documentation; laboratory testing results; field testing results; and an

as-built topographic map of the capped area, prepared at a scale of one-inch to 100 feet, with a contour interval of one foot.

PROCEDURAL REQUIREMENTS AND OTHER CONSIDERATIONS

43. The Siskiyou County Public Works Department prepared and approved a Negative Declaration for the work proposed in the December 2003 *Final Closure and Post-closure Maintenance Plan, Tulelake Landfill* on January 9, 2004, to satisfy the requirements of the California Environmental Quality Act (CEQA). The Regional Water Board, acting as a responsible agency under CEQA, has considered this Negative Declaration pursuant to Title 14, California Code of Regulations, Section 15096.
44. 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.
45. The Basin Plan includes water quality objectives and receiving water limitations.
46. The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge, and has provided them with an opportunity to submit their written comments and recommendations.
47. The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge.
48. 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 WDRs Order No. 89-74 is rescinded and General Order No. 93-83 is amended to delete City of Tulelake Sheepy Ridge 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, fire control, and the establishment and maintenance of vegetation.
3. The Discharger shall not cause the concentration of any Constituent 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 and 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 at this facility is prohibited.
5. The discharge of wastes, including leachate, solids, 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 portion of storm water control system 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. R1-2004-0032.

2. Leachate collection and removal systems shall be operated so as to minimize the buildup of leachate in the landfill and to ensure that wastes in the landfill are not saturated.
3. Any leachate generated and collected at the Site shall be handled and disposed of in a manner approved by the Executive Officer of the Regional Water Board. (Executive Officer).
4. Materials used to construct or to 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.
5. Surface drainage from tributary areas or internal site drainage shall not contact or percolate through wastes discharged at the Site.
6. Precipitation and drainage control systems for storm water runoff 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 flows from a 25-year, 24-hour storm event.
7. 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.
8. 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, so 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.
9. 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 October 15, 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 to prevent the use of inferior products and/or materials that do not meet the approved design plans and specifications.
3. Materials used for final cover construction 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 information 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 a 60-mil textured high-density polyethylene (HDPE) geomembrane barrier layer with a hydraulic conductivity of less than 1×10^{-6} centimeters per second, overlain by two feet of vegetative layer. The foundation layer will be compacted to 90 percent relative compaction. 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 exceed 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. Appropriate documents will be maintained by the Discharger, and provided at the request of the Executive Officer, to document that supervision.
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. R1-2004-0032, incorporated herein by reference. A violation of the Monitoring and Reporting Program is a violation of these WDRs.
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 WDRs.
4. The Discharger may file a written request, including appropriate supporting documents, with the Executive Officer proposing modifications to Monitoring and Reporting Program No. R1-2004-0032. The Discharger shall implement any changes in the revised Monitoring and Reporting Program upon receipt from the Executive Officer 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 to 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, any 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 next 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. By October 15, annually, the Discharger shall submit a report to the Executive Officer describing measures taken to comply with this provision.
10. Prior to any construction, the Discharger shall obtain any and all permits required under federal, state, or local laws.
11. During times of active closure construction or any periods of repair to the waste containment, drainage, or monitoring facilities, legible copies of the daily CQA field notes and summary reports shall be submitted to the Regional Water Board via facsimile at (707) 523-0135 by noon the following weekday. The facsimile shall be addressed to the Regional Water Board, Land Disposal Unit, and include the name of the staff person assigned to the Site.
12. A closure report prepared and certified by the Construction Quality Assurance (CQA) Officer shall be prepared and submitted, under penalty of perjury, to the Regional Water Board and other appropriate agencies in accordance with Sections 20324(c), 20324(d), and 21880, Title 27, CCR. The report, at a minimum, shall include the certificate of closure; daily summary reports; material acceptance reports; final CQA documentation; laboratory testing results; field testing results; and an as-built topographic map of the capped area, prepared at a scale of one-inch to 100 feet, with a contour interval of one foot.

13. By January 2010, January 2015, and at least every five years thereafter, 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 to be submitted in the 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 in the Closure Report, but showing the current topography of the final cover, and featuring overprinted isopleths indicating the total settlement to date. Land surveying to a one-foot contour interval rather than aerial surveying may be substituted to produce the iso-settlement map [Section 21090 (e) (2), Title 27, CCR].
14. 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.
15. 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.

16. The Discharger shall provide proof to the Regional Water 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, the responsibility for carrying out such work falls to the property owner.
17. 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.
18. By January 15, 2005, 2010, 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 cost estimates, with the exception of inflation adjustments, upon finding that the need for further corrective action is unlikely and that post-closure costs are likely to remain constant.
19. The Discharger is required to update approved cost estimates annually to account for inflation, in accordance with Section 22236, Title 27, CCR.
20. In the event that 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 are 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.
21. 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.

22. The Discharger shall continue to monitor each WMU, surface drainage, and underlying medium throughout the post-closure maintenance period, per Monitoring and Reporting Program No. R1-2004-0032. Monitoring shall continue until the Regional Water Board determines that the Site no longer threatens water quality.
23. 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. R1-2004-0032, as required by Sections 13750 through 13755 of the CWC.
24. Monitoring points and Points of Compliance for groundwater and landfill gas shall be as listed in the Monitoring and Reporting Program No. R1-2004-0032 for the Site. Leachate, if encountered, shall be sampled in accordance with Monitoring and Reporting Program No. R1-2004-0032.
25. If the Discharger determines that there is measurably significant evidence of a release from the WMUs, as defined in Section 20164, Title 27, CCR, the Discharger:
 - a. shall immediately notify the Regional Water Board verbally and take all necessary corrective actions. Written notification by certified mail shall be provided within 7 days of occurrence. [Section 20420(j)(1), Title 27, CCR]
 - b. can immediately initiate the verification procedure pre-approved by the Regional Water Board to verify the release. [Section 20420(j)(2), Title 27, CCR]
26. Immediately following detection of a release, or after completion of the retest, the Discharger:
 - a. Shall immediately sample all Monitoring Points in the affected medium at the WMUs and determine the concentration of all COCs. [Section 20420(k)(1), Title 27, CCR]
 - b. Within 90 days of determining measurably significant evidence of release, submit an amended ROWD to establish an evaluation monitoring program, in accordance with Section 20420(k)(5), Title 27, CCR.
 - c. Within 180 days of verifying measurably significant evidence of a release from a WMU, submit an engineering feasibility study for a corrective action program. The corrective action program shall, at a minimum, meet the requirements of Section 20430, Title 27, CCR. [Section 20420(k)(6), Title 27, CCR]

27. The Regional Water Board may make an independent finding that there is a measurably significant evidence of release. The Regional Water Board shall send written notification of such a determination to the Discharger by certified mail, return receipt requested. The Discharger shall comply with all provisions of Section 20420, Title 27, CCR and Provisions in this Order that are required in response to a measurably significant evidence of release.
28. The Discharger shall report to the Regional Water Board by certified mail the results of both the initial statistical test and the results of the verification procedure, as well as all concentration data from samples collected for use in these tests within seven days of the last laboratory analysis of the samples collected for the verification procedure. [Section 20415(e)(8)(E)(6), Title 27, CCR]
29. If the Discharger verifies that there has been a measurably significant release from the WMUs, the Discharger may demonstrate that a source other than the WMUs caused the evidence of a release or that the evidence is an artifact caused by an error in sampling, analysis or the data analysis protocol. [Section 20420(k)(7), Title 27, CCR] The Discharger may make this demonstration in addition to or in lieu of submitting an amended ROWD and an engineering feasibility study pursuant to Section 20420(k)(5), Title 27, CCR and Section 20420(k)(6), Title 27, CCR. The Discharger is not relieved of the requirements specified in Sections 20420(k)(5) and (k)(6), Title 27, CCR unless the demonstration report is accepted by the Executive Officer. In making a demonstration, the Discharger shall:
 - a. Within 7 days of determining measurably significant evidence of a release, submit a report to the Regional Water Board by certified mail stating that the Discharger intends to make a demonstration pursuant to Section 20420(k)(7)(A), Title 27, CCR.
 - b. Within 90 days of determining measurably significant evidence of a release, submit a report to the Regional Water Board that demonstrates that a source other than the WMU caused the apparent release. [Section 20420(k)(7)(B), Title 27, CCR]
 - c. Within 90 days of determining measurably significant evidence of a release, submit an amended ROWD to make any appropriate changes to the detection monitoring program. [Section 20420(k)(7)(C), Title 27, CCR]
30. If the Discharger determines that there is significant physical evidence of a release, as described in Section 20385(a)(3), Title 27, CCR, or that the detection monitoring program does not meet the requirements of Section 20420, Title 27, CCR, the Discharger shall:
 - a. notify the Regional Water Board by certified mail within 7 days of such a determination [Section 20420(l)(1), Title 27, CCR]; and

- b. within 90 days of such a determination, submit an amended ROWD to the Regional Water Board to make any appropriate changes to the program [Section 20420(1)(2), Title 27, CCR]
31. Any time that the Regional Water Board determines that the detection monitoring program does not satisfy the requirements of Section 20420, 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. [Section 20420(m), Title 27, CCR]

Compliance Time Schedule

32. Pursuant to Section 13267(b) of the CWC, the Discharger shall complete the tasks outlined in these WDRs and the attached Monitoring and Reporting Program No. R1-2004-0032, in accordance with the following time schedule:

Action	Compliance Date
The Discharger shall submit a completion report for the monitoring system changes.	October 29, 2004
The Discharger shall prepare cost estimates for the known and foreseeable release and proposal for funding mechanism for Regional Water Board approval.	January 15, 2005
The Discharger shall obtain a financial assurance mechanism for remediation of the known and reasonably foreseeable release.	June 30, 2005

33. 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 performed in compliance with any existing WDRs and any revisions thereof. The Regional Water Board shall amend the existing WDRs to name the new Discharger.
34. 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; or

- c. a change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

35. The Discharger shall remove and relocate any wastes discharged at this Site in violation of this Order.

36. Severability

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

37. 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 WDRs.

38. 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.

39. 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, 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 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.

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. 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 Discharger's annual fee account.

41. 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.

42. 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. to inspect monitoring equipment or records; and
- d. to sample any discharge.

43. 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 shall 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.

44. 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. R1-2004-0032 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.

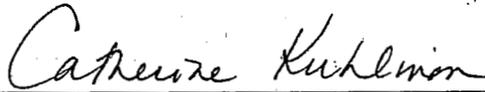
45. Revision of Requirements

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

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

Certification

I, Catherine E. Kuhlman, 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 23, 2004.



Catherine E. Kuhlman
Executive Officer

California Regional Water Quality Control Board
North Coast Region

MONITORING AND REPORTING PROGRAM NO. R1-2004-0032

FOR

CITY OF TULELAKE, SISKIYOU COUNTY DEPARTMENT OF PUBLIC WORKS
SHEEPY RIDGE LANDFILL CLASS III SOLID WASTE DISPOSAL SITE

Siskiyou County

The Discharger shall maintain water quality monitoring systems that are appropriate for detection monitoring and corrective action, and that comply with Subchapter 3, Chapter 3, Subdivision 1, Division 2, Title 27, CCR, and any other applicable provisions therein.

Compliance with this Monitoring and Reporting Program (MRP), and with the companion Standard Provisions and Reporting Requirements, is ordered by Waste Discharge Requirements (WDRs) Order No. R1-2004-0032, and under the authority of California Water Code Section 13267(b). Failure to comply with this MRP, or with the General Monitoring and Reporting Requirements, constitutes non-compliance with the WDRs and with Division 7 of the California Water Code, which can result in the imposition of civil monetary liability.

I. REPORTING

The Discharger shall report monitoring data and information as required in this Monitoring and Reporting Program, and as required in the General Monitoring and Reporting Requirements. Reports which do not comply with the required format will be rejected, and the Discharger shall be deemed to be in noncompliance with the WDRs.

A narrative discussion of the monitoring results, including notations of any water quality violations, or other monitoring results of potential significance to water quality, shall precede tabular summaries of the water quality data. In reporting the monitoring data required by this program, the Discharger shall arrange the data in tabular form so that the date, the constituents, the concentrations, and the units are readily discernible. The data shall be summarized in such a manner as to illustrate clearly the compliance with waste discharge requirements or the lack thereof. Historical and current monitoring data shall be graphed at least once annually and submitted within the Annual Report. Graphs for the same constituent shall be plotted at the same scale to facilitate visual comparison of monitoring data.

The results of any monitoring done more frequently than required at the locations specified herein shall be reported to the Regional Water Board in the monitoring report(s) for that period.

A. REQUIRED REPORTS

1. Detection Monitoring Report

Detection Monitoring Reports (DMRs) shall be prepared and submitted to the Regional Water Board quarterly by the 15th of the month following the quarter. Sampling shall occur in the second month of each quarter. The reports shall include the results of all monitoring programs listed herein. The established monitoring and reporting period is as follows:

<u>QUARTER</u>	<u>PERIOD NO.</u>	<u>REPORTING DATE</u>
January through March	1	April 15
April through June	2	July 15
July through September	3	October 15
October through December	4	January 15 (Annual Report date)

2. Annual Report

An Annual Report, which summarizes the monitoring results for the prior four quarters, shall be submitted to the Regional Water Board by January 15, annually. The report shall contain both tabular and graphical summaries of the detection and corrective action monitoring data and a discussion of the progress toward re-establishment of compliance with WDRs and the Water Quality Protection Standard (WQPS). In lieu of submitting a separate report, the Annual Report information may be included with the November Sampling Detection Monitoring Report. The Annual Report shall include a map showing any areas of differential settlement, highlighting areas of repeat or severe differential settlement. This map shall be made by or under the direction of a professional civil engineer or registered geologist. The Annual Report shall also include a summary of the results of the landfill gas monitoring program.

3. Water Quality Protection Standard Report

As noted above, any changes to the water quality protection standard are to be included in the Annual Report.

4. Five Year Iso-Settlement Map

The Discharger shall produce an iso-settlement map by January 2010, January 2015, and every five years thereafter, until the Executive Officer has determined that differential settlement is unlikely to be of such magnitude as to impair either the Unit's containment features (e.g., final cover) or the free drainage of surface flow. The map shall be submitted to the Regional Water Board with the Annual Report for that year. The iso-settlement map shall accurately depict the estimated total change in elevation of each portion of the final cover's low-hydraulic-conductivity layer. Therefore, 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 produced at closure, 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 produced at closure, but showing the current topography of the final cover, and featuring overprinted isopleths indicating the total settlement to date. This map shall be made by, or under the direction of, a professional civil engineer or registered geologist and shall be stamped and signed.

5. **Annual Erosion Control Report**

By October 15, annually, the Discharger shall submit a report to the Executive Officer describing any measures taken to comply with erosion control requirements. This report may be included in the third quarter DMR. This shall include a description of any erosion control measures implemented, and any necessary construction, maintenance, or repairs of precipitation and drainage control facilities. The Executive Officer may delete the requirement for submitting annual erosion control reports upon finding that no erosion control work is necessary prior to the return of winter rains.

6. **Constituents-of-Concern (COC)**

The results of COC monitoring shall be submitted with, or reported in, the Quarterly Report for the quarter sampling took place.

7. **Notification of Release and Re-test**

For any WMU, if the results of a detection monitoring program shows that there is a measurably significant increase in an indicator parameter or waste constituents over the WQPS at or beyond the points of compliance (i.e., measurably significant evidence of an exceedence or release), the Discharger shall:

- a. immediately notify the Regional Water Board by telephone or fax of the exceedence,
- b. within seven days of the initial findings, follow up with written notification (or acknowledgment of the Regional Water Board's finding),
- c. within 30 days of the initial finding, re-sample for the constituent(s) or parameter(s) at the point where the standard was exceeded, and
- d. within 60 days of the initial finding, submit the results of the re-sampling and statistical analysis, indicating whether or not an exceedence or release was confirmed by the re-test.

8. **Detection of a Release**

Immediately following detection of a release, or after completion of the retest, the Dischargers:

- a. Shall immediately sample all Monitoring Points in the affected medium at the WMUs and determine the concentration of all COCs. [Section 20420(k)(1), Title 27, CCR]

- b. Within 90 days of determining measurably significant evidence of release, submit an amended ROWD to establish an evaluation monitoring program, in accordance with Section 20420(k)(5), Title 27, CCR.
- c. Within 180 days of verifying measurably significant evidence of a release from a WMU, submit an engineering feasibility study for a corrective action program. The corrective action program shall, at a minimum, meet the requirements of Section 20430, Title 27, CCR. [Section 20420(k)(6), Title 27, CCR]

9. **Responding to a Release Discovery**

Upon verifying a measurably significant evidence of a release from a WMU according to Section 20420(j) of Title 27 and Section I.A.7 and I.A.8 of this MRP, the Discharger shall follow the procedures and timeline described in Section 20420(k) of Title 27.

II. MONITORING PROGRAMS

A. ROUTINE MAINTENANCE

The disposal site shall be inspected quarterly. At a minimum, the integrity of the cover material, drainage structures, potential erosion areas, and any leachate facilities shall be inspected. The inspections shall also meet the requirements of the postclosure inspections as described in the Final Closure and Postclosure Maintenance Plan. Inspection logs, problem areas, special occurrences, and corrective actions taken shall be included in the quarterly DMRs. The Discharger may request a decrease in inspection frequency after the site has stabilized.

B. CONSTITUENTS OF CONCERN

Except as otherwise indicated in this Order, the Discharger shall monitor each media of the existing landfill unit for applicable Constituents of Concern (per federal Subtitle D, Appendices I and II and State Water Resources Control Board Resolution 93-62). The monitoring locations, analytical methods, and frequency of analysis are as follows:

1. **Monitoring Locations**

- a. Leachate – If a leachate seep is discovered it shall be sampled for Constituents of Concern (COCs)
- b. Groundwater – Downgradient monitoring wells MW 87-1, MW-4, MW-5, MW-6, and upgradient monitoring well MW 87-3.

2. Monitoring Schedule

**TABLE II. A.
CONSTITUENTS OF CONCERN MONITORING**

<u>Constituents of Concern</u>	<u>Units</u>	<u>Frequency</u>
Carbonate	mg/l	Every 5 years
Bicarbonate Alkalinity	mg/l	Every 5 years
Volatile Organic Compounds (EPA Method 8260)	ug/l	Every 5 years
Semi-Volatile Organic Compounds (EPA Method 8270)	ug/l	Every 5 years
Organochlorine Pesticide, PCBs (EPA Method 8080)	ug/l	Every 5 years
Chlorophenoxy Herbicides (EPA Method 8150)	ug/l	Every 5 years
Organophosphorus Compounds (EPA Method 8141)	ug/l	Every 5 years
Inorganics (dissolved)	mg/l	Every 5 years
MTBE	ug/l	Every 5 years

Groundwater monitoring wells shall be sampled for COCs in the second quarter of 2005, second quarter of 2010, and every five years thereafter. The constituent-by-constituent listings of COCs for each of the above groups are included in Attachment E, which accompanies this Order.

C. LEACHATE MONITORING

1. Monitoring Locations

There are no established leachate monitoring locations. At least once a quarter, as well as after each large storm event, the Discharger shall observe the fill areas to determine if leachate seeps have developed. If leachate is observed, the flow shall be estimated and a representative grab sample shall be collected and analyzed for the COCs, as described in Table. II A. If leachate is not observed, the Discharger shall so note in the quarterly DMRs.

D. GROUNDWATER ELEVATION MONITORING

Groundwater elevations taken prior to purging the well and sampling for Monitoring Parameters shall be used to fulfill the groundwater gradient/direction analyses required. For each monitored groundwater body, the Discharger shall measure the water level in each well, including Lower Well, and shall determine groundwater gradient and direction at least quarterly, including the times of expected highest and lowest elevations of the water level for the respective groundwater body. Groundwater elevations for all upgradient and downgradient wells for a given groundwater body shall be measured within a period of time short enough to avoid temporal variations in groundwater flow which could preclude accurate determination of groundwater gradient and direction. This information shall be included in the quarterly monitoring reports.

III. DETECTION MONITORING

A. GENERAL

The Discharger shall perform Detection Monitoring (per Section 20420, Title 27, CCR) on all media potentially affected by a release, including surface water, groundwater, and the unsaturated zone. For any given monitored medium, a sufficient number of samples shall be taken from all Monitoring Points and Background Monitoring Points to satisfy the data analysis requirements for a given Reporting Period, and samples shall be collected in a manner that ensures sample independence to the greatest extent feasible.

The Discharger shall use a Regional Water Board-approved statistical (or non-statistical) procedure to determine whether there has been a measurably significant increase in a constituent over the water quality protection standard, as set forth in Section 20415(e)(5) of Title 27.

B. UNSATURATED ZONE

The landfill does not currently have any landfill gas monitoring wells. Five new gas monitoring wells, GM-1, GM-2, GM-3, GM-4, and GM-5 will be installed during the 2004 construction season. Monitoring will be conducted at each screened interval by normal accepted practice for landfill gas monitoring probes. The landfill gas extraction vents shall also be monitored quarterly to determine if landfill gas is being extracted from beneath the landfill cap.

Gas well pressure will be measured in all wells prior to sampling, using a water manometer. All sampling will be performed using vacuum pumps designed for gas monitoring, per California Air Resources Board Guidelines. Direct field measurements shall be made for methane, carbon dioxide, oxygen, and nitrogen on a quarterly basis. The temperature, weather conditions, and barometric pressure shall also be reported. In addition, the gas probe screen interval showing the highest levels of methane will have samples taken for either GC or GC/MS laboratory analysis using at least a ten liter sample of soil pore gas (e.g., collected in a vacuum canister) starting the third quarter 2005 and first quarter 2006, then semiannually thereafter.

The results shall be reported to the Regional Water Board in the quarterly DMRs. In addition, any future Landfill Gas Monitoring Reports conducted for the CIWMB and LEA shall be copied to this agency. All Landfill Gas Wells shall be added to the quarterly monitoring program until such time as it is no longer needed and written concurrence is obtained from Regional Water Board staff.

**TABLE III.A.
 UNSATURATED ZONE DETECTION MONITORING PROGRAM**

<u>Parameter</u>	<u>Units</u>	<u>Frequency</u>
<i>Field Parameters</i>		
Well Pressure	Inches H ₂ O	Quarterly
Methane	percent	Quarterly
Carbon Dioxide	percent	Quarterly
Oxygen	percent	Quarterly
Nitrogen	percent	Quarterly
<i>Laboratory Monitoring Parameters</i>		
Methane	percent	Starting 3 rd Quarter 2005, 1 st Quarter 2006 then semiannually. Sample taken at gas probe screen interval with highest methane field readings.
Volatile Organic Compounds (USEPA Method TO-14)	µg/cm ³	Starting 3 rd Quarter 2005, 1 st Quarter 2006 then semiannually. Sample taken at gas probe screen interval with highest methane field readings

C. SURFACE WATER

No surface water samples are collected at the landfill. The landfill does not have any established surface drainage patterns, and perimeter drainage ditches provide run-on control. The landfill is located at least a quarter mile from the nearest surface water. So long as no surface water ponding is permitted to develop, no surface water sampling will be required. Should surface water ponding develop, the Discharger shall include that information and the circumstances surrounding that change, in the next report due to the Regional Water Board.

D. GROUNDWATER

The groundwater surface elevation (in feet and hundredths, M.S.L.) in all wells and piezometers shall be measured on a quarterly basis and used to determine the velocity and direction of groundwater flow. The amount of siltation in all wells and piezometers shall be measured on an annual basis and shall be used to make recommendations for maintenance. Additional monitoring wells shall be added to the program as needed.

1. Monitoring Locations

The landfill currently has five groundwater monitoring wells, MW 87-1, MW 87-2, MW 87-3, Upper Well, and Lower Well. During closure the Upper Well will need to be destroyed because of cap placement and MW 87-2 will be destroyed because it has been damaged. Three new wells, MW-4, MW-5, and MW-6, will be constructed during the 2004 construction season to update the monitoring network. Once the new wells are installed, the Lower Well will be used as a piezometer for groundwater elevations rather than for sampling because the details of the well construction are unknown.

The groundwater monitoring points for City of Tulelake Sheepy Ridge SWDS, shown in Attachment C, are as follows:

Background Monitoring Wells:	MW 87-3
Downgradient Monitoring Wells:	MW 87-1, MW-4, MW-5, and MW-6
Points of Compliance Wells:	MW 87-1, MW-4, MW-5, and MW-6

Water levels shall be monitored quarterly, in compliance with Title 27, CCR. Any additional monitoring wells constructed at the site shall be added to the monitoring network. Samples shall be collected from all installed wells at the frequency and for the parameters specified in Table III.B.

2. Monitoring Schedule

The analytes and frequency of groundwater monitoring is as follows:

**TABLE III.B.
 GROUNDWATER DETECTION MONITORING PROGRAM**

<u>Parameter</u>	<u>Units</u>	<u>Frequency</u>
<i>Field Parameters</i>		
pH	pH units	Quarterly
Specific Conductance	Mhos/cm	Quarterly
Temperature	°C	Quarterly
Groundwater Elevations	Ft./tenths TOC	Quarterly
Turbidity	Turbidity units	Quarterly
Siltation in Well Casing	Ft./tenths	Annually, Second Quarter

<u>Monitoring Parameters Parameter</u>	<u>Units</u>	<u>Frequency</u>
Sodium	mg/l	Quarterly
Magnesium	mg/l	Quarterly
Calcium	mg/l	Quarterly
Bicarbonate Alkalinity	mg/l	Quarterly
Carbonate Alkalinity	mg/l	Quarterly
Hydroxide Alkalinity	mg/l	Quarterly
Potassium	mg/l	Quarterly
Fluoride	mg/l	Quarterly
Total Dissolved Solids (TDS)	mg/l	Quarterly
Hardness	mg/l	Quarterly
Chemical Oxygen Demand (COD)	mg/l	Quarterly
Chlorides	mg/l	Quarterly
Sulfates	mg/l	Quarterly
Nitrate	mg/l	Quarterly
Halogenated VOC's	µg /l	Semiannually, Second Quarter, Third Quarter
Aromatic VOC's	µg /l	Semiannually, Second Quarter, Third Quarter
MTBE	µg /l	Semiannually, Second Quarter, Third Quarter
Dissolved Metals by ICAP: Sb, As, Ba, Be, Cu, Fe, Pb, Mn, Ni, Ag, Tl, Vd, and Zn	mg/l	Annually, Second Quarter

Field parameters of pH, specific conductance, and turbidity may substitute measurement by laboratory analyses.

V. WATER QUALITY PROTECTION STANDARD

The Water Quality Protection Standard (Standard) consists of the following elements:

- a. Constituents of Concern;
- b. Concentration Limits;
- c. Monitoring Points;
- d. Points of Compliance; and
- e. Compliance Period.

Each of these is described as follows:

A. Constituents of Concern

The Constituents of Concern (COCs) required under Section 20395 of Title 27 shall include all constituent groups identified in Table II.A. and specifically listed in Appendices I and II, Subtitle D. The Discharger shall monitor all COCs every five years or more frequently, as required under the detection monitoring program.

B. Concentration Limits

The Concentration Limit for any given Constituent of Concern or Monitoring Parameter in a given monitored medium (i.e., the uppermost aquifer) at a landfill shall be as follows, and shall be used as the basis of comparison with data from the Monitoring Points in that monitored medium:

- a. The background value established in the WDRs by the Regional Water Board for that constituent and medium;
- b. The constituent's background value, from the Background Monitoring Points for that monitored medium. Either:
 1. The mean (or median, as appropriate) and standard deviation (or other measure of central tendency, as appropriate) of the constituent's background data; or
 2. The constituent's MDL, in cases where less than 10 percent of the background samples exceed the constituent's MDL; or
- c. A concentration limit greater than background, as approved by the Regional Water Board for use during or after corrective action.

C. Monitoring Points

1. **Unsaturated Zone** - GM-1, GM-2, GM-3, GM-4, and GM-5 at all screen intervals.

The discharger shall submit copies of quarterly gas monitoring reports for all landfill gas wells monitored in accordance with the Solid Waste Facilities Permit issued by the CIWMB and Section III.B. of the MRP.

2. **Groundwater** - As listed in Section III.D.1.

D. Points of Compliance

The point(s) of compliance at each groundwater monitoring point is the vertical surface located at the downgradient limit of the WMU that extends through the uppermost aquifer underlying the WMU. The wells representing the point of compliance for the landfill shall be MW 87-1, MW-4, MW-5, and MW-6.

E. Compliance Period

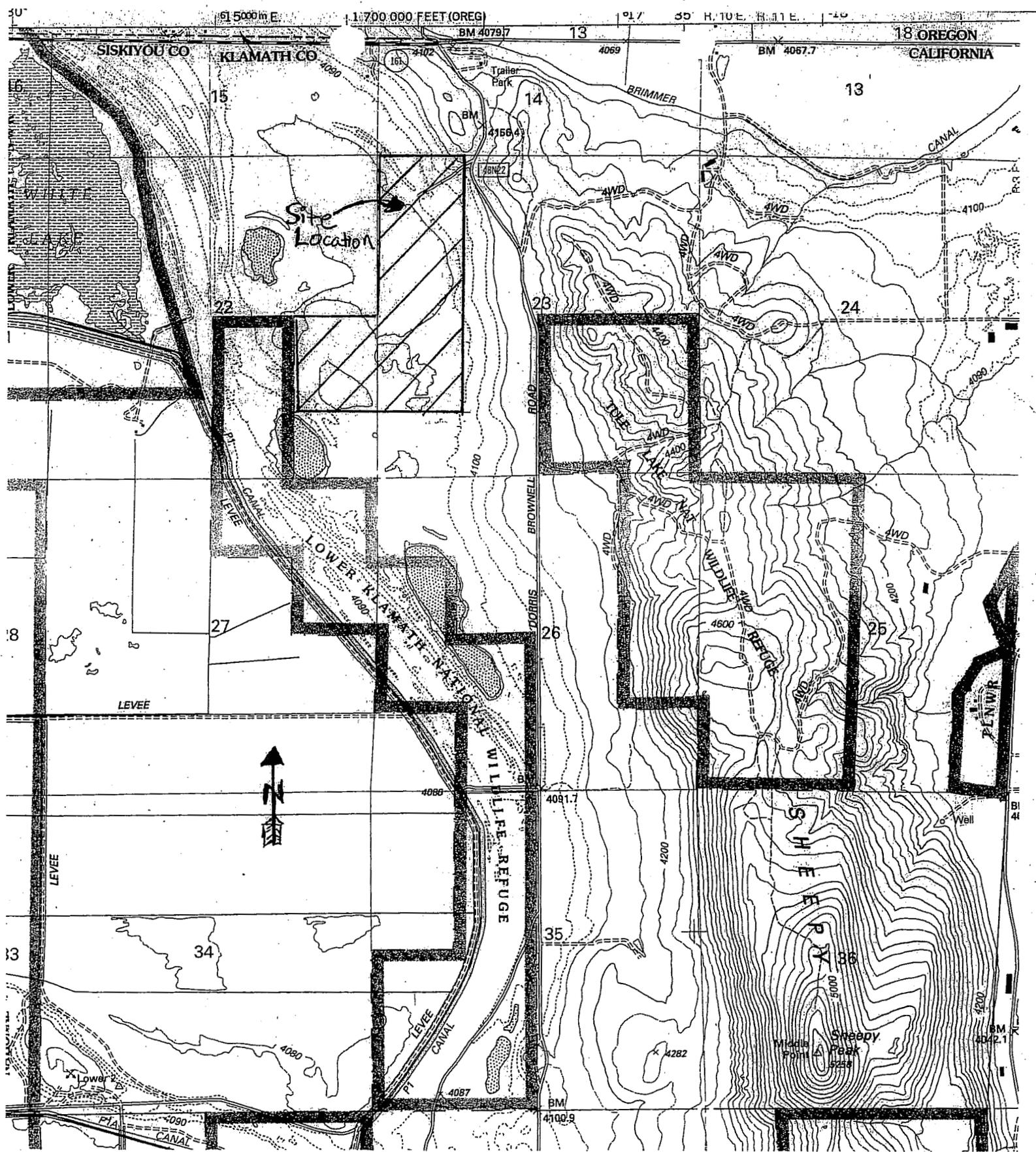
The Compliance period is the number of years equal to the active life of the landfill plus the closure period. Each time the Standard is exceeded (i.e., a release is discovered), the landfill begins a Compliance Period on the date the Regional Water Board directs the Discharger to begin an Evaluation Monitoring Program. If the Discharger's Corrective Action Program has not achieved compliance with the Standard by the scheduled end of the Compliance Period, the Compliance Period is automatically extended until the landfill has been in continuous compliance for at least three consecutive years.

The Discharger shall implement the above monitoring program beginning on the effective date of this Order.

Ordered by: Catherine Kuhlman
Catherine E. Kuhlman
Executive Officer

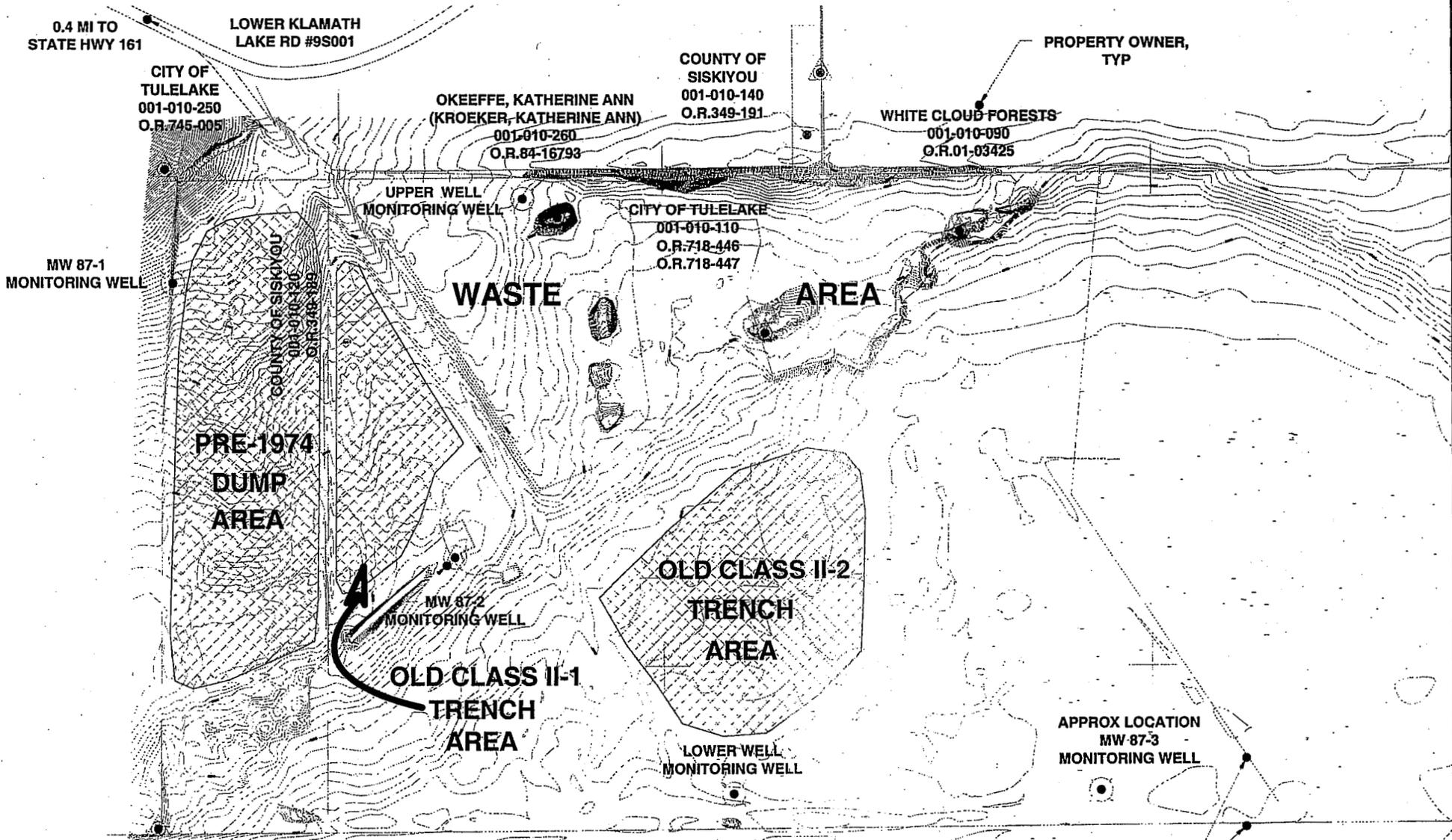
June 23, 2004

(Tulelake SWDS_MRP_2004)



**Attachment A
Site Vicinity Map
City of Tulelake, Sheepy Ridge SWDS**

Source: USGS Topographic 7.5 Minute Map, Hatfield, California-Oregon Quadrangle, 1993



NOTE: THE APPROXIMATE LOCATIONS OF THE OLD DUMP AND TRENCH AREAS WERE BASED UPON THE REPORTS PREPARED BY ROBERT W. WICKENDEN (DATED MARCH 1, 1974) AND THE SOLID WASTE ASSESSMENT TEST (DATED JUNE OF 1988) PREPARED BY STEFFEN ROBERTSON & KIRSTEN INC. AND OTT WATER ENGINEERS.

Attachment B

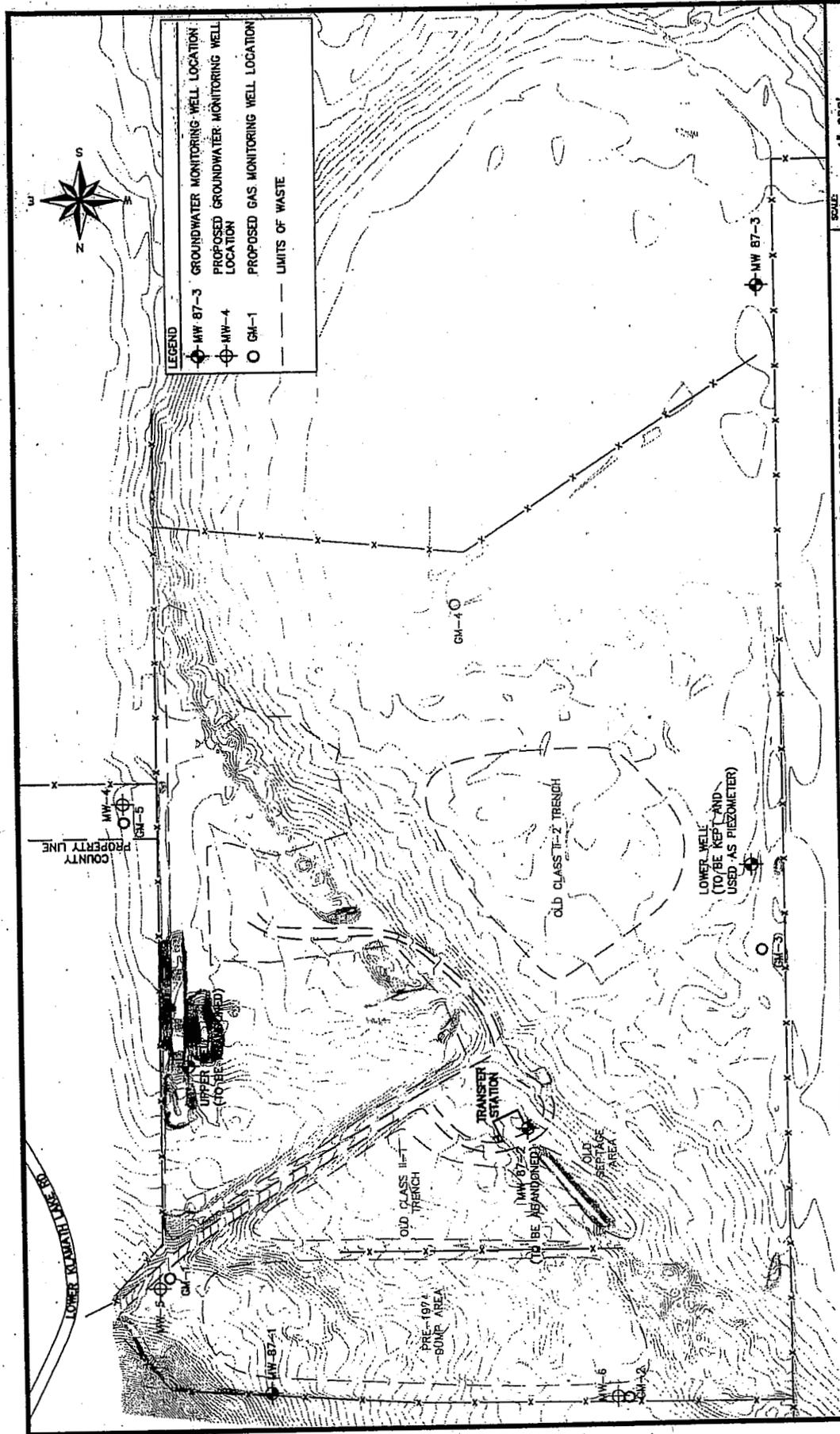
Site Plan With Historic Waste Footprints

DERIVED FROM SISKIYOU COUNTY DEPARTMENT OF PUBLIC WORKS CAD FILE BY BRUCE GWYNNE, NCRWQCB



TULELAKE LANDFILL

DUMPING AREAS PRIOR TO COUNTY OPERATION
LOCATED IN T48N, R03E, SEC. 23, M.D.M.



CLIENT: SISKIYOU CO.	PROJECT: TULELAKE LF - WELL INSTALLATION WORK PLAN	DRAWN BY: J. HOLDEN	CHECKED BY: B. GARTNER	SCALE: 1" = 200'
				DATE: 5/13/2004
LAWRENCE & ASSOCIATES 2001 MARKET STREET, RM. 523 REDDING, CA 96001 PHONE (530) 244-8703 FAX (530) 244-5021				JOB NO.: 003176.00
ATTACHMENT C Site Plan with Proposed Monitoring Locations City of Tulelake, Sheepley Ridge SWDS				FIGURE 3

Approximate Scale 1 inch = 320 feet

Source: Lawrence & Associates, Addendum No. 2, Work Plan for Monitoring Well Installation and Abandonment, City of Tulelake Landfill, Siskiyou County, California, May 2004

ATTACHMENT E

CONSTITUENTS OF CONCERN & APPROVED USEPA ANALYTICAL METHODS

Inorganics (dissolved):	USEPA Method
Aluminium	6010
Antimony	7041
Barium	6010
Beryllium	6010
Cadmium	7131A
Chromium	6010
Cobalt	6010
Copper	6010
Silver	6010
Tin	6010
Vanadium	6010
Zinc	6010
Iron	6010
Manganese	6010
Arsenic	7062
Lead	7421
Mercury	7470A
Nickel	7521
Selenium	7742
Thallium	7841
Cyanide	9010B
Sulfide	9030B

Volatile Organic Compounds: USEPA Method 8260

Acetone
Acetonitrile (Methyl cyanide)
Acrolein
Acrylonitrile
Allyl chloride (3-Chloropropene)
Benzene
Bromochloromethane (Chlorobromomethane)
Bromodichloromethane (Dibromochloromethane)
Bromoform (Tribromomethane)
Carbon disulfide
Carbon tetrachloride
Chlorobenzene
Chloroethane (Ethyl chloride)

(USEPA Method 8260, continued)

Chloroform (Trichloromethane)
Chloroprene
Dibromochloromethane (Chlorodibromomethane)
1,2-Dibromo-3-chloropropane (DBCP)
1,2-Dibromoethane (Ethylene dibromide; EDB)
o-Dichlorobenzene (1,2-Dichlorobenzene)
m-Dichlorobenzene (1,3-Dichlorobenzene)
p-Dichlorobenzene (1,4-Dichlorobenzene)
trans- 1,4-Dichloro-2-butene
Dichlorodifluoromethane (CFC 12)
1,1 -Dichloroethane (Ethylidene chloride)
1,2-Dichloroethane (Ethylene dichloride)
1,1 -Dichloroethylene (1, 1-Dichloroethene; Vinylidene chloride)
cis- 1,2-Dichloroethylene (cis- 1,2-Dichloroethene)
trans- 1,2-Dichloroethylene (trans- 1,2-Dichloroethene)
1,2-Dichloropropane (Propylene dichloride)
1,3-Dichloropropane (Trimethylene dichloride)
2,2-Dichloropropane (Isopropylidene chloride)
1,1 -Dichloropropene
cis- 1,3-Dichloropropene
trans- 1,3-Dichloropropene
Di-isopropylether (DIPE)
Ethanol
Ethyltertiary butyl ether
Ethylbenzene
Ethyl methacrylate
Hexachlorobutadiene
Hexachloroethane
2-Hexanone (Methyl butyl ketone)
Isobutyl alcohol
Methacrylonitrile
Methyl bromide (Bromomethane)
Methyl chloride (Chloromethane)
Methyl ethyl ketone (MEK; 2-Butanone)
Methyl iodide (Iodomethane)
Methyl t-butyl ether
Methyl methacrylate
4-Methyl-2-pentanone (Methyl isobutyl ketone)
Methylene bromide (Dibromomethane)
Methylene chloride (Dichloromethane)
Naphthalene
Propionitrile (Ethyl cyanide)
Styrene
Tertiary amyl methyl ether

(USEPA Method 8260, continued)

Tertiary butyl alcohol
1,1,1,2-Tetrachloroethane
1,1,2,2-Tetrachloroethane
Tetrachloroethylene (Tetrachloroethene; Perchloroethylene; PCE)
Toluene
1,2,4-Trichlorobenzene
1,1,1 -Trichloroethane, Methylchloroform
1,1,2-Trichloroethane
Trichloroethylene (Trichloroethene; TCE)
Trichlorofluoromethane (CFC- 11)
1,2,3-Trichloropropane
Vinyl acetate
Vinyl chloride (Chloroethene)
Xylene (total)

Semi-Volatile Organic Compounds:**USEPA Method 8270 - base, neutral, & acid extractables**

Acenaphthene
Acenaphthylene
Acetophenone
2-Acetylaminofluorene (2-AAF)
Aldrin
4-Aminobiphenyl
Anthracene
Benzo[a]anthracene (Benzanthracene)
Benzo[b]fluoranthene
Benzo[k]fluoranthene
Benzo[g,h,i]perylene
Benzo[a]pyrene
Benzyl alcohol
Bis(2-ethylhexyl) phthalate
alpha-BHC
beta-BHC
delta-BHC
gamma-BHC (Lindane)
Bis(2-chloroethoxy)methane
Bis(2-chloroethyl) ether (Dichloroethyl ether)
Bis(2-chloro-1-methylethyl) ether (Bis(2-chloroisopropyl) ether; DCIP)
4-Bromophenyl phenyl ether
Butyl benzyl phthalate (Benzyl butyl phthalate)
Chlordane
p-Chloroaniline
Chlorobenzilate

(USEPA Method 8270, continued)

p-Chloro-m-cresol (4-Chloro-3-methylphenol)
2-Chloronaphthalene
2-Chlorophenol
4-Chlorophenyl phenyl ether
Chrysene
o-Cresol (2-methylphenol)
m-Cresol (3-methylphenol)
p-Cresol (4-methylphenol)
4,4'-DDD
4,4'-DDE
4,4'-DDT
Diallate
Dibenz[a,h]anthracene
Dibenzofuran
Di-n-butyl phthalate
3,3'-Dichlorobenzidine
2,4-Dichlorophenol
2,6-Dichlorophenol
Dieldrin
Diethyl phthalate
p-(Dimethylamino)azobenzene
7,12-Dimethylbenz[a]anthracene
3,3'-Dimethylbenzidine
2,4-Dimethylphenol (m-Xylenol)
Dimethyl phthalate
m-Dinitrobenzene
4,6-Dinitro-o-cresol (4,6-Dinitro-2-methylphenol)
2,4-Dinitrophenol
2,4-Dinitrotoluene
2,6-Dinitrotoluene
Di-n-octyl phthalate
Diphenylamine
Endosulfan I
Endosulfan II
Endosulfan sulfate
Endrin
Endrin aldehyde
Ethyl methanesulfonate
Famphur
Fluoranthene
Fluorene
Heptachlor
Heptachlor epoxide
Hexachlorobenzene

(USEPA Method 8270, continued)

Hexachlorocyclopentadiene
Hexachloropropene
Indeno(1,2,3-c,d)pyrene
Isodrin
Isophorone
Isosafrole
Kepone
Methapyrilene
Methoxychlor
3-Methylcholanthrene
Methyl methanesulfonate
2-Methylnaphthalene
1,4-Naphthoquinone
1-Naphthylamine
2-Naphthylamine
o-Nitroaniline (2-Nitroaniline)
m-Nitroaniline (3-Nitroaniline)
p-Nitroaniline (4-Nitroaniline)
Nitrobenzene
o-Nitrophenol (2-Nitrophenol)
p-Nitrophenol (4-Nitrophenol)
N-Nitrosodi-n-butylamine (Di-n-butylnitrosamine)
N-Nitrosodiethylamine (Diethylnitrosamine)
N-Nitrosodimethylamine (Dimethylnitrosamine)
N-Nitrosodiphenylamine (Diphenylnitrosamine)
N-Nitrosodipropylamine (N-Nitroso-N-dipropylamine; Di-n-propylnitrosamine)
N-Nitrosomethylethylamine (Methylethylnitrosamine)
N-Nitrosopiperidine
N-Nitrosopyrrolidine
5-Nitro-o-toluidine
Pentachlorobenzene
Pentachloronitrobenzene (PCNB)
Pentachlorophenol
Phenacetin
Phenanthrene
Phenol
p-Phenylenediamine
Polychlorinated biphenyls (PCBs; Aroclors)
Pronamide
Pyrene
Safrole
1,2,4,5-Tetrachlorobenzene
2,3,4,6-Tetrachlorophenol
o-Toluidine

(USEPA Method 8270, continued)

sym-Trinitrobenzene
Toxaphene
2,4,5-Trichlorophenol
0,0,0-Triethyl phosphorothioate

**Chlorophenoxy Herbicides:
USEPA Method 8151A**

2,4-D (2,4-Dichlorophenoxyacetic acid)
Dinoseb (DNBP; 2-sec-Butyl-4,6-dinitrophenol)
Silvex (2,4,5-Trichlorophenoxypropionic acid; 2,4,5-TP)
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)

**Organophosphorus Compounds:
USEPA Method 8141A**

Atrazine
Chlorpyrifos
0,0-Diethyl 0-2-pyrazinyl phosphorothioate (Thionazin)
Diazinon
Dimethoate
Disulfoton
Ethion
Methyl parathion (Parathion methyl)
Parathion
Phorate
Simazine

California Regional Water Quality Control Board
North Coast Region

GENERAL MONITORING AND REPORTING PROVISIONS

February 3, 1971
(Retyped May 20, 1993)

GENERAL PROVISIONS FOR SAMPLING AND ANALYSIS

Unless otherwise noted, all sampling, sample preservation, and analyses shall be conducted in accordance with the current edition of "Standard Methods for the Examination of Water and Waste Water" or approved by the Executive Officer.

All analyses shall be performed in a laboratory certified to perform such analyses by the California State Department of Health or a laboratory approved by the Executive Officer.

All samples shall be representative of the waste discharge under the conditions of peak load.

GENERAL PROVISIONS FOR REPORTING

For every item where the requirements are not met, the discharger shall submit a statement of the actions undertaken or proposed which will bring the discharge in full compliance with requirements at the earliest time and submit a timetable for correction.

By January 30 of each year, the discharger shall submit an annual report to the Regional Board. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous year. In addition, the discharger shall discuss the compliance record and the corrective actions taken or planned which may be needed to bring the discharge into full compliance with the waste discharge requirements.

The discharger shall file a written report within 90 days after the average dry weather flow for any month that equals or exceeds 75 percent of the design capacity of the waste treatment or disposal facilities. The report shall contain a schedule for studies, design, and other steps needed to provide additional capacity or limit the flow below the design capacity prior to the time when the waste flow rate equals the capacity of the present units.

California Regional Water Quality Control Board
North Coast Region

CONTINGENCY PLANNING AND NOTIFICATION REQUIREMENTS

FOR

ACCIDENTAL SPILLS AND DISCHARGES

ORDER NO. 74-151

The California Regional Water Quality Control Board, North Coast Region, finds that:

1. Section 13225 of the Porter-Cologne Water Quality Act requires the Regional Board to perform general duties to assure positive water quality control.
2. The Regional Board has been advised of situations in which preparations for, and response to accidental discharges and spills have been inadequate.
3. Persons discharging waste or conveying, supplying, storing, or managing wastes or hazardous materials have the primary responsibility for contingency planning, incident reporting and continuous and diligent action to abate the effects of such unintentional or accidental discharge.

THEREFORE, IT IS HEREBY ORDERED THAT:

- I. All persons who discharge wastes or convey, supply, store, or otherwise manage wastes or other hazardous material shall:
 - A. Prepare and submit to this Regional Board, according to a time schedule prescribed by the Executive Officer, a contingency plan defining the following:
 1. Potential locations and/or circumstances under which accidental discharge incidents might be expected to occur,
 2. Possible water quality effects of accidental discharges,
 3. The conceptual plan for cleanup and abatement of accidental discharge incidents, including:
 - a. The individual who will be in charge of cleanup and abatement activities on behalf of the discharger,
 - b. The equipment and manpower available to the discharger to implement the cleanup and abatement plans,
 - B. Immediately report to the Regional Board any accidental discharge incidents. Such notification shall be made by telephone as soon as the responsible person or his agent has knowledge of the incident.
 - C. Immediately begin diligent and continuous action to cleanup and abate the effects of any unintentional or accidental discharge. Such action shall include temporary measures to abate the discharge prior to completing permanent repairs to damaged facilities.

D. Confirm the telephone notification in writing within two weeks of the telephone notification. The written notification shall include: reasons for the discharge, duration and volume of the discharge, steps taken to correct the problem and steps being taken to prevent the problem from recurring.

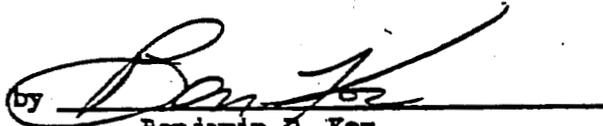
I. Upon original receipt of phone report (I.B.), the Executive Officer shall immediately notify all affected agencies and known users of waters affected by the unintentional or accidental discharge.

II. Provide updated information to the Regional Board in the event of change of staff, size of the facility, or change of operating procedures which will affect the previously established contingency plan.

V. The Executive Officer or his employees shall maintain liaison with the discharger and other affected agencies and persons to provide assistance in cleanup and abatement activities.

The Executive Officer shall transmit copies of this Order to all persons whose discharges of waste handling activities are governed by Waste Discharge Requirements or an NDPES permit. Such transmittal shall include a current listing of telephone numbers of the Executive Officer and his key employees to facilitate compliance with Item I.B of this Order.

Ordered by



Benjamin D. Kor
Executive Officer

July 24, 1974
(Retyped February 15, 1990)

our primary notification should be to the Regional Board office in Santa Rosa at (707) 76-2220. During off hours, you will be able to leave a recorded message at that number and, if you have a spill or discharge emergency, you will also be referred to the State office of Emergency Services (OES) at (800) 852-7550. OES maintains a roster of key employees and will relay your notification to Regional Board staff.