

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
81 HIGUERA STREET, SUITE 200
SAN LUIS OBISPO, CALIFORNIA 93401-5427**

ORDER NO. 94-79

**WASTE DISCHARGE REQUIREMENTS
FOR
CALIFORNIA ARMY NATIONAL GUARD
CAMP SAN LUIS OBISPO CLASS III LANDFILL
SAN LUIS OBISPO COUNTY**

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

1. The California Army National Guard (hereafter "Discharger") owns and operates the Camp San Luis Obispo Class III Landfill (hereafter "Landfill").
2. The 5.2 acre Landfill is located 500 feet west of the O'Connor Way entrance to the Base, one mile south of State Highway 1, in Section 13, Township 30 south, Range 11 east, Mount Diablo Base and Meridian, as shown on Attachments A & B included as part of this Order.
3. This Waste Discharge Requirements Order (Order) is being revised/updated to incorporate closure criteria and criteria currently applicable to solid waste disposal sites, particularly:
 - a. criteria established in California Code of Regulations, Title 23, Division 3, Chapter 15 (Chapter 15), including Article 5, pertaining to landfill water quality monitoring and response programs, as amended July 1, 1991; and
 - b. criteria established in 40 CFR Parts 257 and 258 Solid Waste Facility Disposal Criteria, Final Rule (Known as "Subtitle D"), as promulgated October 9, 1991.
4. This Order replaces Order No. 89-77, as adopted on May 12, 1989. Order No. 89-77 regulated all waste discharges to the Landfill. Additionally, this Order is intended to address all items of Order No. 93-84 adopted by the

Board on October 8, 1993. Implementation of applicable revised Article 5 monitoring requirements and various other pertinent landfill changes, including compliance with other State and Federal landfill regulations, will bring the Landfill into compliance with current requirements.

Physical Description: Geology

5. Land use within 1000 feet of the Landfill includes agriculture and industrial.
6. The Landfill is located in a flat, low-lying area in the Poison Oak Creek valley between Cerro Romauldo peak and Conner peak. Landfill elevation is approximately 220 feet above mean sea level.
7. The Discharger's data demonstrate natural geologic materials between the base of the Waste Management Unit and ground water cannot ensure that degradation of beneficial uses of ground water beneath or adjacent to the Landfill will not occur.
8. The Landfill is underlain by Holocene-aged alluvial soils consisting of clay, silty clay, and sandy clay interbedded with sand and gravel strata.
9. No known Holocene faults underlie the Landfill. The nearest fault is the Madonna fault which is defined to the southwestern side of Chorro Creek basin. The San Andreas fault is located approximately 40 miles east of the Landfill.

Item No. 23, Attachment No. 1
December 1-2, 2005 Meeting
Camp San Luis Obispo Landfill

The Landfill contains no engineered structures or slopes which could be affected by earthquake activity.

Water Resources

10. The Landfill is located within the 100 year flood plain of Chorro Creek. Average annual rainfall at the Landfill is 22 inches.
11. The Chorro Creek basin is the underlying ground water basin. Ground water in the basin is unconfined and flows generally to the north, along the axis of Poison Oak Creek valley between Cerro Romauldo and Conner peaks, with a gradient of .025 foot per foot. Ground water levels appear to fluctuate seasonally and from year to year, ranging from 11 to 20 feet below grade in well MW-2 to 22 to 31 feet below grade in well MW-4. The Chorro Creek basin discharges to the Pacific Ocean in the vicinity of Morro Bay.
12. There are numerous domestic and irrigation wells within one mile of the Landfill. The nearest well is located approximately 1,100 feet to the northeast. The well is operated by the California Men's Colony. Five wells exist at the Landfill for ground water monitoring. The on-site wells are depicted in Attachment C.
13. Ground water in outlying areas is generally of good quality for domestic and agricultural uses. Average quality of the upper aquifer at the Landfill, using MW-2 histories, is as follows:

Electrical Conductivity	451	(umhos/cm)
pH	7.35	
Nitrate (N)	.66	(mg/L)
Total Dissolved Solids	530	(mg/L)
Iron	<.03	(mg/L)

14. Ground water sampling and analyses have been performed inconsistently. Impacts to ground water from the landfill have been indicated but never verified. Most recently, verification sampling indicates that ground water has not been impacted by waste disposal activities.

Beneficial Uses

15. The Water Quality Control Plan, Central Coast Basin (Basin Plan), was adopted by the Board on November 17, 1989, and approved by the State Water Resources Control Board on August 16, 1990. The Basin Plan incorporates statewide plans and policies by reference and contains a strategy for protecting beneficial uses of State Waters. This Order implements the water quality objectives stated in that Plan.
16. Present and anticipated beneficial uses of surface waters down gradient of the discharge include:
 - a. Domestic and Municipal supply;
 - b. Agricultural supply;
 - c. Ground water recharge;
 - d. Water contact recreation;
 - e. Wildlife habitat; and
 - f. Non-contact water recreation.
17. Present and anticipated beneficial uses of ground water in the vicinity of the discharge include:
 - a. Municipal and Domestic supply;
 - b. Industrial supply; and
 - c. Agricultural Supply.

Landfill Specifics.

18. The California Integrated Waste Management Board and its local enforcement agent, San Luis Obispo County Environmental Health Department, regulate the Landfill with Solid Waste Facilities Permit No. 40-AA-0009.
19. The Landfill is scheduled to be properly closed in 1995. No waste disposal has occurred at the Landfill since 1985. This Order specifically prohibits discharge.
20. The Landfill meets the criteria of the California Code of Regulations as stated in Chapter 15 for classification as a Class III landfill. This Order implements the prescriptive standards and performance goals of Chapter 15, as adopted by the State Water Resources Control Board on October 18, 1984, and as amended on July 1, 1991.
21. A contract for developing a closure and postclosure plan for the Landfill has been awarded. The draft plans are expected to be made available for review by January of 1995.

Statements of Regulation

22. Due to revisions of Article 5, of Chapter 15, the Discharger was required to submit a Report of Waste Discharge (ROWD) to update Waste Discharge Requirements for the Landfill, including a monitoring and reporting program. The report has not been submitted. Recently the Discharger submitted a report titled, Verification Ground Water Monitoring dated December 1993. The submittal of this report has provided sufficient information to allow updating the waste discharge requirements and monitoring program. The revised monitoring program includes improved ground water, and surface water monitoring programs.
23. On October 9, 1991, the Environmental Protection Agency (EPA) promulgated regulations pertaining to solid waste disposal facilities known as 40 CFR, Parts 257 and 258 Solid Waste Disposal Facility Criteria, Final Rule (also known as Subtitle D). California has received USEPA authorization (became an "Approved" State) to implement the Federal

Subtitle D regulations. The majority of the Subtitle D regulations for most municipal solid waste landfills became effective and self-implementing on October 9, 1993. The Subtitle D regulations establish minimum criteria for location, design, operation, clean-up, and closure for most municipal solid waste landfills. Subtitle D implementation/applicability is as follows:

- a. municipal solid waste landfills with Requirements that stopped receiving waste on or before October 9, 1991 are exempt from Subtitle D except for monitoring requirements and deed restrictions;
- b. municipal solid waste landfills that received waste on or after October 9, 1991, but stop prior to October 9, 1993, must meet only the final cover requirements specified in Section 258.60(a); and
- c. municipal solid waste landfills that received waste on or after October 9, 1993 must comply with all requirements of Subtitle D.

However, USEPA recently changed the effective date of the Subtitle D criteria to April 9, 1994 for existing, smaller municipal solid waste landfills that (1) accept less than 100 tons per day; (2) are in a State that has submitted an application to USEPA for approval of its permit program by October 9, 1993; and (3) are not on the Superfund National Priorities List. Ground water and corrective action requirements become effective prior to receipt of waste for new landfills; October 9, 1994 through October 9, 1996 for existing landfills and lateral expansions. Financial assurance requirements become effective April 9, 1995.

24. Discharge of waste is a privilege, not a right, and authorization to discharge waste is conditioned upon the discharge complying with provisions of Division 7 of the California Water Code and with any more stringent limitations necessary to implement the Basin Plan, to protect beneficial uses, and to prevent nuisance. Compliance with this Order should assure conditions are met and mitigate any potential changes in water quality due to the project.

September 9, 1994

25. This Order contains prohibitions, discharge specifications, water quality protection standards, and provisions intended to protect the environment by mitigating or avoiding impacts of the project on water quality. This Order is for an existing facility and is exempt from provisions of the California Environmental Quality Act (Public Resources Code, Section 21000, et seq.) in accordance with Title 14, California Code of Regulations, Chapter 3, Section 15301.

Board Dates

26. On June 16, 1994, the Board notified the Dischargers and interested agencies and persons of its intention to update the Order for the discharge and has provided them with a copy of the proposed Order and an opportunity to submit written views and comments.
27. After considering all comments pertaining to this discharge during a public hearing on September 9, 1994, this Order was found consistent with the above findings.

IT IS HEREBY ORDERED pursuant to authority in Section 13263 of the California Water Code, the California National Guard, Department of the Military, its agents, successors, and assigns must maintain the Camp San Luis Obispo Class III Landfill, in compliance with the following:

(Throughout this Order, footnotes are listed to indicate the source of requirements specified. Requirement footnotes are as follows:

a=CCR, Title 23, Chapter 15

b=Basin Plan

c=CFR, Part 257 and 258 (Subtitle D)

d=California Water Code

Requirements without footnotes are based on professional judgement.)

A. DISCHARGE PROHIBITIONS

General Prohibitions

1. Discharge of waste at the Landfill is prohibited.
2. Ponding of liquids over solid wastes is prohibited.^a

B. CLOSURE SPECIFICATIONS

General Specifications

1. The Discharger shall implement the attached Monitoring and Reporting Program No. 94-79 in order to detect, at the earliest opportunity, any unauthorized discharge of waste constituents from the Landfill, or any unreasonable impairment of beneficial uses associated with (caused by) discharges of waste to the Landfill.^a
2. The Discharger shall prevent formation of a habitat for carriers of pathogenic microorganisms.
3. The Discharger shall close the Landfill and configure the final Landfill contours, in conformance with the most recent Executive Officer approved Closure Plan, except where the Plan conflicts with this Order. In the event of conflict, this Order shall govern in cases where it is most restrictive. Any changes to the Closure Plan that may affect compliance with this Order must be approved in writing by the Executive Officer.^{a,d}

Wet Weather

4. By October 1 of each year, all necessary runoff diversion and erosion prevention measures shall be implemented. All necessary construction, maintenance, or repairs of precipitation and drainage control facilities shall be completed to prevent erosion or Landfill flooding and to prevent surface drainage from contacting or percolating through wastes.^a

5. All Landfill surfaces shall be graded and operated to minimize rainfall infiltration into wastes, to prevent ponding of water, and to resist erosion. Positive drainage to divert rainfall runoff from areas containing waste shall be provided.
6. Waste containment barriers shall be maintained to ensure their effectiveness.^a
7. The Discharger shall monitor potential releases from the Landfill related to surface water runoff by complying with all National Pollution Discharge Elimination System (NPDES) Stormwater Monitoring Program requirements.
8. Storage facilities associated with precipitation and drainage control systems shall be emptied immediately following each storm, or otherwise managed, to maintain the design capacity of the system.^a
9. Throughout the rainy season of each year, a minimum one (1) foot thick compacted soil cover designed and constructed to minimize percolation of precipitation through wastes, shall be maintained over the entire active Landfill area.^b The soil cover shall be in-place by October 1, of each year until closure is completed. Based on site-specific conditions, the Executive Officer may require a thicker soil cover for any portion of the Landfill's active waste management unit prior to the rainy season.
10. By October 1, of each year, vegetation shall be planted and maintained over all Landfill slopes within the entire Landfill area to prevent erosion. Vegetation shall be selected to require a minimum of irrigation and maintenance and shall have a rooting depth not in excess of the vegetative layer thickness. Upon Executive Officer approval, non-hazardous sludge may be utilized as a soil amendment to promote vegetation. Soil amendments and fertilizers (including wastewater sludge) used to establish vegetation shall not exceed the vegetation's agronomic rates (i.e., annual nutrient needs), unless approved by the Executive Officer.

Design Criteria

11. Waste management units, containment structures and drainage facilities shall be designed and constructed under the direct supervision of a California registered civil engineer or a certified engineering geologist, and shall be certified by that individual as meeting the prescriptive standards and performance goals of all State and Federal landfill regulations including, but not limited to Chapter 15 and 40 CFR Parts 257 and 258, prior to waste discharge. Drainage ditches crossing over landfill areas shall be lined with material which provides an effective field permeability of 1.0×10^{-6} cm/sec or less. If material other than clay or synthetic is used, data must be provided to, and approved by, the Executive Officer. The drainage facilities shall be designed and constructed to accommodate anticipated precipitation and peak surface runoff flows from a 100-year, 24-hour event.^{a,c}
12. All Landfill facilities shall be designed and constructed to ensure the integrity of the final slopes under both static and dynamic conditions considering seismic acceleration and to minimize damage during the "maximum probable earthquake" to the graded foundation and to structures which control leachate, surface drainage, erosion, and gas. The slope of those portions of the fill which will be the final exterior surface shall be developed in accordance with Federal requirements, Chapter 15, Subsection 2581, and the following:
 - a. all slopes shall have a minimum of one 15-foot wide bench for every 50 feet of vertical height;
 - b. slopes shall not be steeper than a horizontal to vertical ratio of 1.75:1 (57%);
 - c. slopes steeper than a horizontal to vertical ratio of 3:1 (33%) shall be supported by a slope stability analysis report approved by the Executive Officer; and
 - d. slopes with grades less than 3% require Executive Officer approval.

The operator must demonstrate that all containment structures, including liners, leachate collection and removal systems, and surface water control systems are designed to resist the maximum horizontal acceleration in lithified earth material for the Landfill. The owner or operator must place the demonstration in the operating record and notify the Executive Officer that it has been placed in the operating record.

13. Waste management units, containment structures, and drainage facilities shall be designed, constructed and maintained to limit, to the greatest extent possible, ponding, infiltration, inundation, erosion, slope failure, washout, overtopping, and damage due to natural disasters (e.g., floods with a predicted frequency of once in 100 years, the maximum probable earthquake, and severe wind storms).^a

Closure

14. All Landfill areas, underlain by waste, shall be covered with a final cover pursuant to Chapter 15 and Subtitle D final cover requirements, including from bottom to top:^a
- a. at least a two foot foundation layer placed over waste;
 - b. a low permeability geomembrane or a one-foot minimum thickness compacted clay layer with an in-place permeability no faster than 1×10^{-6} cm/sec, or no faster than the permeability of underlying natural geologic materials, whichever is less; and
 - c. at least one foot of soil capable of supporting vegetation, resisting erosion, and protecting the underlying low permeability layer.

The final cover shall be graded to a slope of at least 3%, but not more than 10% unless adequate erosion control measures are implemented and approved by the Executive Officer.

15. Permeability determinations shall be as specified in Article 4 of Chapter 15. Permeabilities specified for containment structures other than cover shall be relative to the fluids, including waste and leachate, to be contained. Permeabilities specified for cover shall be relative to water. Permeabilities shall be determined primarily by appropriate field test methods in accordance with civil engineering practice (sealed double ring infiltrometer test is required). The results of laboratory tests with both water and leachate, and field tests with water, shall be compared to evaluate how the field permeabilities will be affected by leachate. Appropriate compaction tests may be used in conjunction with laboratory permeability tests to determine field permeabilities as long as a reasonable number of field permeability tests are also conducted. Construction methods and quality assurance procedures shall be submitted for Board review, and shall insure all parts of the low-permeability layer meet the hydraulic conductivity and compaction requirements.^a
16. All closed Landfill waste management unit(s) shall be provided with at least two permanent monuments, installed by a licensed land surveyor, from which the location and elevation of all wastes, containment structures, and monitoring facilities can be determined throughout the post-closure maintenance period. Cumulative waste subsidence and settlement of areas where final cover is installed, shall be documented and reported annually.^a
17. Partial closure shall be accomplished by implementing closure activities, including but not limited to: placement of final cover, final grading, maintenance, re-vegetation, and installation of environmental monitoring control systems consistent with the closure of the entire Landfill. Landfill waste management units closed in accordance with a Closure Plan approved by the Executive Officer are not subject to future regulatory changes, unless monitoring data indicate impairment of ground waters' beneficial uses.^a

18. Alternative intermediate and final cover designs may be considered for Executive Officer approval, if such designs provide equivalent reduction in infiltration and protection from wind and water erosion.^a
19. Methane and other Landfill gases shall be adequately vented, removed from the Landfill, or otherwise controlled, as required, to prevent nuisance conditions, or the impairment of beneficial uses due to migration through the vadose (unsaturated) zone.^a

Reporting

20. Discharger shall notify Board staff, within 24 hours by telephone and within seven days in writing, of any noncompliance potentially or actually endangering health or the environment. Any noncompliance which threatens the Landfill's containment integrity shall be promptly corrected. Correction schedules are subject to the approval of the Executive Officer, except when delays will threaten the environment and/or the Landfill's integrity (i.e., emergency corrective measures). Corrections initiated prior to Executive Officer approval shall be so stated in the written report. The written report shall contain a description of the noncompliance and its cause; the period of noncompliance including exact dates and times or anticipated duration; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. This provision includes, but is not limited to:
- a. violation of a discharge prohibition;
 - b. violation of any treatment system's discharge limitation;
 - c. slope failure; and
 - d. leachate seep occurring on or in proximity to the Landfill.^a

21. Reports of compliance or noncompliance with, or any progress reports on interim and final requirements contained in any compliance schedule, shall be submitted within 14 days following each scheduled date unless otherwise specified within the Order. If reporting noncompliance, the report shall include a description of the reason, a description and schedule of tasks necessary to achieve compliance, and an estimated date for achieving full compliance. A second report shall be submitted within 14 days of achieving full compliance.
22. Reports shall be submitted in advance of any planned changes in the permitted facility or in an activity which could potentially or actually result in noncompliance.
23. Additional reporting requirements are contained in the current Monitoring and Reporting Program.

C. WATER QUALITY PROTECTION STANDARDS

1. Water Quality Protection Standard (Standard). The five parts of the Standard are as follows:
- a. Constituents of Concern. The list of Constituents of Concern for water-bearing media are listed in Part I.D.5. of Monitoring and Reporting Program No. 94 - 79.
 - b. Concentration Limits. For each Monitoring Point assigned to the Detection Monitoring Program, the Concentration Limit for each Constituent of Concern or Monitoring Parameter shall be as described in Part II.B of Monitoring and Reporting Program No. 94-79.
 - c. Monitoring Points and Background Monitoring Points for Detection Monitoring shall be those listed in Monitoring and Reporting Program No. 94-79, Part I.D.1. and shown on Attachment C to this Order.

- d. Point of Compliance. The Point of Compliance is the edge of the Landfill's permitted area (Existing Permit Limits), as shown on Attachment C, and extends vertically down through the uppermost aquifer.
- e. Compliance Period. The Compliance Period is the number of years equal to the active life of the waste management unit (including any waste management unit activity prior to the adoption of this Order) plus the closure period. The Compliance Period is the minimum period of time during which the Discharger shall conduct a water quality monitoring program subsequent to a release. The estimated duration of the Compliance Period for this Unit is 50 years. Each time the Standard is broken (i.e., a release is discovered), the Unit begins a Compliance Period on the date the 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 Unit has been in continuous compliance for at least three consecutive years.
2. Monitoring Parameters for Detection Monitoring.
- The Monitoring Parameters for water bearing media are listed in Part I.D.3. of Monitoring and Reporting Program 94-79.
3. Additional Requirements
- a. The concentrations of indicator parameters or waste constituents in water passing through the "Detection" Points of Compliance shall not exceed the "water quality protection standard(s)" established pursuant to Monitoring and Reporting Program No. 94-79 which is attached and made part of this Order.
- b. Discharge of waste shall not cause a "statistically significant" increase over background for any of the constituents of concern or monitoring parameters listed in Appendix I and II of Subtitle D.
- c. Discharge of waste shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Board or the State Water Resources Control Board.
- d. Discharge of waste shall not cause concentrations of chemicals and radionuclides in underlying and downgradient ground water to exceed limits set forth in Title 22, Chapter 15, Articles 4 and 5 of the code.
- e. Discharge of waste shall not adversely impact the quality of water in any aquifer.
- f. Discharge of waste shall not cause ground water in downgradient wells to exceed the State Department of Health Services latest recommended Drinking Water Action Levels or Maximum Contaminant Levels.

D. PROVISIONS

General Provisions

1. Order No. 89-77 "Waste Discharge Requirements for Camp San Luis Obispo Class III Landfill," adopted by the Board on May 12, 1989, is hereby rescinded.
2. The Discharger shall comply with "Monitoring and Reporting Program No 94-79", as specified by the Executive Officer.
3. The Discharger shall maintain a copy of this Order at the Camp's headquarters and make it available at all times to regulatory agency personnel and to facility operating personnel, who shall be familiar with its contents.

4. The Discharger shall comply with all other applicable provisions of Chapter 15, Subtitle D and other State and Federal landfill regulations that are not specifically referred to in this Order. If any applicable regulation requirements overlap or conflict in any manner, the most restrictive requirement shall govern in all cases, unless specifically stated otherwise in this Order, or as directed by the Executive Officer.
5. The Discharger shall have a continuing responsibility to assure protection of usable waters, from discharged wastes and from gases and leachate generated by discharged waste, during the Landfills active life, closure, and post-closure maintenance periods and during subsequent use of the property for other purposes.
6. The Board considers the Discharger to have a continuing responsibility for correcting any problems which may arise in the future as a result of the Landfill.
7. At any time, the Discharger may file a written request (including appropriate supporting documents) with the Executive Officer, proposing appropriate modifications to the Monitoring and Reporting Program. The request may address changes (a) to any statistical method, non-statistical method, or retest method used with a given constituent or parameter, (b) to the manner of determining the background value for a constituent or parameter, (c) to the method for displaying annual data plots, (d) to the laboratory analytical method used to test for a given constituent or parameter. (e) to the media being monitored [e.g., the addition of soil pore gas to the media being monitored], (f) to the number or placement of Monitoring Points or Background Monitoring Points for a given monitored medium, or (g) to any aspect of monitoring or QA/QC. After receiving and analyzing such a report, the Executive officer either shall reject the proposal for reasons listed, or shall incorporate it, along with any necessary changes, into the attached Monitoring and Reporting Program. The Discharger shall implement any changes in the Monitoring and Reporting Program proposed by the Executive Officer upon receipt of a revised Monitoring and Reporting Program.
8. If the Discharger or the Board determines, pursuant to Section 2550.8(g) or (i), that there is evidence of a release or a new release from any portion of the Landfill, the Discharger shall immediately implement the procedures outlined in Monitoring and Reporting Program, Part IV.C.^a
9. 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. 94-79, as required by Sections 13750 through 13755 of the California Water Code.^d
10. All reports shall be signed as follows:
 - a. for a corporation-by a principal executive officer of at least the level of vice president*;
 - b. for a partnership or sole proprietorship-by a general partner or the proprietor, respectively*;
 - c. for a public agency-by either a principal executive officer or ranking elected official*; or,
 - d. engineering reports-by a California Registered Civil Engineer or Certified Engineering Geologist.*or their "duly authorized representative."
11. Any person signing a report makes the following certification, whether its expressed or implied:

"I certify under penalty of perjury I have personally examined and am familiar with the information submitted in this document and all attachments and, based on my inquiry of those individuals immediately responsible for

- obtaining the information, I believe the information is true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment."
12. Except for data determined to be confidential under Section 13267 (b) of the California Water Code, all reports prepared in accordance with this Order shall be available for public inspection at the Board office.^d
 13. The Discharger shall notify the Board in writing of any proposed change in ownership or responsibility for construction or operation of the facility. This notification shall be given at least 90 days prior to the effective date of the change and shall be accompanied by an amended Report of Waste Discharge and any technical documents that are needed to demonstrate continued compliance with this Order. In the event of any change in ownership of this waste management facility, the Discharger shall notify the succeeding owner or operator, in writing, of the existence of this Order. A copy of that notification shall be sent to the Board. Notification to the Board shall also comply with Section 2590(c) of Chapter 15.^a
 14. To assume operation pursuant to this Order, the succeeding owner or operator must apply in writing to the Executive Officer requesting transfer of the Order. The request must contain the requesting entity's full legal name, the state of incorporation if a corporation, the name and address and telephone number of the persons responsible for contact with the Board, and a statement indicating that the new owner or operator assumes full responsibility for compliance with this Order. Failure to submit the request shall be considered a violation of Section 13264 of the Water Code (discharge without waste discharge requirements). Transfer may be approved or disapproved in writing by the Executive Officer.^d
 15. The Discharger shall submit a 'Wet Weather Preparedness Report' by **November 1, of each year**. The report must address, in detail, compliance with all wet weather preparedness related specifications (e.g., Discharge Specifications B.4, B.5, B.6, B.7, B.8, B.9, and B.10) of this Order, and all other relevant Chapter 15 and Subtitle D criteria.
 16. The Discharger shall submit to the Board, for Executive Officer approval, a Draft Closure and Post-closure maintenance plan (Closure Plan) by **January 15, 1995**. The Closure Plan shall describe the methods and controls to be used to assure protection of the quality of surface and ground waters of the area during partial and final closure operations and during any proposed subsequent use of the land. The Closure Plan shall include:
 - a. a description of the final cover, designed in accordance with all applicable State and Federal regulations and the methods and procedures to be used to install the cover;
 - b. an estimate of the largest Landfill area ever requiring a final cover at any time during the active life;
 - c. an estimate of the maximum inventory of wastes ever on-site over the Landfill's active life;
 - d. a schedule for completing all activities necessary to satisfy all closure criteria as required by Chapter 15 and Subtitle D regulations;
 - e. an estimate of closure and post closure maintenance costs;
 - f. a proposal for a trust fund or equivalent financial arrangement to provide sufficient funding for closure and post-closure maintenance; and
 - g. the amount to be deposited in the trust fund or equivalent financial arrangement each year.

The Closure Plan shall be prepared by or under the supervision of a California registered civil engineer or certified engineering geologist. Plan updates are required whenever substantial changes occur or five years has elapsed since the last major revision. The method, identified for each Landfill waste management units' closure and protection of the quality of surface and ground waters, shall comply with Requirements established by the Board. The Closure Plan report shall be consistent with all applicable State and Federal regulations, including Chapter 15 and Subtitle D.^{a,c}

17. The Discharger shall notify the Board at least 180 days prior to beginning any partial or final Landfill closure activities. The notice shall include a statement that all closure activities will conform to the most recently approved Closure Plan and that the Plan provides for closure in compliance with all applicable State and Federal regulations. If there is no approved Closure Plan, the Discharger must submit a complete Closure Plan at least 240 days prior to beginning any Landfill closure activities.^{a,b}
18. The Executive Officer may require partial and/or final closure of any Landfill waste management unit regardless of whether such waste management unit has reached final capacity laterally and/or vertically for the protection of water quality. Such a requirement will be requested in writing.^a
19. Within 60 days after completing final closure of all Landfill waste management units,
 - a. the owner or operator must record a notation on the deed to the Landfill facility property, or some other instrument that is normally examined during title search, and notify the Executive Officer that the notation has been recorded and a copy has been placed in the operating record.
- b. the notation on the deed must, in perpetuity, notify any potential purchaser of the property that:
 - i. the land has been used as a landfill facility;
 - ii. its use is restricted pursuant to Subtitle D, Section 258.61(c)(3); and
 - iii. should the Discharger default in post-closure care, liability shifts to the new owner/operator.^{a,c}
20. The Discharger shall maintain waste containment facilities and precipitation and drainage controls, and shall continue to monitor, as appropriate, ground water, leachate from the Unit, the vadose zone, and surface waters per the current version of the Monitoring and Reporting Program throughout the post-closure maintenance period.^a
21. The post-closure maintenance period shall continue until the Board determines that remaining wastes in the Landfill will not threaten water quality.^a
22. Discharger shall notify the Board within 24 hours by telephone and within seven days in writing of any flooding, equipment failure, slope failure, or other change in Landfill conditions which could impair the integrity of waste containment facilities or of precipitation and drainage control structures.
23. Pursuant to the California Code of Regulations, Title 23, Chapter 15, Article 9, the Discharger shall submit a technical report to the Executive Officer not later than March 15, 1999, which:
 - a. discusses whether, in their opinion, there is any portion of the Order that is incorrect, obsolete, or otherwise in need of revision;

- b. addresses all other applicable sections of Article 9, Chapter 15 (e.g., update of the Landfill's Development and Operations Plan, etc.); and
 - c. includes any other technical documents needed to demonstrate continued compliance with this Order and all pertinent State and Federal requirements.^a
24. Any person failing or refusing to furnish technical or monitoring program reports as required by subdivision (b) of section 13267 of the California Water Code, or falsifying any information provided therein, is guilty of a misdemeanor.^d
25. The discharger and/or any person who violates waste discharge requirements and/or who intentionally or negligently discharges waste, causes or permits waste to be deposited where it is discharged to waters of the state, may be liable for civil and/or criminal remedies, as appropriate, pursuant to the California Water Code.^e
26. Prior to March 15, of every year, the Discharger shall submit a report addressing compliance with all terms of this Order.
27. The Board will review this Order periodically and may revise this Order when necessary.
28. The Discharger shall comply with the following submittal and implementation schedule for all tasks and/or reports required by this Order:

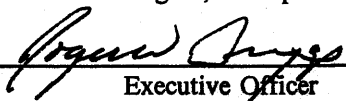
REPORT AND IMPLEMENTATION DATE SUMMARY

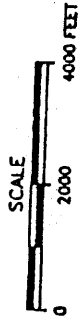
TASK

IMPLEMENTATION DATE

Runoff diversion and erosion prevention [Specification No. 4.]	October 1, of each year
Minimum One foot cover over entire Waste Management Unit [Specification No. 9.]	October 1, of each year until closure is completed
Vegetation placement over entire Landfill area [Specification No. 10.]	October 1, of each year
<u>REPORT</u>	<u>DUE DATE</u>
Wet Weather Preparedness Report [Provision No. 15.]	November 1, of each year
Draft Closure Plan [Provision No. 16.]	January 15, 1995
Technical Report [Provision No. 23.]	March 15, 1999
Compliance Report [Provision No. 26.]	March 15, of each year

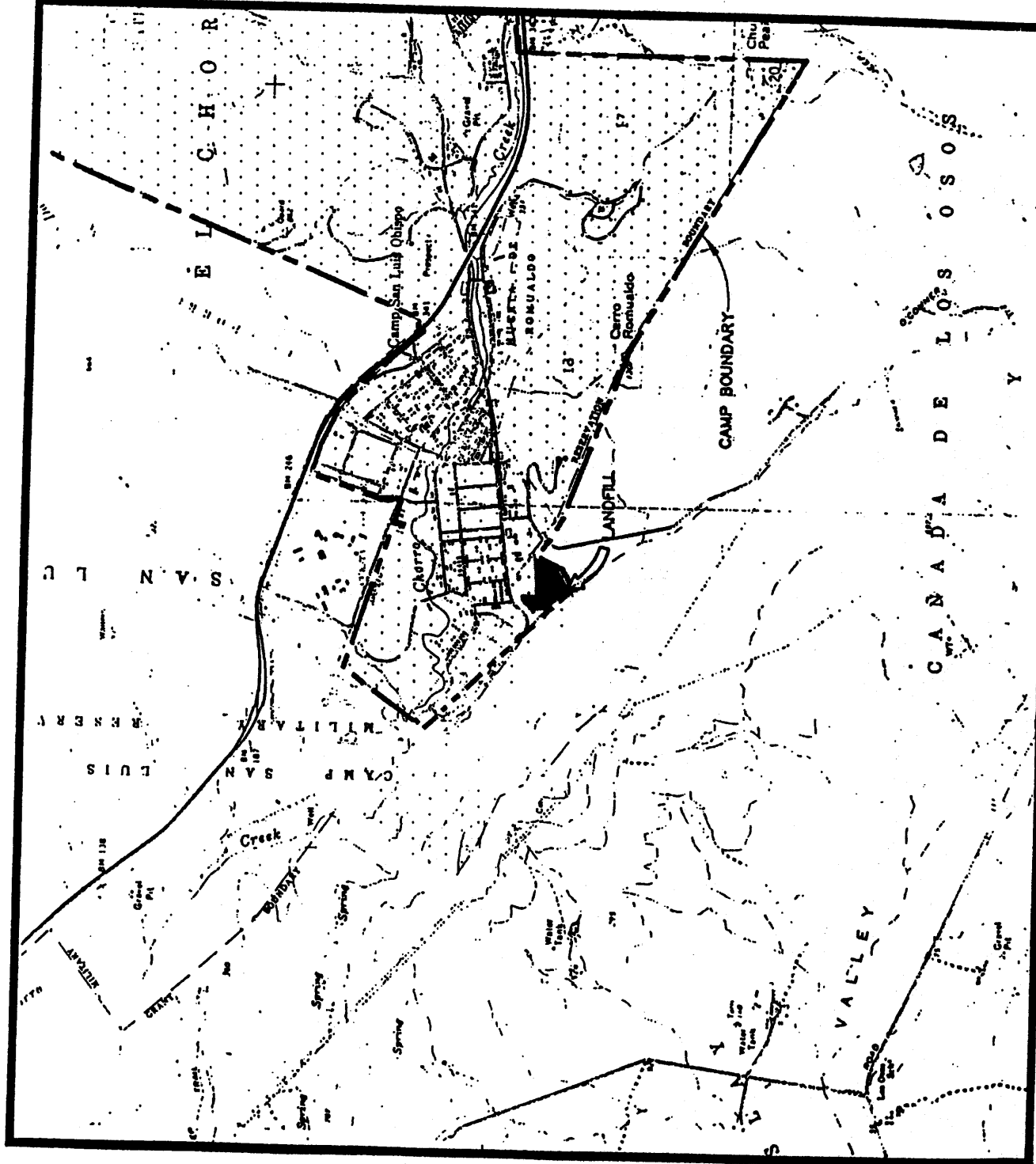
I, ROGER W. BRIGGS, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Coast Region, on September 9, 1994.


 Executive Officer



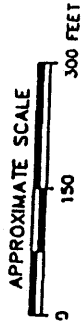
CAMP SAN LUIS OBISPO CLASS III LANDFILL

VICINITY MAP
ATTACHMENT B



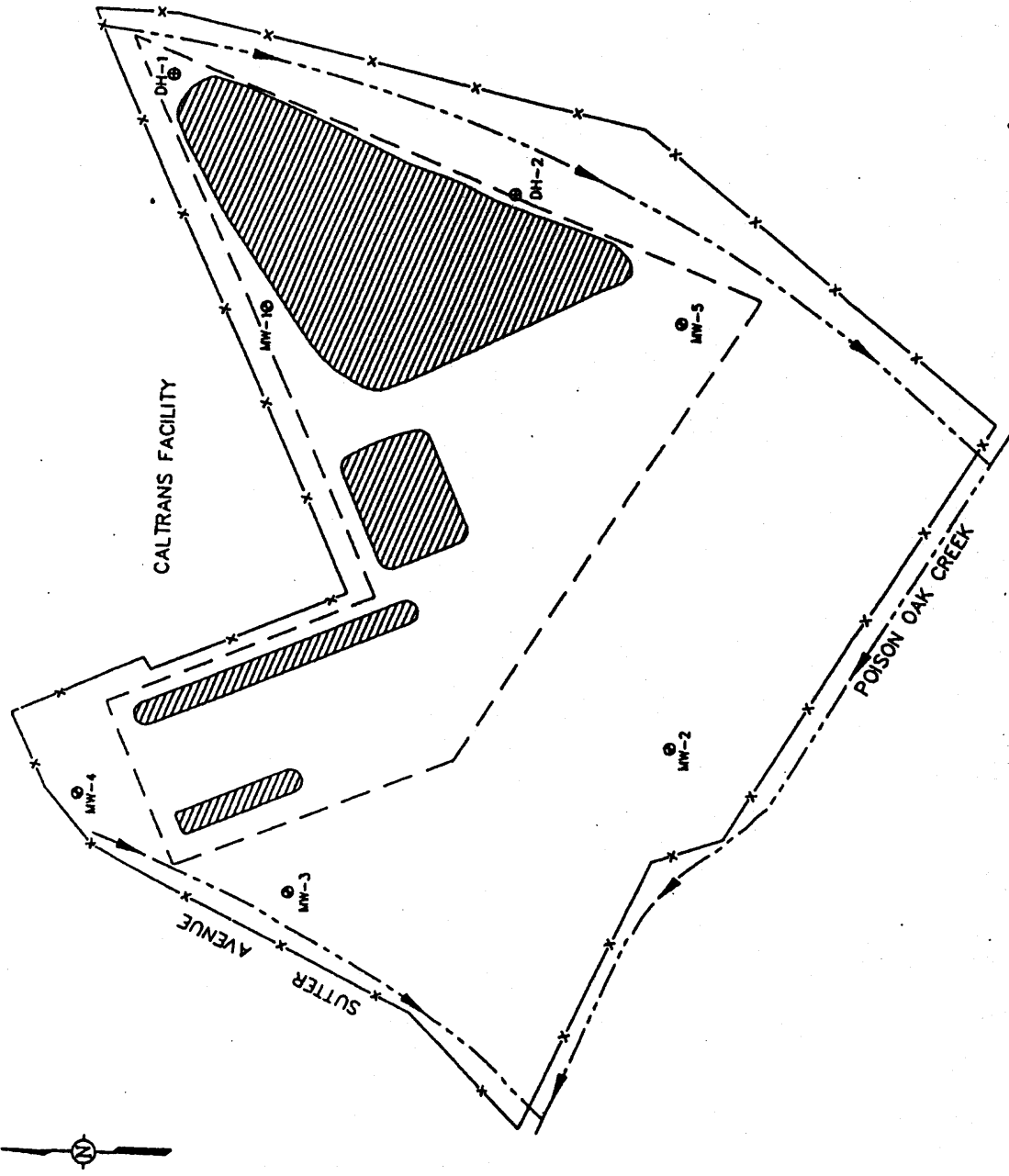
LEGEND

- ⊙ MONITORING WELL
- ⊕ EXPLORATORY BORING
- x- PERIMETER FENCE
- - - DRAINAGE DITCH AND DIRECTION OF FLOW
- - - APPROXIMATE WASTE DISPOSAL BOUNDARY
- ▨ APPROXIMATE BOUNDARY OF KNOWN WASTE DEPOSITS



**CAMP SAN LUIS OBISPO
CLASS III LANDFILL**

**SITE PLAN
ATTACHMENT C**



**STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
81 Higuera Street, Suite 200
San Luis Obispo, California 93401-5411**

**Revised MONITORING AND REPORTING PROGRAM NO. 94-79
(Revised May 10, 2002)**

FOR

**CAMP SAN LUIS OBISPO
SUTTER AVENUE CLOSED CLASS III LANDFILL
COUNTY OF SAN LUIS OBISPO**

PART I: MONITORING AND OBSERVATION SCHEDULE

Unless otherwise indicated, all monitoring and observations shall be reported as outlined in **PART IV**.

A. SITE INSPECTIONS

The Discharger shall inspect the Sutter Avenue Closed Class III Landfill (hereafter Landfill), in accordance with the following schedule, and record (at a minimum) the Standard Observations defined below.

1. SITE INSPECTION SCHEDULE:

- a. During the wet season (October through April); at least monthly and following each storm event producing a minimum of 1" of rain within a 24-hour period.
- b. During the calendar year, a minimum of one inspection between January and June, and one inspection between July and December. (Note: Ideally, the first inspection is completed after the rainy season and the second is completed prior to the rainy season).

2. STANDARD OBSERVATIONS:

a. At the Landfill:

- Evidence of ponded water at any point on the waste management facility.
- Evidence of odors; presence or absence, characterization, source, and distance of travel from source.
- Evidence of erosion and/or exposed refuse.
- Integrity of all drainage and containment systems.

b. Along the Landfill Perimeter:

- Evidence of liquid leaving or entering the Landfill, estimated size of affected area, and flow rate.
- Evidence of odors; presence or absence, characterization, source, and distance of travel from source.
- Evidence of erosion and/or exposed refuse.
- Inspection of all storm water discharge locations for evidence of non-storm water discharges during dry seasons and integrity during wet seasons.
- Evidence of trespass/illegal access and damage to the cover system, structures, monitoring points or any other onsite equipment.

c. For Receiving Waters:

- Floating and suspended materials of waste origin.
- Discoloration and turbidity.
- Evidence of odors.
- Evidence of beneficial use- presence of water-associated wildlife.
- Flow rate to the receiving water.

B. DRAINAGE SYSTEMS INSPECTIONS

The Discharger shall inspect all drainage control systems following each storm event generating runoff and record the following information:

1. Condition of drainage ditches and culverts.
2. General conditions of Landfill.
3. Steps taken to correct any problems found during inspection and when steps were taken.

C. RAINFALL DATA

The Discharger shall record the following information. Rainfall data shall be collected from the nearest monitoring station:

1. Daily precipitation totals.
2. Total precipitation during each three-month period: January through March, April through June, July through September, and October through December.
3. Precipitation during the most intense twenty-four hour interval of each three-month period.
4. Return rating of most intense storm [e.g., 25 year, 100 year, and so on].

D. GROUNDWATER MONITORING

1. Monitoring Points shall include those shown on Figure 1, and as follows:

Groundwater Monitoring Wells: MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, MW-8, MW-9, and MW-10

2. Monitoring Frequency: Monitoring of all Monitoring Points shall be performed as follows:

a) Detection Monitoring:

Sample Point(s)	Frequency	Analytes	Medium
MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, MW-8, MW-9, MW-10	Quarterly	Potentiometric surface	Groundwater
MW-8, MW-9, MW-10	Semi-annually (February and August)	Table 1. Field and laboratory parameters	Groundwater

b) **Corrective Action/ Evaluation Monitoring:**

Sample Point(s)	Frequency	Analytes	Medium
MW-1, MW-3, MW-4, MW-6, MW-7	Annually (in February)	Table 1. Field and laboratory parameters	Groundwater

3. **Monitoring Parameters:** The Discharger shall analyze all water samples from all Monitoring Points for the constituents/parameters, by the methods and reporting units listed in Table 1, below.

TABLE 1: MONITORING PARAMETERS (1)

Constituent/Parameter	USEPA Method	Units (3)
Total Dissolved Solids	160.1	mg/L
Sulfate	300	mg/L
Nitrate (as N)	300	mg/L
Dissolved Oxygen	Field	mg/L
Temperature	Field	F/C
Turbidity	Field	NTU
pH	Field	--
Electrical Conductivity	Field	µmhos/cm
VOC _{water} (2)	8260B	µg/L

Footnotes:

- (1) *Field parameters (dissolved oxygen, temperature, turbidity, pH, and electrical conductivity) shall be determined at each well and reported each time groundwater is sampled.*
- (2) *VOC_{water} is a Monitoring Parameter that encompasses a variety of VOCs. The Discharger shall analyze for all organic constituents detectable using the indicated USEPA analytical methods, including at least all constituents listed in Appendix I of 40 CFR 258 (subtitle D), as well as MtBE, 1,4-Dioxane, and all unidentified peaks (except for common lab contaminants).*
- (3) *mg/L – milligrams per liter, F/C – degrees Fahrenheit and Celsius, NTU – nessler turbidity units, µmhos/cm – micro-mhos per centimeter, and µg/L – micrograms per liter.*

4. **Constituents of Concern Monitoring:**

Constituents of Concern (COC) are listed in Table 2, which directly includes (or includes by reference) all constituents listed in Appendix II of 40 CFR, Part 258. Analysis of COCs shall be carried out **once every five years** at each of the site's groundwater monitoring points. If there is an indication of release, monitoring for COCs is also required. The COC monitoring shall be carried out in the spring of one year and the fall of the fifth year, **beginning in February/ March 2004**. Monitoring wells that have not previously been sampled for COCs shall be sampled and analyzed for all COCs within two years of this program becoming effective.

TABLE 2: CONSTITUENTS OF CONCERN PARAMETERS (1)

Constituents	USEPA Method	Units
Antimony	6010	mg/l
Arsenic	7060	mg/l
Barium	6010	mg/l
Beryllium	6010	mg/l
Cadmium	6010	mg/l
Chromium	6010	mg/l
Cobalt	6010	mg/l
Copper	6010	mg/l
Cyanide	9010	mg/l
Lead	7421	mg/l
Mercury	7470	mg/l
Nickel	6010	mg/l
Selenium	7740	mg/l
Silver	6010	mg/l
Sulfide	9030	mg/l
Thallium	7841	mg/l
Tin	6010	mg/l
Vanadium	6010	mg/l
Zinc	6010	mg/l
Chlorophenoxy Herbicides	8150	µg/l
Nonhalogenated Volatiles	8015	µg/l
Organochlorine Pesticides and PCBs	8080	µg/l
Phthalate Esters	8060	µg/l
Phenols	8040	µg/l
Semi-Volatile Organic Compounds	8270	µg/l
Volatiles	8260	µg/l

Footnotes:

(1) *The Discharger shall analyze for all organic constituents detectable using the indicated USEPA analytical methods, including at least all constituents listed in Appendix II of 40 CFR 258 (subtitle D), as well as MtBE, 1,4-Dioxane, and all unidentified peaks (except for common lab contaminants).*

5. **Groundwater Flow Rate and Direction:** For each monitored groundwater body, the Discharger shall measure the water level in each well, at least quarterly, including the times of expected highest and lowest elevations of the water level. The Discharger shall compare observed groundwater characteristics with those from previous determinations, noting the appearance of any trends as well as any indications that a change in the hydrogeologic conditions beneath the site has occurred. This information shall be reported in the Annual Monitoring Reports.
6. **Sample Procurement Limitation:** For any given monitored medium, the samples taken from all Monitoring Points satisfying the data analysis requirements for a given Monitoring Period shall be taken in a manner that ensures sample independence to the greatest extent feasible. A minimum of one sample shall be obtained from each Monitoring Point during each corresponding Monitoring Period. In the case of total dissolved solids, electrical conductivity, pH and nitrate, the number of samples collected must be sufficient for selecting

the most appropriate statistical method(s), as described in Part III Statistical and Non-Statistical Analysis of Data.

E. PASSIVE LANDFILL GAS SYSTEM

1. Gas Probes shall be inspected and maintained for proper venting capacity.

PART II: SAMPLE COLLECTION AND ANALYSIS

A. SAMPLING AND ANALYTICAL METHODS

Sample collection, storage, and analysis shall be performed according to the most recent version of Standard U.S. EPA Methods (U.S. EPA Publication SW-846) or in accordance with an Executive Officer approved sampling and analysis plan. A laboratory shall be approved for specified analytical methods by the State of California. Specific methods of analysis must be identified. If methods other than USEPA-approved methods or Standard Methods are used, the exact methodology must be submitted for review and must be approved by the Executive Officer prior to use. The director of the laboratory whose name appears on the certification shall supervise all analytical work in his/her laboratory and shall sign all reports submitted to the Regional Board. All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements. Sampling shall occur at a date that allows timely submittal of monitoring reports according to the schedule required by this Monitoring and Reporting Program. In addition, the Discharger is responsible for seeing that the laboratory analyses of all samples from all Monitoring Points meet the following restrictions:

1. Method Selection: The methods of analysis and the detection limits used must be appropriate for the expected concentrations. For detection monitoring of any constituent or parameter that is found in concentrations which produce more than 90% non-numerical determinations (i.e., trace) in historical data for that medium, the analytical method having the lowest Facility-Specific Method Detection Limit (MDL) shall be selected from among those methods which would provide valid results in light of any Matrix Effects involved.
2. Trace results: Results falling between the Method Detection Limit and the Facility Specific Practical Quantitation Limit (PQL) shall be reported as "trace", and shall be accompanied by both the (nominal or estimated) MDL and PQL values for that analytical run.
3. Nominal or Estimated MDL and PQL: The nominal MDL and PQL shall be derived according to State of California laboratory accreditation procedures for each analytical procedure. Both limits shall reflect the detection and quantitation capabilities of the specific analytical procedure and equipment used by the lab, rather than simply being quoted from USEPA analytical method manuals. If the lab suspects that, due to a change in matrix or other effects, the true detection limit or quantitation limit for a particular analytical run differs significantly from the laboratory-derived MDL/PQL values, the results shall be flagged accordingly and an estimate of the detection limit and/or quantitation limit actually achieved shall be included.
4. Quality Assurance/Quality Control (QA/QC) Data: All QA/QC data shall be reported along with the sample results to which it applies. Sample results shall be reported unadjusted for blank results or spike recovery. The QA/QC data submittal shall include the:
 - a. Method, equipment, and analytical detection limits;
 - b. Recovery rates and an explanation for any recovery rate that is less than 80%;
 - c. Results of equipment and method blanks;
 - d. Results of spiked and surrogate samples;

- e. Frequency of quality control analysis;
 - f. Chain of custody logs, and;
 - g. the name and qualifications of the person(s) performing the analyses.
5. **Common Laboratory Contaminant:** Upon receiving written approval from the Executive Officer, an alternative statistical or non-statistical procedure can be used for determining the significance of analytical results for a constituent that is a common laboratory contaminant (i.e., methylene chloride, acetone, 2-Butanone, diethylhexyl phthalate, and di-n-octyl phthalate) during any given Monitoring Period in which QA/QC samples show evidence of laboratory contamination for that constituent. Nevertheless, analytical results involving detection of these analytes in any background or down-gradient sample shall be reported and flagged for easy reference by Regional Board staff.
 6. **Unknowns:** Unknown chromatographic peaks shall be reported, along with an estimate of the concentration of the unknown analyte. When unknown peaks are encountered, second column or second method confirmation procedures shall be performed to attempt to identify and more accurately quantify the unknown analyte.
 7. In cases where contaminants are detected in QA/QC samples (i.e., field, trip, or lab blanks), the accompanying sample results shall be appropriately flagged.
 8. The **Method Detection Limit** shall always be calculated such that it represents a concentration associated with a 99% reliability of a non-zero result. In relatively interference-free water, laboratory-derived MDLs are expected to closely agree with published USEPA MDLs.
 9. The **Practical Quantitation Limit** shall be the lowest acceptable calibration standard (acceptable as defined for a linear response or by actual curve fitting) times the sample extract dilution factor times any additional factors to account for matrix interference.
 10. The **Matrix Effect** is any increase in the MDLs or PQLs for a given constituent as a result of the presence of other constituents, either of natural origin or introduced through a release, that are present in the sample being analyzed.

B. CONCENTRATION LIMITS

The concentration limit for the Monitoring Parameters of Nitrate, Total Dissolved Solids and sulfate shall be determined in accordance with Title 27, Section 20400 or the constituents' background value, established using historical background monitoring data collected from the background monitoring wells. The background value shall be either the:

1. Mean (or median, as appropriate) and standard deviation (or other measure of central tendency, as appropriate) of the constituent's background data;
2. Constituent's Method Detection Limit, in cases where the constituent's Method Detection Limit is exceeded in less than 10% of the historical samples; or,
3. Mean (or median, as appropriate) and standard deviation (or other measure of central tendency, as appropriate) of each formation's background well data.

C. RECORDS TO BE MAINTAINED

Written records shall be maintained by the Discharger or laboratory, and shall be retained for a minimum of five years. This period of retention shall be extended during the course of any

unresolved litigation regarding this cleanup or when requested by the Executive Officer. Such records shall show the following for each sample:

1. Identity of sample and of the monitoring point from which it was taken, along with the identity of the individual who obtained the sample;
2. Date and time of sampling;
3. Date and time that analyses were started and completed, and the name of the personnel performing each analysis;
4. Complete procedure used, including method of preserving the sample, and the identity and volumes of reagents used;
5. Chromatographs and calculation of results; and
6. Results of analyses, and the Method Detection Limit and Practical Quantitation Limit for each analysis.

PART III: STATISTICAL AND NON-STATISTICAL ANALYSIS OF DATA

A. STATISTICAL METHOD

For Detection Monitoring, the Discharger shall use statistical methods to analyze COC and Monitoring Parameters that exhibit concentrations that equal or exceed their respective MDL in at least ten percent of applicable historical samples. The Discharger may propose and use any statistical method that meets the requirements of California Code of Regulations, Title 27, §20415(e)(7). All statistical methods and programs proposed by the Discharger are subject to Executive Officer approval.

B. NON-STATISTICAL METHOD

The following non-statistical method shall be used for analyzing constituents that are detected in less than 10% of applicable historical samples. This method involves a two-step process:

1. For applicable constituents, compile a sampling location specific list of those constituents that exceed their respective MDL. The list shall be compiled based on either the data from the single sample or in cases of multiple independent samples, from the sample which contains the largest number of constituents;
2. Evaluate whether the listed constituents meet either of two possible triggering conditions. Either, the list, from a single sampling location, contains two or more constituents, or contains one constituent that equals or exceeds its PQL. If either condition is met, a conclusion shall be made that a release is tentatively indicated and the Discharger shall immediately implement the appropriate Discrete Retest procedure, below.

C. DISCRETE RETEST

1. In the event that the Discharger concludes that the Landfill is tentatively a source of any Monitoring Parameters listed in Table 1 above. The Discharger shall within 30 days of this conclusion, collect two new suites of samples for the indicated Monitoring Parameter(s) at each indicating Monitoring Point, collecting at least as many samples per Monitoring Point as were used for the initial test.

2. As soon as the retest data is available, the Discharger shall use the same statistical method (or non-statistical comparison) as that which tentatively indicated the Landfill is a significant source to separately analyze each of the two suites of retest data for the affected Monitoring Points.

For any indicated Monitoring Parameter at an affected Monitoring Point, if the test results of either (or both) of the retest data suites confirms the original indication, the Discharger shall conclude that the Landfill is a significant source and report this conclusion in the ensuing Monitoring Report. All re-tests shall be carried out only for the Monitoring Point(s) for which a conclusion is tentatively made, and only for the Monitoring Parameter(s) which triggered the indication.

PART IV: REPORTING

A. MONITORING REPORT

The Discharger shall submit a written Monitoring Report Annually in accordance with the time frame provided in Table 3, below. The Monitoring Report shall include the results of all Monitoring Parameters analyzed as required by this Monitoring and Reporting Program. All reports shall be comprised, as appropriate, of at least the following:

TABLE 3: REPORTING FREQUENCY

Annual Monitoring Period	Report Due Date*
January 1- December 31	January 31

*(Note: * if the Report Due Date falls on a weekend or holiday, the report is due on the next working day.)*

1. GENERAL

- a. All data required by this monitoring program for each corresponding Monitoring Period in tabular and electronic format.
- b. All previous groundwater data (electronic format) for comparison of historical trends.
- c. An evaluation and interpretation of all available data.
- d. Copy of sampling log (record) for each well and gas boring.

2. LETTER OF TRANSMITTAL

A letter summarizing the groundwater monitoring results shall accompany each report. Such letter shall include a discussion of any violations found since the last report was submitted, and shall describe actions taken or planned for correcting those violations. If a detailed time schedule has been previously submitted for correcting said violations, a reference to the correspondence transmitting such schedule will be satisfactory. If no violations have occurred since the last submittal, this shall be stated in the letter of transmittal. The monitoring reports and the letter transmitting the monitoring reports shall be signed by a County government division head or above, or by his/her duly authorized representative, if such a representative is responsible for the overall operation of the Landfill assessment and cleanup. The letter shall contain a statement by the official, under penalty of perjury, that to the best of the signer's knowledge the report is true, complete, and correct.

3. COMPLIANCE EVALUATION SUMMARY

The summary shall contain at least:

- a. **Determination of the velocity and direction of groundwater flow:** For the monitored groundwater zone, a description and graphical presentation of the velocity and direction of groundwater flow under/ around the Landfill, based upon water level elevations taken during the collection of the water quality data in the Monitoring Report (i.e., groundwater elevation contour map for each water-bearing zone, beneath and adjacent to the Landfill) shall be included. The analysis shall include a discussion of how observed groundwater rate, flow, and direction compare with those from previous determinations, and the appearance of any trends as well as any other items that may indicate a potential change in the hydro-geological conditions beneath or adjacent to the Landfill.
- b. **Pre-Sampling Purge:** For each monitoring well addressed by the report, a description of the method and time of water level measurement, the type of pump used for purging and the placement of the pump in the well, and the method of purging (the pumping rate, the equipment and methods used to monitor field pH, temperature, and conductivity during purging, the calibration of the field equipment, results of the pH, temperature, conductivity, and turbidity testing, the well recovery time, and the method of disposing of the purge water).
- c. **Sampling:** For each Monitoring Point addressed by the report, a description of the type of pump, or other device used, its placement for sampling, and a description of the sampling procedure (number of samples, field blanks, travel blanks, and duplicate samples taken; the type of containers and preservatives used; the date and time of sampling; the name and qualifications of the person actually taking the samples; and a description of any anomalies).
- d. **Post Sampling Purge:** Discussion of the Post-Sampling Purge method used when collecting multiple independent samples.

4. MAP

A map or aerial photograph showing the locations of all observation stations and monitoring points (groundwater and gas).

5. LABORATORY RESULTS

Laboratory statements, concerning the results of all analyses, demonstrating compliance with the most recently approved Sampling & Analyses Plan. Additionally, results of all sampling and analyses performed at the site, outside the requirements of this Monitoring and Reporting Program, shall be summarized and reported.

6. GRAPHICAL PRESENTATION OF DATA

Provide (in electronic format) a complete data history of all groundwater laboratory analytical data from each Monitoring Point. All analytical data must be presented in graphical format for each Monitoring Point. Each such graph shall plot the concentration of one or more constituents over time, at a scale appropriate to show trends or variations in water quality. Maximum contaminant levels (MCL) shall be graphed along with constituent concentrations where applicable. Graphs shall plot each datum, rather than plotting mean values. For each groundwater body monitored, graphical presentation shall also include iso-concentration contours. For any given constituent or parameter, the scale for background plots shall be the same as that used to plot down-gradient data.

7. STANDARD OBSERVATIONS

A summary of all Standard Observations for the Landfill, the perimeter of the Landfill, the Receiving Waters, and a summary of the Drainage Systems Inspections and Rainfall Data recorded.

8. DISCUSSION

A comprehensive discussion of the compliance record, the result of any corrective actions taken or planned to bring the Discharger into full compliance with the waste discharge requirements, and a summary of the groundwater and surface water analyses that indicates any changes made since the previous annual report.

9. ANALYTICAL DATA

All monitoring analytical data obtained during the previous year, presented in tabular form as well as on CD-ROM. The Board regards the submittal of data in electronic format as "...the necessary form for..." statistical analysis [§ 2550.8(h) of Article 5], as it facilitates periodic review by the Board's statistical consultant. Additionally, complete data histories of each well shall be submitted in electronic format.

B. CONSTITUENTS OF CONCERN

A report summarizing the results of the analysis for the constituents of concern at each monitoring point identified in **PART I. D. 4.** shall be submitted to the Board once every five years beginning **February/ March 2004**, or following indication of a release. The COC report may be combined with the annual monitoring report.

TABLE 4: COC REPORTING FREQUENCY (5-YR)

Monitoring Period	Report Due Date*
February/ March 2004	January 31, 2005
August/ September 2009	January 31, 2010

*(Note: * if the Report Due Date falls on a weekend or holiday, the report is due on the next working day.)*

C. CONTINGENCY RESPONSE

1. Discharger shall notify the Executive Officer, within 24 hours by telephone and within 14 days in writing, of:
 - a. Any noncompliance potentially or actually endangering health or the environment;
 - b. Any flooding, equipment failure, slope failure, or other change in Landfill conditions which could impair the integrity of waste containment facilities or of precipitation and drainage control structures;
 - c. Leachate seep occurring on or in proximity to the Landfill; and
 - d. Any statistical or non-statistical indication of a release from the Landfill.
2. The Discharger or persons employed by the Discharger shall comply with all notice and reporting requirements of the State Department of Water Resources and with concurrence of the Executive Officer regarding the construction, alteration, destruction, or abandonment of all monitoring wells used for compliance with this monitoring program, as required by §13750.5 through §13755 and §13267 of the California Water Code.

3. If the Discharger or the Regional Board determines, pursuant to Title 27, §20420, that there is evidence of a release or a new release from any portion of the Landfill, the Discharger shall immediately implement the procedures outlined in CCR Title 27 Section 20380, 20385, 20430 and this monitoring program.

PART V: DEFINITION OF TERMS

A. CONCENTRATION LIMITS

The Concentration Limit for any given COC or Monitoring Parameter in a given monitored medium shall be either:

1. The constituent's statistically determined background value or interval limit, established using an Executive Officer approved method (Part III); or
2. In cases where the constituent's MDL is exceeded in less than 10% of historical samples, the MDL is the concentration limit defined in Part II. A.1.

B. CONSTITUENTS OF CONCERN (COC)

COC includes a broad list of constituents likely to be present in a typical municipal solid waste landfill. The COCs for this landfill are listed in Table 2.

C. MATRIX EFFECT

Any increase in the MDL or Practical Quantitation Limit for a given constituent as a result of the presence of other constituents, either of natural origin or introduced through a release, that are present in the sample being analyzed.

D. METHOD DETECTION LIMIT (MDL)

The lowest concentration at which a given laboratory, using a given analytical method to detect a given constituent, can differentiate with 99% reliability, between a sample which contains the constituent and one which does not. The MDL shall reflect the detection capabilities of the specific analytical procedure and equipment used by the laboratory.

F. MONITORED MEDIUM

Those media that are monitored pursuant to this Monitoring and Reporting Program (groundwater, surface water, or other as specified).

G. MONITORING PARAMETERS

A short list of constituents and parameters used for the majority of monitoring activities. The Monitoring Parameters are listed in Part I. D.

H. MONITORING PERIOD (frequency)

The duration of time during which a sampling event must occur. The Monitoring Period for the various media and programs is specified in Part I. D. (2 & 4).

I. MONITORING POINT

A well, device, or location specified in the waste discharge requirements (WDR) at which monitoring is conducted.

J. PRACTICAL QUANTITATION LIMIT (PQL)

The lowest acceptable calibration standard (acceptable as defined for a linear response or by actual curve fitting) times the sample extract dilution factor times any additional factors to account for Matrix Effect. The PQL shall reflect the quantitation capabilities of the specific analytical procedure and equipment used by the laboratory. PQLs reported by the laboratory shall not simply be restated from USEPA analytical method manuals. Laboratory derived PQLs are expected to closely agree with published USEPA estimated quantitation limits (EQL).

K. RECEIVING WATERS

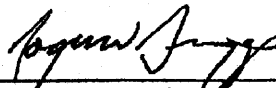
Any surface water, which actually or potentially receives surface or groundwater, which pass over, through, or under waste materials or contaminated soils.

L. WASTE MANAGEMENT FACILITY

The entire parcel of property at which waste discharge operations are conducted.

All reports required in this monitoring and reporting program are required pursuant to California Water Code Section 13267.

ORDERED BY: _____



Roger W. Briggs
Executive Officer

5-10-02

Date

Attachment: Figure 1. Monitoring Point Location Map

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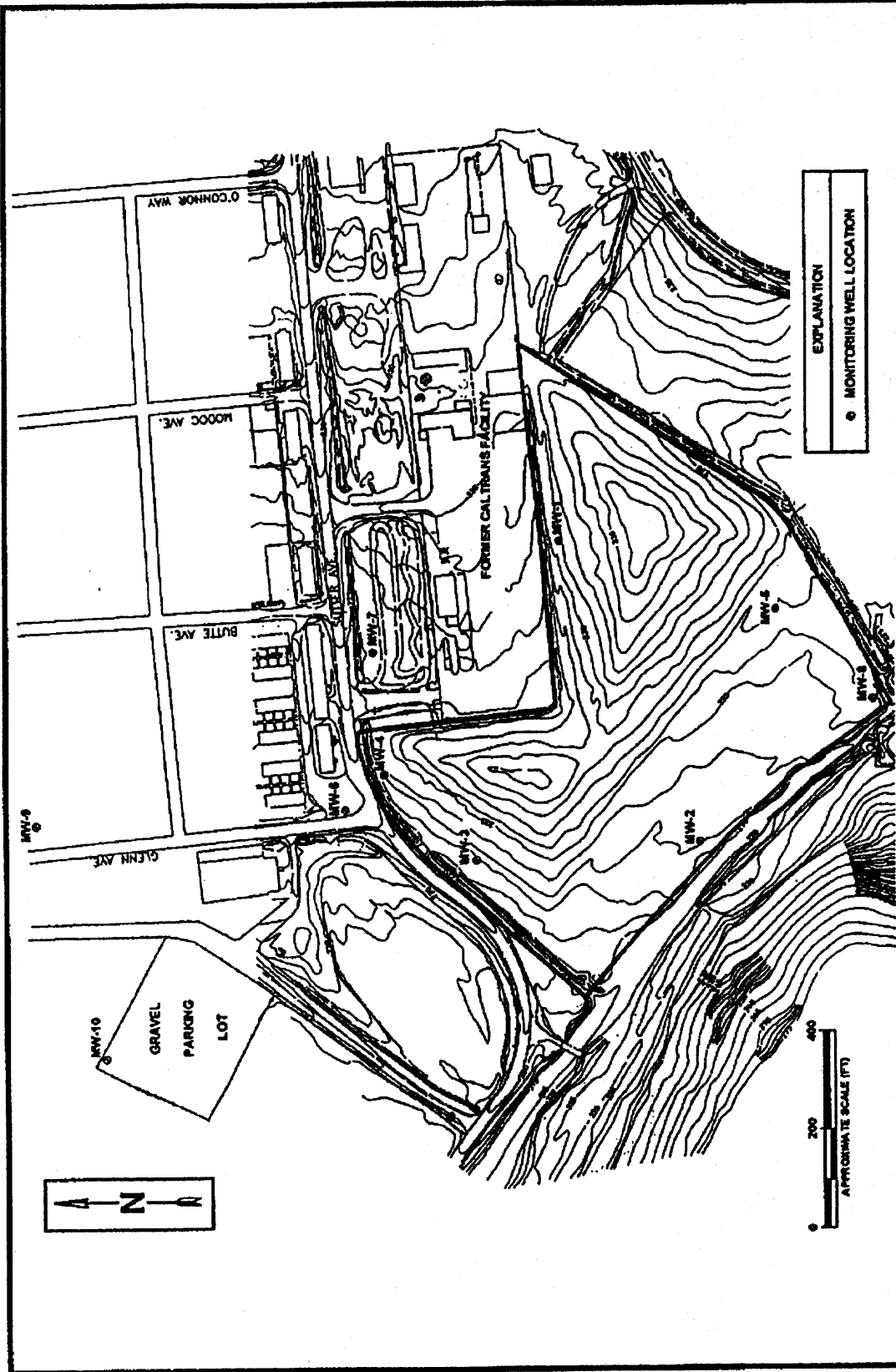


Figure 1

**Camp San Luis Obispo, Sutter Ave. Closed Class III Landfill
County of San Luis Obispo**

Monitoring Point Location Map

