

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 88-058

UPDATED WASTE DISCHARGE REQUIREMENTS FOR:

CLOVER FLAT LANDFILL, INC.,
UPPER VALLEY DISPOSAL SERVICE, INC.,
WALTER TAMAGNI, AND THE COUNTY OF NAPA
CLASS III SOLID WASTE DISPOSAL SITE
CALISTOGA, NAPA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter called the Board), finds that:

1. The land on which the Clover Flat Landfill (previously known as the Upper Valley Landfill) operates is owned by Mr. Walter Tamagni, 4397 Silverado Trail, Calistoga, California, and leased by the County of Napa. The landfill is operated by Clover Flat Landfill Inc. The Clover Flat Landfill, Inc., Mr. Walter Tamagni, Napa County, and the Upper Valley Disposal Service, Inc. are hereinafter collectively referred to as the discharger. The discharger, by application dated February 5, 1988 has applied for revision of Waste Discharge Requirements (WDR), pursuant to Title 23, Chapter 3, Subchapter 15 of the California Administrative Code (Subchapter 15), for the continued operation of the Clover Flat Class III Landfill in Calistoga, Napa County. This Order is an update of existing waste discharge requirements for the site.
2. The project site, as shown on Attachment A, which is incorporated herein and made a part of this Order, is situated in a steep canyon located in the northern part of the San Francisco Bay Basin between the cities of St. Helena and Calistoga, off of the Napa County Roadway "Silverado Trail". The disposal site lies approximately 0.8 miles north of the Silverado Trail, and about four miles southeast of the City of Calistoga. The landfill occupies approximately 112 acres of land and accepts for disposal only non-hazardous solid wastes generated in northern Napa County and delivered to the site by the general public and Upper Valley Disposal Services, Inc. As presently configured and operated, the existing landfill has an approximate remaining lifetime of 12 years, at a disposal rate of about 94 tons of refuse per day.
3. The Clover Flat Landfill is currently regulated by this Board's Order No. 78-66, adopted on August 15, 1978. Order No. 78-66 was amended by Order No. 80-18 on April 15, 1980.
4. The Clover Flat Landfill lies within the hilly volcanic terrain forming the eastern boundary of the Napa Valley. Natural elevations of the portion of the site currently used for landfilling range from 600 feet on the southeast to more than 950 feet on the northwest. The natural elevations have been altered by previous excavation and landfilling activities conducted at the site. The site has been used for waste disposal since 1963.

5. The site is underlain by a complex series of interlayered volcanic rock types covered by a thin soil mantle. Volcanic rocks identified on site range from extremely hard intrusive types to soft, light colored pyroclastic or wind-deposited ash and sand/silt.
6. Data from the U.S. Geological Survey and the Napa County Flood Control and Water Conservation District have established that the site is located within essentially non-water bearing volcanic deposits. The limited groundwater that is found in the volcanic deposits is thought to be contained in fractures. A well drilled on the site in 1961 to an approximate elevation of 460 feet, or about 140 feet below the base of the landfill, did not encounter water. Regional groundwater flow in the nearby Napa Valley is toward the southeast. The potential beneficial uses of any groundwater that exists beneath the site are unknown at this time. Compliance with this Order will provide an assessment of groundwater occurrence beneath the site, and the potential beneficial uses of any groundwater that may exist.
7. The site is adjacent to an intermittent stream channel which runs in a southerly direction just beyond the toe of the landfill. This unnamed creek is tributary to the Napa River. Other surface waters in the vicinity of the site that could potentially be impacted by the landfill include surface water run-off from the surrounding hills.
8. The Clover Flat Landfill lies in the geologically active coastal region of California. The entire region experiences moderate seismic activity as the result of movement along several regional fault systems. Major known faults in the area are the San Andreas, Green Valley, and Healdsburg-Rodgers Creek faults. The site lies approximately 30 miles northwest of the Green Valley fault, 10 miles east of the Healdsburg-Rodgers Creek fault, and about 36 miles east of the San Andreas fault.
9. The beneficial uses of the Napa River, which is situated approximately a mile and a half from the landfill, are as follows:
 - a. Wildlife habitat
 - b. Water contact recreation
 - c. Non-contact water recreation
 - d. Commercial and sport fishing
 - e. Preservation of rare and endangered species
 - f. Estuarine habitat
 - g. Fish migration and spawning
10. The Clover Flat Landfill, subsequent to any modifications required to comply with this Order, will meet the criteria contained in Subchapter 15 for classification of the site as a Class III landfill to receive non-hazardous solid waste.
11. In order to satisfy requirements of Article 5 of Subchapter 15 the discharger submitted a proposed groundwater monitoring program.
12. Background water quality for ground waters beneath and adjacent to the site, for the purpose of establishing Water Quality Protection Standards (WQPS) pursuant to Section 2552 of Subchapter 15 have not been

determined. Compliance with this Order will provide for the establishment of WQPS according to the requirements of Subchapter 15.

13. Reports submitted by the discharger for the Clover Flat Landfill include a Report of Waste Discharge dated February 26, 1975, "Proposed Improvements and Operation Procedures at the Napa County Dumpsite" dated August 1974, a report, "Report of Waste Discharge Disposal Operation Date for Upper Valley Landfill" dated July 1, 1975, a report, "Closure Plan Upper Valley Disposal Site Napa County, California" dated May, 1979, and a proposed groundwater monitoring program dated May 23, 1985. These reports are hereby incorporated as part of this Order.
14. The Board adopted a revised Water Quality Plan for the San Francisco Bay Basin (Basin Plan) on December 17, 1986 and this Order implements the water quality objectives stated in that plan.
15. This project constitutes a minor modification to land for the continued operation of an existing landfill, with changes to meet public health and safety standards, and is therefore categorically exempt from the provisions of the California Environmental Quality Control Act (CEQA) pursuant to Section 15301 of the Resources Agency Guidelines.
16. The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge, and has provided them with an opportunity to submit their written views and recommendations.
17. The Board in a public meeting heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that the Clover Flat Landfill, Mr. Walter Tamagni, the County of Napa, and the Upper Valley Disposal Service, Inc., and any other persons that currently or in the future own this land or operate this facility, shall meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder and shall also comply with the following:

A. PROHIBITIONS

1. The disposal of waste shall not create a pollution or nuisance as defined in Section 13050 (1) and (m) of the California Water Code.
2. Wastes shall not be placed in or allowed to contact ponded water from any source whatsoever.
3. Wastes shall not be disposed of in any position where they can be carried from the disposal site and discharged into waters of the State or of the United States.

4. Hazardous and designated wastes as defined in Sections 2521 and 2522 of Subchapter 15, and high moisture content wastes including sewage sludge, septic tank waste, restaurant grease, and wastes containing less than 50% solids, shall not be deposited or stored at this site.
5. The discharger, or any future owner or operator of this site, shall not cause the following conditions to exist in waters of the State at any place outside the waste management facility:
 - a. Surface Waters
 1. Floating, suspended, or deposited macroscopic particulate matter or foam.
 2. Bottom deposits or aquatic growth.
 3. Alteration of temperature, turbidity, or apparent color beyond natural background levels.
 4. Visible, floating, suspended or deposited oil or other products of petroleum origin.
 5. Toxic or other deleterious substances to be present in concentrations or quantities which may cause deleterious effects on aquatic biota, wildlife or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentrations.
 - b. Ground Water
 1. The ground water shall not be degraded as a result of the waste disposal operations.
6. Leachate from wastes and ponded water containing leachate or in contact with refuse shall not be discharged to waters of the State or the United States.

B. SPECIFICATIONS

1. Water used during disposal operations shall be limited to a minimal amount necessary for dust control and fire suppression.
2. The site shall be protected from any washout or erosion of wastes or covering material and from inundation which could occur as a result of a 100 year 24 hour precipitation event, or as the result of flooding with a return frequency of 100 years. Diversion and drainage facilities shall be designed and constructed to accommodate the anticipated volume of precipitation and peak flows from surface run-off during the 100-year storm. Precipitation on the landfill which is not diverted by covers or drainage control systems shall be collected and managed through a leachate collection and removal system, which shall be designed and constructed to accommodate the 100-year storm.

3. Surface drainage from tributary areas, and internal site drainage from surface and subsurface sources, shall not contact or percolate through wastes during disposal operations or during the life of the site. Drainage ditches constructed over refuse fill shall be underlain with a minimum 5-foot thickness of compacted earth fill. Surface drainage ditches shall be constructed to ensure that all rainwater is diverted off-site and does not contact wastes or leachate.
4. The discharger shall ensure that the foundation of the site, the refuse fill, the structures which control leachate, surface drainage, erosion, and gas for this site are constructed and maintained to withstand conditions generated during the maximum probable earthquake.
5. Site characteristics shall provide adequate separation between non-hazardous solid waste and waters of the state. Soil characteristics, distance from waste to groundwater, and other factors shall ensure no impairment of beneficial uses of surface water or of groundwater beneath or adjacent to the landfill. Factors to be evaluated shall include: the size of the waste management unit; permeability and transmissivity of underlying soils; depth to groundwater and variations in depth to groundwater; background water quality; current and anticipated use of the groundwater; and, annual precipitation. Where consideration of these factors indicates that site characteristics alone do not ensure protection of the quality of groundwater or surface water, the landfill shall be lined with a single clay liner with permeability of 1×10^{-6} cm/s or less. This liner shall be in accordance with Sections 2541 and 2542 of Subchapter 15.
6. If a liner is required for the landfill, a Leachate Collection and Removal System (LCRS) shall be installed over the liner. This LCRS shall be constructed and operated in accordance with Section 2543 of Subchapter 15.
7. The landfill shall be provided with interim cover. Interim cover at landfills is daily cover and intermediate cover as defined by the California Waste Management Board. Interim cover shall be designed and constructed to minimize percolation of precipitation through wastes.
8. The landfill shall accept for disposal only non-hazardous solid wastes as defined in Section 2523(a) of Subchapter 15. A periodic load checking program, as specified in Section 2523(b) of Subchapter 15, shall be implemented at the site to ensure that hazardous materials are not discharged at the landfill.
9. As portions of the landfill are closed, the exterior surfaces shall be graded to a minimum slope of three percent in order to promote lateral runoff of precipitation. In addition, all completed disposal areas shall be covered with a minimum of 4 feet of cover and meet other applicable requirements as described in Article 8 of Subchapter 15.

10. Closure shall be under the direct supervision of a registered civil engineer or a certified engineering geologist.
11. Pursuant to Section 2580(d) of Subchapter 15, the discharger shall provide two surveyed permanent monuments on or near the landfill from which the location and elevation of wastes, containment structures, and monitoring facilities can be determined throughout the post-closure maintenance period. These monuments shall be installed by a licensed land surveyor or registered civil engineer.
12. The discharger shall establish an irrevocable closure fund, or equivalent financial assurances pursuant to Section 2580(f) of Subchapter 15, that will provide sufficient funds to properly close each area of the landfill and for the post-closure monitoring and maintenance of the site. For the purposes of planning the amount of this fund the discharger shall assume a post-closure period of at least 30 years. The discharger shall provide an evaluation of closure and post closure monitoring and maintenance costs.
13. The discharger shall operate the landfill so as not to cause a statistically significant difference to exist between water quality at the compliance points and the WQPS to be established for the site. The compliance points are still to be identified. The discharger shall establish WQPS according to the requirements of this Order and Article 5 of Subchapter 15. WQPS shall be evaluated for, at a minimum, the following constituents:
 - a. pH
 - b. Specific Conductivity
 - c. Chloride
 - d. Total Organic Carbon
 - e. Nitrate Nitrogen
 - f. Total Kjeldahl Nitrogen
 - g. Total Phenol
 - h. Total Dissolved Solids
 - i. Arsenic
 - j. Total Chromium
 - k. Copper
 - l. Nickel
 - m. Zinc
 - n. Lead
14. The discharger shall provide all applicable information pursuant to Article 9 (Compliance Procedures) of Subchapter 15. This information shall include that which is set forth in Sections 2594 through 2597 of Article 9, in accordance with Section 2590(a). Any applicable information which has been submitted to the regional board, or another state agency, may be incorporated by reference, provided that the report shall not be considered complete until referenced information is received or obtained by the regional board.

15. The discharger shall install any additional ground water and leachate monitoring devices required to fulfill the terms of any Self-Monitoring Program issued to the discharger in order that the Board may evaluate compliance with the conditions of this Order.

C. PROVISIONS

1. The discharger shall comply with all Prohibitions, Specifications, and Provisions of this Order, immediately upon adoption of this Order.
2. The discharger shall submit, by October 1, 1988, a Report of Waste Discharge pursuant to Article 9 of Subchapter 15, and a proposed water quality monitoring program pursuant to Article 5. This report shall address all applicable requirements of Sections 2594 through 2597, and Article 8. This report shall demonstrate compliance with Section 2533 of Subchapter 15. If compliance is not demonstrated, a time schedule for achieving compliance shall be included with the Report of Waste Discharge. This report shall assess the feasibility and need for installation of additional leachate monitoring and collection facilities in the filled area of the landfill. This report shall also assess the need for a liner in areas of the site remaining to be filled. If a liner is required, it shall be implemented as part of the landfill construction no later than December 1, 1988.
3. The discharger shall submit, by February 1, 1989, an evaluation of leachate build-up within all portions of the landfill, and a proposed leachate management plan. This plan should evaluate the quantity of leachate produced, the storage of the leachate, and the ultimate disposal of the leachate. This management plan should also provide for an annual evaluation of the leachate generated at the site. If recirculation of the leachate is to be considered, the discharger must demonstrate that a minimum solids to liquid ratio of 5:1 by weight, using a moisture content of the solid waste of at least 30%, is maintained at the landfill.
4. The discharger shall submit, by October 1, 1990, a report on the groundwater quality at the site that evaluates and proposes Water Quality Protection Standards for the constituents listed in Specification B.13 of this Order according to the requirements of Article 5 of Subchapter 15. If it is determined that the statistical comparison requirements of Article 5 are infeasible the report should include a proposal, pursuant to Section 2510(b) of Subchapter 15, for an alternative comparison procedure.
5. The discharger shall file with the Board quarterly self-monitoring reports performed according to any self-monitoring program issued by the Executive Officer.
6. All reports prepared pursuant to these Provisions shall be prepared under the supervision of a registered civil engineer or certified engineering geologist.

7. The discharger shall remove and relocate any wastes which are discharged at this site in violation of these requirements.
8. The regional board shall be notified immediately of any slope failure occurring in the waste management unit. Any failure which threatens the integrity of containment features or the landfill shall be promptly corrected after approval of the method and schedule by the regional board.
9. The discharger shall notify the regional board at least 180 days prior to beginning any partial or final closure activities. This notice shall include a statement that all closure activities will conform to the most recently approved closure plan and that the plan provides for site closure in compliance with all applicable regulations.
10. The discharger shall submit, within 90 days after the closure of any portion of the landfill, a closure certification report that documents that the area has been closed according to the requirements of this Order and Subchapter 15. The discharger shall certify under penalty of perjury that all closure activities were performed in accordance with the most recently approved closure plan and in accordance with all applicable regulations.
11. The discharger shall file with this Board a report of any material change or proposed change in the character, location, or quantity of this waste discharge. For the purpose of these requirements, this includes any proposed change in the boundaries of the disposal areas or the ownership of the site.
12. The discharger shall maintain a copy of this Order at the site so as to be available at all times to site operating personnel.
13. The Board considers the property owner and site operator to have continuing responsibility for correcting any problems which arise in the future as a result of this waste discharge or related operations.
14. The discharger shall maintain all devices or designed features installed in accordance with this Order such that they continue to operate as intended without interruption except as a result of failures which could not have been reasonably foreseen or prevented by the discharger.
15. The discharger shall permit the Board or its authorized representative, upon presentation of credentials:
 - a. Entry upon the premises on which wastes are located or in which any required records are kept.
 - b. Access to copy any records required to be kept under the terms and conditions of this Order.
 - c. Inspection of any treatment equipment, monitoring equipment,

or monitoring method required by this Order.

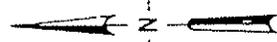
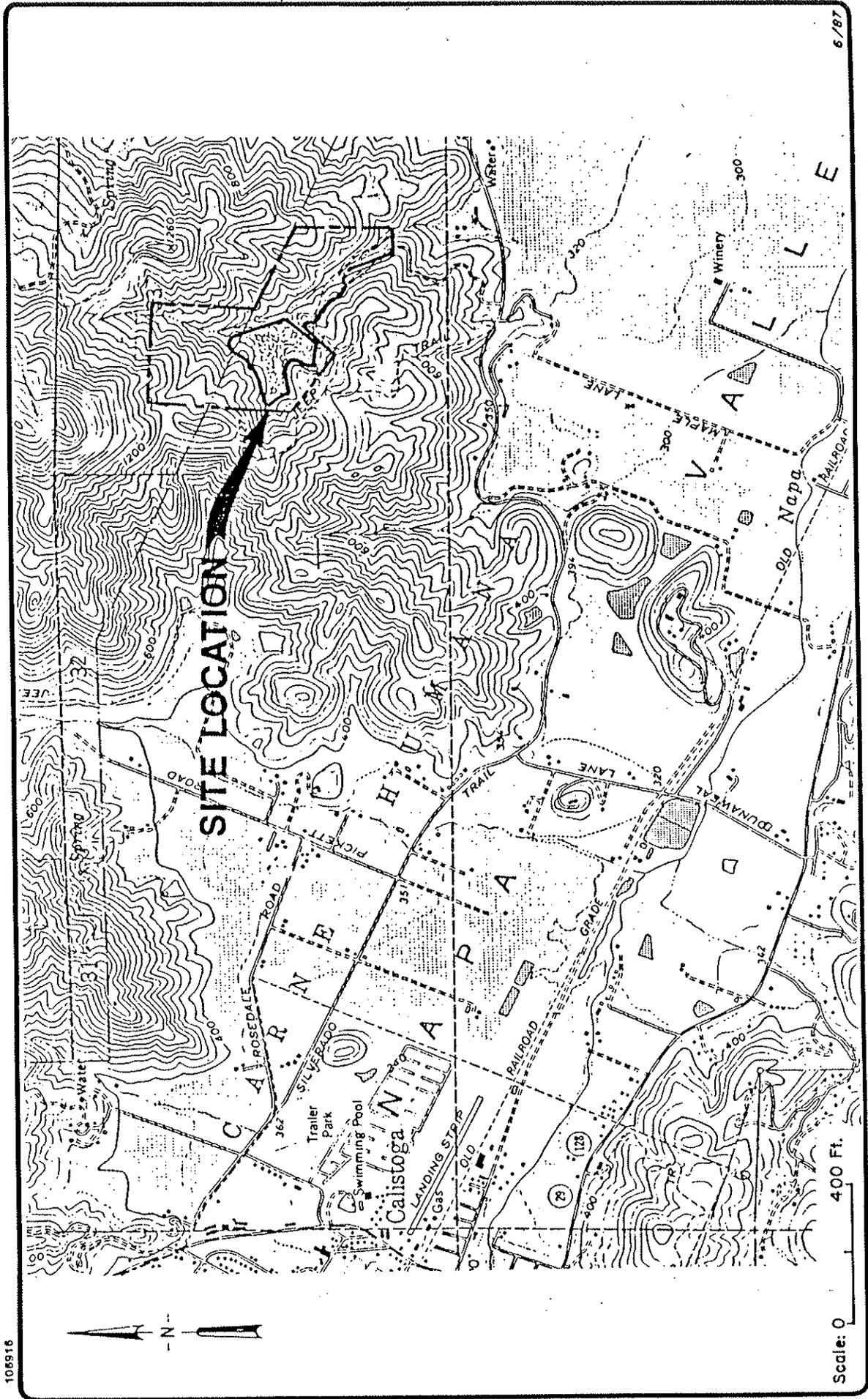
- d. Sampling of any discharge or ground water covered by this Order.
16. This Board's Order Nos. 78-66 and 81-18 are hereby rescinded.
17. These requirements do not authorize commission of any act causing injury to the property of another or of the public; do not convey any property rights; do not remove liability under federal, state or local laws; and do not authorize the discharge of wastes without appropriate permits from other agencies or organizations.
18. This Order is subject to Board review and updating, as necessary, to comply with changing State or Federal laws, regulations, policies, or guidelines; changes in the Board's Basin Plan; or changes in the discharge characteristics, in five year increments from the effective date of this Order.

I, Roger B. James, Executive Officer, do hereby certify that the foregoing is a full, complete, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on April 20, 1988.


Roger B. James
Executive Officer

Attachments: A) Site map
B) Self Monitoring Program

106916



Scale: 0 400 Ft.

UPPER VALLEY DISPOSAL SERVICES, INC.
 UPPER VALLEY DISPOSAL SITE
 NAPA COUNTY, CALIFORNIA

SITE LOCATION MAP

6/87

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

FOR

CLOVER FLAT LANDFILL,
UPPER VALLEY DISPOSAL SERVICE, INC.,
WALTER TAMAGNI, AND COUNTY OF NAPA

CLOVER FLAT LANDFILL
CALISTOGA, NAPA COUNTY

ORDER NO. 88-058

CONSISTS OF

PART A

AND

PART B

PART A

A. GENERAL

Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13383, and 13387(b) of the California Water Code and this Regional Board's Resolution No.73-16. This Self-Monitoring Program is issued in accordance with Section C.5 of Regional Board Order No. 87-058.

The principal purposes of a self-monitoring program by a waste discharger are: (1) to document compliance with waste discharge requirements and prohibitions established by the Board, (2) to facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge, (3) to develop or assist in the development of effluent standards of performance, pretreatment and toxicity standards, and other standards, and (4) to prepare water and wastewater quality inventories.

B. SAMPLING AND ANALYTICAL METHODS

Sampling

Sample collection, storage, and analyses shall be performed according to most recent version of Standard Methods for the Analysis of Wastewater and in accordance with an approved sampling and analysis plan.

Water and waste analysis shall be performed by a laboratory approved for these analyses by the State Department of Health. 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 of such work submitted to the Regional Board.

All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements.

C. DEFINITION OF TERMS

1. A grab sample is a discrete sample collected at any time.
2. A composite sample is a sample composed of individual grab samples mixed in proportions varying not more than plus or minus five percent from the instantaneous rate of waste flow corresponding to each grab sample collected at regular intervals not greater than one hour, or collected by the use of continuous automatic sampling devices capable of attaining the proportional accuracy stipulated above throughout the period of discharge or 24 consecutive hours, whichever is shorter.
3. Receiving waters refers to any water which actually or potentially receives surface or groundwaters which pass over, through, or under waste materials or contaminated soils. In this case the groundwater beneath and adjacent to the landfill, the surface runoff from the site, the drainage ditches surrounding the site, and the intermittent stream channel that lies adjacent to the landfill are considered the receiving waters.

4. Standard observations refer to:

a. Receiving Waters

- 1) Floating and suspended materials of waste origin: presence or absence, source, and size of affected area.
- 2) Discoloration and turbidity: description of color, source, and size of affected area.
- 3) Evidence of odors, presence or absence, characterization, source, and distance of travel from source.
- 4) Evidence of beneficial use: presence of water associated wildlife
- 5) Flow rate.
- 6) Weather conditions: wind direction and estimated velocity, total precipitation during the previous five days and on the day of observation.

b. Perimeter of the waste management unit.

- 1) Evidence of liquid leaving or entering the waste management unit, estimated size of affected area and flow rate. (Show affected area on map)
- 2) Evidence of odors, presence or absence, characterization, source, and distance of travel from source.
- 3) Evidence of erosion and/or daylighted refuse.

c. The waste management unit.

- 1) Evidence of ponded water at any point on the waste management facility.
- 2) Evidence of odors, presence or absence, characterization, source, and distance of travel from source.
- 3) Evidence of erosion and/or daylighted refuse.
- 4) Standard analysis and measurements refer to:

- a. pH
- b. Electrical Conductivity (EC)
- c. Total Dissolved Solids (TDS)
- d. Total Phenols
- e. Chloride
- f. Total Organic Carbon
- g. Nitrate Nitrogen
- h. Total Kjeldahl
- i. Arsenic

- j. Total Chromium
- k. Copper
- l. Nickel
- m. Zinc
- n. Lead
- o. Water elevation in feet above Mean Sea Level
- p. Settleable Solids, ml/l/hr
- q. Turbidity, NTU
- r. EPA Method 601, identifying all peaks greater than 1 microgram/liter.

D. SCHEDULE OF SAMPLING, ANALYSIS, AND OBSERVATIONS

The discharger is required to perform sampling, analysis, and observations according to the schedule specified in Part B, and the requirements in Article 5 of Subchapter 15.

E. RECORDS TO BE MAINTAINED

Written reports shall be maintained by the discharger, and shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or when requested by the Board. Such records shall show the following for each sample:

1. Identity of sample and sample station number.
2. Date and time of sampling.
3. Date and time that analyses are started and completed, and name of the personnel performing the analyses.
4. Complete procedure used, including method of preserving the sample, and the identity and volumes of reagents used. A reference to a specific section of a reference required in Part A Section B is satisfactory.
5. Calculation of results.
6. Results of analyses, and detection limits for each analyses.

F. REPORTS TO BE FILED WITH THE BOARD

1. Written self-monitoring reports shall be filed by the 15th day of the month following the report period. In addition an annual report shall be filed as indicated in F.2. The reports shall be comprised of the following:

a. Letter of Transmittal

A letter transmitting the essential points in each self-monitoring report should accompany each report. Such a letter shall include a

discussion of any requirement violations found during the last report period, and actions taken or planned for correcting the violations, such as, operation and/or facilities modifications. If the discharger has previously submitted a detailed time schedule for correcting requirement violations, a reference to the correspondence transmitting such schedule will be satisfactory. If no violations have occurred in the last report period this shall be stated in the letter of transmittal. Monitoring reports and the letter transmitting the monitoring reports shall be signed by a principal executive officer at the level of vice president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates. 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.

- b. Each monitoring report shall include a compliance evaluation summary sheet. This sheet shall contain:
 - 1) The sample mean and the sample variance for all sample sets taken from all compliance points, and shall determine if the difference between the mean of each sample set and the water quality protection standard is significant at the 0.05 level using Cochran's Approximation to the Behrens-Fisher Student's t-test as described in Appendix II of Subchapter 15. The discharger may propose an alternative statistical procedure to be used in making this determination pursuant to Section 2555(h)(3) of Subchapter 15. If a statistically significant difference is found this shall be reported as a suspected requirement violation in the letter of transmittal.
 - 2) A graphic description of the velocity and direction of groundwater flow under/around the waste management unit, based upon the past and present water level elevations and pertinent visual observations.
 - 3) The method and time of water level measurement, the type of pump used for purging, pump placement in the well; method of purging, pumping rate, equipment and methods used to monitor field pH, temperature, and conductivity during purging, calibration of the field equipment, results of the pH, temperature conductivity and turbidity testing, well recovery time, and method of disposing of the purge water.
 - 4) Type of pump used, pump placement for sampling, a detailed description of the sampling procedure; number and description of equipment, field and travel blanks; number and description of duplicate samples; type of sample containers and preservatives used, the date and time of sampling, the name and qualifications of the person actually taking the samples, and any other observations; the chain of custody record.
- c. A map or aerial photograph shall accompany each report showing observation and monitoring station locations.

- d. Laboratory statements of results of analyses specified in Part B must be included in each report. The director of the laboratory whose name appears on the laboratory certification shall supervise all analytical work in his/her laboratory and shall sign all reports of such work submitted to the Board.
 - 1) The methods of analyses and detection limits must be appropriate for the expected concentrations. Specific methods of analyses must be identified. If methods other than EPA approved methods or Standard Methods are used, the exact methodology must be submitted for review.
 - 2) In addition to the results of the analyses, laboratory quality control/quality assurance (QA/QC) information must be included in the monitoring report. The laboratory QA/QC information should include the method, equipment and analytical detection limits; the recovery rates; an explanation for any recovery rate that is less than 80%; the results of equipment and method blanks; the results of spiked and surrogate samples; the frequency of quality control analysis; and the name and qualifications of the person(s) performing the analyses.
- e. An evaluation of the effectiveness of the leachate monitoring/control facilities.
- f. A summary and certification of completion of all standard observations for the waste management unit, the perimeter of the waste management unit, and the receiving waters.
- g. The quantity and types of wastes disposed of during the past quarter, and the locations of the disposal operations.

2. CONTINGENCY REPORTING

- A. A report shall be made by telephone of any seepage from the disposal area immediately after it is discovered. A written report shall be filed with the Board within five days. This report shall contain the following information:
 - 1) a map showing the location(s) of discharge;
 - 2) approximate flow rate;
 - 3) nature of effects; i.e. all pertinent observations and analyses; and
 - 4) corrective measures underway or proposed.
- B. A report shall be made in writing to the Board within seven days if a statistically significant difference is found between a self-monitoring sample set and a WQPS. Notification shall indicate what WQPS(s) have been exceeded. The discharger shall immediately resample at the compliance point(s) where this difference has been found and analyze another sample set of at least four portions split in the laboratory from the source sample.

- C. If resampling and analysis confirms the earlier finding of a statistically significant difference between self-monitoring results and WQPS(s) the discharger must submit to the Board within 90 days an amended Report of Waste Discharge for establishment of a verification monitoring program meeting the requirements of Section 2557 of Subchapter 15. This submittal shall include the information required in Section 2556(b)(2) of Subchapter 15.
 - D. The discharger must notify the Board within seven days if the verification monitoring program finds a statistically significant difference between samples from the verification monitoring program point of compliance and the WQPS(s).
 - E. If such a difference or differences are found by the verification monitoring program, it will be concluded that the discharger is out of compliance with this Order. In this event the discharger shall submit within 180 days an amended Report of Waste Discharge requesting authorization to establish a corrective action program meeting the requirements of Section 2558 of Subchapter 15. This submittal shall include the information required in Section 2557(g)(3) of Subchapter 15.
3. By January 31 of each year the discharger shall submit an annual report to the Board covering the previous calendar year. This report shall contain:
- a. Tabular and graphical summaries of the monitoring data obtained during the previous year.
 - b. A comprehensive discussion of the compliance record, and the corrective actions taken or planned which may be needed to bring the discharger into full compliance with the waste discharge requirements.
 - c. A map showing the area, if any, in which filling has been completed during the previous calendar year.
 - d. A written summary of the groundwater analyses indicating any change in the quality of the groundwater.
 - e. An evaluation of the effectiveness of the leachate monitoring/control facilities.
4. A boring log shall be submitted for each sampling well established for this monitoring program, as well as a report of inspection or certification that each well has been constructed in accordance with the construction standards of the Department of Water Resources. These shall be submitted within 30 days after well installation.

Part B

1. DESCRIPTION OF OBSERVATION STATIONS AND SCHEDULE OF OBSERVATIONS

A. WASTE MONITORING

1. Record the total volume and weight of refuse in cubic yards and tons disposed at the site during the month. Report this information quarterly.
2. Record the volume of fill completed, in cubic yards, showing locations and dimensions on a sketch or map. Report this information quarterly.

B. ON-SITE OBSERVATIONS

STATION	DESCRIPTION	OBSERVATIONS	FREQUENCY
V-1 thru V-'n'	Located on the waste disposal area as delineated by a 500 foot grid network.	Standard observations for the waste management unit.	Weekly
P-1 thru P-'n' (perimeter)	Located at equidistant intervals not exceeding 1000 feet around the perimeter of the waste management unit.	Standard observations for the perimeter.	Weekly

C. GROUND WATER MONITORING

STATION	DESCRIPTION	OBSERVATION	FREQUENCY
G-1 thru "G-n"	Groundwater monitoring wells, as shown on the attached site map, including wells to be installed.	Standard analysis other than "p".	Once per quarter.

D. SURFACE WATER MONITORING

STATION	DESCRIPTION	OBSERVATION	FREQUENCY
S-001	Downgradient spring.	Standard analysis other than "o".	Once per quarter.

E. LEACHATE MONITORING

STATION	DESCRIPTION	OBSERVATION	FREQUENCY
GR-1 thru "GR-n"	Leachate control facilities, as shown on the attached site map, including sumps and wells to be installed	Depth of leachate built up at base of landfill, and volume removed. Elevation of leachate above Mean Sea Level.	Once each week and at time of leachate removal.

F. SEEPAGE MONITORING

STATION	DESCRIPTION	OBSERVATION/ ANALYSIS	FREQUENCY
S-1 thru S-'n' (seepage)	At any point(s) at which seepage is found occurring from the waste management unit.	Standard observations for the perimeter, and standard analysis other than "o".	Daily until remedial action is taken and seepage ceases.
R-001 (receiving waters, upstream)	Located in receiving waters 200 feet upstream from the upper-most point of seepage discharge(s).	Standard observation for receiving waters and standard analysis other than "o".	Daily, during a seepage event.
R-002 (receiving waters, downstream)	Located in receiving waters 200 feet downstream of seepage discharge(s).	Same as receiving waters upstream.	Daily during a seepage event.

I, Roger B. James, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedures set forth in this Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in this Board's Order No. 87-058.
2. Is effective on the date shown below.
3. May be reviewed or modified at any time subsequent to the effective date, upon written notice from the Executive Officer, or request from the discharger.



Roger B. James
Executive Officer

April 26, 1988
Date Ordered