

CALIFORNIA WATER QUALITY CONTROL BOARD  
SAN DIEGO REGION

ORDER NO. 94-106  
CLOSURE AND POST-CLOSURE MAINTENANCE REQUIREMENTS  
FOR  
SAN JUAN MEADOWS-LP AND THE COUNTY OF ORANGE  
FORSTER CANYON LANDFILL  
ORANGE COUNTY

The California Regional Water Quality Control Board, San Diego Region (hereinafter Regional Board), finds that:

1. On September 15, 1957, Derek T. Harris, Water Pollution Engineer for the Orange County Air Pollution Control District, submitted a Report of Waste Discharge (RWD) proposing the establishment of a refuse disposal site to be located in the vicinity of San Juan Capistrano on a portion of a 148 acre site owned by Marco F. Forster. The site is located in portions of Section 7 and 18 of Township 8 South, Range 7 West and Sections 12 and 13 of Township 8 South, Range 8 West of the San Bernardino Base and Meridian.
2. On December 16, 1957, the State of California San Diego Regional Water Pollution Control Board adopted Resolution 57-R59, "**A Resolution Prescribing Requirements Regulating the Discharge of Wastes from the Forster Canyon Dump of the County of Orange.**" The disposal site would be known as the Forster Canyon Landfill during its operating life. The County of Orange began sanitary canyon type landfill operations at the Forster Canyon Landfill in August 1958 (figure 1).
3. San Juan Meadows-LP estimate that subsequent to landfill closure approximately 2 to 8 feet of fill materials were placed as a cover on the site to attain the post landfill topographic elevation of approximately 250 feet mean sea level (MSL).
4. The County of Orange estimates that 2.5 to 3 million cubic yards of refuse was disposed of at the Forster Canyon Landfill during its active life. Landfilling operations at the Forster Canyon Landfill were terminated in March 1976.
5. On April 5, 1993 San Juan Creek Associates submitted a RWD entitled, "**Closure and Post Closure Maintenance Plan, Forster Canyon Landfill.**" The RWD was submitted for closure of the Forster Canyon Landfill in order to facilitate development of the San Juan Meadows Development Project to be located at the site.

The RWD included:

- a. A description of the proposed San Juan Meadows Development Project
- b. Form 200, Application for Facility Permit/Waste Discharge together with an application fee of \$5000.00.
- c. A final Environmental Impact Report (EIR) prepared and certified by the City of San Juan Capistrano, dated July 21, 1992.

6. The RWD indicates the proposed development project covers approximately 148 acres of which approximately 50 acres is the landfill. The project includes the relocation of a significant volume of trash to the central portion of the landfill, placement of approximately 5 feet of cover, and improved drainage controls. The portion of the site underlain by landfill material was proposed to be developed into a golf course.
7. Regional Board staff, by letter dated June 4, 1993, indicated the revised RWD was incomplete and that additional information was necessary to evaluate closure of the landfill. Additional information was requested concerning a proposed golf course, irrigation of the golf course and adjacent development site, details regarding landfill cover, proposed methods to control erosion, and disposal of landfill gas condensate.
8. San Juan Meadows-LP, formerly San Juan Creek Associates submitted supplemental information on March 24, April 4 & 8, 1994 for the RWD. Significant changes included the deletion of the proposed golf course. The landfill site is now proposed to be left as open space.
9. An irrevocable closure fund as specified by Chapter 15, Section 2550 has not been established.
10. Regional Board staff, by letter dated May 26, 1994, indicated that enough of the technical issues pertaining to water quality and closure of the landfill have been substantially addressed to issue WDR in order to implement California Code of Regulation Title 23, Chapter 15 for Closure and Post-Closure Maintenance of the Forster Canyon Landfill. However, concerns regarding demonstration of the project's closure fund and monitoring requirements need to be addressed.
11. The RWD indicates the landfill deck cover will consist of: a two-foot foundation layer; a one and a half foot low permeability layer and; a two-foot vegetative layer. All cover materials will consist of low permeability soils consisting of selected materials tested to yield a permeability of  $1 \times 10^{-6}$  cm/sec or less compacted to 90 percent of the maximum density and will be generated from the borrow areas identified. The final cover design for the front face slope areas will consist of: a two-foot thick foundation layer and a three-foot thick low-permeability and vegetative layer. Cover materials will consist of selected low-permeability materials tested to yield a permeability of  $1 \times 10^{-6}$  cm/sec or less and compacted to 90 percent of the maximum density.
12. The RWD indicates that approximately 212,000 cubic yards of refuse is planned to be excavated from the perimeter of the landfill and redispersed in the central portion of the existing landfill deck.
13. The RWD indicated that irrigation will consist of a temporary irrigation system installed at the site in order to establish plant growth.

14. The RWD indicated that a landfill gas control system (LGCS) will be installed at the site. The system, subject to approval by the South Coast Air Quality Management District is to consist of 40 shallow and 10 deep vertical gas wells. Headers will be buried within the low permeability final cover. In order to facilitate collection of gas condensate, the header pipes are to be designed with sufficient slopes to drain the condensate to a collection sump where it can be pumped and removed from the site. Condensate generated as a result of extraction of gas will not be introduced into the landfill.
15. The RWD indicates that anticipated settlement of the Forster Canyon Landfill site may range from 7 to 10 feet over the next 60 years due to compression and decomposition of refuse under the landfilled site.
16. The geology of the area of the Forster Canyon Landfill consists of fill, topsoil, colluvium, landslide debris and bedrock. The Forster Canyon Landfill is situated on a major Quaternary landslide. The landslide is superimposed on nearly horizontal or gently northwesterly inclined sedimentary rocks of the Capistrano Formation. No active, potentially active or inactive faults have been mapped across the Forster Canyon Landfill site. The nearest significant fault to the project site is the Cristianitos Fault which is classified as potentially active and located 3.5 miles east of the landfill site.
17. Ground water at the Forster Canyon Landfill occurs locally as perched zones within the Forster Canyon Landslide. The underlying Capistrano Formation and clayey slide planes act as aquitards for downward migrating waters. A regional east to west groundwater gradient exists within the landfill footprint. Ground water elevations are typically below the base of the landfill or refuse.
18. The County of Orange submitted a Solid Waste Assessment Test (SWAT) report on December 24, 1991 to determine if the site is leaking hazardous waste to ground or surface water.
19. The SWAT report and associated monitoring reports indicate that organic and inorganic contaminants have been detected in both soil and ground water beneath and adjacent to the landfill. Regional Board staff, by letter dated September 29, 1993 requested additional measures must be implemented to verify the results of the SWAT investigation and to upgrade the monitoring program to comply with California Code of Regulations (CCR), Title 23, Chapter 15, Article 5, monitoring requirements.
20. The Forster Canyon Landfill is located within the Mission Viejo Hydrologic Area of the San Juan Hydrologic Unit. The landfill is located approximately one and one-half miles south of San Juan Capistrano and immediately east of Interstate 5.

21. The **Comprehensive Water Quality Control Plan Report, San Diego Basin (9)** (Basin Plan), adopted by this Regional Board on March 17, 1975; approved by the State Board on March 20, 1975. Subsequent revisions to the Basin Plan have also been adopted by the Regional Board and approved by the State Board.
  
22. The Basin Plan establishes the following beneficial uses for the waters of the Mission Viejo Hydrologic Area (1.20):
  - a. **Inland Surface Waters**
    1. Agricultural Supply
    2. Industrial service supply
    3. Water contact recreation
    4. Non contact water recreation
    5. Warm fresh-water habitat
    6. Cold fresh-water habitat
    7. Wildlife habitat
    8. Preservation of rare and endangered species
  
  - b. **Groundwater**
    1. Municipal
    2. Agricultural Supply
    3. Industrial Service Supply

23. The Basin Plan established the following water quality objectives for water of the Mission Viejo Hydrologic Area (I.20):

Constituent	Surface Water	Ground Water
Total Dissolved Solids	500 mg/l	500 mg/l
Chloride	250 mg/l	250 mg/l
Percent Sodium	60%	60%
Sulfate	250 mg/l	250 mg/l
Nitrate (as NO <sub>3</sub> )	---	45 mg/l
Nitrogen & Phosphorus	---	---
Iron	0.3 mg/l	0.3 mg/l
Manganese	0.05 mg/l	0.05 mg/l
Methylene Blue Active Substances	0.5 mg/l	0.5 mg/l
Boron	0.5 mg/l	0.5 mg/l
Odor	none	none
Turbidity	20 NTU	5 NTU
Color	20 Units	15 Units
Fluoride	1.0 mg/l	1.0 mg/l

The above concentrations not to be exceeded more than 10% of the time.

Note: mg/l = milligrams per liter                      NTU = Nephelometric Turbidity Units

- Concentrations of nitrogen and phosphorus, by themselves or in combinations with other nutrients, shall be maintained at levels below those which stimulate algae and emergent plant growth. Threshold total Phosphorus (P) concentrations shall not exceed 0.05 mg/L in any stream at the point where it enters any standing body of water, nor 0.025 mg/L in any standing body of water. A desired goal in order to prevent plant nuisances in streams and other flowing waters appears to be 0.1 mg/L total P. These values are not to be exceeded more than 10 percent of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1 shall be used.

24. The Basin Plan contains the following prohibitions which are applicable to the site:

- a. "The dumping or deposition of oil, garbage, trash or other solid municipal, industrial or agricultural waste directly into inland waters or watercourses or adjacent to watercourses in any manner which may permit its being washed into the watercourse is prohibited."
- b. "Dumping or deposition of oil, garbage, trash or other solid municipal, industrial or agricultural waste into natural or excavated sites below historic water levels or deposition of soluble industrial wastes at any site is prohibited, unless such site has been specifically approved by the Regional Board for that purpose."
- c. "Land grading and similar operations causing soil disturbance which do not contain provisions to minimize soil erosion and limit suspended matter in are runoff are prohibited."

25. On July 21, 1992, the City of San Juan Capistrano approved a Final Environmental Impact Report for San Juan Meadows. The project as approved will not have a significant impact on water quality.

26. The Regional Board, in establishing the requirements contained herein, considered factors including, but not limited to the following:

- a. Past, present, and probable future beneficial uses of water.
- b. Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto.
- c. Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area.
- d. Economic considerations.
- e. The need for developing housing within the region.
- f. Beneficial uses to be protected and water quality objectives reasonably required for that purpose.
- g. Other waste discharges.
- h. The need to prevent nuisance.

27. The Regional Board has considered all water resource related environmental factors associated with the final closure plan for the Forster Canyon Landfill.

28. The Regional Board has notified San Juan Meadows-LP, County of Orange, the City of San Juan Capistrano, and all known interested parties of its intent to issue for closure and post-closure maintenance requirements of the Forster Canyon Landfill.
29. The Regional Board in a public meeting August 11, 1994, heard and considered all comments pertaining to closure and post-closure requirements of the Forster Canyon Landfill.

**IT IS HEREBY ORDERED**, That the San Juan Meadows-LP and the County of Orange, hereinafter referred to as the Discharger, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following at their respective sites:

**A. PROHIBITIONS**

1. Discharges of wastes to lands which have not been specifically described to the Regional Board and for which valid Waste Discharge Requirements are not in force are prohibited.
2. The discharge of waste shall not:
  - a. Cause the occurrence of coliform or pathogenic organisms in waters pumped from the basin;
  - b. Cause the occurrence of objectionable tastes and odors in water pumped from the basin;
  - c. Cause waters pumped from the basin to foam;
  - d. Cause the presence of toxic materials in waters pumped from the basin;
  - e. Cause the pH of waters pumped from the basin to fall below 6.0 or rise above 9.0; and
  - f. Cause this Regional Board's objectives for the ground or surface waters of the Mission Viejo Hydrologic Area, as established in the Basin Plan, to be exceeded.
3. Odors, vectors, and other nuisances of waste origin beyond the limits of the landfill site are prohibited.
4. The discharge of waste in a manner other than as described in the findings of this Order or in the Report of Waste Discharge is prohibited unless the discharger obtains revised Waste Discharge Requirements that provide for the proposed change.
5. The discharge of waste from the Forster Canyon Landfill to surface drainage courses or to usable ground water is prohibited.

6. Basin Plan prohibitions shall not be violated.

**B. CLOSURE SPECIFICATIONS & POST-CLOSURE MAINTENANCE**

1. The discharger shall implement the approved Forster Canyon Landfill closure and post-closure plan including the implementation of a post-closure maintenance and monitoring program according to schedules provided by San Juan Meadows-LP (Tables 1 & 2), and described in the findings of this Order. Any proposed amendments to the closure and post-closure plan must be approved in writing by the Executive Officer.
  - a. The migration of methane gas from the landfilled areas shall be controlled as necessary to prevent creation of a nuisance.
  - b. The landfilled areas shall be adequately protected from any washout, erosion of wastes or covering material. Adequate protection is defined as protection from at least a 100-year 24 hour storm event.
  - c. Annually, prior to the anticipated rainy season but not later than October 31, any necessary erosion control measures shall be implemented, and any necessary construction, maintenance, or repairs of precipitation and drainage control facilities shall be completed to prevent erosion or flooding of the facility and to prevent surface drainage from contacting or percolating through wastes.
  - d. All necessary facilities shall be provided to ensure that landfill gases from wastes are not discharged to surface waters or to usable ground waters.
  - e. The landfill site shall be graded and maintained to prevent ponding and to provide slopes necessary to carry off surface drainage. Areas subject to erosion by water and/or wind shall be provided with a lining, planted with vegetation, or otherwise designed and constructed to prevent such erosion.
2. Throughout the post-closure maintenance period, and for as long as the wastes contained in the Forster Canyon Landfill pose a threat to water quality the discharger shall:
  - a. Maintain the structural integrity and effectiveness of all containment structures, and maintain the final cover as necessary to correct the effects of settlement or other adverse factors.
  - b. Maintain monitoring systems and monitor the ground water, surface water, and the unsaturated zone in accordance with applicable requirements of Article 5 of Chapter 15.
  - c. Prevent erosion and related damage of the final cover due to adverse affects.



- d. Protect and maintain surveyed monuments.
3. Application of a final cover shall comply with minimum standards in accordance with requirements of Chapter 15, Section 2581. Cover will consist of a five and one-half foot monolithic cover consisting of the following: a two-foot foundation layer; a one and a half foot low permeability layer and; a two-foot vegetative layer. All cover materials will consist of low permeability soils consisting of selected materials tested to yield a permeability of  $1 \times 10^{-6}$  cm/sec or less compacted to 90 percent of the maximum density and will be generated from the borrow areas identified. Final cover design for the front face slope areas will consist of a five foot thick monolithic cover consisting of the following: a two-foot thick foundation layer and a three-foot thick low-permeability and vegetative layer.
4. The final cap will serve to trap landfill gas and serve as an infiltration barrier.
5. Vegetation used at the site shall be selected to require minimum irrigation and maintenance, and shall not impair the integrity of containment structures including the final cover. Landscaping overlying the landfill portion of the site shall be shallow rooted native grasses and shrubs. Slope areas of the landfill will be designed with vegetation which respond to solar orientation, degree of erosion potential, and water conservation. The deck areas of the landfill will be planted with grass species common for the Southern California coast range.
6. Closure shall be under the direct supervision of a California registered civil engineer or a certified engineering geologist.
7. The site shall be provided with at least two permanent monuments installed by a licensed land surveyor or a registered civil engineer, from which the location and elevation of wastes, containment structures, and monitoring facilities can be determined throughout the post-closure maintenance period.
8. The discharger shall establish an irrevocable closure fund or provide other means to ensure post-closure maintenance of this portion of the waste management facility. Funds shall be accessible only for intended purposes of post-closure maintenance as defined by Chapter 15, Article 10, Section 2601.
9. The discharger shall establish a landfill gas control system (LGCS) that is approved by the South Coast Air Quality Management District (SCAQMD) and the Orange County Health Care Agency, Environmental Health Division. In order to facilitate drainage of gas condensate, the header pipes shall be designed with sufficient slopes to drain the condensate to a collection sump where it can be pumped and removed from the site. Disposal of condensate generated at the site is prohibited.
10. The surface drainage system shall be designed to adequately handle the rainfall from a 100-year 24 hour storm event.

11. The discharger shall prepare a water quality monitoring program for the Forster Canyon Landfill, prepared in accordance with Chapter 15, Article 5 requirements. Article 5 establishes requirements for implementation of a detection monitoring program for ground water, surface water, and the unsaturated zone and, if necessary, corrective action programs.

### C. PROVISIONS

1. Neither the treatment nor the discharge of waste shall create a pollution, contamination, or nuisance, as defined by Section 13050 of the California Water Code.
2. The discharger shall comply with applicable provisions of Chapter 15 and all conditions of this Order. Any noncompliance with this Order constitutes a violation of the California Water Code and is grounds for: (a) enforcement action; (b) termination, revocation and reissuance, or modification of this Order; or (c) denial of a Report of Waste Discharge in application for new or revised Waste Discharge Requirements.
3. In an enforcement action, it shall not be a defense for the discharger that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with this Order.
4. The discharger shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Order, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the noncompliance.
5. The discharger shall, at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the discharger to achieve compliance with conditions of this Order. Proper operation and maintenance includes effective performance, adequate laboratory and process controls including appropriate quality assurance procedures.
6. This Order may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:
  - a. Violation of any terms or conditions of this Order;
  - b. Obtaining this Order by misrepresentation or failure to disclose fully all relevant facts; or
  - c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge. The filing of a request by the discharger for the modification, revocation and reissuance, or termination of this Order, or notification of planned changes or anticipated noncompliance does not stay any condition of this Order.

7. This Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, nor protect the discharger from liability under federal, state, or local laws, nor create a vested right for the owner and operator to continue the regulated activity.
8. The discharger shall allow the Regional Board, or an authorized representative upon the presentation of credentials and other documents as may be required by law to:
  - a. Enter upon the discharger premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Order;
  - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order;
  - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order;
  - d. Sample or monitor at reasonable times, for the purposes of assuring compliance with this Order or as otherwise authorized by the California Water Code, any substances or parameters at any location.
9. A copy of this Order shall be maintained at the local offices of the San Juan Meadows-LP site and at the County of Orange Integrated Waste Management Department and shall be available to operating personnel at all times.
10. The provisions of this Order are severable, and if any provision of this Order, or the application of any provision of this Order to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Order, shall not be affected thereby.
11. Alternatives, exceptions, and exemptions of waivers from requirements of Chapter 15 shall be subject to the approval of the Executive Officer and shall be authorized only as provided for by Chapter 15.
12. This Order becomes effective on the date of adoption by the Regional Board. This Order supersedes Order No. 57-R59.
13. Closure of this waste management facility may be subject to regulations of the California Integrated Waste Management Board, the South Coast Air Quality Management District and the Orange County Health Care Agency, Environmental Health Division.

**D. REPORTING REQUIREMENTS**

1. The discharger shall file a new Report of Waste Discharge at least 120 days prior to the following:
  - a. Change in the closure and post-closure maintenance plan from that described in the findings of this Order.
  - b. Any planned change in the regulated facility or activity which may result in noncompliance with this Order.
2. The discharger shall furnish to the Executive Officer of this Regional Board, within a reasonable time, any information which the Executive Officer may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The discharger shall also furnish to the Executive Officer upon request, copies of records required to be kept by this Order.
3. The discharger shall notify the Executive Officer, in writing, at least 30 days in advance of any proposed transfer of this Order's responsibility and coverage between the current owner and the new owner. This agreement shall include an acknowledgement that the existing owner is liable for violations up to the transfer date and that the new owner is liable from the transfer date on.
4. Where the discharger becomes aware that it failed to submit any relevant facts in a Report of Waste Discharge or submitted incorrect information in a Report of Waste Discharge or in any report to the Regional Board, it shall promptly submit such facts or information.
5. The discharger shall report any noncompliance which may endanger health or the environment. Any such information shall be provided verbally to the Executive Officer within 24 hours from the time the owner becomes aware of the circumstances. A written submission shall also be provided within five days of the time the owner becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected; the anticipated time it is expected to continue, and steps taken or planned to reduce, eliminate, or prevent recurrence of the noncompliance. The Executive Officer, or an authorized representative, may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.
6. Within 30 days prior to commencement of closure activities, the discharger shall provide demonstration of the establishment of financial responsibility pursuant to CCR, Title 23, Division 3, Chapter 15, Section 2550 (b) for initiating and completing corrective action for all known and reasonably foreseeable releases from the waste management unit in accordance with closure specification B.6 of this Order.

7. Within 30 days prior to commencement of closure, activities the discharger shall provide demonstration of the establishment of an irrevocable closure fund or other means pursuant to CCR, Title 23, Division 3, Chapter 15, Section 2580 (f) to ensure closure and post-closure maintenance of the landfill in accordance with closure specification B.6 of this Order.
8. Within 30 days prior to implementation of closure, activities the discharger shall provide notification of closure activities conducted in accordance with the schedule contained in Table 3. These include grading, excavation and relocation of trash.
9. Within 30 days following the construction of each component of the closure and post closure plan, the discharger shall submit Certification, by a California registered civil engineer or certified engineering geologist, certifying the adequacy of each component of the closure plan (as contained in Table 3), in accordance with closure specifications B.6 of this Order unless modified by the Executive Officer.
10. The discharger shall install at least two permanent monuments in accordance with closure specification B.6 of this Order within 12 months after commencement of closure construction unless modified by the Executive Officer.
11. The discharger shall implement a landfill gas migration control and detection system as required by the South Coast Air Quality Management District (SCAQMD) and Orange County Health Care Agency, Enforcement Health Division.
12. The discharger shall conduct such monitoring as may be necessary in order to provide information requested by the Executive Officer.
13. The discharger shall submit to the Executive Officer, within nine months of adoption of this Order, a ground water, surface water, and unsaturated zone water quality monitoring program (Article 5 RWD) for the Forster Canyon Landfill in accordance with closure specification B.11 of this Order. The monitoring program shall be prepared to comply with Chapter 15, Article 5 requirements and in accordance with the time schedule submitted by San Juan Meadows-LP (Table 4) unless modified by the Executive Officer.
14. All applications, reports, or information submitted to the Executive Officer of this Regional Board shall be signed and certified as follows:
  - a. The Report of Waste Discharge shall be signed as follows:
    1. **For a corporation** - by a principal executive officer of at least the level of vice-president.
    2. **For a partnership or sole proprietorship** - by a general partner or the proprietor, respectively.

3. **For a municipality, state, federal or other public agency** - by either a principal executive officer or ranking elected official.
  4. **For a military installation** - by the base commander or the person with overall responsibility for environmental matters in that branch of the military.
- b. All other reports required by this Order and other information required by the Executive Officer shall be signed by a person designated in paragraph (a) of this provision, or by a duly authorized representative of that person. An individual is a duly authorized representative only if:
1. The authorization is made in writing by a person described in paragraph (a) of this provision;
  2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity; and
  3. The written authorization is submitted to the Executive Officer.
- c. Any person signing a document under this Section shall make the following certification:
- "I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."
15. In the event of a release of harmful liquids, gases, vapors, or particulates, such release will be reported to the following agencies: National Response Center, California Office of Emergency Services, South Coast Air Quality Management District, and Orange County Health Care Agency, Environmental Health Division.
  16. In the event of spill to storm drain or ditch the following agencies will be contacted: Regional Water Quality Control Board, Department of Fish and Game, and Orange County Health Care Agency, Environmental Health Division.

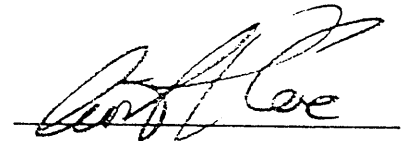
17. The discharger shall submit reports required under this Order and other information requested by the Executive Officer, to:

Executive Officer  
California Regional Water Quality Control Board  
San Diego Region  
9771 Clairemont Mesa Blvd., Suite B  
San Diego, California 92124-1331

**E. Notifications**

1. These requirements have not been officially reviewed by the United States Environmental Protection Agency and are not issued pursuant to Section 402 of the Clean Water Act.
2. The California Water Code provides that any person who intentionally or negligently violates any Waste Discharge Requirements issued, reissued, or amended by this Regional Board is subject to administrative civil liability of up to 10 dollars per gallon of waste discharged, or if no discharge occurs, up to 1000 dollars per day of violation. The Superior Court may impose civil liability of up to 10,000 dollars per day of violation or, if a cleanup and abatement order has been issued, up to 15,000 dollars per day of violation.
3. The California Water Code provides that any person failing or refusing to furnish technical or monitoring program reports, as required under this Order, or falsifying any information provided in the monitoring reports is guilty of a misdemeanor and may be subject to administrative civil liability of up to 1000 dollars per day of violation.
4. This Order becomes effective on the date of adoption by the Regional Board.
5. Definitions of terms used in this Order shall be as set forth in California Code of Regulations Chapter 15.

I, Arthur L. Coe, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Diego Region, On August 11, 1994.



Arthur L. Coe  
Executive Officer





**Table 1**

**FORSTER CANYON LANDFILL  
POST-CLOSURE MONITORING SCHEDULE\***

	POST-CLOSURE YEARS	
	1 thru 3	4 thru 30
<b>GROUNDWATER MONITORING</b>		
A. Regular Well Sampling	3	3
B. New Well Sampling (first 6 months)	4	4
C. Lysimeter Sampling	3	3
<b>GAS RECOVERY SYSTEM MONITORING</b>		
A. Collection Headers	6	6
B. Wells	4	4
C. Sumps and Condensate Drain Lines	6	6
<b>GAS MIGRATION CONTROL SYSTEMS MONITORING</b>		
A. Perimeter Probes	4/6	4/6
B. Perimeter Wells	4	4
C. Well Influence Testing	9	9
D. Collection Header Sampling	3	3
<b>SURFACE EMISSIONS MONITORING</b>		
A. Integrated Surface Emissions (50 PPM Rule)	1	1
B. Instantaneous Surface Emissions (500 PPM Rule)	2	2
C. Visual Inspection of Landfill Surfaces	6	6
D. Sampling Gas in Collection Headers and Wells	1	1
E. Ambient Air Samples at Perimeter of the Site	1	1
<b>FLARE EMISSIONS TESTING</b>		
A. Source Testing	1	1
B. Speciated Samples	1	1
<b>STORMWATER MONITORING</b>		
A. During Discharges	9	9
<b>LEGEND</b>		
1 = Annually	6 = Weekly	
2 = Biannually	7 = After Each Heavy Rainfall	
3 = Quarterly	8 = As Required	
4 = Monthly	9 = Seasonally	
5 = Every Two Weeks		

\* (From Forster Canyon Final Post-Closure Plan, Table 10-4, July 1994)

**Table 2**  
**FORSTER CANYON LANDFILL**  
**POST-CLOSURE MAINTENANCE SCHEDULE\***

	POST-CLOSURE YEARS	
	1 thru 3	4 thru 30
<b>FINAL COVER MAINTENANCE</b>		
A. Inspection	4	4
B. Repair	9	9
<b>DRAINAGE FACILITIES MAINTENANCE</b>		
A. Bench Drains and Deck Drainage System	7	7
B. Concrete Drainage Channels, Down Drain System, Pipes, Ditches and Detention Basin	6	6
<b>LIQUID MANAGEMENT SYSTEM MAINTENANCE</b>		
A. Pumps	1/9	1/9
B. Liquid Sumps, Storage Tanks and Condensate Drain Line	9	9
<b>LIQUID DISPOSAL MAINTENANCE</b>		
A. Transfer Pump and Pipeline	1/9	1/9
<b>LANDFILL GAS RECOVERY SYSTEM MAINTENANCE</b>		
A. Gas Extraction Well Maintenance and Piping System	4	4
B. Gas Extraction Well Replacement	9	9
C. Gas Flares and Blowers	2/9	2/9
<b>GAS MIGRATION MONITORING SYSTEM MAINTENANCE</b>		
A. Perimeter Probes	9	9
B. Perimeter Wells	4	4
<b>LANDSCAPE AND IRRIGATION MAINTENANCE</b>		
A. Weed Control	2/9	2/9
B. Rodent Control	8	8
C. Fertilization, Reseeding and Mulching	1	1
D. Irrigation System	5	5
<b>SURVEY MONUMENTATION MAINTENANCE</b>		
A. Disposal Area Monuments	1	1
<b>FENCE/BLOCK WALL MAINTENANCE</b>		
A. Inspection	3	3
B. Maintenance and Repair	1	1
<b>GROUNDWATER MONITORING SYSTEM MAINTENANCE</b>		
A. Well Maintenance	1	1
B. Well Replacement	9	9
<b>LEGEND</b>		
1 = Annually	6 = Weekly	
2 = Biannually	7 = After Each Heavy Rainfall	
3 = Quarterly	8 = As Required	
4 = Monthly	9 = Seasonally	
5 = Every Two Weeks		

(From Forster Canyon Final Post-Closure Plan Table 10-3, July 1994)

Table 3

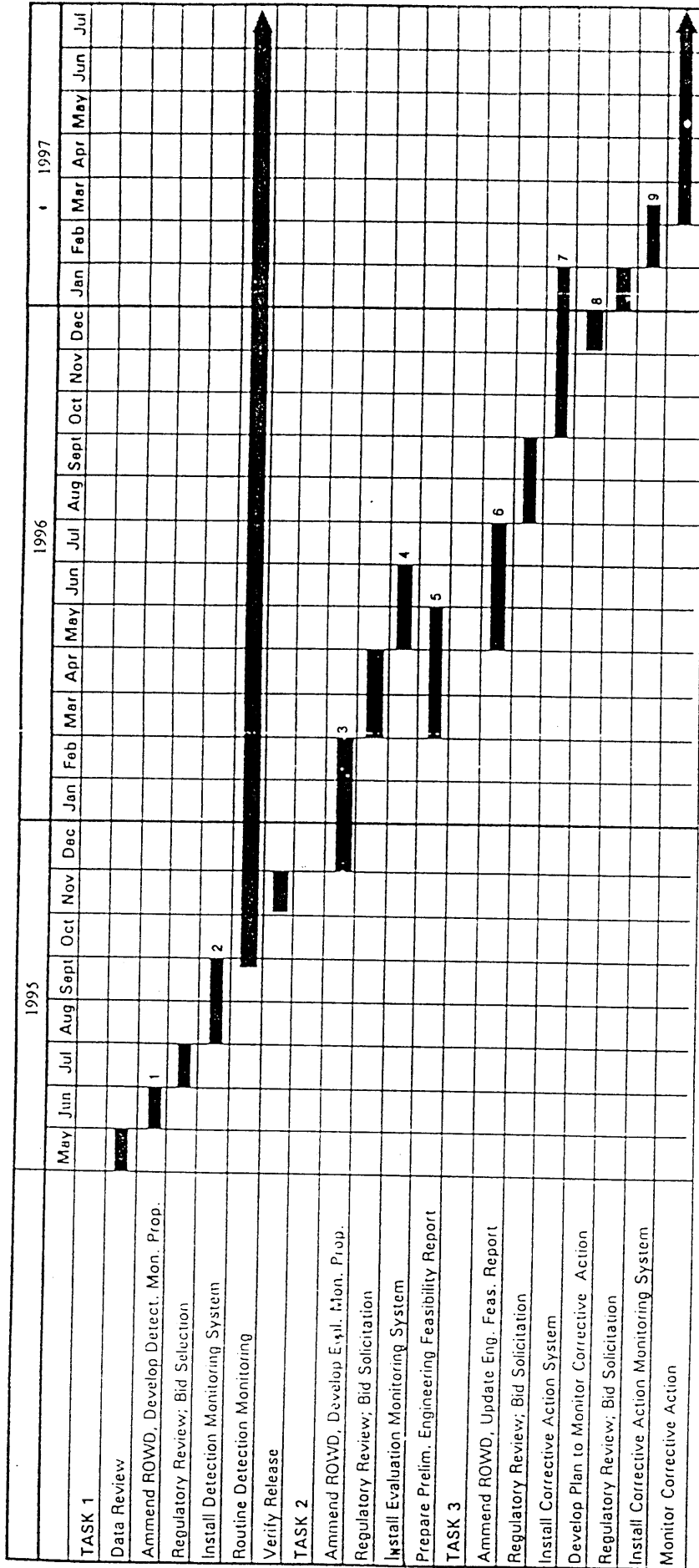
FORSTER CANYON CLOSURE PLAN  
IMPLEMENTATION SCHEDULE\*

ACTIVITY DESCRIPTION	MONTHS											
	1	2	3	4	5	6	7	8	9	10	11	
Test Pad Construction Completed	█											
Closure Construction Start Date		█										
Refuse Excavation		█										
Rough Grade			█									
Install Final Cover				█								
Storm Drain System					█							
Bench Drain System							█					
Perimeter Drainage Channels								█				
Gas Collection System									█			
All Weather Roadway										█		
Hydroseeding Slope Areas											█	

(From Forster Canyon Final Closure Plan, Figure 10-1, July 1994)

# Table 4

## FORSTER CANYON LANDFILL ARTICLE 5 COMPLIANCE SCHEDULE\*



### Deliverables

- 1 Revised Report of Waste Discharge (ROWD)
- 2 Upgraded DMP System Installation Report
- 3 Amend ROWD, Proposed Evaluation Monitoring Program
- 4 Evaluation Monitoring Program System Installation Report
- 5 Preliminary Engineering Feasibility Report
- 6 Amend ROWD, Update Engineering Feasibility Report
- 7 Corrective Action System Installation Report
- 8 Corrective Action System Monitoring Plan
- 9 Corrective Action Monitoring System Installation Report

\* (From Forster Canyon Final Closure Plan, Figure 7-6, July 1994)