

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
COLORADO RIVER BASIN REGION**

ORDER NO. 00-046

WASTE DISCHARGE REQUIREMENTS  
FOR  
UNITED STATES MARINE CORPS OWNER/OPERATOR  
AIR GROUND COMBAT CENTER  
CLASS III LANDFILL  
Twentynine Palms - San Bernardino County

The California Regional Water Quality Control Board, Colorado River Basin Region, finds that:

1. The United States Marine Corps Air Ground Combat Center, (U.S. MCAGCC), (hereinafter referred to as the discharger), with the mailing address of P.O. Box 788100, Twentynine Palms, California 92278-8100, owner and operator of a Class III solid waste municipal landfill (hereinafter referred to as the landfill), submitted an Application Form 200 on June 13, 2000 for update of Waste Discharge Requirements (WDRs).
2. The U.S. MCAGCC is located in south central San Bernardino County, just north of the City of Twentynine Palms as shown on Attachment No. 1.
3. The Waste Management Facility (WMF) is located in the S 1/2 of Section 8 and NE 1/4 of Section 17, T2N, R9E, SBB&M at the end of Landfill Road, about 1,000 feet north of Rifle Range Road and 3,500 feet northwest of Del Valle Road. The site is in a canyon in the Bullion Mountains as shown on Attachment No. 2.
4. Board Order No. 93-071 amended all municipal solid waste landfill Board Orders to comply with federal regulations that were adopted by the California Regional Water Quality Control Board, Colorado River Basin Region (hereinafter referred to as Regional Board). In 1995 the WMF became subject to WDRs under Board Order no. 95-006 updating Board Order 93-071. Board Order No. 95-006 is being updated to incorporate requirements of combined State Water Resources Control Board (SWRCB)/California Integrated Waste Management Board (CIWMB) regulations, Division 2, Title 27 (hereinafter referred to as Title 27) and regulations of Section 258, Subpart F of Resources Conservation and Recovery Act, Subtitle D (hereinafter referred to as RCRA Subtitle D).
5. The WMF property is 30 acres, while the landfill footprint is approximately 1,500 feet long by 500 feet wide (about 17.25 acres).
6. The discharger reports that there is no plan for future lateral expansion of the Landfill footprint.
7. The landfill was opened in 1972 and has received only wastes generated at the MCAGCC. The landfill is not open to the public. The discharger reports that the landfill operates five days a week.
8. The landfill presently receives about 142 cubic yards-per-day of non-hazardous solid waste, as defined in Title 27, California Code of Regulations, including domestic waste, and construction/demolition waste.

9. The total volume of materials disposed of at the landfill is about 1 million cubic yards. The landfill has a total remaining capacity of about 530,000 cubic yards and an estimated remaining life of two years.
10. Waste disposal at the site is by the trench method. Lifts are formed by covering trash with fill from the adjacent borrow area. The borrow area is eventually filled and a new borrow area is formed downgradient. Since no lateral expansion of the landfill is planned, the discharger intends to import daily cover material from an off-site location. The discharger reports that lifts are built up to approximately 50 feet. Daily cover consists of one to two feet of soil applied to the 150-foot working face.
11. Land within 1,000 feet of this site is natural desert.
12. The WMF lies on the southern boundary of the Mojave Desert in San Bernardino County and is considered part of the Mojave Desert Geomorphological Province. The WMF is bounded on the northeast by the northwest-trending Bullion Mountain Range, on the south by the Pinto and Little San Bernardino Mountains, on the west by the San Bernardino and San Gabriel Mountains, and on the north by numerous northwest-trending smaller ranges and faults. Elevation of the WMF is approximately 2,200 feet above mean sea level.
13. The geologic setting of the landfill is the contact between Mesozoic bedrock of granitic composition (quartz monzonite) of the Bullion Mountains, and dissected debris and fan deposits of the low mountain pass in which the site is located. The WMF is underlain by basement rock with overlying Quaternary alluvial and playa deposits. The lithology of WMF consists of highly to moderately permeable alluvial silty sands, and the crystalline quartz monzonite bedrock. The surface of the quartz monzonite, typical of that found in a canyon, forms a system of troughs leading to a primary valley trough.
14. The crystalline bedrock near the landfill appears to be fractured but unfaulted. There is visible evidence of the northwest-trending West Bullion Mountain fault south-southwest of the landfill.
15. The discharger reports that there are no Holocene faults within 200 feet of the existing landfill footprint.
16. The landfill lies within a steep-walled canyon which drains to the south onto a broad alluvial fan. The alluvial valley fill that overlies the crystalline bedrock is a major water-bearing unit in the area. These units yield water freely to wells when saturated. However, the discharger reports that ground water has not been located within 2,800 feet of the landfill.
17. The Water Quality Control Plan for the Colorado River Basin Region of California (Basin Plan) was adopted on November 17, 1993 and designates the beneficial uses of ground and surface waters in this Region.
18. The landfill is located in the Dale Hydrologic Unit. The beneficial uses of ground waters in the Dale Hydrologic Unit are:
  - a. Municipal supply (MUN)
  - b. Industrial supply (IND)
  - c. Agricultural supply (AGR)

19. The discharger submitted a draft fourth quarter monitoring report on January 15, 2000. Monitoring wells at the WMF were reported dry. However, wells located about half-mile downgradient of the landfill were sampled. The average depth-to-ground water at these monitoring wells was 404 feet. Total dissolved solids concentration ranged from 1,200 to 1,500 mg/L in these wells. The downgradient concentration of total organic carbon, purgeable halocarbon and purgeable aromatics were below detection levels.
20. The average annual precipitation has been reported at 4.11 inches with an average annual evaporation rate of 120 inches.
21. Virtually all MSW landfills produce several volatile organic compounds (VOCs). VOCs exist in detectable concentrations in the gas and leachate produced by the landfill, and very little attenuation occurs after being released from such a landfill; therefore, the Federal MSW regulations require the use of VOCs as monitoring parameters.
22. Statistical data-comparison methods typically used to detect the migration of wastes from a waste management unit cannot be used in cases where the constituent to be monitored has a background concentration which does not exceed the constituents detection limit in at least ten percent of the background samples. In such cases, an alternative non-statistical testing methodology that is sensitive, reliable and not prone to falsely identifying a release, is necessary.
23. In accordance with Section 15301, Chapter 3, Title 14 of the California Code of Regulations, the issuance of these waste discharge requirements, which govern the operation of an existing facility involving negligible or no expansion of use beyond that previously existing, is exempt from the provisions of the California Environmental Quality Act (CEQA) per Public Resources Code, Section 21000 et. seq.
24. The Regional Board has notified the discharger and all known interested agencies and persons of its intent to update waste discharge requirements for this waste management facility.
25. The Board, in a public meeting, heard and considered all comments pertaining to this discharge.

IT IS HEREBY ORDERED, that Board Order No. 95-006 is rescinded, and in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, the discharger shall comply with the following:

A. Prohibitions

1. The discharge or deposit of designated waste (as defined in Title 27) at this site is prohibited unless approved by the Regional Board's Executive Officer.
2. The discharge or deposit of hazardous waste (as defined in Title 27) at this site is prohibited.
3. The discharge of liquid or semi-solid waste (i.e., waste containing less than 50 percent solids) to the waste management units is prohibited unless approved by the Regional Board's Executive Officer.

4. The direct discharge of any wastes to any surface waters or surface water drainage courses or to ground water is prohibited.
5. The discharge or deposit of waste to land not owned or controlled by the discharger is prohibited.
6. The disposal of incompatible wastes is prohibited.

B. Specifications

1. The discharger shall implement the attached Monitoring and Reporting Program No. 00-046, and revisions thereto, in order to detect, at the earliest opportunity, any unauthorized discharge waste constituents from the landfill, or any unreasonable impairment of beneficial uses associated with (caused by) discharges of waste to the landfill.
2. The discharger shall not expand the landfill footprint laterally beyond the existing footprint.
3. The treatment or disposal of wastes at this landfill shall not cause pollution or nuisance as defined in Sections 13050(l) and 13050(m) of Division 7 of the California Water Code.
4. Waste materials shall be confined to the waste management facility as described on the attached site maps.
5. Waste material shall not be discharged on any ground surface that is less than five feet above the highest anticipated ground water level.
6. The discharge shall not cause degradation of any water supply.
7. The discharger is the responsible party for the waste discharge requirements and the monitoring and reporting program for the facility. The discharger shall comply with all conditions of these waste discharge requirements. Violations may result in enforcement actions, including Regional Board Orders or court orders, requiring corrective action or imposing civil monetary liability, or in modification or revocation of these waste discharge requirements by the Regional Board.
8. The waste management facility shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods having a predicted frequency of once in 100 years.
9. Surface drainage from tributary areas and internal site drainage from surface or subsurface sources, shall not contact or percolate through the wastes discharged at this site.
10. The discharger shall maintain legible records on the volume and type of each waste discharged at the site. These records shall be available for review by representatives of the Regional Board at any time during normal business hours. At the beginning of the post-closure maintenance period, copies of these records shall be sent to the Regional Board.
11. The discharger shall maintain visible monuments identifying the boundary limits of the entire waste management facility.

12. The exterior surfaces of the disposal area, including the intermediate and final landfill covers, shall be graded and maintained to promote lateral runoff of precipitation and to prevent ponding.
13. The discharger shall remove and relocate any wastes discharged at this site in violation of these requirements within 90 days of the date of discharge.
14. Water used for site maintenance shall be limited to amounts necessary for dust control.
15. The discharger shall obtain written approval from the Regional Board's Executive Officer prior to using any treated contaminated soil as daily cover material at the landfill.
16. The discharger shall maintain a hazardous waste load-checking program at the WMF. The discharger shall report the findings of said program in the monitoring reports submitted in accordance with Provisions C.3 of this Order.
17. The discharger shall submit for consideration and approval by the Regional Board's Executive Officer, a closure and post-closure maintenance plan (or a suitable modification to a pre-existing plan) one year prior to closure. The closure and post -closure maintenance plan shall comply with Section 21769 of Title 27.
18. The discharger shall provide within 60 days of final closure, proof to the Regional Board that the deed to the waste management facility property or some other instrument that is normally examined in title search, has been modified to include, in perpetuity, a notation to any potential purchaser of the property stating that:
  - a. The parcel has been used as an MSW landfill.
  - b. Land use options for the parcel are restricted in accordance with the post-closure land use set forth in the post-closure plan.

#### C. Provisions

1. The discharger shall insure that all site-operating personnel are familiar with the contents of this Board Order.
2. The discharger shall notify the Regional Board of any material change or proposed change in the characteristics and volume of the wastes discharged. This notification shall be accompanied by an amended report of waste discharge and any additional information as may be required by the Regional Board's Executive Officer.
3. The discharger shall comply with "Monitoring and Reporting Program No. 00-046", and future revisions thereto, as specified by the Regional Board's Executive Officer.
4. All reports required by the "Monitoring and Reporting Program No. 00-046" and future revisions thereto shall be certified by a California Registered Civil Engineer or Registered Geologist.
5. The discharger shall maintain visible monuments identifying the boundary limits of the entire waste management facility.
6. The discharger shall within 48 hours of a significant earthquake event, submit to the Regional Board, a detailed post-earthquake report describing any physical damages to the

containment features, ground water monitoring and/or leachate control facilities and a corrective action plan to be implemented at the landfill.

7. The discharger shall immediately notify the Regional Board of any flooding, slope failure or other change in site conditions which could impair the integrity of waste containment facilities or of precipitation and drainage control structures.
8. Prior to any change in ownership or management of this operation, the discharger shall transmit a copy of this Board Order to the succeeding owner/operator, and forward a copy of the transmittal letter to the Regional Board.
9. The discharger shall comply with all applicable provisions of Title 27 that are not specifically referred to in this Board Order.
10. All containment structures and erosion and drainage control systems shall be designed and constructed under direct supervision of a California Registered Civil Engineer or Certified Engineering Geologist, and shall be certified by the individual as meeting the prescriptive standards and performance goals of Title 27.
11. The discharger shall maintain in good working order, and operate as efficiently as possible, any facility or control system installed by the discharger to achieve compliance with the waste discharge requirements.
12. This Board Order is subject to Regional Board review and updating, as necessary, to comply with changing State or Federal laws, regulations, policies, or guidelines, or changes in the discharge characteristics.
13. The Regional Board considers the property owner to have a continuing responsibility for correcting any problems that may arise in the future as a result of this waste discharge.

I, Philip A. Gruenberg, 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, Colorado River Basin Region, on June 28, 2000.

---

Executive Officer