

**STATE OF CALIFORNIA  
REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL COAST REGION**

**STAFF REPORT FOR REGULAR MEETING OF SEPTEMBER 2, 2010**  
Prepared on August 5, 2010

**ITEM NUMBER: 17**

**SUBJECT: Revised Waste Discharge Requirements, Order No. R3-2010-0038, for Camp Roberts Class III Landfill, San Luis Obispo County.**

**KEY INFORMATION:**

Location: Approximately 36 miles north of San Luis Obispo along U.S. Highway 101.

Owner/Operator: California Army National Guard

Type of Waste: Non-hazardous solid wastes and lead impacted construction debris (special waste).

Remaining Capacity: Approximately 336,000 cubic yards of waste (54,000 cubic yards municipal type solid wastes / 282,000 cubic yards special waste).

Disposal: Area-fill method.

Liner System: Previously unlined. A composite liner consisting of 2 feet of clay, 60-mil high-density polyethylene (HDPE), and a leachate collection and removal system is proposed for future waste disposal.

Existing Orders: Waste Discharge Requirements Order No. 94-78 and State Water Resources Control Board Water Quality Order No. 97-03 DWQ (General Industrial Storm Water Permit)

**This Action: Adopt Waste Discharge Requirements Order No. R3-2010-0038**

**SUMMARY**

Central Coast Regional Water Quality Control Board (Water Board) staff proposed Waste Discharge Requirements Order No. R3-2010-0038 (Order or Order No. R3-2010-0038) for the Camp Roberts Class III Landfill (Landfill) to specify landfill design and operation modifications to protect water quality from the landfill. The revisions proposed in Order No. R3-2010-0038 (Attachment 1) and Monitoring and Reporting Program (MRP) No. R3-2010-0038 (Attachment 2) update the regulatory and operational status of the Landfill, provide for modifications to the waste stream acceptable at the landfill, increases the approved waste disposal footprint to more accurately reflect existing and historic waste disposal areas, and update the groundwater monitoring network and sampling requirements.

Proposed Order R3-2010-0038 includes these substantive changes:

- Permits disposal of lead impacted construction debris with special waste variance from Department of Toxic Substances and Control (DTSC) and approval for the disposal from the Water Board's Executive Officer through updated WDRs.
- Requires composite liners for all future waste disposal cells, except inert wastes.
- Permits disposal in previously-approved areas, provided these areas meet composite liner and other requirements stated in this Order. Also captures operational and proposed system upgrades.
- Permits disposal of treated wood waste similar to other lined landfills.
- Evaluates compliance status for the Landfill.
- Requires Landfill compliance with California Code of Regulations Title 27, Solid Waste, effective July 18, 1997 (CCR Title 27), and Code of Federal Regulations Title 40, Parts 257 and 258 Solid Waste Facility Disposal Criteria, Final Rule, as promulgated October 9, 1991 (40 CFR 257 and 258).
- Revises the MRP including groundwater, surface water, landfill gas, and leachate monitoring.

The Discharger's main facility goals are to expand and upgrade the Landfill to comply with current regulatory requirements, and to dispose of lead impacted construction debris. Proposed Order No. R3-2010-0038 results in both environmental and economic benefits including improved water quality protection through the use of composite liners with leachate collection for future waste disposal areas. Additionally, there are reduced costs, air quality improvements, and energy reductions for the Discharger from not transporting 280,000 cubic yards of lead-impacted construction debris more than 75 miles to the Kettleman Hills Landfill or transporting class III municipal type wastes offsite to the Paso Robles Landfill.

## **DISCUSSION**

Proposed Order No. R3-2010-0038 updates and replaces existing Waste Discharge Requirements Order No. 94-78, adopted by the Water Board on September 9, 1994. The California Army National Guard (Discharger) submitted a joint technical document on February 10, 2010, to facilitate the review and revision of Order No. 94-78. The proposed Order provides guidance and requirements for planned changes at the Landfill. The design and construction specifications within the proposed Order meet or exceed requirements in both the CCR Title 27 and 40 CFR 257 and 258, both of which pertain to siting, design, construction, and operation of solid waste management facilities.

**Facility Description:** The Landfill is located 36 miles north of San Luis Obispo along Highway 101 and within Camp Roberts. Although Camp Roberts is split relatively evenly between San Luis Obispo and Monterey County, the Landfill is located in San Luis Obispo County.

The Landfill's property boundary encompasses approximately 85 acres and includes two waste management units totaling 17.6 acres. Both the North Unit (4.9 acres) and the South Unit (12.7 acres) are unlined; however, the Discharger is in the process of closing the North Unit and is proposing to upgrade the South Unit with a liner in 2010. The Discharger has modified the waste footprint for the Landfill to include historical waste

disposal, which based on recent information occurred slightly outside of the currently permitted waste footprint area.

The majority of land within a one-mile radius of the Landfill falls within the Camp Roberts boundary and includes warehouse facilities, vehicle and equipment maintenance facilities, troop barracks and training areas, and administrative offices. However, to the southeast the one-mile radius includes private rangeland that borders Camp Roberts approximately ¼ mile from the Landfill and is largely undeveloped apart from a single residence and several agricultural buildings.

**Surface Water:** The Landfill is located entirely outside of the 100-year flood plain and there are no designated wetlands within the Landfill property boundary. The Salinas River is approximately one mile to the northeast of the Landfill and flows to the northwest. The Nacimiento River is approximately three miles to the northwest of the Landfill and flows to the northeast into the Salinas River. An unnamed drainage channel along East Perimeter Road is just west of the Landfill and flows north towards the Salinas River. Surface drainage from the Landfill will be routed to a detention pond with overflow to the natural drainage channel along East Perimeter Road.

**Groundwater:** Groundwater is located at depths greater than 150 feet below the landfill and flows in a relatively consistent north-northwest direction. There are two hydraulically upgradient water supply wells located ¾ of a mile to the southeast of the landfill. There are no water supply wells within one mile that are hydraulically downgradient from the landfill.

**Groundwater Quality:** Groundwater quality data does not indicate significant impacts to groundwater from existing landfill waste. Some sporadic, very low level (significantly less than MCL), unconfirmed detections of volatile organic compounds have been detected in groundwater samples collected from wells downgradient of the North and South Unit. Therefore, monitoring data does not indicate significant impacts to groundwater quality from the previously active unlined North and South Units.

**Lead Impacted Construction Debris:** The Department of Defense directed the Discharger to remove buildings constructed during World War II as part of its Facilities Reduction Plan. Over 659 structures at Camp Roberts and 13 structures at Camp San Luis Obispo are expected to generate up to 44,000 tons of waste after demolition. Construction materials include lumber, plywood siding and decking, and asphalt shingle roofs. Lead and barium were components of the paint used on the buildings in 1944. Asbestos is found in the siding and flooring, which is also typical of the materials and construction methods of that era.

The construction debris is expected to be hazardous due to lead. However, the construction debris is not expected to exceed the Resource Conservation and Recovery Act (RCRA) hazardous waste threshold as measured by the toxicity characteristic leaching procedure. Since lead is the only characteristic that would classify this material as a non-RCRA hazardous waste, it meets the requirements for consideration as a Special Waste in accordance with CCR Title 22 §66261.124. In March 2008, DTSC approved that the construction debris from 287 of the buildings to be a Special Waste so that it can be disposed of as set forth in the proposed Order. The Discharger expects to receive a similar approval for the construction waste from remaining buildings as the buildings were all constructed during the same time period and with similar materials.

DTSC's approval of the Special Waste designation for the lead impacted construction debris allows the Water Board to approve disposal into a Class III landfill through waste discharge requirements. Based on leachability testing, lead is not expected to leach in significant amounts from the construction debris. However, the Discharger proposed a more conservative design because there is a potential for landfill leachate from municipal wastes to leach metals in the construction debris due to its lower pH. To minimize contact between the construction debris and the low pH leachate, the Discharger will segregate the municipal and construction debris wastes into separate disposal areas (cells).

**Landfill Upgrades:** The Discharger plans to upgrade the South Unit, dividing it into two separate cells; one to handle construction debris and the other to handle the traditional municipal solid waste generated at Camp Roberts. Both cells will incorporate liners and leachate collection and removal systems consistent with CCR Title 27 and 40 CFR 257 and 258. The lead impacted construction debris cell will have a capacity of 282,000 cubic yards and will be closed as soon as demolition activities are completed in approximately 11 years. The other cell will handle municipal solid waste generated at Camp Roberts and will have a capacity of approximately 54,000 cubic yards. Based on current waste disposal rates, the municipal solid waste cell would reach permitted capacity in approximately 2019.

**Proposed Order:** The majority of updates proposed in the Order are consistent with recent waste discharge requirements adopted by the Water Board for other Class III landfills. However, the allowance to dispose of lead impacted construction debris is site specific to Camp Roberts, as is DTSC's approval of a Special Waste designation for the lead impacted construction debris. The DTSC's approval of a Special Waste designation is specific to the characterized lead impacted construction debris at Camp Roberts. Water Board staff is confident that by segregating and disposing of lead impacted construction debris into a dedicated cell and by installing a Water Board-approved composite liner and leachate collection system, waste disposal at Camp Roberts will be protective of water quality.

## **MONITORING AND REPORTING PROGRAM**

The Landfill Monitoring and Reporting Program (MRP) includes:

**Part I – Monitoring and Observation Schedule:** This section requires periodic routine inspections of the Landfill and the leachate collection system, and detailed analytical monitoring of groundwater, leachate, and landfill gas.

**Part II – Sample Collection and Analysis:** This section establishes criteria for sample collection and analysis, methods to determine concentration limits, and specifies how the Discharger must maintain these records.

**Part III – Statistical and Non-Statistical Analysis of Data:** This section establishes methods for the Discharger to determine Landfill compliance with water quality protection standards based on laboratory analytical information.

**Part IV – Reporting:** This section establishes formats and requirements that the Discharger must follow when submitting analytical data, annual reports, and summaries to the Water Board.

**Part V – Definition of Terms:** This section defines specific terms used in the MRP.

Water Board staff revised the existing MRP for the Landfill to coincide with proposed Order No. R3-2010-0038. The revised MRP includes:

- New or updated leachate, unsaturated zone, landfill gas, and stormwater monitoring. Although leachate is not currently collected from the existing unlined waste management units, Water Board staff anticipate leachate generation and collection from the future lined cells and waste disposal operations. Unsaturated zone monitoring is required as early leak detection for the new lined units. Gas generation and/or migration has historically not been an issue due to the small size of the Discharger's waste disposal operation and semi-arid conditions; however, if landfill gas is detected in soil vapor gas probes it will be monitored and gas extraction from the waste management units may be required in the future.
- Additional monitoring for lead and barium in groundwater detection monitoring due to disposal of lead impacted construction debris.
- Site inspection schedule for the landfill, surface water, pollution control systems, and drainage systems.
- Nine detection monitoring wells and two surface water locations.
- Stormwater monitoring in accordance with State Water Board Order No. 97-03-DWQ, General Permit No. CAS000001.

### **COMPLIANCE HISTORY**

The Landfill has been inactive since 2003, while the Discharger worked with DTSC to obtain a Special Waste variance for the lead impacted construction debris; concurrently the Discharger has worked with Water Board staff to develop and propose landfill improvements consistent with CCR Title 27, 40 CFR 257 and 258, and this proposed Order.

The Discharger and the Landfill are in compliance with the existing Order. The Discharger is responsive to Water Board staff's information requests and readily addresses compliance issues. Water Board staff has not issued any violations to the Discharger since the last WDR update, and the Discharger has met all reporting deadlines.

### **ENVIRONMENTAL SUMMARY**

This Order contains prohibitions, discharge specifications, water quality protection standards, and provisions intended to protect the environment by mitigating or avoiding impacts of Landfill operations on water quality.

### **CALIFORNIA ENVIRONMENTAL QUALITY ACT**

Proposed changes for the Camp Roberts Landfill including an expanded waste footprint, increased landfill capacity, landfill upgrades, demolition of army barracks and corresponding disposal of lead impacted construction debris have undergone the Federal National Environmental Policy Act (NEPA) process. The Discharger prepared a Final Environmental Assessment (EA) in March 2010 in accordance with NEPA and the California Environmental Quality Act (CEQA) resulting in a finding of no significant impact and a Negative Declaration. The Final EA and Negative Declaration satisfy the

requirements for the California Environmental Quality Act (CEQA).

### **PUBLIC NOTICE AND COMMENTS ON ORDER NO. R3-2010-0038**

Water Board staff distributed the draft Order No. R3-2010-0038 and MRP No. R3-2010-0038 on June 25, 2010 to a list of interested parties and agencies and surrounding landowners that have been historically involved with the Landfill. After a 30-day public comment period, Water Board staff received no comments to the proposed Order and MRP.

### **CONCLUSION**

The proposed Order updates operational and monitoring requirements for the Camp Roberts Landfill to protect groundwater and surface water through required engineering controls, preventative inspections, and monitoring. The Discharger's proposed facilities upgrade to accept construction debris waste and municipal waste is consistent with other landfills within the Central Coast Region, and the Landfill does not pose a significant risk to groundwater and surface water with the controls and requirements included in the proposed Order.

### **RECOMMENDATION**

Adopt Waste Discharge Requirements Order No. R3-2010-0038 with Monitoring and Reporting Program No. R3-2010-0038.

### **ATTACHMENT**

Attachment 1: Proposed Waste Discharge Requirements Order No. R3-2010-0038

Attachment 2: Monitoring and Reporting Program No. R3-2010-0038