Monitoring Requirements: Under the DTSC Hazardous Waste Permit, Waste Management must always monitor for chemical releases to air, soil vapor, surface water, and groundwater at the Kettleman Hills Facility. The Central Valley Regional Water Quality Control Board works with DTSC to administer these monitoring programs.
Air Monitoring

Three air monitoring stations collect air samples during a 24-hour period every 12 days. This monitoring system also includes a meteorological station. The monitoring stations are located to detect chemical concentrations coming from facility operations. Regulatory agencies have monitored facility air emissions at the site since 1986. DTSC has analyzed site airborne data for a more comprehensive list of chemicals since 2006. Predominant winds at the Kettleman Hills facility blow from northwest to southeast. Kettleman City is northeast of the facility. DTSC is proposing to add one more monitoring station and require longer sampling times for PCBs.

Soil Vapor

Soil vapor is found in the air between soil particles below the surface of the ground. Soil vapor at the Kettleman Hills Facility is monitored and sampled for chemical contaminants from two former unlined ponds and for methane gas from landfill areas that contain municipal waste or trash. Regulating agencies review data from the 11 methane monitoring wells and the nine volatile organic compound monitoring wells.

Surface Water

Surface water is water that flows or collects on the surface of the ground. No rainfall, stormwater or surface water that contacts hazardous waste is allowed to flow outside the facility’s boundaries. Runoff that contacts hazardous waste is contained and managed as hazardous waste. Other runoff is collected through ditches and culverts to lined retention basins designed to handle the maximum rainfall. Runoff in the basins is allowed to evaporate. Because the area has very low rainfall, surface water rarely collects at the site.

Groundwater

There are 48 monitoring wells at the Kettleman Hills Facility to detect and track any chemicals released into the groundwater. Samples have been collected from monitoring wells four times yearly for the past 25 years. DTSC and other agencies review the results to determine whether releases to groundwater have occurred. For the facility’s future, DTSC will continue to monitor groundwater at the site.
Avenal is 6.5 miles North-West from Waste Management.
Kettleman City is 3.5 miles North-East from Waste Management.
Hazardous wastes are transported to KHF by truck via I-5 to SR-41.
Hazardous Waste Permitting

WASTE MANAGEMENT, INC. • KETTLEMAN HILLS FACILITY

Permitted Activity

Waste Management accepts almost all solid, semi-solid, and liquid hazardous wastes.

Waste Management may NOT accept:
• Class A explosives
• Compressed gases
• Regulated radioactive materials
• Biological agents
• Infectious wastes

Examples of Active Operating Hazardous Waste Units

PCB Flushing

Drum Storage

Landfill Unit B-18

Pond P-16
Enforcement Program

WASTE MANAGEMENT, INC. • KETTLEMAN HILLS FACILITY

Preparing for the Inspection

1. Review US EPA and DTSC files on the facility
2. Prepare a plan for carrying out the inspection safely
3. Review all laws, regulations, and permits that apply to the facility
4. Prepare all equipment and supplies needed for the inspection
5. Invite the local regulator to participate in the inspection

Inspecting the Facility

1. After arriving at the facility, meet the operators and give them a list of documents that DTSC and US EPA will review
2. Talk with the operators about the facility’s procedures
3. Walk through the facility and write down all observations and identify potential violations
4. Review the facility’s documents
5. After the inspection, meet with the operators and provide them with a summary of any noted violations

Completing the Report

1. Write the inspection report that explains what was inspected and identifies any noted violations
2. Send the inspection report to the facility
3. Take appropriate enforcement action for any violations

Contacting DTSC:
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Public Participation Specialist
8800 Cal Center Drive
Sacramento, California 95826
Email: NSchumac@dtsc.ca.gov
Phone: (866) 495-5651
Fax: (916) 255-3654

Contacting DTSC’s Enforcement Program:
Clovis Regional Office
1515 Tollhouse Road
Clovis, CA 93611-0522
Ignacio Dominguez, Clovis
Email: idomingu@dtsc.ca.gov
Telephone: (559) 297-3901
DTSC Permitting for Hazardous Waste Disposal

Application Received for a Permit Modification

Public Comment Period on the Permit Application (Facility)

Application Reviewed:
• Does application meet regulatory requirements?

Proposed Decision and Draft Environmental Review Analysis
  Approve / Deny

Public Notice of Proposed Decision

Public Comment Period (DTSC):
• Written Comments  • Public Comments  • Public Hearing/Community Workshop

Public Comments Reviewed for Consideration

Issued: Final Permit Decision and Final Environmental Analysis

Public Permit Appeal Period for the Final Decision

Final Permit Appeal Decision
How DTSC Determines Risk from Kettleman Hills Landfill Air Emissions

Under oversight by DTSC a health risk assessment was conducted to determine the health risks from permitted KHF activities. The health risk assessment studies the effect of chemicals released to the air from the KHF Landfill and how they travel by wind and expose ranch workers and ranch residents near KHF and residents of Kettleman City and Kettleman Junction.

Health Risk Assessment

The health risks from exposure to air emissions from the KHF Landfill were calculated for different receptors using monitoring data that has been collected for the last 5 years. The health risk assessment demonstrated that there is no significant health risk for Kettleman City Residents, Kettleman Junction Residents, Kettleman City Area Ranch families or a Ranch Worker at Landfill Fenceline. DTSC continues to require air monitoring, quarterly air monitoring reports and an annual update of the Health Risk Assessment.

Air Dispersion of . . .

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<tr>
<th>Benzene</th>
<th>Chromium</th>
<th>Formaldehyde</th>
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Health Risk: Red, orange, yellow . . . Significant health risk to residents
Green, blue, gray . . . . . Not significant health risk to residents
The draft decision would add permit conditions to the current permit, including:

1. Compliance with the mitigation measures identified in the Subsequent Environmental Impact Report
2. Longer ambient air sampling periods for PCBs
3. An additional air monitoring station to sample air when wind is blowing toward Kettleman City
4. Annual meeting in Kettleman City to explain the environmental monitoring results
5. Construction of a containment system at the sample rack
6. Increased landfill leachate sampling and analysis
7. Annual aerial or land surveys of active hazardous waste landfills and monthly estimates of landfill airspace consumption
8. Compliance with the terms of a Biological Opinion and Incidental Take Statement
9. Specific procedures and notifications for reporting spills, leaks and releases
10. Reduction of diesel truck emissions by prohibiting trucks older than 2007. Trucks older than 2010 would be prohibited beginning in 2018

The Department also announced an effort to reduce the amount of hazardous waste disposed in California by 50 percent by the year 2025. The reduction would affect the amount of wastes going to landfills in Kettleman Hills, Buttonwillow near Bakersfield and Westmoreland in Imperial County.