
Executive Summary

**DRAFT REPORT:
ANNUAL SCREENING LEVEL HEALTH RISK ASSESSMENT
OCTOBER 2011 – SEPTEMBER 2012**

Prepared for Chemical Waste Management, Inc., Kettleman Hills Facility, California
Prepared by Wenck Associates, Inc. and AECOM
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SUMMARY

This Screening Level Health Risk Assessment (HRA) annual update was prepared in accordance with the Kettleman Hills Facility (KHF) Resource Conservation and Recovery Act (RCRA) Part B permit, as part of the Ambient Air Monitoring Program (AAMP) at KHF. Since late 2006, AAMP air measurements have been regularly collected at three sampling stations located around the KHF boundary. KHF completed a detailed, four-year evaluation of comprehensive ambient air quality measurements collected at those three sampling stations during October 2006 through September 2010, and performed an HRA based on those measurements to evaluate potential risks to human health in the area of the KHF facility. That HRA was completed in November 2011 (Wenck, November 2011) and, on January 12, 2012, the California Department of Environmental Protection (CalEPA) Department of Toxic Substances Control (DTSC) approved and accepted the Final HRA and the conclusions presented therein.

A Screening Level HRA (2012 Screening Level HRA) presenting a human health risk evaluation of the next year of AAMP ambient air data (October 2010 through September 2011) was submitted in April 2012 (Wenck, April 2012) and approved by DTSC in July 2012. This 2013 Screening Level HRA covers the time period October 2011 through September 2012. Both Screening Level HRAs rely on the same approved and conservative risk assessment methodology as the 2011 Final HRA. For example, the 2012 and 2013 Screening Level HRAs use the same methods for air data evaluation and selection of chemicals of potential concern (COPCs), as well as the same procedures for development of exposure point concentrations that reflect long-term COPC concentrations in ambient air downwind from the facility (at the immediate property boundary and at nearby residential locations) due to potential KHF emissions.

As in the 2011 Final HRA, the Screening Level HRAs calculate potential risks for several different receptors in accordance with input from DTSC (hypothetical commercial/industrial worker, ranch worker, and resident) and use the same exposure parameters to evaluate these receptors.

The 2011 Final HRA risk assessment results were evaluated by comparison to benchmark risk levels that have been identified by DTSC, CalEPA, the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) and the U.S. Environmental Protection Agency (USEPA). This 2013 Screening Level HRA results were also evaluated by comparison to risk-based screening levels developed in accordance with directions provided by DTSC. The results of both assessments were also compared to one another.

The results of this 2013 Screening Level HRA demonstrate that with respect to potential human health risk there is no substantial difference between the most recent year of AAMP data (October 2011 through September 2012) and the first four years of AAMP data (October 2006 through September 2010) evaluated in the 2011 Final HRA or the fifth year of data (October 2010 through September 2011) evaluated in the 2012 Screening Level HRA. The results of this assessment indicate the following:

- **Potential risks associated with emissions from KHF for a hypothetical commercial/industrial worker, assumed to work at the maximum impact property boundary location, are at or below the benchmark risk levels identified by CalEPA, SJVUAPCD, DTSC, and USEPA.** The hypothetical commercial/industrial worker scenario is not considered to be plausible even under future land use conditions given the presence of the current waste management facility and County zoning restrictions.
- **Potential emissions from KHF would not pose health risks to a ranch worker at the facility boundary.** All of the risk assessment results for this scenario were below the benchmark risk levels identified by CalEPA, SJVUAPCD, DTSC, and USEPA.
- **Potential emissions from KHF do not pose health risks in residential areas in and around Kettleman City.** All of the risk assessment results at evaluated residential locations (in Kettleman City, in Kettleman Junction, and at the nearest residence) were below the benchmark risk levels identified by CalEPA, SJVUAPCD, DTSC, and USEPA. The calculated risks in and around Kettleman City associated with KHF emissions were at least 700 times lower than the calculated upwind ambient air inhalation risk.