

**Low Temperature Thermal Desorption
Delivers Complete Soil Remediation**
Think Green.® Think Waste Management.

When it comes to clean, cost-effective remediation of soil or various media contaminated by non-hazardous petroleum hydrocarbons and other organics, Waste Management now offers a proven solution to meets the needs of customers across Southern and central California.

Low Temperature Thermal Desorption technology makes it possible to quickly and efficiently remove non-hazardous organic and petroleum materials – such as petroleum fuels, hydraulic oils, jet fuels and crude oil – from contaminated material without negatively impacting the environment. This enables real estate developers, pipeline transmission companies, refineries, industrial businesses, manufacturers, schools and hospitals to conduct rapid soil remediation thus eliminating the hassle and potential liabilities tied to managing organic contaminated media.



Our LTTD facility is conveniently located in Azusa, California near the 605 and 210 freeways.

**THE LOW TEMPERATURE
THERMAL DESORBER**

Waste Management’s Low Temperature Thermal Desorber (LTTD) plant is designed to deliver the fast remediation of soils containing heavy or longer chain hydrocarbons that require operating temperatures of >800°F to be efficiently and safely removed. The permitted desorption process is built around applying measured heat levels to contaminated material, by which the LTTD is able to produce clean, contaminant-free media at a rate of 30 tons per hour. Analysis and submittal of a Generator’s non-hazardous waste profile must be submitted in advance of scheduling.



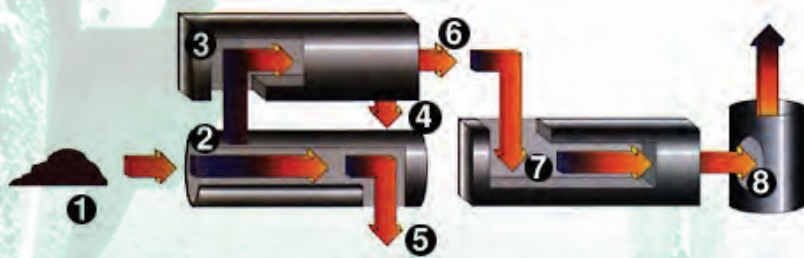
The LTTD produces clean, contaminant-free media at a rate of 30 tons per hour.

This highly efficient and cost-effective solution enables Waste Management customers to:

- Use a green alternative, ensuring that contaminated media is handled in a manner that protects the environment
- Reduce long-term liability concerns associated with direct landfill disposal
- Obtain a Certificate of Destruction verifying treatment to acceptable treatment levels
- Pursue project opportunities that require remediation technologies beyond landfill limits
- Take advantage of enhanced local treatment options for contaminated media
- Reduce emissions associated with remediation
- Minimize the cost of properly handling and treating contaminated media beyond direct landfilling of organics



Low Temperature Thermal Desorber



Media is carried through clearly-defined stages in the remediation process.

This highly-effective remediation process includes the following stages:

- First, the contaminated media is loaded into a feed hopper. (1)
- A variable speed belt at the hopper loads the media at a rate of approximately 25-30 tons/hour into the rotary drum desorber. (2)
- The temperature of the media in the desorber is raised to volatilize the hydrocarbons. The low temperature exhaust gases from the desorber are then transferred to the Thermal Oxidizer (3), where they are superheated up to 2200°F to completely destroy residual hydrocarbons trapped in any dust particles that may be present.
- The gas stream from the Thermal Oxidizer is then cooled to a temperature of 375°F (6) before entering the bag house. (7)
- The now clean gas stream is released into the atmosphere through the discharge stack. (8)
- The collected gas particulate that has been recombined with the remediated media drops into the mixer section (4) of the mixer cooler system.
- The media is then routed into a single shafted cooler for final re-hydration and onto a covered discharge conveyor. (5)

WASTE MANAGEMENT'S THERMAL DESORPTION FACILITY

Waste Management's Thermal Desorption facility is conveniently located in Azusa, California near the 210, 57, 10 and 605 freeways, and is capable of receiving 2,500 tons of soil per day and temporarily store up to 40,000 tons at a time. This allows customers to complete remediation efforts in a timely manner thus reducing the number of days spent at the project site and tax advantages.



Our Azusa, CA facility can receive up to 2,500 tons of soil per day.

For more information about Waste Management's Thermal Desorption capabilities and how they can help your business, please contact your Waste Management Manufacturing and Industrial Services representative at 800-WMDisposal (800-693-4776) or log onto www.WMDisposal.com.



Discharged media is clean, contaminant-free, and ready for reuse.



From everyday collection to environmental protection, Think Green. Think Waste Management.



**LANDFILL &
INDUSTRIAL
SERVICES**