

# Eagle Valley Recycling and Disposal Facility

Orion Township, Michigan

**Waste Management's Eagle Valley Recycling and Disposal Facility** has been providing service for the disposal needs of residential, municipal and commercial customers in Oakland County and southeast Michigan since 1985. The landfill is a Type II solid waste disposal facility and recycling drop-off center that also creates renewable energy. Eagle Valley is owned and operated by Waste Management, the leading provider of comprehensive waste and recycling services in North America.

## About Our Facility

Eagle Valley is a modern, engineered landfill offering an environmentally sound process for managing the waste generated by local residents, commercial businesses and communities in SE Michigan.

**For tours call (248) 391-0990.**

## Converting Landfill Gas to Renewable Energy

Landfill gas is a by-product of the natural decomposition of waste in the landfill. Methane is recovered from the landfill gas at Eagle Valley and converted into fuel that is used to generate energy for General Motors and DTE Energy.

## Environmental Protection

Waste Management is committed to the highest standards of environmental responsibility and has invested millions of dollars into the site's environmental control systems which include landfill liners, landfill gas collection, and groundwater and air quality monitoring.

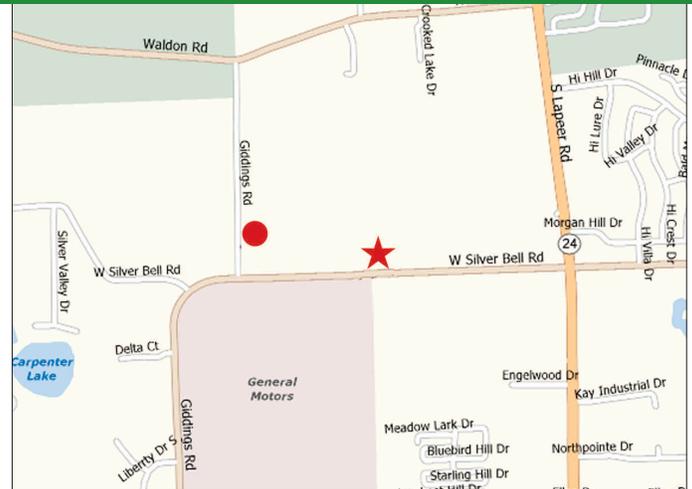
## Facility Permits and Environmental Monitoring

Eagle Valley Landfill operates in compliance with regulations promulgated under the Natural Resources and Environmental Protection Act, 1994 P.A.451 as amended. The Michigan Department of Environmental Quality (MDEQ) is the agency that oversees the landfill's construction, operation, and environmental monitoring. The facility operates under the following permits:

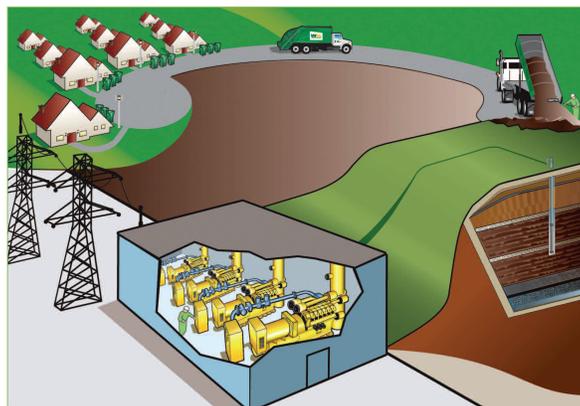
- Solid Waste Disposal Area Construction Permits
- Solid Waste Disposal Area Operating License
- Soil Erosion and Sediment Control Permit
- Title V Renewable Operating Permit (Air Permit)
- Stormwater General Permit
- Detroit Water and Sewerage Industrial Discharge Permit

In addition to these permits, Eagle Valley is required to maintain numerous monitoring and pollution prevention plans. These include waste screening and acceptance plans, groundwater monitoring, landfill gas monitoring and storm water pollution prevention plans, to name just a few.

- In accordance with MDEQ regulations, the facility monitors surface water, groundwater and air emissions.
- There are 20 groundwater monitoring wells around the site that monitor the groundwater that flows below the landfill.
- The gas collection system is expanded regularly and is currently comprised of approximately 100 extraction wells that are monitored monthly. Reports are submitted to the MDEQ on a semiannual basis.



★ Waste Management's Eagle Valley Recycling and Disposal Facility  
● Waste Management's Eagle Valley Renewable Energy Facility



## Site Facts

- Total property: 277.5 acres
- Permitted area for solid waste: 147.8 acres
- Waste received: approximately 500 to 1000 tons per day
- Landfill gas to energy production: Eagle Valley provides renewable energy to GM's Lake Orion manufacturing facility. The landfill gas used by GM provides the equivalent in energy required to power approximately 1,500 to 3,000 homes.
- The Eagle Valley Renewable Energy Plant also provides electricity to the DTE Energy grid, providing power for approximately 3,000 homes.

<http://eaglevalleylandfill.wm.com>

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## Components of the Landfill Liner System

Waste disposal at the Eagle Valley Landfill is managed with protection of the environment as a primary goal. The entire site has been constructed with an engineered liner and leachate collection system. The originally licensed cell was constructed with a 3-foot thick recompacted clay liner placed above a thick natural clay soil layer. The remaining ten cells were constructed utilizing the best available technology liner system, which consists of multiple layers that separate the waste from, and protect the environment. The double composite liner system at Eagle Valley is a liner and leachate collection system comprised of (from the bottom up) re-compacted clay liner or geo-synthetic liner, followed by a 60-mil high density polyethylene (HDPE) liner overlain by a geosynthetic secondary leachate collection system. Above this, the same system is repeated again to complete the double composite liner.

The primary and secondary leachate collection systems collect leachate, which is a liquid, primarily precipitation, that passes through the waste. The leachate collects in a combination of granular soil layers, geosynthetic drainage layers and a network of pipes that direct the liquid to sumps for removal. The sumps are fitted with pumps with automatic controls that pump the liquid from the landfill. The leachate is then pumped to the sanitary sewer system for treatment at the Detroit Water and Sewerage Department.

## Natural Habitat and Wetlands Protection

Eagle Valley Recycling and Disposal Facility is a certified Wildlife Habitat Council/ Wildlife at Work program. The Wildlife Habitat Council, formed in 1988, is a nonprofit, non-lobbying 501(c)(3) group of corporations, conservation organizations, and individuals dedicated to restoring and enhancing wildlife habitat.

Eagle Valley provides over 45 acres of dedicated natural and wetland area adjacent to the site which serves as home to numerous species of wildlife, including deer, fox, a variety of waterfowl, turtles and other aquatic life and important pollinators.

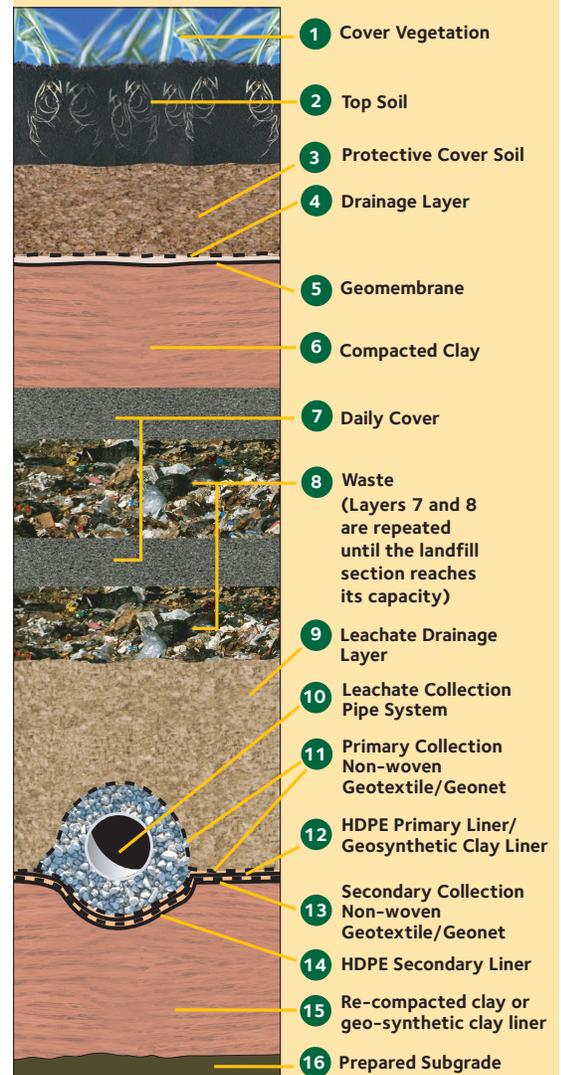
Wildlife monitoring, observation journals and species inventories are updated on a routine basis by Waste Management employees and community members that make up the Eagle Valley Wildlife Management Team. The program is designed to encourage individuals to connect with their natural environment and provides important information to local and national groups on wildlife populations.

## Community Programs

Along with protecting the environment through its state-of-the-art landfill and renewable energy operations, Waste Management also believes in making a strong commitment to the local community. Each year, Eagle Valley participates in several programs and organizations that encourage a vital community.

- Clinton River Watershed Council
- Friends of Bald Mountain
- Lake Orion Education Foundation
- Michigan Alliance of Environmental and Outdoor Education
- Orion Art Center (Re-Create Art Contest & Dragon on the Lake)
- Orion Chamber of Commerce
- Orion/Oxford Boys and Girls Club
- Six Rivers Regional Land Conservancy
- Two free disposal days & free recycling all year for Township residents

## Typical Anatomy of a Landfill



The Eagle Valley Landfill utilizes a double composite liner system.

## WM Eagle Valley Recycling and Disposal Facility

600 W. Silver Bell Rd.  
Orion, MI 48359

**Telephone**  
(248) 391-0990

**Fax**  
(248) 391-1219

**Site Manager:** Scott Rowe

### Hours

- Please call (248) 391-0990 for current hours of operation as hours change seasonally.
- Recycling drop-off available during normal landfill hours.
- Tours are available.