Autumn Hills Recycling and Disposal Facility

Zeeland Township, Michigan

Autumn Hills Recycling and Disposal Facility is located in a rural agricultural setting in Zeeland Township, Michigan. The facility was developed as a "greenfield" site in 1992 and is a licensed Type II Solid Waste Facility. With its commitment to community and protection of the environment, Autumn Hills is pleased to be a business partner serving west Michigan. Autumn Hills RDF is owned by Waste Management, the leading provider of comprehensive environmental services in North America.

Facility Permits

Autumn Hills Recycling & Disposal Facility operates in compliance with the 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:

- Michigan Solid Waste Disposal Area Construction Permit
- Michigan Solid Waste Disposal Operating License
- NPDES general stormwater permit certificate of coverage
- Renewable Operating Permit (Air) No. MI-ROP-N6006

In addition to these permits, Autumn Hills RDF is required to maintain numerous environmental 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.

Environmental Monitoring

- Surface water retention and sedimentation ponds contain all surface water at the site. Routine inspections by local and state inspectors are completed to ensure that all required surface water conditions are met under our general stormwater discharge permit.
- A total of 11 ground water wells are sampled and tested semi-annually with the results sent to the MDEQ and copies maintained in the facility's Operating Record.
- In accordance with the Renewable Operating (Air) Permit, the facility conducts air quality testing on a monthly and quarterly basis.

Components of the Landfill Liner System

Waste disposal at Autumn Hills RDF is performed with protection of the environment in mind. The entire site utilizes a multiple layer liner that contains waste and protects the environment. The liner system is comprised of a composite liner system (2-foot minimum recompacted clay or geosynthetic clay liner and a 60-mil HDPE liner) a one foot granular leachate drainage protection layer, and an automated leachate collection/disposal system. Leachate is liquid, primarily rainwater, which passes through the waste. The leachate is collected in a series of sumps and managed through the appropriate disposal process.

Zeeland

Zeeland

Zeeland

Zeeland

Gerald R. Ford FwY

Swh Ave

Sth Ave

Adams St.

OTTAWA COUNTY
ALLEGAN COUN

★ Waste Management's Autumn Hills Recycling & Disposal Facility in Zeeland Township provides waste disposal and recycling services to area residents and businesses.

Site Facts

- Total property: 379.14 acres
- Permitted area for waste disposal: 152.2 acres
- Average volumn of waste received: 1,800 tons per day
- Remaining site life: More than 50 years
- Number of employees: 10
- Operating hours: 6:30 a.m. to 4:30 p.m. Monday through Friday, Sat 7-11:30 a.m.

Call for current hours of operation as hours can change seasonally.

Landfill Liner System graphic on next page.

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Landfill Gas Recovery/Renewable Energy Systems

Zeeland Farms Services

Gas collection wells are used to collect methane gas which is generated by the natural decomposition of waste. The landfill gas is collected from Autumn Hills 100+ vacuum wells and piped to North American Natural Resources (NANR). NANR scrubs the landfill gas and compresses it before sending it through six (6) miles of 18 inch pipe to Zeeland Farms Services (ZFS). ZFS uses the gas to power their Soy Bean Processing plant.

ZFS's initial use of Autumn Hills gas is providing environmental benefits that are the equivalent of powering 4,000 homes with energy, or removing 21,000 cars from the road, or planting 28,800 acres of trees annually.

Electrical Generation

In 2009 Autumn Hills RDF also began supplying gas to NANR for the generation of electricity for the City of Zeeland. The landfill gas being provided to NANR is anticipated to provide enough electricity to supply the City of Zeeland with 10% of its needs over the next 20 years.

Community Programs

Besides protecting the environment through its state-of-the-art landfill operations, Waste Management also believes in making a strong commitment to the local community. Each year, Autumn Hills RDF participates in several programs and organizations that support a healthy community, education, and the environment, including:

- Host Community Tipping Fees to Zeeland Township and Ottawa County.
- Zeeland Township's residents receive the benefit of two (2) separate annual "Free Disposal Day" events (dates are determined by Zeeland Township), as well as free recycling.
- Support various local events and activities such as Drenthe Annual Chicken BBQ, Holland Fish and Game Club, Macatawa Greenway/Outdoor Discovery, Ducks Unlimited, Hudsonville 4-H etc.
- Autumn Hills RDF houses Ottawa Counties Household Hazardous Waste drop off for all Ottawa County residents.
- Supports local schools contributing to fundraisers and sponsorships.

Site Tour Program

Autumn Hills RDF provides a free tour program for schools, colleges, and local groups. You can learn firsthand how North America's leading provider of comprehensive environmental services is protecting the environment while managing waste in the most environmentally sound manner possible. Waste Management – providing environmental protection, green energy production and partnering with local businesses and communities.

To arrange a tour of the site, please call (616) 953-5910.

Autumn Hills Landfill Liner



WM Autumn Hills Recycling and Disposal Facility

700 56th Avenue Zeeland, MI 49464

Telephone (616) 953-5910

Fax (616) 688-5781

Hours

Monday - Friday: 6:30 a.m. - 4:30 p.m. Saturday: 7:00 a.m. - 11:30 a.m. Please call for current hours of operation as hours can change seasonally.

