



## WASTE MANAGEMENT AUTUMN HILLS – IW-1 NON-HAZARDOUS WASTE DISPOSAL WELL

Waste Management of Michigan, Inc (Waste Management) has submitted a Part 625 permit application to the Michigan Department of Environment, Great Lakes, and Energy (EGLE) Oil, Gas, and Minerals Division (OGMD) to drill and operate a non-hazardous waste disposal well in Ottawa County. The proposed well is called the Waste Management Autumn Hills IW-1 well (IW-1). It is located at the Waste Management Autumn Hills Recycling and Disposal Facility in Zeeland, Michigan.



Waste Management proposes to dispose non-hazardous landfill leachate generated on-site from the Autumn Hills Landfill into deep, confined, porous rock formations between 3,800 and 6,600 feet below the ground surface. The base of the Underground Source of Drinking Water (USDW) is much shallower: about 350 feet below the ground surface.

Landfill leachate is the liquid generated within a landfill. It is created from moisture contained within the waste itself, as well as precipitation that falls on the landfill and moves through the waste. Leachate is primarily water and is also composed of low concentrations of non-hazardous compounds. The pH of the wastewater is generally neutral, and is not considered ignitable, reactive, or corrosive. Waste Management has provided results of leachate testing with the permit application, as well as a waste analysis plan. The wastewater will be tested regularly to monitor for various parameters and assure that it remains classified as non-hazardous.

Wells of this type are permitted under two separate programs: the OGMD and the United States Environmental Protection Agency (USEPA) – Underground Injection Control (UIC) Program. According to the USEPA classification, this is considered a Class I disposal well. Class I disposal wells inject industrial and municipal wastewaters into deep confined formations far below and isolated from freshwater zones. There are 23 active Class I disposal wells in Michigan and approximately 800 active Class I disposal wells in the United States.

Class I wells that meet design and operating requirements are very low risk. Class I disposal wells are designed and constructed to allow for disposal of wastewater while preventing the movement of injected fluids into (shallower) freshwater zones. There are redundant protections and strict guidelines related to well location, design, construction, operation, monitoring, testing, reporting, and closure. The safeguards in place ensure protection to freshwater, the environment, and human health.

The proposed IW-1 well is designed to isolate the disposal zone from the freshwater zones with multiple strings of casing (steel pipes) cemented to the surface. The disposal is through steel tubing within the casing strings. There are several confining rock formations and over 3,500 feet of vertical separation between the disposal zone and the freshwater zone. Under no circumstances would a disposal well be approved or allowed to operate if there were indications that the disposed fluids could migrate into freshwater zones.

The application documents can be viewed at: [www.michigan.gov/EGLE](http://www.michigan.gov/EGLE) (Land--Mineral Wells). Public comments will be accepted regarding this proposal until **September 24, 2019 11:59pm**, and may be submitted via email to [EGLE-OGMDpubliccomments@michigan.gov](mailto:EGLE-OGMDpubliccomments@michigan.gov) or mailed to:

Michigan Department of Environment, Great Lakes, and Energy-Oil, Gas, and Minerals Division
RE: Comments Waste Management Autumn Hills IW-1 Application
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