



**RENEWABLE OPERATING PERMIT APPLICATION
C-001: CERTIFICATION**

This information is required by Article II, Chapter 1, part 55 (Air Pollution Control) of P.A. 451 of 1994, as amended, and the Federal Clean Air Act of 1990. Failure to provide this information may result in civil and/or criminal penalties. Please type or print clearly.


This form is completed and included as part of Renewable Operating Permit (ROP) initial and renewal applications, notifications of change, amendments, modifications, and additional information.

Form Type C-001	SRN N2688
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Stationary Source Name Advanced Disposal Services Arbor Hills Landfill, Inc.	
City Northville	County Washtenaw

SUBMITTAL CERTIFICATION INFORMATION	
1. Type of Submittal <i>Check only one box.</i>	
<input type="checkbox"/> Initial Application (Rule 210)	<input type="checkbox"/> Notification / Administrative Amendment / Modification (Rules 215/216)
<input type="checkbox"/> Renewal (Rule 210)	<input checked="" type="checkbox"/> Other, describe on AI-001
2. If this ROP has more than one Section, list the Section(s) that this Certification applies to <u>01</u>	
3. Submittal Media <input type="checkbox"/> E-mail <input type="checkbox"/> FTP <input type="checkbox"/> Disk <input checked="" type="checkbox"/> Paper	
4. Operator's Additional Information ID - Create an Additional Information (AI) ID that is used to provide supplemental information on AI-001 regarding a submittal. AI Fug Dust	

CONTACT INFORMATION	
Contact Name Robert D. Walls	Title General Manager
Phone number 248-412-0704	E-mail address bob.walls@advanceddisposal.com

This form must be signed and dated by a Responsible Official.				
Responsible Official Name Robert D. Walls			Title General Manager	
Mailing address 10833 Five Mile Rd., Building B				
City Northville	State MI	ZIP Code 48168	County Washtenaw	Country United States
As a Responsible Official, I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this submittal are true, accurate and complete.				
 _____ Signature of Responsible Official			<u>2-5-19</u> _____ Date	



RENEWABLE OPERATING PERMIT APPLICATION

AI-001: ADDITIONAL INFORMATION

This information is required by Article II, Chapter 1, Part 55 (Air Pollution Control) of P.A. 451 of 1994, as amended, and the Federal Clean Air Act of 1990. Failure to obtain a permit required by Part 55 may result in penalties and/or imprisonment. Please type or print clearly. Refer to instructions for additional information to complete this form.

SRN: N2688	Section Number (if applicable): 01
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1. Additional Information ID AI-Fug Dust

Additional Information

2. Is This Information Confidential?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
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Please see attached Updated Fugitive Dust Plan



Fugitive Dust Control Plan

Advanced Disposal Services – Arbor Hills West Expanded Sanitary Landfill

Plan Overview

Advanced Disposal Services (ADS) Arbor Hills West Expanded Sanitary Landfill (AHWESL) is a Type II Municipal Solid Waste landfill located in Salem Township, Washtenaw County, Michigan. The site is operated in accordance with the Operations Plan included by reference in its Michigan Department of Environmental Quality (MDEQ) Solid Waste Disposal Area Construction Permit (#4108, issued December 11, 2009). The site is also regulated by the MDEQ's Air Quality Division (AQD) through Renewable Operating Permit (ROP) MI-ROP-N2688-2011.

Fugitive Dust in the case of this landfill is dust that escapes the site when garbage hauling and other traffic raise particulate matter on haul roads and the active areas of the landfill. Fugitive dust is prohibited in the rules regulating solid waste sites, can be a nuisance for neighbors, and can be a safety hazard by causing poor visibility or unsafe road conditions. Section 5.3 of the Operating Plan describes the dust control measures implemented across the site. The Operating Plan describes that fugitive dust is minimized by the application of water or other approved dust control products, the sweeping of paved surfaces and other best management practices.

This updated plan was prepared in response to a December 2018 request by the AQD to expand and update the dust control methods and monitoring of fugitive dust.

Areas of Concern

Paved Roads

The AHWESL entrance and scales are paved with asphalt. The entrance road leads into the east perimeter haul road, which is approximately 0.5 miles of asphalt pavement going up the east slope of the landfill. This section of road can accumulate dirt and mud from truck tires tracked out from the waste disposal areas, and if not properly maintained can also be tracked out onto the public roads, Napier Road and 5 Mile Road. If not dealt with in a

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timely manner it can cause slick driving conditions for both the landfill customers and the public. Track out on the roads can also be blown up by traffic, causing dust and poor visibility.

Unpaved Roads

The north, west, and south perimeter of the landfill are served by gravel roads. The Compost Facility also has a gravel entrance and access roads around the compost piles. Additional unpaved haul roads are located on top of the landfill, splitting off from the asphalt haul road and providing access to the active disposal areas. In dry conditions, traffic on these roads can raise dirt causing dust. This can be especially problematic due to the higher elevation of the active areas, where wind can pick up the dust and carry it further off site.

Compost Facility

The Compost Facility for Arbor Hills is located on the north side of 6 Mile Road, and contains approximately 25 acres of designated compost area. At any given time, the Compost Facility contains several different stockpiles of compost in varying stages of completion. These stockpiles are mixed or turned to introduce air and moisture, to facilitate the degradation organic materials. In very dry conditions, turning of the compost piles can release dust to the air.

Stockpiles

Landfill activities require a great deal of soil materials, for use as daily cover, intermediate cover, and final cover, as well as construction activities around the site. AHWESL has a large stockpile located near the Compost Facility which is used as a source for some of these purposes. Other stockpiles are more transient, being brought in for specific construction projects and being used up over the construction season. However, any stockpile can generate dust through wind erosion if not properly maintained. When in use, the stockpile is vulnerable to additional wind erosion at the loading site, which can be exacerbated during the loading, hauling, and unloading of the material at its destination.

Control Methods

Any maintenance program will only be effective if the personnel at the site are trained in how to implement it. As part of the regular training program at ADS, the employees will be instructed in what conditions to look for, who to report any dust-generating conditions to, what best management practices are to be employed, and what treatment is appropriate in

various circumstances. Awareness of fugitive dust and off-site migration is a key step to an effective program which will minimize the impact of dust both on and off-site.

Each project at the landfill will include planning meetings in which dust control will be a discussion topic. Outside contractors will be made aware of the Operations Plan and the Fugitive Dust Controls which are required for site activities. Landfill personnel will be empowered to take action if conditions are observed which are creating or could create fugitive dust issues.

Paved Roads

The paved road along the east side of the site and the paved entrance area are themselves, dust control measures. As vehicles will be traveling on improved surfaces, the chances for producing dust will be greatly minimized. Landfill traffic will be directed to travel on the paved surfaces to the maximum extent possible. Vehicles found to not be traveling on the paved surfaces where appropriate will be redirected. Additionally, these paved areas provide a deposition area where mud, loose dirt and debris from the tires and truck undercarriages can fall prior to leaving the site. However, the deposited material must be removed from the pavement so it is not picked up again and moved further along, potentially out onto the public roads.

The entrance area will be inspected at least twice daily to ascertain that mud and dirt are not being tracked off site. Inspections will be conducted twice a day, Monday through Friday and once on Saturday during operational days. In wet conditions, mud from the adjacent unpaved roads (6 Mile Road to the east, Napier Road to the north, and 5 Mile Road and Napier Road to the south) can be tracked into the site.

The site's fleet will be upgraded to include a new waterless sweeper truck for sweeping roads and removing debris (Brochure available). The sweeper truck will be kept in good working order at all times. If the truck experiences a breakdown and cannot be repaired within a reasonable time frame, a contract sweeping company will be hired. All on site paved roads including the site entrance and entrance access from Napier Road will be maintained by sweeping on a regular basis.

Additionally, the paved areas will be inspected for standing water from storm events. Where possible, repairs will be made to correct any drainage problems which are noted during these inspections. Standing water can create more mud and prolong conditions which contribute to off-site tracking.

In 2019, the facility plans to reconfigure the entrance. During the construction, rumble strips will be installed. These strips will promote debris to fall off of the trucks, prior to the trucks entering Napier Road. It is anticipated that the rumble strips will be installed by September 2019.

A speed limit of 15 miles per hour applies to all site roads and is posted in several locations. This speed is posted for safety reasons as well as to minimize dust generation. Site operators and personnel monitor traffic speeds and will speak to employees and customers who exceed the limit.

Unpaved Roads

The gravel haul roads and compost access roads will be monitored throughout daily operations at the AHWESL. As vehicles will be traveling on unimproved surfaces, the chances for producing dust will be increased. Landfill traffic will be directed to travel on the paved surfaces to the maximum extent possible and where not possible traffic will be directed to travel on treated surfaces. Vehicles found to not be traveling on the designated route surfaces will be redirected. Additionally, all personnel will be trained to be observant at all times for dust generated by landfill customer traffic, operating equipment, and on site vehicles. If any dust generation is observed it will be reported to the Site Operations Supervisor and/or the Site General Manager. These individuals will direct the response action.

A speed limit of 15 miles per hour applies to all site roads and is posted in several locations. This speed is posted for safety reasons as well as to minimize dust generation. Site operators and personnel monitor traffic speeds and will speak to employees and customers who exceed the limit. Heavily used haul roads, such as to the active areas or to and from stockpile locations, are subject to repeated loading. Off-road vehicles and multi-axle trucks can dry the road surface more quickly than would be expected on a normal road or parking surface. Therefore, dust controls may need to be reapplied frequently during dry weather or in peak traffic times.

Dust control on unpaved roads can be achieved with road improvements (gravel, chip and seal, asphalt millings, etc.), water spray or application of a dust suppressant, such as calcium chloride. Road improvements will be evaluated on a case by case to ensure all weather access to the landfill working areas as well as prevent the generation of dust when vehicles travel on fine grained material. If weather conditions provide precipitation on a regular basis, it may be only necessary to provide intermediate water application to keep roads relatively free of fugitive dust. The site's fleet includes a dedicated water truck for applying water to roads and removing debris. The water truck will be kept in good

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working order at all times. If the truck experiences a breakdown and cannot be repaired within a reasonable time frame, a rental unit will be obtained.

If there is an extended period of time where rainfall and water spray cannot keep dust under control (i.e. water truck spraying is required more than twice daily or there is too much area to keep controlled), a chemical application may be implemented. The application method will vary depending on the type of product selected, but all chemical suppressants will be applied in accordance with the manufacturer's instructions, and in compliance with state and local regulations.

Chemical suppressant application will be recorded as an appendix to this Plan. The application log will include type and application rate (dilution factor) of the material, locations of application, application operator and quantity. Sample log sheets can be found in Appendix A.

Compost Facility

The Compost Facility is limited in treatment options as chemical applications may damage the bacterial community creating the compost, and are contrary to the regulatory requirements. To minimize dust generation during compost pile turning, the stockpiles and windrows will be kept moist as part of routine operations. Further water application will be performed just prior to turning the piles, and depending on conditions, may be applied as the piles are turned. The compost facility utilizes the onsite water truck to administer any necessary dust suppression.

Stockpile & Truck Loading

As with the unpaved roads, moisture control is a key factor in dust control at all stockpile locations. As material is excavated and handled, observations will be made to evaluate the dust generation of the activities. Loading of fine grain material or granular (non-cohesive) soil will be minimized during windy conditions, or performed in a sheltered location where wind cannot carry the material off site. Water spray may be applied to the pile during excavation or in the trucks to minimize fugitive dust during handling. The facility utilizes the onsite water truck to administer any necessary dust suppression.

If a stockpile is temporary or short-term, the pile will be graded to minimize wind erosion, and temporary cover measures such as tarps or temporary seeding can be implemented. Long term stockpiles will be protected by grading for erosion protection as well as permanent seeding. Borrow from the pile will be planned to minimize open area and keep the borrow location protected from wind and storm water runoff.

Haul routes to and from the stockpile will be maintained in the same manner as the unpaved roads around the landfill are maintained. Site personnel and contractors will be observing these areas and providing treatment as needed to control fugitive dust.

Monitoring and Action Plan

AHWESL will monitor all landfill activities and routes to observe dust generation, response or control activities, and observed outcomes on a continuous basis. The frequency and type of dust control activities will be adjusted to match the atmospheric conditions and type of area being monitored. Employees and contractors will be trained and encouraged to be proactive with continuous observation and awareness, reporting, and response to any dust-generation activities.

Sweeping of paved roads and watering of unpaved roads and areas are standard operating practices of AHWESL. Calcium chloride application to unpaved roads is also a common practice of AHWESL when conditions warrant. As part of this Plan update, chemical application records will be kept as an Appendix to this Plan. Prior records can be found in the AHWESL accounts payable system as material order invoices.

APPENDIX A
DUST SUPPRESSANT APPLICATION LOG

Fugitive Dust Control Plan – Chemical Application Log

Advanced Disposal Services – Arbor Hills West Expanded Sanitary Landfill

Chemical Treatments Used (list Chemical Name, Common Name, and Typical Concentration/Dilution Strength):

1. _____

2. _____

Date	Quantity (gal. or # of loads)	Location(s) of application	Weather (temp, wind dir., speed)	Operator Initials
Comments:				
Comments:				
Comments:				
Comments:				

APPENDIX B
DAILY INSPECTION LOG

Fugitive Dust Control Plan – Daily Inspection Log

Advanced Disposal Services – Arbor Hills West Expanded Sanitary Landfill

Date/Time	Road Condition	Broom or Sweeping Conducted	Weather	Inspector Initials
Comments:				
Comments:				
Comments:				
Comments:				
Comments:				