

**RESOLUTION #R2010-31**

**APPROVING  
THE REQUEST OF WASTE MANAGEMENT OF ILLINOIS, INC. FOR  
SITE LOCATION OF THE DEKALB COUNTY LANDFILL EXPANSION**

WHEREAS, the DeKalb County Board has the authority pursuant to the Illinois Environmental Protection Act (415 ILCS 5/39.2) to approve or deny requests for siting pollution control facilities in DeKalb County; and

WHEREAS, the Act establishes the criteria a proposed facility must meet before a local siting authority may grant approval; and

WHEREAS, the Act allows the DeKalb County Board, in granting site approval, to impose such conditions as may be reasonable and necessary to accomplish the purposes of Section 39.2 of the Act and as are not inconsistent with Illinois Pollution Control Board regulations; and

WHEREAS, Pursuant to 50-57(c) of the DeKalb County Regional Pollution Control Facility Siting Ordinance, whether the Board approves or disapproves of the proposed site location, a resolution shall be passed to that effect, stating the reasons for the decision; and

WHEREAS, Waste Management of Illinois, Incorporated, as operator of the DeKalb County Sanitary Landfill, has submitted an Application for site approval of an expansion of that landfill; and

WHEREAS, Waste Management of Illinois, Incorporated has paid the established County Application fee; and

WHEREAS, the DeKalb County Board, having considered the Application, the record of hearing, public comments, and the recommendation of the DeKalb County

Pollution Control Facilities Committee finds that Waste Management of Illinois, Incorporated has met each of the nine siting criteria subject to the special conditions as follows:

**Criterion 1:** The facility is necessary to accommodate the waste needs of the area it is intended to serve, provided:

1. Provided the required permits and approvals are obtained for the expansion, WMII will guarantee disposal capacity at the Landfill for non-hazardous solid waste, as defined in the Host Community Agreement, generated in DeKalb County, for a period that equals the life of the landfill.

**Criterion 2:** The facility is so designed, located and proposed to be operated that the public health, safety and welfare will be protected, provided:

2. WMII shall, except for the roadway bridge, avoid development on, and allow, at least 25 foot of open area on either side of Union Ditch for the purpose of maintenance.
3. Any Henry Formation found to intersect the excavation for the liner will be removed by over-excavation and replaced with a cohesive silty clay backfill up to the bottom of composite liner grades. Although the proposed waste footprint is underlain by clayey soils, there are areas where the location of the bottom recompacted clay liner would sit on a lense of sandy materials. Patrick Engineering recommends that these areas be over excavated and replaced with soil with a lower permeability material. The backfill shall be compacted to a minimum of 95% of the

Standard Proctor density and have a maximum triaxial permeability of  $1 \times 10^{-6}$  centimeter per second and properly documented by the CQA Officer.

4. The 20-inch drain that captures flow from the south infiltration swale shall be extended to the Union Ditch and not terminated at other drain tiles.
5. Hydrogen Sulfide Monitoring. WMII shall maintain an ongoing and continuous monitoring program for hydrogen sulfide ( $H_2S$ ) emissions around the perimeter of the operating landfill. This program shall be described in a Perimeter Air Monitoring Plan (the Monitoring Plan), a document that shall be submitted to the County within 60 days of the occurrence of a non-appealable siting approval, and at least 30 days prior to submission of the developmental permit application to IEPA for the expansion. The Plan will be subject to the approval of the County Health Department staff in conjunction with appropriate professional engineers retained by the County. WMII must implement an approved Plan within 120 days of County Health Department staff approval of the Monitoring Plan.

At a minimum, the Plan must include provisions for multiple air monitoring stations around the perimeter of the operating landfill. These stations must be capable of continuously monitoring  $H_2S$  concentrations such that a concentration of 10 parts per million of  $H_2S$  will sound an alarm, immediately alerting the operator of this condition. The Monitoring Plan must also contain a Contingency Plan for addressing an

alarm condition as defined above (e.g., investigation of the emission source, remedial actions, etc.).

A contingency plan that responds to an H<sub>2</sub>S concentration alarm shall be prepared by WMII prior to submittal of a permit for expansion to the IEPA. It shall be consistent with any Notification Protocol prepared by WMII and approved by County Health Department staff.

6. WMII shall continue to monitor the ambient levels and ground level gas constituents for at least six (6) months after any portion of the active gas system is installed and operational to verify the system is operating effectively. The County Health Department staff shall be made aware of the installation of the active system and of the monitoring data. WMII shall continue to monitor until such time after the 6-month period it demonstrates the ambient and ground levels are below levels of concern, which is a methane concentration level over 50% of the lower explosive limit in air. The County Health Department staff shall approve the reduction of frequency prior to WMII requesting a reduction with the IEPA. The County Health Department staff shall not unnecessarily withhold approval when shown adequate demonstration.
7. WMII shall notify the County Health Department staff of the need to temporarily extend the hours of operation, and that a 24-hour notification is required for waste resulting from any emergency or public benefit purpose within DeKalb County.

8. The minimum number of random load inspections shall be three per week as specified in state regulations. For any amount of tonnage received above an average of 500 tons per day, the number of inspections shall be increased based on the following basis:

For each 500 ton per day average increase, the number of random weekly inspections shall be increased by two. For example, if up to 1,000 tons per day average is accepted the previous week, the following week shall have five inspections (three inspections for the first 500 tons, and two for the next 500). If the weekly rate is between 1,000 and 1,500 tons per day, then 7 random inspections shall be scheduled. If the weekly rate is between 1,500 and 2,000 tons per day, the inspection rate is nine random inspections.

After two years of operations, WMII may request a reconsideration from the County Health Department staff for this random inspection requirement. A County Health Department representative shall have the right to inspect and to be present at any random load inspection.

9. Litter from the Landfill expansion found on adjacent property shall be removed by WMII in an expeditious manner with consent of the landowner.
10. WMII shall, at a minimum, inspect the public right of ways, and areas adjacent to these right of ways, from the landfill facility gate north to Route 38, west to the Peace Road, and then south to Interstate 88 interchange. Litter collection along these rights of ways shall be performed at least once per week. WMII shall also inspect daily Somonauk Road from the entrance south to Keslinger Road and address visible litter. WMII shall develop a procedure that ensures that all transfer

trailers are empty when leaving the facility, either from the active face or at the gatehouse through a visual observation.

11. WMII shall have a 24-hour complaint hotline established prior to submitting a development permit application to the IEPA for the proposed expansion.
12. WMII shall, upon receiving complaints from the Cortland school or residents about odor, log the complaint, and within one day work with the complainant to determine if the landfill is the source.
13. WMII shall prepare a Notification Protocol, reviewed and approved by the County Health Department staff, for the purpose of informing adjacent property owners and residences of an occurrence or a detection of exceedance of landfill gas monitoring point threshold of 10 ppm for Hydrogen Sulfide. Residences within one half (½) mile of the property boundary shall be included on the notification list. The Notification Protocol shall be submitted to the County Health Department staff for approval prior to the submittal of an IEPA development permit application to expand the landfill and shall be implemented consistent with the Hydrogen Sulfide Monitoring Plan.
14. Soil shall be the only approved daily cover permitted to be used on an exterior permanent perimeter slope in conjunction with effective operating berms. Alternative daily cover is allowed in areas that are screened by operational berms. The purpose of this condition is to minimize potential odor and litter escape from the Landfill during placement of the waste.

15. Within 4 years from receipt of the IEPA operating permit for the expansion, WMII shall construct and operate a gas to energy facility unless it can be demonstrated to the County Health Department Staff that this timing cannot be met. An alternative time frame shall be presented for review by the County Health Department Staff and approval by the DeKalb County Board.
16. During the exhumation of waste from the 24-acre old area, WMII shall not allow ponding liquid levels within any portion of the exhumed areas, at any time, to be in excess of two feet in height. In addition, during the exhumation activities, WMII shall provide sufficient leachate storage, temporary or otherwise, as is necessary to satisfy this condition.
17. If the waste exhumation and relocation process generates odor that is not controlled and subsequently drifts beyond the property boundary, the County Health Department staff shall then restrict the exhumation activity to the months of October, November, December, January, February, March and April. If and once restricted to these months, WMII may request year round exhumation only if it can demonstrate to the County Health Department staff that the process can occur without off-site odor migration or other impacts associated with the process.
18. All exhumed and relocated waste, shall be covered with a minimum of six inches of soil at the end of each working day.
19. WMII shall inspect the waste, as it is being excavated, for signs of inappropriate or hazardous materials. A site worker shall be present

during excavation that has been trained to identify asbestos materials and other hazardous materials to understand proper handling. If asbestos is identified, then it shall be carefully handled by experienced personnel such that it is contained and not allowed to become windblown on or off-site.

20. The excavated area of exhumed waste, on surfaces where waste remains, shall be covered with a minimum of twelve (12) inches of compacted soil should exhumation activities cease for a period longer than 60 days.
21. Dust from the excavation shall be controlled to prevent off-site drift of the excavated waste materials. If necessary, the operator shall utilize water spray, chemical foams, or other IEPA-approved methods.

**Criterion 3:** The facility is located so as to minimize incompatibility with the character of the surrounding area and to minimize the effect on the value of the surrounding property, provided:

22. The Application of the operational screening berms (shown on Drawing 41 in the Application) shall be included in routine daily operations at the landfill. The operational berms may be constructed of waste and/or cover materials and be at least 8 feet in height (and within the permitted airspace) with subsequent filling to take place "inside" said operational berms, thereby providing screening of most landfill operations at most times. From time to time, for short durations of time the operational berm will be under construction and thus the waste operations will be visible these short time frames. The waste berms will be covered daily with soil.



23. WMII shall build the screening berms on the east landfill property at least 500 feet in advance of any cell construction. Vegetation shall be planted upon berm completion allowable by weather conditions, within the same season the berm is constructed. The berm shall be at least 8 feet above surrounding grade.
24. The screening berm on the east side of the eastern landfill expansion shall be built and vegetated at the time construction of Phase I of the Eastern Unit begins.
25. Trees selected as for planting on the screening berms shall be a minimum of 8 feet tall.
26. The screening berm on the east side of the east landfill expansion shall be built near the property line instead of adjacent to the Landfill unless WMII can demonstrate to the County Health Department staff that significant disadvantages result from this condition.
27. The screening berm on the north side of the east landfill expansion shall be built near the property line instead of adjacent to the Landfill unless it can be demonstrate to the County Health Department staff that significant disadvantages result from this condition. The center of the berm shall be approximately 50 feet from the property line unless site conditions warrant a greater distance.
28. WMII shall extend the Property Value Guarantee Plan as set forth in the Host Community Agreement approved by DeKalb County on March 18, 2009, to current owners of properties located at least 1 mile from the

landfill expansion footprint (this area is depicted in map attached as Exhibit C).

**Criterion 4:** The facility is located outside of the 100-year floodplain.

**Criterion 5:** The plan of operations for the facility is designed to minimize the danger to the surrounding area from fire, spills, or other operational accidents.

**Criterion 6:** The traffic patterns to or from the facility are so designed as to minimize the impact on existing traffic flows, provided:

29. WMII shall inform all haulers to and from the facility of the designated truck routes, in writing. WMII shall inquire of new haulers of the route taken, and provide warning to all haulers to not use roads with insufficient weight limits.
30. WMII shall develop a system whereby a WMII employee will observe the top of incoming commercial waste hauler vehicles to determine whether the cover or tarp is inadequate to contain waste. The driver of any vehicle observed to have inadequate covering shall be provided one warning and education of the importance of containment, and if a second offense occurs, that driver shall have his rights to use the Landfill terminated.

**Criterion 7:** The facility will not be treating, storing or disposing of hazardous waste.

**Criterion 8:** The facility is consistent with the county solid waste management plan.

**Criterion 9:** The facility is not located in a regulated recharge area.

**GENERALLY APPLICABLE**

31. WMII shall include these special conditions in its IEPA development and operating permit applications and shall request that IEPA include those conditions in the issued IEPA permits.

**CRITERON 6: ADDITIONAL CONDITION**

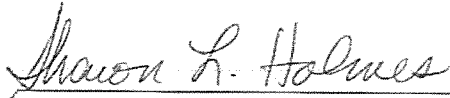
32. The road shoulder width shall be increased to five (5) feet on either side of Somonauk Road from the I-88 overpass to Route 38 and shall be built to the standard slope for an aggregate shoulder, which is 6%. In addition, the slope of the embankments from the shoulder edge to the toe of slope shall be standard slope and fall within approved IDOT standards. In no case shall the embankment slope be steeper than 1 vertical to 3 horizontal (1V:3H). WMII shall be responsible for funding and maintaining the shoulder improvements and the slope improvements.

NOW, THEREFORE, BE IT RESOLVED by the DeKalb County Board that siting approval, subject to the conditions set forth above, is hereby granted to Waste Management of Illinois, Incorporated.

PASSED AT SYCAMORE, ILLINOIS, THIS 10th DAY OF MAY, 2010, A.D.

ATTEST:

SIGNED:



Sharon L. Holmes  
County Clerk



Ruth Anne Tobias  
County Board Chairman