BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

ENVIRONMENTAL RECYCLING AND)	
DISPOSAL SERVICES, INC.,)	
Petitioner,)	
v.)	PCB No. 16-76 (Third-Party Pollution Control
COUNTY BOARD OF WILL COUNTY,)	Facility Siting Appeal)
ILLINOIS and WASTE MANAGEMENT OF)	• 6 11
ILLINOIS, INC.,)	
)	
Respondents.)	

NOTICE OF FILING

TO: See Attached Service List

PLEASE TAKE NOTICE that on August 19, 2016, Waste Management of Illinois, Inc. filed with the Illinois Pollution Control Board, WASTE MANAGEMENT OF ILLINOIS, INC.'S BRIEF IN SUPPORT OF THE DECISION OF THE WILL COUNTY BOARD APPROVING SITE LOCATION FOR THE LARAWAY RDF EXPANSION, in this proceeding, a copy of which is attached and served upon you.

Dated: August 19, 2016

Donald J. Moran PEDERSEN & HOUPT 161 North Clark Street Suite 2700

Chicago, Illinois 60601 Telephone: (312) 641-6888 Respectfully Submitted,

WASTE MANAGEMENT OF ILLINOIS, INC.

Donald J. Møran

CERTIFICATE OF MAILING

The undersigned, an attorney, states that on August 19, 2016, he caused to be filed by U.S. Mail at or before 5:00 p.m., the foregoing WASTE MANAGEMENT OF ILLINOIS, INC.'S BRIEF IN SUPPORT OF THE DECISION OF THE WILL COUNTY BOARD APPROVING SITE LOCATION FOR THE LARAWAY RDF EXPANSION and this Certificate of Mailing by depositing the same in the U.S. Mail located at 161 N. Clark St., Chicago, Illinois, enclosed in a sealed envelope with First Class postage fully prepaid and addressed to the Illinois Pollution Control Board Clerk:

John Therriault Illinois Pollution Control Board James R. Thompson Center Suite 11-500 100 West Randolph Street Chicago, IL 60601

Donald J. Møran

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CERTIFICATE OF SERVICE

I, Donald J. Moran, an attorney, certify that I have served the attached WASTE MANAGEMENT OF ILLINOIS, INC.'S BRIEF IN SUPPORT OF THE DECISION OF THE WILL COUNTY BOARD APPROVING SITE LOCATION FOR THE LARAWAY RDF EXPANSION on the named parties by electronic service and by depositing same in the U.S. mail at 161 N. Clark Street, Chicago, Illinois 60601, at 5:00 p.m. on August 19, 2016.

Donald J. Møran

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WASTE MANAGEMENT OF ILLINOIS, INC.'S BRIEF IN SUPPORT OF THE DECISION OF THE WILL COUNTY BOARD APPROVING SITE LOCATION FOR THE LARAWAY RDF EXPANSION

Respondent, Waste Management of Illinois, Inc. ("WMII"), by its attorneys, Pedersen & Houpt, P.C., submits this brief in support of the Will County Board's ("County Board") Resolution 15-380 approving the request of WMII for site location of the Laraway Recycling and Disposal Facility ("Laraway RDF") expansion. In support thereof, WMII states as follows:

I. INTRODUCTION

This third-party appeal arises out of the July 10, 2015, site location application ("Application") filed by WMII with the County Board requesting site location approval for the expansion of the existing Laraway RDF ("Expansion" or "Facility"), pursuant to Section 39.2 of the Illinois Environmental Protection Act ("Act"). The County Board approved the Application on December 17, 2015, after three days of public hearing held on October 14, 19 and 21, 2015, during which seven expert witnesses testified in support of the Application on all nine Section 39.2(a) criteria. No other expert witness testified or presented evidence contradicting or refuting WMII's experts, or establishing that any of the criteria were not satisfied.

On December 17, 2015, the County Board approved the Application. In Resolution

#15-380, pursuant to Section VII (E.) and (F.) of the Will County Pollution Control Facility Siting Ordinance, the County Board found that WMII demonstrated compliance with each of the statutory criteria by a 25-0 vote.

On appeal, Petitioner, Environmental Recycling and Disposal Services, Inc. ("ERDS") contends that the County Board's findings on criteria (i), (ii) and (vi) were against the manifest weight of the evidence. The record, however, demonstrates that WMII established compliance with the statutory criteria by clear and compelling evidence, and that no expert testimony or evidence was offered to controvert this proof. Accordingly, the County Board's decision granting site location approval is supported by the manifest weight of the evidence and should be affirmed.

II. FACTS

A. Expansion.

On July 10, 2015, WMII filed the Application with the Will County Board requesting site location approval for the Expansion pursuant to Section 39.2 of the Act. The Facility is located on 606 acres approximately two miles west of Illinois Route 53, directly west and southwest of the intersection at Laraway and Patterson Roads. The Facility comprises property owned by WMII and the Olin Corporation ("Olin").

The Expansion includes two areas identified as the North Area and the South Area. The North Area consists of a 70.4-acre horizontal expansion and a 40.6 acre vertical expansion of the Laraway RDF¹. The South Area consists of a 23.5-acre horizontal expansion and a 69.1-acre vertical expansion. The Expansion will receive the same waste as the Laraway RDF: nonhazardous special and industrial waste and construction and demolition debris. The capacity of the Expansion is 30,364,000 tons. Expected to receive 3,000,000 tons of waste per year, the

¹ The Laraway RDF, located on an 808-acre property, received site location approval from the Will County Board on February 8, 2007 (Resolution #07-31), and development and operating permits from the Illinois Environmental Protection Agency ("IEPA") in 2009. Laraway RDF has been receiving waste since it commenced operation in 2009.

Expansion will provide approximately 10 years of additional site life to the Laraway RDF, which is expected to reach capacity in 2021.

The Expansion also includes an environmental enhancement that will remediate and close three Olin ponds in the North Area. This closure will include the removal and treatment of liquids from the ponds, the removal and disposal of residual solids and the excavation of impacted or unsuitable soils prior to construction of the North Area.

B. Legal Standards and Evidence.

Section 39.2(a) of the Act requires the County Board to approve the Application if compliance with the nine statutory criteria is demonstrated. 415 ILCS 5/39.2 (a)(2012). That demonstration is made by the presentation of facts and expert opinion establishing that it is more likely true than not that each criterion is met. In addition, the criteria themselves are not absolute standards requiring that there be no impact, problem or risk. Rather, the criteria assume impact or risk, and only require that such impact or risk be sufficiently managed or minimized.

WMII presented seven expert witnesses who demonstrated compliance with the criteria not merely by a preponderance of the evidence, but by clear and compelling evidence. Their expert analysis and opinions were based on uncontradicted facts, unchallenged scientific principles and sound engineering methods. No substantive evidence was offered to contradict, refute or rebut any part of the Application or expert testimony, much less the proof that each of the nine criteria were satisfied.

C. Public Hearing.

Public hearings on the Application were held pursuant to Section 39.2(d) of the Act and the Will County Pollution Control Facility Siting Ordinance dated January 19, 2006 ("Ordinance") on October 14, 19 and 21, 2015². The participants in the public hearings were (i) the Will County

² Citations to the transcript of the public hearings will be referred to herein as " $(10/14 \text{ Tr. at } \underline{\hspace{1cm}}$.)", "(10/19 00875771 3

Staff, represented by Mr. Matthew Guzman, State's Attorney's Office; (ii) the Will County Board, represented by Mr. Charles Helsten; (iii) ERDS, Inc., represented by Mr. George Mueller; (iv) the City of Joliet, represented by Mr. Martin Shanahan; and (v) the Village of Rockdale, represented by Mr. Michael Stiff. WMII presented seven witnesses who testified in support of the Application and the nine statutory criteria. No other witnesses testified and no opposing testimony or evidence was presented. Public comment was made by Ms. Judy Kreiser. (10/19 Tr. at 293-298; 10/21 Tr. at 500-505.)

D. Evidence Established Criteria (i), (ii) and (vi).

WMII presented five expert witnesses who testified in support of criteria (i), (ii), and (vi). No other witnesses testified and no opposing testimony or evidence was presented. WMII's expert testimony established that the Expansion is necessary, presents no unacceptable or increased risk to the public health, safety and welfare, and minimizes any impact on existing traffic flows.

1. Criterion (i)

a. Need

Ms. Sheryl R. Smith prepared the written report on criterion (i) and testified at the public hearing regarding the need for the Expansion. (Pet. Ex. 3, Criterion 1; 10/14 Tr. at 73-170.) Ms. Smith is a solid waste consultant with 33 years of experience in the solid waste industry, was qualified as an expert, and has prepared or reviewed approximately 25 need reports for solid waste landfills and 10 need reports for transfer stations. (10/14 Tr. at 76, 77-92; Pet. Ex. 5.) She has given expert testimony on need in local siting hearings on approximately 30 occasions. (10/14 Tr. at 77.)

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Tr. at ____.)" or "(10/21 Tr. at ____.)."

The service area for the Expansion is the geographic region from which the Facility intends to take waste. (10/14 Tr. at 80.) That service area consists of 12 counties, including Will County and the surrounding counties of Cook, DeKalb, Du Page, Grundy, Kendall, Kane, Kankakee, Lake, LaSalle and McHenry counties in Illinois and Lake County, Indiana. (10/14 Tr. at 80-81; Pet. Ex. 3, Criterion 1, p. 2-1.) The Expansion will accept industrial waste, construction and demolition debris, and contaminated soils. (10/14 Tr. at 81.)

Ms. Smith determined the amount of waste types that are generated in the service area. (10/14 Tr. at 82.) For industrial waste, the solid waste plans for the counties in the service area determine waste generation on either per person or per capita rate or based on a per employee generation rate. For those counties with solid waste plans that use an employment waste generation rate (Will, Cook, Du Page, Grundy and LaSalle), Ms. Smith projected employment over the 10-year operating period of the Facility using data from the Illinois Department of Employment Security and from the Indiana Work Force Development Agency. She then applied the appropriate per employee generation rates as well as the recycling goals identified in the plans to calculate a net amount of industrial waste. (10/14 Tr. at 82-83.) For those counties that use a per capita basis (DeKalb, Kane, Kankakee, Kendall, Lake and McHenry in Illinois, and Lake County in Indiana), Ms. Smith collected population data from the Illinois Department of Commerce and Economic Opportunity and the Indiana Stats Database and performed 10-year projections, to which she applied the per capita waste generation rate and recycling goals. (10/14 Tr. at 82-83.)

To determine the amount of construction and demolition debris, Ms. Smith relied on the solid waste plans for all counties. The solid waste plans use a per capita waste generation rate. Ms. Smith applied the per capita generation rate to the population projections and then applied the appropriate recycling goals for each county solid waste plan.

To determine the amount of contaminated soils, Ms. Smith obtained data from the Illinois Special Waste Annual Reports for generators of contaminated soils within the service area and quarterly reports from the Indiana Department of Environmental Management. (10/14 Tr. at 83-84; Pet. Ex. 3, at Criterion 1, p. 3-2.) In addition, she also reviewed five years of information from WMII for the Laraway RDF. (10/14 Tr. at 84.)

Based on her calculations, approximately 56.2 million tons of the types of waste to be accepted at the Facility will be generated and require disposal within the service area over the 10-year operating period of the Facility. By waste type, that total breaks down to approximately: (1) 13.3 million tons of industrial waste; (2) 14.2 million tons of construction and demolition debris; and (3) 28.7 million tons of contaminated soils. (10/14 Tr. at 85.)

Ms. Smith testified about the amount of disposal capacity available to the service area for the types of waste to be accepted at the Facility. She identified all solid waste facilities within the service area and within a 25-mile radius of the service area. There were 26 such facilities throughout Illinois, Wisconsin, Indiana and Michigan. (10/14 Tr. at 86.) For these facilities, she obtained from state regulatory agencies, data on each currently permitted facility with respect to: (1) types of waste received; (2) total tons of waste received for 2011 to 2013; and (3) remaining capacity. (10/14 Tr. at 87; Pet. Ex. 3 at Criterion 1, Table 5.) Based on this data, Ms. Smith concluded and testified that there is not sufficient capacity available to meet the waste needs of the service area. The waste capacity available to the service area is approximately 23.1 million tons. However, the amount of waste requiring disposal is approximately 56.2 million tons. This results in a disposal capacity shortfall of approximately 33.1 million tons. (10/14 Tr. at 87.)

Further, the amount of waste received at the Laraway RDF in each of the years since 2012 indicates a strong market demand for the Facility. (10/14 Tr. at 88-89.) In those years, Laraway RDF received 1.7 million tons in 2012, 2.2 million tons in 2013, and 2.9 million tons in 2014.

(10/14 Tr. at 88.) This high and increasing demand is further evidence of the service area's need for the Facility. (10/14 Tr. at 88-89.) Ms. Smith testified to her opinion that, based upon the disposal capacity shortfall alone, the Facility is necessary to meet the waste needs of the area it intends to serve. (10/14 Tr. at 87.)

Ms. Smith's report and testimony was not contradicted. Although ERDS contends that Ms. Smith has "a general lack of knowledge of the subject matter," (ERDS Brief at Criterion One), she was qualified as an expert having prepared or reviewed 35 need reports for solid waste facilities, and has testified as an expert on criterion (i) on 30 occasions, including as a witness for ERDS' counsel. (10/14 Tr. at 77; Pet. Ex. 5.) Ms. Smith is qualified based on her expert knowledge and experience concerning criterion (i). (*Id.*) ERDS presented no evidence to contradict Ms. Smith's testimony. Further, no evidence was presented to demonstrate that Ms. Smith made any mistakes, that her report contained inaccuracies, or that there was a general lack of data to support her conclusions. The Application contained the report prepared by Ms. Smith, which included 28 pages of detailed analysis, citations to 55 sources of information, and seven detailed tables presenting her calculations and citations to all sources, all of which she relied upon for the basis of her opinion. (Pet. Ex. 3, at Criterion 1.)

Unlike ERDS, who misrepresented Ms. Smith's calculations of available landfill capacity, Ms. Smith evaluated facility host agreements, IEPA reports, county plans and actual site data to determine available capacity. (10/14 Tr. at 142-144.) Ms. Smith accounted for restrictions that preclude facilities within the service area to take certain waste types or that limit volumes, unlike ERDS, which did not consider these factors. (10/14 Tr. at 142-144.) Ms. Smith testified that "huge disposal capacity which has received final, unappealable siting approval" but is not yet permitted does not render all disposal capacity in the service area available for disposal of the intended waste streams for the Expansion. (ERDS Brief at Criterion One; 10/14 Tr. at 142-144.)

Ms. Smith properly excluded capacity from her calculations that had been identified for disposal otherwise.

2. Criterion (ii)

WMII presented three witnesses who testified regarding the design, operation and location of the Expansion, namely Andy Nickodem, Joan Underwood, and Dale Hoekstra. The evidence introduced by WMII demonstrated that the Expansion is so designed, located and proposed to be operated that the public health, safety and welfare will be protected.

a. Landfill Design

Mr. Nickodem, a licensed civil engineer in Illinois, Indiana, Kansas, Tennessee and Wisconsin, who specializes in solid waste management and landfill design, testified concerning the design of the Expansion. (10/21 Tr. at 302.) He designed the Laraway RDF in 2006. (10/21 Tr. at 304-305.) The Laraway RDF design was approved by the Will County Board in 2007 and was permitted by the IEPA in 2009. (10/21 Tr. at 304-305.) The design has performed very well since operation began in 2009. (10/21 Tr. at 305.)

The Application proposes the horizontal and vertical expansion of the Laraway RDF. (Pet. Ex. 3, Criterion 2, p. 1-1.) Mr. Nickodem testified that the design of the Expansion is an extension of the permitted design of the Laraway RDF. (10/21 Tr. at 306.) Hence, the Expansion has the same design features as the Laraway RDF, which are a composite liner consisting of low permeability soil and a 60-mil HDPE geomembrane, a leachate management system to collect and control leachate, a final cover system, a surface water management system, a groundwater monitoring system and a gas monitoring system. (10/21 Tr. at 306; Pet. Ex. 3, Criterion 2, p. 1-1.) The design for the Expansion complies with all applicable governmental regulations. (10/21 Tr. at 305.)

The Expansion consists of the North Area and the South Area. There will be a horizontal expansion of the North Area, as well as a vertical expansion of the North Area over a portion of the Laraway RDF permitted waste disposal area. There will also be a horizontal and vertical expansion of the South Area. (10/21 Tr. at 308-309.) The North Area will consist of an approximate 70-acre horizontal expansion and an approximate 41-acre vertical expansion. The South Area will consist of an approximate 23-acre horizontal expansion and an approximate 69-acre vertical expansion. (Pet. Ex. 3, Criterion 2, p. 1-1.) The North Area and the South Area are designed to contain waste and leachate. (10/21 Tr. at 302.) The design of both areas will include five engineered components: (1) a composite liner system; (2) a leachate management system; (3) a composite final cover system; (4) a surface water management system; and (5) a monitoring system for all of the engineered components. (10/21 Tr. at 303, 309-312; Pet. Ex. 3, Criterion 2, p. 4-1.)

- 1. The composite liner system for the North Area and the South Area will extend across the entire base and sidewalls of the waste disposal area and will be tied into the existing composite liner. (10/21 Tr. at 309-310, 323.) It will consist of three feet of compacted, low permeability soil under a 60-mil HDPE geomembrane liner. (10/21 Tr. at 312.) A geosynthetic clay liner will be placed on top of the 60-mil HDPE geomembrane liner and under the leachate collection sumps and pipe. (10/21 Tr. at 313.) A geotextile cushion will be placed on top of the entire liner system. The liner is designed to slope toward the center of each cell to facilitate proper leachate drainage and collection. (10/21 Tr. at 312-313.)
- 2. The leachate management system is designed to ensure the control and collection of leachate so that it is kept off of the liner. (10/21 Tr. at 310.) The collected leachate will be transferred off-site to a treatment plant. (10/21 Tr. at 366-369; Pet. Ex. 3, Criterion 2, p. 4-1.) The leachate collection system will be installed throughout the North Area and South Area in 21 phases. (10/21 Tr. at 313, 329.) Each phase will have its own central leachate collection pipe (a 6 inch diameter perforated HDPE pipe), leachate collection sump (a depressed area in the liner where leachate is collected), and pump system to pump leachate out of the landfill. (10/21 Tr. at 313, 319, 320-324.) One foot of permeable granular drainage material will be placed on top of the liner system so that leachate can flow to the central leachate collection pipes. (10/21 Tr. at 313.) Clean out risers will be placed at the end of the pipes to ensure against clogging. (Pet. Ex. 3, Criterion 2, Drawing No. 7.)

Mr. Nickodem testified that he was not aware of arrangements to transfer leachate for treatment to the City of Joliet. (10/21 Tr. at 365-369.) Whether the leachate is transferred offsite for treatment at a treatment facility, or directly discharged to a leachate treatment facility, is not related to the design of the leachate management system. It is part of the system to have the leachate treated. Currently it is trucked offsite for treatment, with an alternate facility available in the event the current facility is not available. (10/21 Tr. at 366-369.)

- 3. Once the liner is in place and after the completion of each phase of the leachate collection system, waste materials can be received. (10/21 Tr. at 310.) The final cover system will be constructed over the Expansion once it reaches final grade. (10/21 Tr. at 310, 314.) The final cover system will consist of one foot of compacted, low permeability soil overlain with a 40-mil HDPE geomembrane, overlain with three feet of soil. The top six inches of soil will be vegetated topsoil. (10/21 Tr. at 314; Pet. Ex. 3, Criterion 2, p. 7-1.)
- 4. The surface water management system is designed to control stormwater runoff, prevent erosion and allow sediment to drop out. This system will include a series of diversion berms to intercept downward flows and prevent the creation of erosion gullies. The diversion berms will flow to a series of downslope channels to perimeter channels surrounding the landfill. (10/21 Tr. at 311, 314-316.) The perimeter channels will flow into sedimentation basins that allow any sediment in the surface water to drop out before being discharged. (10/21 Tr. at 316.)
- 5. The final design component is a monitoring system. In addition to a groundwater monitoring system, the Expansion will have ambient air monitoring around the landfill. There will be gas monitoring in the interior of, and around the perimeter of, the waste disposal areas. (10/21 Tr. at 316-318.) Leachate will also be monitored at each of the individual leachate collection sump areas around the landfill, as well as the existing leachate extraction manholes. (10/21 Tr. at 318-319.)

Mr. Nickodem testified that the Expansion has been designed to be stable during construction, operations, and closure and post-closure. (10/21 Tr. at 320-321.) The Port of Will County, LLC has obtained legal authority to construct an underground mine in a 320-acre area in the City of Joliet and unincorporated Will County, the southern extent of which lies beneath the footprint of the North Area. (Pet. Ex. 3, Criterion 2, p. 5-11.) Mr. Nickodem testified that mining is not occurring in this area. (10/21 Tr. at 394-395.) However, even though it is not occurring and there is no information about when, or whether, it will occur in the area, a geotechnical analysis has been performed to determine whether an underground mine would affect the operation of the North Area. The conclusion of the geotechnical analysis is that neither 100875771v3

construction nor operation of an underground mine beneath the North Area will cause damage to the Expansion. (Pet. Ex. 3, Criterion 2, p. 5-11.)

The Expansion is not associated with the former ESL Landfill. Mr. Nickodem testified that this former landfill was closed 20 to 30 years ago. It is in compliance with the IEPA corrective action permit, is not discharging leachate into the surrounding area, is not on the Superfund or National Priority lists. (10/21 Tr. at 339-340.)

The Expansion has been designed so as to protect the public health, safety and welfare because of the presence of: (1) the liner system to contain the waste materials; (2) the leachate management system to contain and collect leachate; (3) the final cover system to contain the waste materials and provide vegetated cover; (4) the surface water management system to manage and control surface water; and (5) the environmental monitoring. (10/21 Tr. at 331-332.)

b. Location/Site Investigation

Joan Underwood testified regarding the geology, hydrogeology and proposed groundwater monitoring system. (10/21 Tr. at 402-438.) She has been a hydrogeologist for 37 years and is currently employed by Quantum Management as vice president and senior hydrogeologist. (Pet. Ex. 9.) Ms. Underwood has performed more than 40 hydrogeologic site investigations, including the site investigation of the Laraway RDF in 2006, and has testified as an expert witness regarding criterion (ii) in more than 10 local siting proceedings. (10/21 Tr. at 404, 406-407.)

Ms. Underwood described in detail her analysis of the geologic and hydrogeologic conditions at the Facility. (10/21 Tr. at 404-438.) She testified that it is important to evaluate the geology and hydrogeology of the Facility to be able to develop a groundwater monitoring program to monitor the performance of the landfill design. (10/21 Tr. at 405.) She designed the groundwater monitoring system for the Laraway RDF in 2006. Based upon her 2006 hydrogeologic site characterization, the IEPA approved the groundwater monitoring system for

the Laraway RDF. The system has operated effectively since Laraway RDF began accepting waste in 2009. There have been no detections of contaminant releases to groundwater. (10/21 Tr. at 405-406.)

Geologic and hydrogeologic information was obtained from the site investigation work and the field and laboratory testing that was performed. This information was integrated with background information and previous information from the Laraway RDF for purposes of understanding groundwater conditions, the geologic subsurface conditions, geologic units, groundwater flow direction, and groundwater quality. (10/21 Tr. at 404-417.) Dr. Don Mikulic, from the Illinois State Geological Survey ("ISGS"), reviewed site-specific rock core obtained at the Facility to confirm that the geological logging was correct. (10/21 Tr. at 410.)

Ms. Underwood described the geology at the Facility. (10/21 Tr. at 410-412.) She constructed a series of geologic cross-sections based on the boring and coring information in order to look at the subsurface geologic layers. (10/21 Tr. at 410-411.) She described one of the cross-sections extending north to south across the Facility and through the eastern portion of the Facility. (10/21 Tr. at 411-412.) This cross-section showed that the Facility is underlain by glacial deposits, which are in turn underlain by bedrock. (10/21 Tr. at 411-412.) This is consistent with the regional stratigraphic succession developed by ISGS. (Pet. Ex. 3, Criterion 2, p. 2-10.) In general, the stratigraphy includes, from ground surface downward, the Peoria Silt, the Yorkville Member of the Lemont Formation, a fine-grained low permeability glacial till, and the Equality Formation 1, a fine-grained low permeability lake clay deposit. Underlying the Equality Formation 1 is the Henry Formation, a sand-deposited formation, or where eroded, the Equality Formation 2 and/or Lemont Formation. Bedrock in the form of Silurian-age dolomite underlies the glacial deposits. (Pet. Ex. 3, Criterion 2, pp. 2-10, 2-15.)

Ms. Underwood used the foregoing information to evaluate groundwater conditions. She first characterized the geology across the Facility based on the data from the boring logs and geologic cross-sections. She considered groundwater flow in both a cross-sectional and plan view, and determined groundwater flow directions and velocities through the geologic materials. She then identified the uppermost aquifer, which is the appropriate zone to monitor. The uppermost aquifer is the upper portion of the bedrock and the coarser grain materials of the glacial deposits. (10/21 Tr. at 412-416.) The minimum distance from the bottom of the landfill to the top of the uppermost aquifer is approximately 10 feet. (10/21 Tr. at 426.) The uppermost aquifer carries shallow groundwater and is not a regional groundwater aquifer. (Pet. Ex. 3, Criterion 2, p. 2-16.) Finally, she assessed the potential impact of the Facility on groundwater conditions. (10/21 Tr. at 412-416; Pet. Ex. 3, Criterion 2, Section 10.)

She designed a groundwater monitoring system based on the direction of groundwater flow at the Facility. (10/21 Tr. at 416.) The system will monitor the upper portion of the Silurian dolomite bedrock and the coarser grain materials of the glacial deposits. (10/21 Tr. at 412-413.) The groundwater flow is primarily to the northwest. (10/21 Tr. at 414.) The groundwater monitoring system will supplement existing wells with additional wells to have appropriate spacing along the downgradient direction of the Facility. (10/21 Tr. at 416-417.) The existing permitted monitoring system will be supplemented to address the North Area. (10/21 Tr. at 416-417.) The wells will be monitored on a quarterly and semi-annual basis. The system will monitor the parameters required by the IEPA for landfills. (Pet. Ex. 3, Criterion 2, p. 11-1.)

Ms. Underwood testified as to the rigorous process that is required for groundwater monitoring. Naturally occurring minerals can appear in background monitoring, while the process of establishing background numbers is occurring around the proposed Expansion. This

happens on many landfill sites as initial background data is collected and is not an exceedance, but represents background levels of naturally occurring compounds. (10/21 Tr. at 419-422.)

WMII has monitored the Laraway RDF in accordance with IEPA permit requirements since it began receiving waste in 2009. Applicable groundwater quality standards have been adjusted and approved in accordance with IEPA permit requirements to establish correct groundwater monitoring levels at the Laraway RDF based on background compounds. The Laraway RDF is not contaminating groundwater. (10/21 Tr. at 420-423.)

As part of the Application, Ms. Underwood performed and included a one-dimensional groundwater model, POLLUTE. (10/21 Tr. at 427-428; Pet. Ex. 3, Criterion 2, Section 10.) This model was performed for the Laraway RDF and approved by the IEPA. (10/21 Tr. at 428.) It is performed using site-specific information and conservative assumptions to look at the conditions of the landfill. (10/21 Tr. at 428-430; Pet. Ex. 3, Criterion 2, p. 10-1.) She testified that using a more complex model could be performed, but would also require using estimates because of the complexity of a hydrogeologic system. (10/21 Tr. at 429.) Using conservative model inputs will overestimate the impact of conditions of the landfill. (10/21 Tr. at 429-430.) She also performed a sensitivity analysis to evaluate the range of input values that would be expected at the site. (10/21 Tr. at 430.)

Ms. Underwood testified that the Facility is monitorable, and the groundwater monitoring system is designed to protect the public health, safety and welfare. (10/21 Tr. at 417-418.)

c. Operation

Mr. Dale Hoekstra presented testimony describing the operation of the Facility. Mr. Hoekstra is the Director of Operations for WMII and has almost 39 years of experience in the solid waste industry, all associated with landfill and transfer station operations. (10/21 Tr. at 441; Pet. Ex. 10.) He currently oversees the operation and construction of pollution control facilities in the

Illinois market area. (10/21 Tr. at 441-442.) He is an IEPA certified landfill operator. (10/21 Tr. at 443.)

The written report in the Application describes the proposed operation of the Expansion. (10/21 Tr. at 443-444; Pet. Ex. 3, Criterion 2, Section 12.) The Facility will accept construction and demolition debris, nonhazardous special waste, and nonhazardous industrial waste. It will not accept municipal solid waste, regulated hazardous waste, radioactive waste, potentially infectious medical waste, regulated PCB waste and bulk liquids. (10/21 Tr. at 444.)

The Facility will have procedures in place to verify that the wastes accepted are acceptable wastes. (10/21 Tr. at 444.) It will have a waste characterization process for special waste that requires a profile sheet describing and analyzing the waste material. (10/21 Tr. at 445.) In addition, it will have a profile system in place for every generator of waste coming to the Facility, which includes sampling, testing and analysis of the waste. A WMII technical manager will review the profile sheet and determines whether the waste meets the requirements for acceptance. (10/21 Tr. at 445.) Receipt control clerks will then cross-check the information on waste characterization in the profile sheet when the waste vehicle arrives at the Facility to assure that the incoming waste matches the waste described in the profile sheet. (10/21 Tr. at 445-446.)

The receipt control area will have a video surveillance system to monitor the activities taking place inside the receipt control office (to record the transaction of the ticket being generated), outside the building (to view the truck on the scale, the name and number of the truck, and the load), and at the rear of the building (to view the truck exiting the Facility if the load is rejected). (10/21 Tr. at 446-448.) An employee training program will be in place so that all employees will be informed and knowledgeable on waste identification procedures. (10/21 Tr. at 445-446.) Additionally, there are random load inspections on a weekly basis in compliance with IEPA regulations and the requirements of the WMII host agreement with Will County. (10/21 Tr.

at 446.) These are the same procedures that have been in place at the Laraway RDF since it commenced operation in 2009, and they have worked well. (10/21 Tr. at 448.)

Mr. Hoekstra testified about the procedures proposed to manage leachate generated at the Facility. The Expansion will have a leachate management system to collect, monitor and remove leachate on a regular basis. The leachate is removed by tanker trucks and taken to either a local Publicly Owned Treatment Works ("POTW") plant or the WMII CID disposal facility for treatment. (10/21 Tr. at 451.)

Mr. Hoekstra testified about the procedures to control litter, odor, dust and vectors. He stated that he does not expect litter, odor or vectors to be a concern, because there will be operational procedures in place to prevent or control them, such as limiting the size of the active areas, prompt management of materials for treatment or disposal, and applying daily and intermediate cover. (10/21 Tr. at 451-452.) Dust is not expected to be a concern and, if it arises, will be controlled by use of a water truck. (10/21 Tr. at 452.)

Mr. Hoekstra testified that the Expansion will be operated to protect the public health, safety and welfare based on: (1) waste acceptance procedures, *i.e.*, waste identification and verification at the receipt control area, video surveillance at the receipt control area, waste identification training for all employees, and random load inspections; (2) waste placement procedures, *i.e.*, prompt management of materials for treatment or disposal, minimization of the size of the active area, and application of daily cover; (3) controlled site access and security; and (4) litter odor, dust and vector control procedures. (10/21 Tr. at 445-453.)

3. Criterion (vi)

a. Traffic Patterns

Ms. Lynn Means testified regarding whether traffic patterns to or from the Facility have been designed to minimize impact on existing traffic flows. (10/19 Tr. at 175-292.) She is a

transportation engineer licensed in Illinois and New Hampshire, and a certified professional transportation operations engineer. (10/19 Tr. at 175-176.) She has 17 years of experience in traffic engineering and transportation planning. (10/19 Tr. at 175-176.) Her work in traffic engineering primarily consists of the preparation and review of traffic impact analysis reports, including public and private sector projects in urban, suburban and rural areas. (10/19 Tr. at 176.)

Ms. Means prepared a traffic impact study of the Facility traffic. (10/19 Tr. at 177; Pet. Ex. 3, Criterion 6.) She performed traffic pattern evaluations, consisting of observing existing conditions including review of the surrounding roadways and intersections. She conducted peak hour and daily traffic counts to determine the amount of traffic generated by the existing conditions on an hourly and daily basis. She determined the Facility traffic characteristics, identified traffic patterns to and from the Facility and performed capacity level of service ("LOS") analysis for area roadways and intersections. (10/19 Tr. at 177-178; Pet. Ex. 3, Criterion 6.)

Traffic counts were conducted along area roadways and intersections. Three intersections were studied: Laraway Road and Centerpoint Way, Laraway and Brandon Road and Laraway Road and Illinois Route 53. (10/19 Tr. at 182.) These were conducted over a 24-hour time frame in October, 2014, and over three days in March, 2015. (10/19 Tr. at 182.) These counts revealed that the morning street peak hour occurred from 6:30 a.m. to 7:30 a.m., and the afternoon street peak hour occurred from 3:00 p.m. to 4:00 p.m. (10/19 Tr. at 182.) Daily traffic counts were also performed along Illinois Route 53, Laraway Road and Brandon Road. (10/19 Tr. at 182-183.) The existing traffic volumes obtained from the traffic counts include traffic associated with the existing Laraway RDF. All results are included in the Application. (Pet. Ex. 3, Criterion 6, pp. 4-5.)

Ms. Means evaluated the amount of traffic that will travel to and from the Facility. Based on average waste acceptance of 10,000 tons per day ("tpd"), there are a total of 1,080 truck trips

per day, which represents 540 trucks entering and 540 trucks departing the Facility. (10/19 Tr. at 185.) In addition, there will be an average of 100 employee/vendor trips per day, representing 50 vehicles entering and 50 vehicles departing the Facility. (10/19 Tr. at 185.)

The total amount of traffic anticipated for the Expansion - an average of 1,180 trips per day - is the same as the amount of traffic currently traveling to and from the existing Laraway RDF ("Laraway RDF traffic"). (10/19 Tr. at 185-187.) The composition of the Expansion traffic is also the same as the existing site: 95% are semi-dump truck trips and 5% are roll-off truck trips. (10/19 Tr. at 186.)

The Expansion traffic peak hour occurs from 9:00 a.m. to 10:00 a.m. (10/19 Tr. at 187.) This does not coincide with the street peak hours of 6:30 a.m. to 7:30 a.m. and 3:00 p.m. to 4:00 p.m. (10/19 Tr. at 186-187.) In addition, as with the Laraway RDF traffic, Expansion traffic comprises only about 15% of the daily traffic on Laraway Road. (10/19 Tr. at 187.)

Ms. Means considered traffic patterns to and from the Laraway RDF. Given the location of the predominant sources of waste within the service area, 95% of the truck trips are coming from the north. (10/19 Tr. at 188.) Based on waste source location and the types of roadways needed for waste transportation, Ms. Means identified the Illinois Route 53/Laraway Road route as the traffic pattern to and from the facility that minimized impact on existing traffic flows. (10/19 Tr. at 188.) The Route 53/Laraway Road route was the preferred traffic pattern identified by Will County in connection with its grant of site location approval for the Laraway RDF expansion in 2006. (10/19 Tr. at 188.)

Ms. Means also performed a capacity analysis to measure the operating efficiency of Laraway Road and the surrounding intersections, both without and with Laraway RDF traffic. A capacity analysis is an industry standard to measure operating characteristics of roadways and intersections. (10/19 Tr. at 188-189.) Operating efficiency is designated by a level of service

("LOS") range from A to F, with A being the best level, representing a free flow condition, and F being the worst level, representing stop-and-go type conditions. (10/19 Tr. At 188-189.)

In performing her capacity analysis, Ms. Means evaluated traffic volumes, including heavy vehicles, lane uses and geometrics in order to analyze the operations of both roadways and intersections. (10/19 Tr. at 189.) Further, to perform a conservative analysis, Ms. Means' analysis considered the Expansion as a new facility, and evaluated the existing traffic without Laraway RDF traffic. (Pet. Ex. 3, Criterion 6, p. 5.) The results of the capacity analysis demonstrates for existing traffic that Laraway Road, between the Laraway RDF site entrance and Illinois Route 53, without Laraway RDF traffic, operates at acceptable LOS C. (10/19 Tr. at 189-190.) Then, in evaluating the Expansion traffic, she added the Laraway RDF traffic, which demonstrates that with Expansion traffic, Laraway Road still operates at acceptable LOS C. (10/19 Tr. at 190.)

The capacity analysis for the three Laraway Road intersections, without Laraway RDF traffic, revealed that the intersections at Centerpoint Way and Brandon Road during the morning street peak hour (6:30 a.m. to 7:30 a.m.) operate at acceptable LOS B, and the Illinois Route 53 intersection operates at acceptable LOS C. (10/19 Tr. at 190.) Adding Laraway RDF traffic, all three intersections continue to operate at acceptable LOS B, B and C respectively. (10/19 Tr. at 190.)

For the afternoon street peak hour (3:00 p.m. to 4:00 p.m.), without Laraway RDF traffic, the Centerpoint Way and Brandon Road intersections operate at acceptable LOS B, and the Illinois Route 53 intersection operates at acceptable LOS D. (10/19 Tr. at 191.) Adding Laraway RDF traffic, acceptable LOS B, B, and D will be maintained at each of the three intersections, respectively. (10/19 Tr. at 191.)

Ms. Means also performed a sensitivity analysis conducting a capacity analysis for the three intersections during the Expansion peak hour of 9:00 a.m. to 10:00 a.m. (10/19 Tr. at 191.) Without Laraway RDF traffic, the Centerpoint Way, Brandon Road and Illinois Route 53 intersections operate at acceptable LOS B, B and C, respectively. (10/19 Tr. at 191-192.) With Laraway RDF traffic, those LOS do not change. (10/19 Tr. at 192.)

As an additional sensitivity analysis, Ms. Means performed capacity analyses of roadways and intersections for 50% and 100% increases in waste acceptance. On an average day, the Facility will accept 10,000 tpd. She performed her sensitivity analyses for 15,000 tpd and 20,000 tpd. The results demonstrate continued acceptable LOS. (10/19 Tr. at 190-192; Pet. Ex. 3, Criterion 6, pp. 8-14.)

The existing Laraway RDF site entrance is off of Laraway Road. (10/19 Tr. at 192-193.) This entrance will be relocated to the north to align directly with Laraway Road, and provide more efficient vehicular movement. (10/19 Tr. at 180-181, 193.) In addition, the Facility proposes to expand on-site stacking capacity from the existing 3,300 feet to 6,325 feet, which will include 4,500 linear feet from the entrance at Laraway Road to the scales at the ticket office. (10/19 Tr. at 194.) This additional capacity will accommodate an additional 132 vehicles, thereby doubling the existing stacking capacity. (10/19 Tr. at 194-195.)

Ms. Means concluded that, based on her experience and review of the traffic data, the traffic patterns to and from the Facility have been designed to minimize impact on existing traffic flows. She based her opinion on the findings that: (1) Facility traffic does not adversely impact LOS at area intersections and roadways; (2) peak hour of Facility traffic does not coincide with street peak hour traffic; (3) during street morning and afternoon peak hours, Facility traffic represents less than 15% to 28% and 11% to 23% of total vehicles on Laraway Road between Illinois Route 53 and Brandon Road, respectively; (4) the Facility entrance will be relocated to

align directly with Laraway Road; (5) on-site stacking capacity will nearly double; and (6) there are no alternative traffic patterns to and from the Facility that would minimize the impact on existing traffic flows to a greater extent than the Route 53/Laraway Road traffic pattern. (10/19 Tr. at 195; Pet. Ex. 3, Criterion 6, p. 20.)

III. STANDARD OF REVIEW

Section 39.2 of the Act vests authority in local governments to approve or disapprove siting for a new pollution control facility. 415 ILCS 5/39.2. A local government's decision is reviewable by this Board for compliance with the nine statutory criteria for local siting approval. *County of Kankakee v. Illinois Pollution Control Board*, 396 Ill.App.3d 1000, 1014, 2009 Ill.App. LEXIS 1185 at *30 (3d Dist. 2009).

On a review of the statutory criteria, the Board must confine itself to the record developed by the local siting authority, and findings of fact should not be disturbed unless such findings are against the manifest weight of the evidence. *Land and Lakes Company v. Illinois Pollution Control Board*, 319 Ill.App.3d 41, 48, 743 N.E. 2d 188, 193 (3d Dist. 2000). A decision is against the manifest weight of the evidence if the opposite result is clearly evident, plain or indisputable from a review of the evidence. *(Id.)*

The Board is required to apply its technical expertise when examining the record to determine if the local siting decision is supported by the record. *Town & Country Utilities, Inc. v. Illinois Pollution Control Board*, 225 Ill. 2d 103, 123-124, 866 N.E. 2d 227, 238-239 (2007). If there is any evidence in the record supporting the decision, the Board must affirm. The Board may not reweigh the evidence and substitute its judgment for that of the County Board. *Fox Moraine, LLC v. United City of Yorkville*, No. PCB 07-46, slip op. at 6 (Oct. 1, 2009). If there is conflicting evidence, the Board is not free to reverse simply because the County Board credited certain witnesses and not others. *(Id.)*

IV. ARGUMENT

The Decision Granting Site Location Approval is Supported By Clear and Compelling Evidence.

ERDS contends that the County Board's findings on criteria (i), (ii) and (vi) are against the manifest weight of the evidence. As no evidence contradicting or refuting WMII's proof that these criteria were satisfied was offered, there is no basis in the record for the ERDS claim, and it must be rejected.

As stated above, the decision of a local siting authority regarding compliance with the statutory criteria will not be disturbed unless the decision is contrary to the manifest weight of the evidence. Land and Lakes Company, 319 Ill.App. 3d at 53, 743 N.E. 2d at 197. The province of the County Board is to weigh the evidence, resolve conflicts in testimony and determine the credibility of witnesses. Fox Moraine, No. PCB 07-46, slip op. at 5. Simply because there may be some evidence which, if accepted, would have supported a contrary conclusion does not mean that this Board may reweigh the evidence and substitute its judgment for that of the County Board. Tate v. Illinois Pollution Control Board, 188 Ill.App. 3d 994, 1026, 544 N.E. 2d 1176, 1197 (4th Dist. 1989); Landfill 33 v. Effingham County Board, Nos. PCB 03-43, 03-52 (cons.), slip op. at 3 (Feb. 20, 2003). If there is any evidence which supports the County Board's decision, and this Board finds that the County Board could have reasonably reached its conclusion, the decision must be affirmed. File v. D & L Landfill, No. PCB 09-94, slip op. at 3 (Aug. 30, 1990). That a different decision might also be reasonable is insufficient for reversal; the opposite conclusion must be clear and indisputable. Willowbrook Motel Partnership v. Pollution Control Board, 135 Ill.App. 3d 343, 481 N.E. 2d 1032 (1st Dist. 1985).

As set forth above, WMII established criteria (i), (ii) and (vi) by clear and convincing evidence. No relevant or probative evidence was presented that controverted WMII's prima facie case. Accordingly, the decision granting siting approval should be affirmed.

1. Criterion (i): The Expansion is Necessary to Accommodate the Waste Needs of the Service Area

Need is established where an applicant shows that a proposed facility is reasonably required by the disposal needs of the service area, taking into account the waste production and waste disposal capacity of the area. *Waste Management of Illinois, Inc. v. Illinois Pollution Control Board*, 122 Ill.App. 3d 639, 461 N.E.2d 542, 546 (3d Dist. 1984). WMII is not required to show absolute necessity to satisfy criterion (i). *Landfill 33*, Nos. PCB 03-43, 03-52 (cons.), slip op. at 26.

WMII presented credible evidence and expert opinion establishing that the Expansion is necessary to accommodate the waste needs of the area it is intended to serve. Based on a 33 million ton disposal capacity shortfall over the 10-year operating period of the Facility, and the high and increasing market demand for the Laraway RDF since 2012, the Expansion is necessary to meet the waste needs of the service area. No testimony or evidence was presented that contradicted or impeached WMII's evidence that the Expansion is necessary. Because there is ample evidence supporting the County Board's finding of need, the decision of the County Board is not against the manifest weight of the evidence and must be affirmed. *Tate*, 188 Ill.App.3d at 1023-1024, 544 N.E.2d at 1195-1196; *Fairview Area Citizens Task Force* ("FACT") v. Pollution Control Board, 198 Ill.App.3d 541, 551-552, 555 N.E.2d 1178, 1184-1185 (3d Dist. 1990); Landfill 33, Nos. PCB 03-43, 03-52 (cons.), slip op. at 26; Industrial Fuels & Resources v. Pollution Control Board, 227 Ill.App. 3d 533, 544-545, 592 N.E.2d 148, 156 (1st Dist. 1992).

2. Criterion (ii): The Expansion is Designed, Located and Proposed to be Operated To Protect the Public Health, Safety and Welfare

Criterion (ii) requires a demonstration that the proposed facility does not pose an unacceptable risk to the public health and safety. *Industrial Fuels*, 227 III.App. 3d at 547, 592 N.E. 2d at 157. It does not, however, require a guarantee against any risk or problem. *Clutts v. Beasley*, 185 III.App. 3d 543, 541 N.E. 2d 844, 846 (5th Dist. 1989).

WMII presented unrefuted evidence from three expert witnesses to establish criterion (ii), that the Expansion is so designed, located and proposed to be operated that the public health, safety and welfare will be protected. Specifically, WMII presented evidence that the design and operation of the Expansion (1) complies with all applicable government requirements, (2) presents no unacceptable or increased risk to the public health, safety and welfare, and (3) provides a higher degree of environmental protection than required under existing standards. ERDS did not present or offer any evidence to demonstrate that the design of the Expansion is flawed from a public safety standpoint or that its proposed operation poses an unacceptable risk to public health or safety.

As there was no testimony or evidence presented that contradicted, much less refuted, WMII's proof that criterion (ii) has been satisfied, the County Board decision on criterion (ii) must be affirmed. *Industrial Fuels*, 227 Ill.App. 3d at 547, 592 N.E.2d at 157; *Fox Moraine*, No. PCB 07-46, slip op. at 82.

3. Criterion (vi): Traffic Patterns to or from the Expansion are Designed to Minimize Impact on Existing Traffic Flows

Criterion (vi) is satisfied upon a showing that traffic patterns to or from the Expansion will minimize impact on existing traffic flows. An applicant is not required to demonstrate no impact or eliminate any problems; an applicant need only show that any impact has been minimized. *FACT*, 198 Ill.App. 3d at 554-555, 555 N.E. 2d at 1187. A traffic plan is not required; the key is to minimize impact on traffic because it is impossible to eliminate all problems. (*Id.*)

WMII presented expert testimony and evidence that criterion (vi) was satisfied. Traffic to

and from the Facility does not adversely impact LOS at area roadways and intersections, and there

are no alternative traffic patterns that would minimize impact on existing traffic flows more than

the Route 53/Laraway Road route. No evidence was presented establishing that impact on

existing traffic flows was not minimized. The record contains support for the County Board's

finding that criterion (vi) was satisfied, and that finding should be affirmed. File, No. PCB 09-94,

slip op. at 3.

V. CONCLUSION

Criteria (i), (ii) and (vi) were proven by clear and compelling evidence. No facts or

evidence were offered that implied, much less established, that the Expansion is not needed, is

flawed in design, location or operation, or would in any way pose an unacceptable or increased risk

to the public health, safety and welfare. To the contrary, WMII demonstrated by the manifest

weight of the evidence that the design, location and operation of the Expansion will protect the

public health, safety and welfare, and that each of the statutory criteria was satisfied.

Accordingly, WMII respectfully requests that the County Board decision granting site location

approval for the Expansion be affirmed.

Respectfully Submitted,

WASTE MANAGEMENT OF ILLINOIS, INC.

Rv.

Donald J. Møran

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