## Response to Waste Management's November 2, 2012 Motion to Alberta Environmental Appeals Board to Disallow Portions of Dr. Lee's Report and Possible Evidence at Hearing

Comments Prepared by G. Fred Lee, PhD, PE, BCEE, F.ASCE and Anne Jones-Lee, PhD G. Fred Lee & Associates El Macero, California USA gfredlee33@gmail.com www.gfredlee.com

November 18, 2012

In a letter dated November 2, 2012, D. Wilson, an attorney on behalf of Waste Management (WMCC), brought a motion to the Alberta Environmental Appeals Board to disallow from the hearing record for the proposed Thorhild Landfill "certain portions" of our report,

Lee, G. F., and Jones-Lee, A., "Comments on Characteristics of Proposed Thorhild Landfill with Respect to Providing Reliable Protection of Public Health & Environmental Quality for as Long as the Wastes Remain a Threat," Comments prepared on behalf of Concerned Citizens of Thorhild County Society, Alberta, Canada, by G. Fred Lee & Associates, El Macero, CA, USA, October 13 (2012).

D. Wilson's letter stated,

"This letter constitutes a motion by WMCC to disallow:

(a) certain portions of the report of G. Fred Lee & Associates ("Dr. Lee"), titled "Comments on Characteristics of Proposed Thorhild Landfill with respect to Providing Reliable Protection of Public Health & Environmental Quality for as Long .as the Wastes Remain a Threat" (the "Report") from the record at the hearing (the "Hearing") of the Appeals; and
(b) Dr. Lee's oral evidence on certain topics at the Hearing.

WMCC brings this motion based on the inadmissibility of certain portions of the Report. Those portions of the Report that criticize the Standards for Landfills in Alberta (2010) (the "Standards") are not admissible before the Environmental Appeals Board (the "Board"). Further, to the extent that Dr. Lee intends to provide oral evidence on the adequacy of the Standards, such oral evidence is also inadmissible and should be disallowed."

The WMCC motion should be denied. Our report referenced by WMCC addresses the technical bases upon which our assessment was made that the Thorhild Landfill as proposed does not meet the requirements of the Alberta "Environmental Protection Act" applicable to landfills to protect public health, groundwater resources, and environmental quality. The framework for our technical comments concerning the proposed landfill was articulated in our report as follows:

"It is clear from the foregoing provisions of the Environmental Protection and Enhancement Act and Water Act that one of the primary goals of these Acts is to protect the water resources of the Province. Thus, while a proposed landfill such as the WM Thorhild Landfill that is proposed to be located at a highly unsuitable site without reliable natural protection of

## groundwater quality may meet existing minimum landfill standards, such a landfill **does not meet** the goals of the Environmental Protection and Enhancement Act and Water Act."

As discussed in our report, the Province of Alberta Finance and Administration Division Regulatory Approvals Centre Approval of the Thorhild Class II Municipal/Industrial Landfill EPEA Application No. 001-236328 staff review of the proposed Thorhild Landfill concluded that the landfill as proposed will be protective of public health and the environment because the design, location, etc., meet the minimum Alberta Environment Landfill Standards. Our technical review discussed the invalidity of that conclusion since the meeting of minimum Alberta Environment Landfill Standards in this situation does not provide protection of public health, groundwater resources, or environmental quality for as long as the wastes in the proposed Thorhild Landfill will be a threat as required to meet the overarching requirements of the Alberta Environmental Protection Act. We provided detailed discussion of the technical issues with references to the professional literature supporting our conclusions. Our comments were not a critique of the Alberta Environmental Landfill standards per se, but rather of their sufficiency for providing the required protection of public health, groundwater resources, and environmental quality with respect to the proposed Thorhild Landfill. The critique was necessitated by the staff's reliance on the meeting of those standards as its basis for approval of the landfill; it was necessary to discuss why the minimum landfill standards used by the staff for evaluating the proposed Thorhild Landfill were inadequate to ensure compliance with Alberta Environment's requirement to protect public health, groundwater resources, and the environment for as long as the wastes in the landfill will be a threat.

In a letter dated November 9, 2012, Re: Waste Management of Canada Corporation Water Act Approval No. 00266612-00-00/Our File Nos. EAB 11-025 etc.; and EPEA Approval No. 236328-00-00/Our File Nos.: EAB 11-049 etc., Valerie Myrmo, Registrar of Appeals of the Alberta Environmental Appeals Board, articulated the issues to be heard at the hearing in question as follows:

## "Issues to be heard at the Hearing:

As advised previously in the Board's Decision dated August 9, 2012, the purpose of the Hearing will be to hear from the parties on the following issues:

1. Do the terms and conditions of the EPEA Approval and Water Act Approval adequately protect the environment and human health? Environment includes land, wetlands, habitat, and wildlife.

2. Do the EPEA Approval and Water Act Approval adequately address the potential impacts of the landfill on the groundwater and local wells?

3. Did the Director adequately consider the potential impacts of the landfill on surface runon and run-off and the surrounding watersheds?

4. Did the Director adequately consider the construction and operation of the landfill? Operations include the types of waste accepted by the landfill and the proposed control of dust, noise, odours, nuisance animals, and fugitive wastes.

5. Are the monitoring programs adequate to protect the environment and human health?

6. Is the Emergency Response Plan adequate?

7. Are the post closure and reclamation conditions adequate?"

Those issues, appropriate in the review of the potential public health, groundwater resources, and environmental quality impacts of a proposed landfill, are also issues that were addressed in the Lee and Jones-Lee report. As we discussed, the location, design, and closure and postclosure monitoring and maintenance protocols proposed for the Thorhild Landfill cannot be relied upon to provide protection of public health, groundwater resources, or environmental quality for as long as the wastes in the proposed landfill will be a threat.

The review of the protective nature of the proposed Thorhild Landfill conducted by the Province of Alberta Finance and Administration Division Regulatory Approvals Centre Approval of the Thorhild Class II Municipal/Industrial Landfill EPEA staff focused on whether the staff believed that the landfill proposal complied with the minimum requirements of the Alberta Environment Landfill Standards. It did not reliably consider or adequately evaluate many of the issues that are the key to evaluating the ability of the landfill proposal for providing protection of public health, groundwater resources, and environmental quality for as long as the wastes in the proposed landfill will be a threat. The review was, therefore, inadequate. The Lee and Jones-Lee report commented on the deficiencies in the landfill review. Unless the only requirement for developing a landfill in Alberta is that it meet minimum requirements of the Alberta Environment Landfill standards, the Alberta Environment Appeal Board review of the Waste Management Landfill proposal should not be restricted to a review of whether the proposed landfill meets the minimum requirements.