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ENV1283MC-2006-4499

## NOV 0 3 2006

Mr. Kevin Bechard Director, Public Affairs Waste Management of Canada Corporation 117 Wentworth Court Brampton ON L6T 5L4

Dear Mr. Bechard:

Thank you for submitting the Richmond Landfill Expansion Environmental Assessment for my review and approval. Waste Management of Canada Corporation's (WMCC) proposal to expand the Richmond landfill site presented many challenges and generated a great deal of public interest and debate.

I have considered WMCC's requests for a referral of this application to the Environmental Review Tribunal (ERT) pursuant to section 9.3 of the *Environmental* Assessment Act ("EAA") and the subsequent request to withdraw the application. For the reasons described below, I regret to inform you that:

- 1. I have decided to refuse your request for a hearing;
- 2. I have decided to refuse your request for the withdrawal of your Environmental Assessment:
- 3. I have, with the approval of the Lieutenant Governor in Council, decided to refuse to approve this undertaking.

#### **BACKGROUND**

WMCC sought approval under the EAA to expand its Richmond landfill site, located in the Town of Greater Napanee. The proposed expansion would allow WMCC to dispose of an additional 750,000 tonnes per year of solid, non-hazardous municipal, industrial, commercial and institutional waste generated in Ontario. The proposed undertaking also includes removing approximately 2.7 million tonnes of existing waste in order to construct a new liner underneath the current landfill footprint. The Terms of Reference ("ToR") for this EA were approved in 1999. The Environmental Assessment was submitted by WMCC in 2005.

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The expanded site would consist of two landfill footprints, namely the north waste fill area (Stage 1) and the south waste fill area (Stage 2). The proposed south fill area is an extension of the current landfilling site; the north fill is a new site. The capacity for the proposed expansion area would be 18,750,000 tonnes (or 25,085,000 cubic metres). It is proposed that the landfill site would operate for an additional 25 years.

The EAA sets out a rigorous approval process whereby each application is assessed against the highest standards of environmental protection outlined in a variety of statutes and regulations administered by the Ministry. WMCC's proposal to expand the Richmond landfill site generated a great deal of public concern associated with the environmental risks of expanding a landfill site located on fractured bedrock.

A Government Review Team (GRT), consisting of technical experts from local, provincial and federal agencies, reviewed the EA to determine whether the information presented was accurate and the conclusions valid. Each member of the GRT was requested to provide comments on the EA based on their agency's mandate and to identify any concerns they had with the EA, or environmental effects of the proposed undertaking.

The EA was circulated to various agencies. In addition to the Ministry of the Environment, other agencies identified environmental concerns that were not addressed during the EA. These included the Quinte Conservation Authority, the Town of Greater Napanee's Peer Review Team, the Township of Tyendinaga and the Canadian Environmental Assessment Agency. The Mohawks of the Bay of Quinte (MBQ) and the Canadian Environmental Law Association (CELA), as counsel for the Concerned Citizens' Committee/Tyendinaga & Environs, also submitted comments and third party reviews outlining similar environmental concerns.

The Government Review concluded that the landfill site is located in a susceptible subsurface environment where there are significant environmental risks associated with expanding the landfill site. The Review stated that WMCC did not:

- adequately describe existing baseline conditions;
- meet regulatory requirements for meeting Reasonable Use Limits (RUL) at the property boundary; and
- provide for a viable leachate control option.

The Government Review recommended that the EA not be approved due to the concerns identified by the Ministry, members of the GRT, MBQ, and the public.

#### ENVIRONMENTAL CONCERNS

# Hydrogeology/Geology

The Richmond landfill site is located in a rural area which is not serviced by municipal water or sewer systems. It is my understanding that area residents use groundwater as a source of drinking water.

The entire region, including the Richmond landfill site, has been identified as being underlain by fractured limestone bedrock with minimal soil protection and having aquifers that are highly vulnerable to contamination. The site's fractured bedrock aquifer has no proven natural attenuation capabilities and groundwater flows through the subsurface environment at a fast rate. The existing site is near capacity, with approximately one year of site life remaining. WMCC recognized the complexity of the site's subsurface environment and conducted additional hydrogeological studies and on-site investigations to address concerns during the development of the EA.

The Government Review identified that the Hydrogeological Baseline Assessment did not adequately assess the existence or absence of major fractures which could convey leachate off-site. The Ministry also identified that the sample grid density in the north portion of the property was insufficient to assess the impact of a liner failure.

On July 18, 2006 WMCC submitted additional geophysical survey results to validate their description of major fracture features. WMCC used a different technique from what was described in the EA. The Ministry's preliminary review indicated that the geophysical survey did not look at the south west portion of the site, which the Ministry believes may contain a critical flow path. Furthermore, this additional analysis was not included in the EA and therefore the public and other members of the GRT did not have an opportunity to comment or be consulted on those additional results.

WMCC failed to establish to the satisfaction of the Ministry that the proposed expansion would not result in conveying leachate off-site through fractures.

#### Reasonable Use Criteria

WMCC was required to demonstrate how they would meet Reasonable Use Limits at the property boundary. The Landfilling Sites Regulation, Ontario Regulation 232/98 (O. Reg. 232/98) made under the *Environmental Protection Act* specifies the design and operation requirements for the expansion of landfill sites.

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The regulation describes the process for calculating maximum allowable groundwater impacts at a landfill site boundary. The maximum impact limits are known as Reasonable Use Limits (RUL).

The EA did not use the method described in O. Reg. 232/98 to calculate RUL; instead WMCC used an alternative method in the EA. The alternative method produced numerical values which were not protective of local drinking water quality. The Ministry concluded that WMCC's RUL would not prevent the impairment of domestic-use groundwater resources by a number of contaminants.

On July 18, 2006 WMCC recommended a second alternative approach for evaluating background concentrations at the Richmond site. The Ministry undertook a preliminary review of the approach. The Ministry has been unable to conclude that this approach would provide information that would demonstrate that the environment is protected. Furthermore, the second alternative approach was not included in the EA, and the public and other members of the GRT did not have an opportunity to comment or be consulted on that approach.

WMCC has failed to establish how groundwater will be protected at the property boundary based on either the methodology prescribed under O.R. 232/98 or an alternative that is suitable to the Ministry.

### Air Quality Impact Assessment

WMCC proposed to remove approximately 2.7 million tonnes of in place waste to construct a liner underneath the existing landfill site. The EA indicated that, at times during reclamation, odours could exceed provincial guidelines. The Government Review found that the EA did not provide the Ministry with a sufficient environmental rationale for the proposal to reclaim the south footprint. Based on the Government Review, the Ministry concluded that the long term benefits of reclamation did not offset the environmental risks associated with reclamation and therefore, it should not be considered for approval.

In July 2006, WMCC submitted additional meteorological data and the results of a cracks and fissures analysis. This analysis identified that certain areas of the landfill had been subject to settlement, which caused cracks to develop within the landfill cover allowing landfill gas to escape. The Ministry noted that the analysis was incomplete, but it did highlight the Ministry's concern that the site has resulted in offsite odour impacts, and the importance of calculating calm air data in the air quality impact analysis.

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Despite the incomplete analysis, Ministry staff noted that this additional analysis altered the EA's conclusions that no odour impacts had been observed from landfilling activities. This new analysis has changed baseline conditions and would have to be reconsidered in any revised air quality impact assessment. Such assessment may conclude that air quality impacts are greater than previously suggested by WMCC. Furthermore, this additional analysis has not been included in the EA, nor reviewed by the public and other members of the GRT.

### **PUBLIC COMMENTS**

The community and members of the Environmental Assessment Study Group (EASG) opposed the proposed undertaking.

On November 25, 2005, WMCC submitted its EA to the Ministry for review and approval. The EA was made available to the public for comment for a seven week public comment period which ended on January 20, 2006. The Ministry received approximately 7,000 submissions opposing the proposed landfill expansion. Together with these submissions, the Ministry also received eleven supplemental technical reports from the MBQ which consisted of additional on-site testing and a peer review of the EA. The Ministry also received third party reviews from the CELA and other members of the public.

Following the publication of the Notice of Completion of the Government Review, the public was afforded a five week comment period that began on June 9, 2006 and ended on July 18, 2006. The Ministry received over 1,200 comments on the Review. All submitters supported the findings of the Government Review and recommended that the EA not be approved. Submitters also requested that I not refer the application or parts of the application to the ERT for a hearing.

### REQUEST FOR HEARING

On July 17, 2006, WMCC requested a hearing. I have considered WMCC's request for a hearing submitted pursuant to section 7.2(3) of the EAA. It is my view that a hearing is unnecessary and would also cause undue delay in determining the application for the reasons described below.

No one, other than WMCC, has requested a hearing. I received approximately 1,200 submissions supporting the conclusions of the Government Review and requesting that I refuse to approve this application for EA approval. In my view, a hearing would result in many members of the public, the MBQ and government agencies becoming involved in a

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potentially lengthy and expensive process that no one other than WMCC has sought. This is not in the public interest.

The MBQ identified that they have spent over \$300,000 to date participating in the Ministry's review process. The requested hearing would add significantly to the MBQ's costs.

Some members of the GRT, comprised of federal, provincial, municipal, and conservation authority, representatives found that the EA resulted in the recommendation of a preferred undertaking whose environmental risks raised significant concern or were not clearly understood. Ample opportunity was afforded to WMCC to address many of the concerns identified in the Government Review. It is not in the public interest to require the public, the MBQ and government agencies to become involved in a potentially lengthy and expensive process in these circumstances.

### REQUEST FOR WITHDRAWAL

I have carefully considered WMCC's request to withdraw the proposal, pursuant to subsection 6.2(3) of the EAA, which was made on October 12, 2006. I have also carefully considered submissions from members of the public, the wording of s. 6.2(3) and the purpose of the EAA. I am of the opinion that s. 6.2(3) not only affords me the discretion to impose conditions, but also the discretion to accept or to refuse to accept WMCC's withdrawal.

In reflecting on WMCC's request to withdraw its EA, I note that WMCC has not been able to demonstrate either scientifically or technically that implementation of the proposed undertaking could be done in a manner that would protect human health and the environment. The Government Review of the EA found that the scientific underpinnings of WMCC's work could not adequately describe the baseline conditions for ground water. It also found that the proposal failed to provide for a technically viable leachate control option that would protect ground water and could not demonstrate whether the project would have environmental impacts beyond the boundaries of the landfill site.

I also note that the community has expressed a strong interest in having a resolution to this EA process. WMCC's intention to expand the landfill site was announced in 1998. In one form or another, the EA has been going on since September 1999 when the ToR was approved. The communities surrounding the Richmond landfill site have participated in a protracted EA process in good faith. The process has demonstrated that there are significant environmental concerns related to this proposal.

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Further, I note that during the EA process, WMCC provided new information or intervened at crucial points in the EA process which prevented decisions from being made. Just prior to the point at which the Director of the Environmental Assessment and Approval Branch could have considered issuing a Deficiency Statement, the company supplied new information, making it impossible to review it and consult on it. The day before the conclusion of the public comment period on the Government Review, July 17, 2006, WMCC requested a hearing and on July 18, 2006 provided additional scientific and technical information that had not been considered in the EA. On October 12, 2006, which was the day before my decision was due under the Time Lines Regulation, WMCC requested that it be allowed to withdraw the proposal without any conditions.

I have examined whether even with the imposition of conditions it would be appropriate to approve your request for withdrawal. In view of the EA submitted, the Government Review, the public submissions, submissions from the MBQ, the additional material you submitted, the purpose of the EAA, the process taken to date and the current stage of the EA, I have concluded that it would not be appropriate to approve your request to withdraw.

#### APPLICATION FOR APPROVAL

Let me now turn to my decision under section 9 of the EAA.

My decision is informed by a variety of statutory considerations as required by 9(2) of the EAA, including the purpose of the EAA which is as follows:

The purpose of this Act is the betterment of the people of the whole or any part of Ontario by providing for the protection, conservation and wise management in Ontario of the environment.

I have also reviewed the approved ToR for the EA, in addition to the EA WMCC submitted, as well as comments submitted by the public under subsection 6.4(2) and 7.2(2) in respect of the EA.

From my review of the information on hydrogeology/geology, groundwater reasonable use limits, and air quality impacts I have concluded that approving this EA would be inconsistent with the purpose of the EAA as outlined above.

I conclude that the undertaking would not meet the regulatory requirements for protecting groundwater. In addition, the EA does not provide a viable leachate control plan.

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I also find that the impacts of the existing landfill operation on the environment are not adequately described in the EA. This information is necessary to predict the environmental effects of the proposed expanded landfill site. Without this information a reliable and traceable impact assessment cannot be conducted.

Finally it is my opinion that the EA does not include a sound plan to mitigate air emissions.

Based on the foregoing, with the approval of the Lieutenant Governor in Council, I refuse to give approval to proceed with the undertaking.

Attached is a signed copy of the Notice of Refusal to Proceed with the Undertaking as required by the *Environmental Assessment Act*.

Yours truly,

Laurel C. Broten

Minister of the Environment

Attachment

c: Mr. Kevin Cinq-Mars

Market Area General Manager Eastern Canada