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4 February 1998

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Mr. Jim Innes Project Manager Michigan Department of Environmental Quality 10650 Bennett Drive Morrice, MI 48857-9792

Work Order No. 01138-079-002

Re: Methane Gas Generation Issues

Linden Road Site

Dear Mr. Innes:

Recently, the Michigan Department of Environmental Quality (MDEQ) had expressed concern regarding the potential for generation and lateral migration of methane upon placement of soil cover. This letter presents General Motors' (GM's) response to MDEQ's concerns.

- 1. The Linden Road site, historically has never been a municipal landfill and has never accepted any putrescible waste material. Therefore, the subsurface material at this site is an unlikely source for generating significant quantities of methane.
- 2. Ambient air monitoring conducted at the Linden Road site several times over the past 9 years has not shown presence of methane or any other organic gases in the ambient air within the site.
- 3. A detailed soil gas study conducted at the site in 1990 revealed the potential presence of methane gas in selected locations in the interior of the site. This occurrence of methane is most likely naturally occurring due to decaying vegetation. Monitoring of peripheral areas did not indicate the presence of methane.
- 4. Combustible gas indicators (CGI) used for air monitoring during investigative and subsequent excavation activities did not indicate evidence of explosive atmospheres that may result from the presence of methane. CGI readings were consistently at background levels (<1).
- 5. The proposed cap for the site consists of a permeable soil cover rather than an impermeable clay cover. Therefore, even limited quantities of naturally occurring methane originating from the site will not be trapped underneath the site and should not migrate off-site laterally.



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Based on the information provided herein, the potential of methane generation for lateral migration at the Linden Road site is minimal. However, to expedite the project and comply with MDEQ's request in the letter dated 8 January 1998, GM will include a methane monitoring program of the site. The methane monitoring system will include a minimum of three gas migration monitoring wells along the northern and southern boundaries of the site, which are the populated boundaries of the site. These wells will be installed during Phase 2 activities (cap construction) at the site. The design and location of the proposed gas monitoring wells will be submitted to MDEQ for review prior to installation. The monitoring will be done by using a combustible gas indicator (CGI) at each well on the same schedule as that proposed for groundwater monitoring.

If you have any questions or require additional information, please call me at (847) 918-4018.

Very truly yours,

ROY F. WESTON, INC.

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Project Manager

SB/sr

cc:

R. Metcalf, GM

E. Peterson, GM