



P.O. Box 1790  
Rochester, New York 14692-1790 USA

September 17, 1991

Mr. Ben Hall  
Environmental Quality Analyst  
Environmental Response Division  
Michigan Dept. of Natural Resources  
Region III Headquarters  
P. O. Box 30028  
Lansing, MI 48909

Re: Linden Road Landfill Progress Report

Dear Mr. Hall:

Enclosed is a progress report prepared by Roy F. Weston, Inc. describing work performed on the Linden Road Landfill Project between August 1, 1991 and September 8, 1991. Please call me at (716) 647-4766 if you have any questions.

Sincerely,

A handwritten signature in cursive script that reads 'Richard C. Eisenman'.

Richard C. Eisenman  
Senior Environmental Engineer  
Divisional Environmental Activities

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ROY F. WESTON, INC.  
THREE HAWTHORN PARKWAY, SUITE 400  
VERNON HILLS, ILLINOIS 60061  
708-918-4000  
FAX: 708-918-4055

13 September 1991

Mr. Richard C. Eisenman  
Senior Environmental Engineer  
General Motors, AC Rochester Division  
Divisional Environmental Activities Group  
1000 Lexington Avenue  
Rochester, New York 14692

Work Order No.: 1138-58-02

Subject: Progress Report  
Linden Road Landfill Project  
08/01/91 through 09/08/91

Dear Mr. Eisenman:

The purpose of this letter is to summarize activities related to the Linden Road Landfill project between 1 August 1991 and 8 September 1991. The following sections of the letter review: the progress made this reporting period; significant findings; problem areas; laboratory work; subcontracted activities; deliverables submitted; and, planned activities/events.

Progress Made this Reporting Period

The following activities were performed during the current reporting period:

- Continued to evaluate, compile, and reduce data gathered during field investigations.
- Completed validation of sample analytical results received from laboratory.
- Continued preparing report for site investigation and interim remedial measures evaluation.
- Continued public health evaluation/risk assessment activities.
- Evaluated analytical results of additional surface waste material sampling at area 32B.

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Mr. Richard C. Eisenman

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### Significant Findings

Based upon review and evaluation of all field and laboratory data related to the investigation activities at the LRLF site, the following important observations are presented:

- Additional surface material sampling conducted on 19 July 1991 identified the material which is likely to have indicated elevated PCB concentrations during the November 1990 sampling. This material which is present in very limited quantities near Area 32B is identified as a dark yellowish brown greasy substance, wrapped in foil, and was found in a drum. This material can be easily identified visually and is not believed to be present in large quantities at the site. The quantity of this material will be estimated during the second round of groundwater sampling which will be conducted during the second week of September 1991.
- Field observations during test pit excavations, and drilling of soil borings and auger probes indicated that the waste/fill material is confined to the upper 15 feet below the surface. A hard, plastic silty clay layer was encountered beneath the waste/fill material throughout the site in test pits, soil borings, auger probes, and monitor wells. This clay layer which ranged in thickness from 8 to 16 feet appears to be continuous across the site, and is believed to act as a confining layer between the upper-most water-bearing zone and underlying water-bearing zones. This silty clay layer is underlain by interlayered thin sand lenses, silty clay, clayey sand, and clayey silt layers.
- Evaluation of water levels in shallow monitoring wells indicated that the water table generally conforms with the surface topography. Groundwater flow direction in the shallow water-bearing zone is generally to the east-northeast except in the southeast corner of the site where preliminary results indicate a flow component towards the southeast due to topography. Water level measurements in the deep monitoring wells indicate that groundwater flow in the deeper water-bearing zone is towards the north-northeast. Additional water level measurements will be obtained during the second round of



groundwater sampling which will be performed during the second week of September 1991.

- Analytical results of samples collected from waste/fill material during test pit excavations, and soil borings indicated some elevated levels of metals, volatile organic compounds, and semivolatile organic compounds. Complete analytical results of soil samples will be presented in the forthcoming investigation report.
- Groundwater sample analyses revealed presence of 1, 2-dichloroethene and trichloroethene (TCE) at concentrations of 36 ug/L and 300 ug/L respectively in a sample collected from the shallow monitoring well (MW-01S) located along the west property line of the site separating this site from the Dye Road Dump. The only other detections of volatile organic compounds (VOCs) in monitoring wells were 10 ug/L of TCE and 12 ug/L of 1,1-dichloroethane (DCA) in the shallow monitoring well MW-3S located along the southern property line of the site. Based on the location of monitoring well MW-01S, the groundwater flow direction in the shallow water-bearing zone, and the absence of VOCs in other on-site wells (except for the trace quantities in monitoring well MW-03S), it is most probable that the VOCs detected in monitoring well MW-01S were derived from off site sources. The locations of monitoring wells installed during the current investigations are shown in Figure 1.
- Detailed descriptions of well construction procedures for the observation wells that were installed prior to the current investigations are not available at this time. It is likely that these observation wells have penetrated the confining layer identified during the current investigations. Evidence of significant settling was observed at the surface around some of the previously installed well casings. Since the utility of these wells are determined to be minimal, it is recommended that these wells be properly decommissioned following MDNR guidelines.



Mr. Richard C. Eisenman

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Problems Areas - Encountered/Resolved

No major problems were encountered during the current reporting period.

Laboratory Work

The 19 July 1991 samples from area 32B were analyzed for total PCBs by National Environmental Testing, Inc., (NET) of Pontiac, Michigan, as arranged through AC Rochester.

Subcontracted Activities

There were no subcontracted activities during the current reporting period.

Deliverable(s) Submitted

No deliverables were submitted during this reporting period.

Planned Activities and Events

The following activities are planned for the next two months.

- Conduct second round of groundwater sampling at the site.
- Identify and determine quantity of material suspected to contain elevated PCB concentrations.
- Complete data evaluation, data reduction, and tabulation.
- Complete Public Health Evaluation/Risk Assessment.
- Evaluate appropriate remedial alternatives.
- Continue to prepare site investigation report.

WESTON will brief GM on a regular basis (at least once a week) on project progress. The next progress report will be submitted to GM



Mr. Richard C. Eisenman

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by 1 November 1991. If you have any questions or need additional information, please call either of the undersigned at (708) 918-4000.

Very truly yours,

ROY F. WESTON, INC.

A handwritten signature in cursive script, appearing to read "S. Babusukumar".

S. Babusukumar, P.G.  
Project Manager

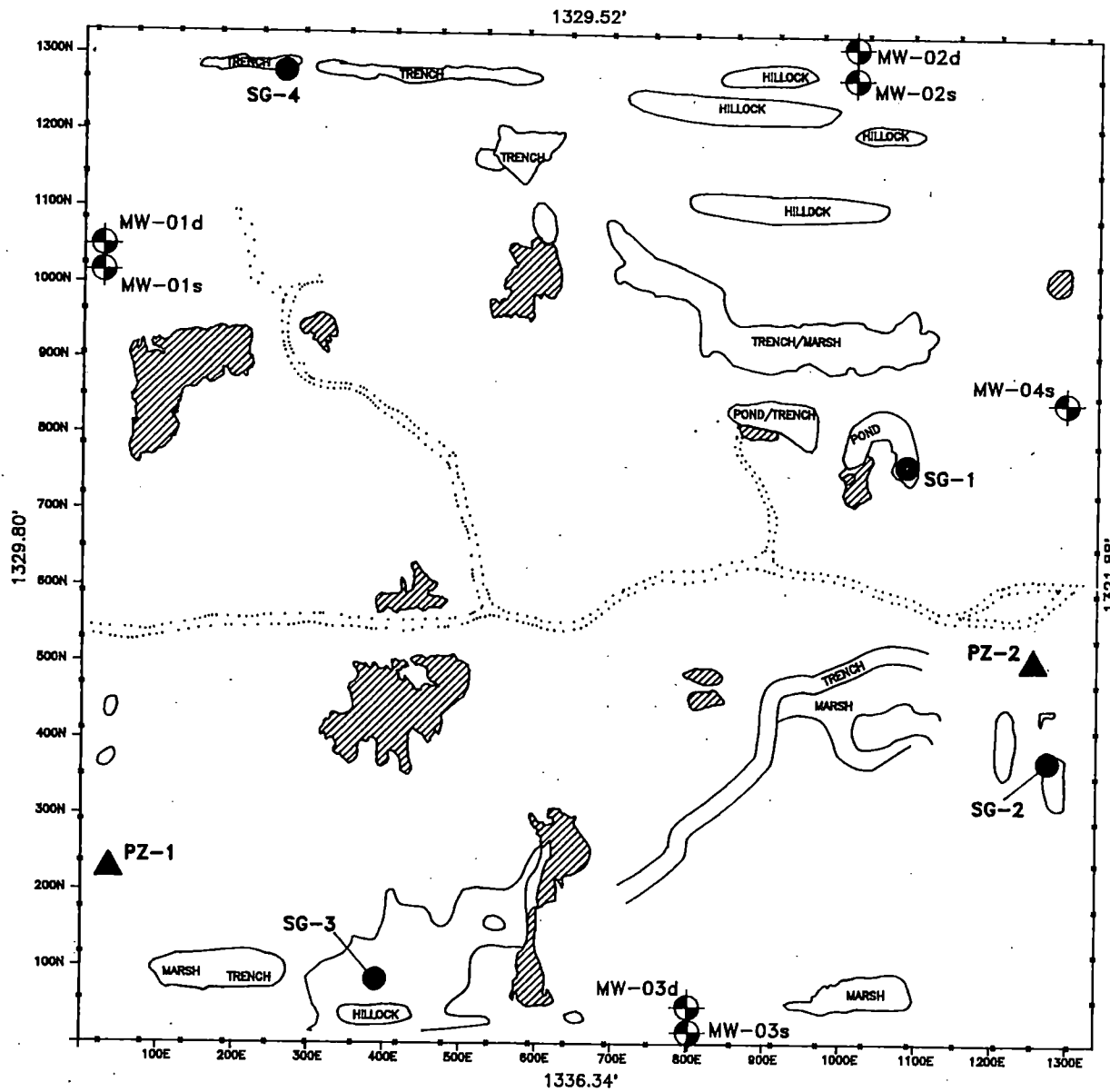
A handwritten signature in cursive script, appearing to read "Tom E. Carlisle".

Thomas E. Carlisle  
Project Director

SB:TEC/slr

cc: R. Neahusan, GM-AC Rochester  
M. Mathews, GM-AC Rochester  
E. Peterson, GM-EAS

# MONITORING WELL, PIEZOMETER & STAFF GAUGE LOCATIONS



- MONITORING WELL
- STAFF GAUGE
- PIEZOMETER



FIGURE 1