

Integrated Environmental Solutions

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March 15, 2002

Ms. Marcy McGrath Wisconsin Department of Natural Resources P.O. Box 10448 Green Bay, Wisconsin 54307-0448

Subject: Former Susie's Restaurant 1020 S. 26<sup>th</sup> Street, Manitowoc, Wisconsin WDNR BRRTS # 02-36-000516 and # 03-36-286308

Dear Ms. McGrath:

The purpose of this letter is to provide an addendum to the letter dated February 21, 2002 addressed to Ms. Marcy McGrath of the Wisconsin Department of Natural Resources (WDNR), and provide clarification of the information regarding the management of excavated materials during highway construction of USH 151 in Manitowoc, Wisconsin.

The management of excavated materials was performed in accordance with the WDNR-approved Material Handling Plan (MHP) dated May 2001. A Phase 2 ½ investigation was performed prior to the highway construction activities to define the limits of and characterize contaminated soil requiring off-site disposal. During that investigation, soil samples were collected from a grid pattern of approximately 10 meters by 10 meters along the alignment of the proposed roadway and along the route of the storm sewers. The analytical results of the soil samples were used to determine the extent of contaminated soil requiring off-site disposal at Waste Management – Ridgeview Landfill in Whitelaw, Wisconsin. Each sample within a 10 meter by 10 meter grid represented approximately 30 to 45 cubic meters of soil based on the planned excavations for highway construction. All soil excavated during construction within a 10 meter by 10 meter grid or excavated for the storm sewer that had any laboratory detection of volatile organic compounds (VOCs) was segregated and disposed of at the Ridgeview Landfill. Soil within the grid that had no laboratory detection of VOCs and soil outside the limits of the area of suspected contamination investigated during the Phase 2 1/2 investigation was disposed of off-site without restrictions. Materials excavated outside of the Phase 2 <sup>1</sup>/<sub>2</sub> investigation grid pattern were limited to the removal of the existing pavement and topsoil. Three representative soil samples were collected from the topsoil and laboratory-analyzed for VOCs. The results indicated no detection of VOCs, and the topsoil was therefore deemed as "clean soil" and the majority of which was reused on-site as topsoil.

In summary, all soil requiring excavation and off-site disposal during highway construction activities was tested prior to off-site disposal. Soil that was not reused on-site includes soil that was tested as part of the Phase 2 ½ investigation or topsoil that was tested during highway construction. Approximately 2,935.41 tons of contaminated soil was transported to and disposed at the Ridgeview Landfill facility in Whitelaw, Wisconsin. Materials excavated outside of the Phase 2 ½ investigation test areas were limited to the removal of existing pavement or soil that was reused during general highway grading.



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Feel free to contact me at (608) 662-5274 with any additional questions.

Sincerely,

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RMT, Inc.

aniel Haak

Daniel Haak Staff Engineer

Attachments: Table 1 – Summary of Soil Analytical Results from Phase 2 ½ Investigation Figure 1 – Site Plan

cc: William Handlos, City of Manitowoc Kevin Gehrmann, WisDOT Carrie Lutz, WisDOT Central Files

SAMPLE ID	SAMPLE DEPTH (ft)	PID	TETRA- CHLORO- ETHENE	TRICHLORO- ETHENE	CIS-1,2- DICHLORO- ETHENE	TOLUENE	BENZENE
HA-1	1.5 - 2.0	<2	1400	110	71	<25	<25
HA-2	2.0 - 2.5	<2	83	<25	<25	<25	<25
HA-5	1.5 - 2.0	85	12,000	120	<25	<25	<25
HA-6	2.0 - 2.5	125	3,100	450	36	<25	<25
HA-7	3.5 - 4.0	<2	<25	<25	<25	<25	<25
HA-8	2.5 - 3.0	<2	140	<25	<25	<25	<25
HA-9	2.5 - 3.0	<2	34	<25	<25	<25	<25
HA-10	2.0 - 2.5	<2	27	<25	<25	<25	<25
HA-13	6.0 - 6.5	<2	<25	<25	<25	<25	<25
HA-15	5.0 - 5.5	<2	<25	<25	<25	<25	<25
HA-16	4.0 - 4.5	<2	<25	<25	<25	<25	<25
HA-17	3.0 - 3.5	<2	43	<25	<25	28	<25
HA-18	1.0 - 1.5	<2	36	<25	<25	<25	<25
HA-19	3.0 - 3.5	2.3	<25	<25	<25	<25	<25
HA-20	3.0 - 3.5	45	5,000	<25	<25	<25	<25
HA-21	3.5 - 4.0	<2	35	<25	<25	<25	<25
HA-22	2.5 - 3.0	<2	<25	<25	<25	<25	<25
HA-23	3.0 - 3.5	<2	<25	<25	<25	<25	<25
HA-24	1.0 - 1.5	<2	<25	<25	<25	<25	<25
HA-25	5.0 - 5.5	<2	<25	<25	<25	<25	<25
HA-26	5.0 - 5.5	<2	<25	<25	<25	<25	<25
HA-27	1.5 - 2.0	<2	<25	<25	<25	31	73
HA-28	4.0 - 4.5	<2	<25	<25	<25	<25	<25
HA-29	3.5 - 4.0	<2	<25	<25	<25	<25	<25
HA-30	3.0 - 3.5	<2	<25	<25	<25	<25	<25

Table 1 Summary of Soil Analytical Results from Phase 2 1/2 Investigation – Prior to Excavation USH 151-Calumet Avenue Manitowoc, Wisconsin

Notes:

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Units are expressed in µg/kg.
Samples were collected on April 26, 2001.

3. Photoionization detector (PID) readings are in instrument units.

4. A full VOC (Method 8260) scan was performed on all samples. Only compounds that were detected are listed.



