HACCO, INC.

Administrative Office
P.O. Box 7190
537 Atlas Avenue (53714)
Madison, WI 53707
(608) 221-6200 • FAX (608) 221-6208

Manufacturing Plant
110 Hopkins Drive
Randolph, WI 53956-1316
(920) 326-5141
FAX (920) 326-5135

November 13, 2000

Ms. Cynde English
Wisconsin Department of Natural Resources
South Central Region
3911 Fish Hatchery Road
Fitchburg, WI 53711

RE: HACCO, Inc., Randolph, WI
Soil Excavation Proposals
FID# 114010820

Dear Ms. English:

Pursuant to your letter dated August 21, 2000, this letter describes three proposals to conduct remedial environmental work at HACCO's Randolph, WI plant. Specifically, these proposals include:

- Excavation of hot spots in the vicinity of soil borings B-46 and B-50 and paving of these areas;
- Excavation of the remaining contamination in Area 16 and confirmation soil sampling; and
- Evaluation of one or more innovative remediation technologies to address remaining source areas of contaminant mass.

If you have any questions regarding these proposals, please contact me at your convenience.

Very Truly Yours:

HACCO Inc.

Richard D. Yabroff, P.E.
Environmental Manager

cc: Lee Schwalenberg, HACCO
Steve Martin, RMT

Proposal For Excavation Of Hot Spots In The Vicinity Of Soil Borings B-46 and B-50 And Paving Of These Areas

HACCO, Inc. Randolph, WI
November 2000

Background: Soil sampling in the April 28, 2000 report titled "1999 Soil Investigation, HACCO, Inc. – Randolph, WI, Facility" included eleven soil borings, B-46 through B-56 along the railroad tracks on the south side of the plant. The distribution and the type of contaminants detected in the soil were very similar. Organochlorine compounds were the primary constituents detected, with lesser numbers of organophosphates, urea carbamates, and VOCs. Concentrations of dieldrin exceeded the site-specific SCL in the shallow soil (1 to 3 feet) in 8 of the 11 borings. In one boring, B-50, the concentration of dieldrin was 10 to 100 times the concentration of the other borings. Also in B-50, the concentration of disulfoton was over 100 times the concentrations in the other borings. Boring B-46 also had soil sampling results that were higher than the other borings. This area was identified for investigation by a localized area of stressed vegetation. In the shallow B-46 boring (1 to 3 feet), the concentrations of phorate and disulfoton were several orders of magnitude higher than other borings along the south side of the plant. The chemicals at higher concentrations are all organophosphate compounds. See the report for specific concentrations.

At both borings, the concentrations decrease rapidly with depth. Exceedances of the site-specific cleanup standards are exceeded at 8 of the 11 borings in this area. After localized excavation, the area along the south side of the plant will be paved.

Objective: Soil containing high concentrations of contaminants will be excavated prior to paving.

Procedure: Soil will be excavated and placed into drums prior to off site disposal as hazardous waste. Soil samples will be collected and analyzed using a micro extraction method that will provide a faster turn around time but has higher detection limits. The detection limits will be below the soil cleanup levels for all of contaminants except for disulfoton which has a cleanup level below standard detection limits. The area will then be backfilled and paved with asphalt.

Schedule: The soil will be excavated this winter or this spring, as weather permits. The area will be backfilled after excavation and paved next summer.

Reporting: A brief documentation report will be submitted after the area is excavated and backfilled and notification will be provided when the area is paved.

Proposal For Excavation Of Area 16

HACCO, Inc. Randolph, WI
November 2000

Background: Soil sampling in the April 28, 2000 report titled "1999 Soil Investigation, HACCO, Inc. – Randolph, WI, Facility" included soil samples from the purple dirt found in this area and from the soil underneath the purple dirt. The results from the soil underneath the purple dirt contained contaminants in excess of the site-specific cleanup standards for leaching to groundwater for phorate, disulfoton, lindane, dieldrin and hexachlorobenzene and for direct contact for hexachlorobenzene. Ten drums of soil have already been excavated prior to the sampling. See the report for specific concentrations.

Objective: Soil containing concentrations of contaminants in excess of site-specific cleanup standards will be excavated.

Procedure: Soil will be excavated and placed into drums prior to off site disposal as hazardous waste. Interim soil samples may be collected and analyzed using a micro extraction method, which will provide a faster turn around time but has higher detection limits. The detection limits will be below the soil cleanup levels for the major contaminants except for disulfoton. After the soils with concentrations exceeding the RCLgw and SSL as measured by the micro extraction method have been excavated, confirmation soil samples will be collected and analyzed using conventional certified methods. The area will then be backfilled.

Schedule: The soil will be excavated this winter or this spring, as weather permits. The area will be backfilled after excavation and confirmation-sampling results are evaluated and submitted to the WDNR.

Reporting: A brief documentation report will be submitted after the area is excavated and sampled.

Proposal to Evaluate the Technical Feasibility of Implementing Innovative Remediation Technologies

HACCO, Inc. Randolph, WI
November 2000

Background: A significant portion of the contaminant mass affecting groundwater quality at HACCO appears to be composed of chemicals, which are located in the upper layers of the fractured dolomite-till unit. These chemicals diffuse into groundwater at a slow rate depending on their solubility and the groundwater movement through the bedrock fractures. The currently operating groundwater recovery system is able to intercept the small quantities of chemicals that leach into the groundwater but this mechanism of mass reduction is very slow. Without a means to reduce the mass of groundwater contaminants more directly, operation of the groundwater recovery system and periodic groundwater monitoring will be required for an extended period of time.

Objective: To identify and evaluate remediation technologies which may directly reduce the groundwater contaminant mass at the HACCO plant.

Procedure: RMT has prepared a proposal to conduct preliminary bench-scale testing on a chemical oxidation method that may be applicable for the geology and contaminant mix at HACCO. This proposal includes testing contaminated groundwater recovered from an on-site well in RMT's laboratory with several different concentrations of chemical oxidants and analyzing the treated water. If the results of the testing are favorable in terms of mass of contaminants removed, more expanded bench scale tests will be conducted to evaluate the feasibility of on-site pilot testing including effectiveness, cost, and contaminants destroyed.

Schedule: The bench-scale testing will be conducted after approval of this Proposal to Evaluate the Technical Feasibility of Implementing Innovative Remediation Technologies. It is expected that the work would be conducted in the spring of 2001.

Reporting: An evaluation report will be prepared based on the results of the analysis of treated water including a recommendation whether to continue to evaluate this technology.