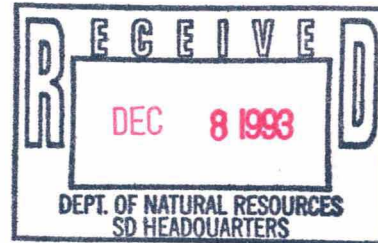


December 2, 1993  
(304733096/1003)

175 N. Corporate Drive  
Suite 100  
Brookfield, WI 53045  
Telephone (414)792-1282  
Facsimile (414)792-1310

Mr. Steve Ales  
Wisconsin Department of Natural Resources  
3911 Fish Hatchery Road  
Fitchburg, WI 53711



RE: Modification from Work Plan Specifications for Well Construction, Ripon FF/NN Landfill RI/FS

Dear Mr. Ales,

As we discussed, the deep piezometer installed on the former Bosveld property, south of the FF/NN landfill, was constructed using a 10-foot screen rather than a 5-foot screen as specified in NR141. The purpose of this letter is to document the deviation from NR141 for the deep piezometer construction. The decision was made to use the longer screen because contaminant concentrations at depth are more critical than potentiometric surface elevations for a specific 5-foot interval. A longer screen is more likely to provide representative contaminant concentrations in ground water because it is more likely to intersect preferential migration pathways (i.e. fractures, etc). The screen was set at the base of the sandstone aquifer, just above the precambrian basement.

If you have any questions, please don't hesitate to call.

Sincerely,

SIMON HYDRO-SEARCH

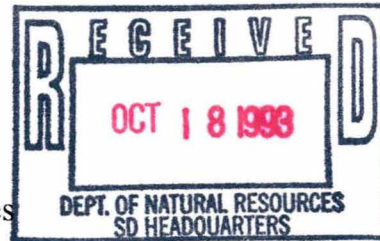


Judy Fassbender  
Project Manager

cc: Mr. Raymond Roder, Whyte Hirschboeck & Dudek

175 N. Corporate Drive  
Suite 100  
Brookfield, WI 53045  
Telephone (414)792-1282  
Facsimile (414)792-1310

October 14, 1993  
(304733096/1006)



Mr. Steve Ales  
Wisconsin Department of Natural Resources  
3911 Fish Hatchery Road  
Fitchburg, WI 53711

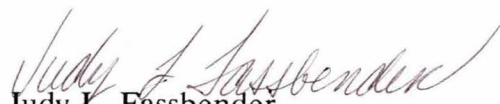
RE: Postponement of Submission Deadline for Ripon FF/NN Landfill RI/FS Technical Memorandum #1

Dear Steve:

As we discussed on the phone this morning, we will require a postponement of the submission deadline for Technical Memorandum #1 for the Ripon FF/NN Landfill to allow for adequate time for the PRP Group's technical advisory committee to review modifications made to the initial draft of the Technical Memorandum. Scheduling conflicts require several additional days to ensure that all members of the advisory committee are in agreement with the document contents. Technical Memorandum #1 will be submitted to you on Wednesday, October 20, 1993. Thank you for your understanding in this matter.

Sincerely,

SIMON HYDRO-SEARCH

  
Judy L. Fassbender  
Hydrogeologist  
Project Manager

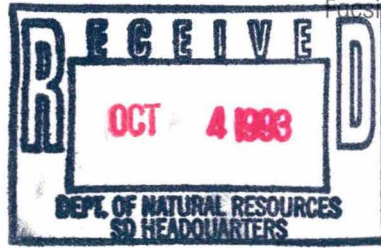
JLF:cb

Copy: Mr Raymond Roder, Whyte Hirschboeck & Dudek S.C.

October 1, 1993  
(304733096/1003)

175 N. Corporate Drive  
Suite 100  
Brookfield, WI 53045  
Telephone (414)792-1282  
Facsimile (414)792-1310

Mr. Steve Ales  
Wisconsin Department of Natural Resources  
3911 Fish Hatchery Road  
Fitchburg, WI 53711



RE: Modifications of Project Plans for the Ripon FF/NN Landfill RI/FS

Dear Steve:

As we discussed earlier this week, field conditions noted during drilling activities for the installation of the shallow piezometer on the former Bosveld property have warranted a modifications to the Project Plans as proposed for the Ripon FF/NN landfill. The modification pertains to the drilling method proposed for installation of the deep piezometer at this location.

In the project plans, drilling using air rotary methods was proposed. Continuous split spoon samples were proposed for collection to characterize geology, and three vertical profile ground water samples were proposed for collection at 150, 250 and 350 feet below ground surface (bgs). To maintain an open borehole in unconsolidated deposits during air rotary drilling, temporary casing is required. The casing must be advanced as the borehole is advanced. The large percentage of gravel and cobbles encountered in the till at this location during the drilling of the shallow piezometer is anticipated to cause difficulties in advancing casing. Typically structural damage to the lead casing section results from attempting advancement through deposits of coarse material. Damage to the lead casing may result in loss of the end section of casing down hole or delays related to bent or non-plumb casing.

An alternate drilling method has been proposed for the deep piezometers to avoid foreseeable problems with the casing. Mud Rotary will be used to drill through the unconsolidated deposits, estimated at 180 feet. Then, air rotary will be used as originally proposed for drilling through the rock. This change to mud rotary will be completed as follows:

- ◆ Drilling from the ground surface to 140 feet bgs will be completed with mud rotary, using the mud to maintain an eight inch diameter hole, and eliminating the need for advancing casing as the drilling progressed for this initial distance.
- ◆ Once the hole has been advanced to 140 feet bgs, six inch diameter casing will be installed in the bore hole. The next ten feet will then be drilled using mud

Mr. Steve Ales  
Wisconsin Department  
of Natural Resources  
Page 2


rotary with a six inch hole in preparation for the collection of the first vertical profile sample at 150 feet bgs.

- ◆ The vertical profile sample will be collected from the 150 foot interval after installing a packer and purging the mud from the packer string and then removing four or more borehole volumes of clear water from the portion of the borehole not sealed off by the packer. With the exception of the mud removal, this sampling procedure is identical to that originally proposed for use with air rotary drilling.
- ◆ After sample collection, drilling will continue and casing will be advanced as the borehole is advanced. Below 140 feet, advancing the casing is not anticipated to be a problem because the coarse gravel and cobble material is not thought to be present at this depth based on the private well log for the former Bosveld well.
- ◆ The casing will be advanced to the top of rock. Once in rock, air rotary drilling methods will be used to complete the hole, and casing should not be required to maintain an open borehole.
- ◆ As was proposed with the air rotary drilling method, split spoon samples will still be collected from 85 feet bgs to the top of rock during mud rotary drilling. Geologic information from 0 to 85 feet bgs is available from the log completed during the drilling for the installation of the adjacent shallow piezometer.

Please call if you have any questions or require additional clarification.

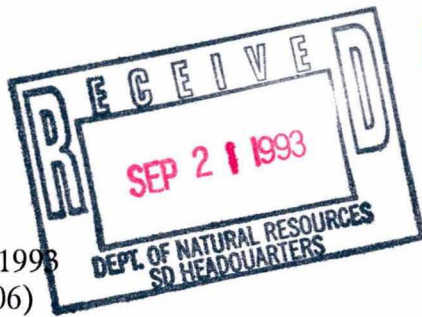
Sincerely,

SIMON HYDRO-SEARCH

  
Judy L. Fassbender  
Hydrogeologist  
RI Task Coordinator

JLF:cb

cc: Mr. Raymond Roder, Whyte & Hirschboeck, S.C.  
Mr. Rick Kubler, Gray, Plant, Mooty, Mooty , and Bennett, P.A.



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Telephone (414)792-1282  
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September 20, 1993  
(304733096/1006)

Mr. Steve Ales  
Wisconsin Department of Natural Resources  
3911 Fish Hatchery Road  
Fitchburg, WI 53711

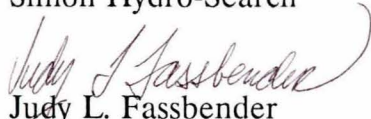
RE: Postponement of Submission Deadline for Ripon FF/NN Landfill RI/FS Technical Memorandum #1

Dear Steve:

As we discussed on the phone Friday September 17, 1993, we will require a postponement of the submission deadline for Technical Memorandum #1 for the Ripon FF/NN Landfill to allow for incorporation of all of the available source characterization data and adequate review time for the PRP Group's technical advisory committee. Technical Memorandum #1 will be submitted to you on Thursday, October 14, 1993. Thank you for your understanding in this matter.

Sincerely,

Simon Hydro-Search

  
Judy L. Fassbender  
Project Manager

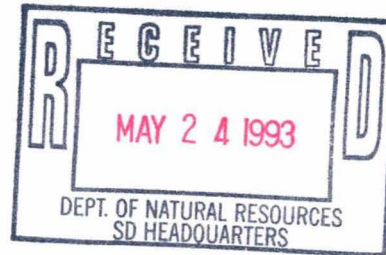
JLF/gf

cc: Mr Raymond Roder, Whyte Hirschboeck & Dudek S.C.

May 20, 1993  
(304733096/1005)

175 N. Corporate Drive  
Suite 100  
Brookfield, WI 53045  
Telephone (414)792-1282  
Facsimile (414)792-1310

Mr. Steve Ales  
Wisconsin Department of Natural Resources  
3911 Fish Hatchery Road  
Fitchburg, WI 53711



RE: Investigative Waste Handling Procedures for the Ripon FF/NN Landfill RI/FS

Dear Steve:


The results of the investigative waste samples collected during air rotary drilling are attached. No volatile organic compounds were detected in the water or cutting sample. based on these results, ground water and drill cuttings discharged during air rotary drilling will not require treatment prior to disposal. Discharge of water and cuttings to the ground surface has been selected as the disposal alternative for the investigative waste.

If this disposal method is approved by the Wisconsin Department of Natural Resources, care will be taken to ensure discharged water and cuttings do not create an unsafe working environment. Precautions will also be taken to prevent the discharged water from entering the ditch to the west of the former Bosveld property to avoid possible drainage to adjacent wetlands.

Please call if you have any questions or require additional clarification. Also, please notify us of your agreement with the recommendations by phone, at (414) 792-1282.

Sincerely,

SIMON HYDRO-SEARCH

  
Judy L. Fassbender  
Hydrogeologist  
RI Task Coordinator

JLF:cb

cc: Mr. Raymond Roder, Whyte & Hirschboeck, S.C.  
Mr. Rick Kubler, Gray, Plant, Mooty, Mooty, and Bennett, P.A.

Sample Number: 6716-0001  
 Footnotes (F&F) & Flags:  
 Warzyn ID#: 6716-0001  
 Client ID: 55004720 Sample ID: P-103

Date Analyzed: 1. 5-19-93 2. \_\_\_\_\_ 3. \_\_\_\_\_ Batch#: \_\_\_\_\_  
 Rerun/Comment: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_ Logbook/pg#: 5998/5 p40  
 Waters File ID: 1. LOK4 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 Matrix: H<sub>2</sub>O Preservation: None Instrument ID: 3400-5998  
 % Solids: \_\_\_\_\_ % Solids Ref. (Batch #): \_\_\_\_\_

Compounds	Reporting Limit		D.F. *	Concentration **		F&F
	ug/L	ug/kg		ug/L	ug/kg	
1 Benzene	1.0	5.0	1.0	<1.0		
2 Bromodichloromethane	1.0	5.0		↓		
3 Bromoform	1.0	5.0		↓		
4 Bromomethane	2.0	10		<2.0		
5 Carbon Tetrachloride	1.0	5.0		<1.0		
6 Chlorobenzene	1.0	5.0		↓		
7 Chlorodibromomethane	1.0	5.0		↓		
8 Chloroethane	2.0	10		<2.0		
9 2-Chloroethylvinyl ether	10	50		<10		
10 Chloroform	1.0	5.0		<1.0		
11 Chloromethane	2.0	10		<2.0		
12 1,2-Dichlorobenzene	1.0	5.0		<1.0		
13 1,3-Dichlorobenzene	1.0	5.0				
14 1,4-Dichlorobenzene	1.0	5.0				
15 1,1-Dichloroethane	1.0	5.0				
16 1,2-Dichloroethane	1.0	5.0				
17 1,1-Dichloroethene	1.0	5.0				
18 cis-1,2-Dichloroethene	1.0	5.0				
19 trans-1,2-Dichloroethene	1.0	5.0				
20 1,2-Dichloropropane	1.0	5.0				
21 cis-1,3-Dichloropropene	1.0	5.0				
22 trans-1,3-Dichloropropene	1.0	5.0				
23 Ethylbenzene	1.0	5.0		↓		
24 Methylene Chloride	3.0	15		<3.0		
25 1,1,2,2-Tetrachloroethane	1.0	5.0		<1.0		
26 Tetrachloroethene	1.0	5.0				
27 Toluene	1.0	5.0				
28 1,1,1-Trichloroethane	1.0	5.0				
29 1,1,2-Trichloroethane	1.0	5.0				
30 Trichloroethene	1.0	5.0				
31 Trichlorofluoromethane	1.0	5.0				
32 Vinyl Chloride	1.0	5.0		↓		
33 m and p-Xylene	2.0	10		<2.0		
34 o-Xylene	1.0	5.0	↓	<1.0		

\* Dilution factor  
 \*\* Concentration equation:  $Concentration (ppb) = \frac{Peak\ response - A}{B}$  Where: A = y-Intercept  
 B = Slope

Calc. by/date: SA/5-20-93 Reviewed by: JCW 5-20-93 Approved by: PML 05-20-93

Sample Number

Warzyn ID#: 6716-0002      Footnotes (F&F) & Flags

Client ID: 55004720      Sample ID: P-103

Date Analyzed: 1. 5-19-93      2. \_\_\_\_\_      3. \_\_\_\_\_      Batch#: \_\_\_\_\_

Iterun/Comment: 1. \_\_\_\_\_      2. \_\_\_\_\_      3. \_\_\_\_\_      Logbook/pg#: 59915, 40

Waters File ID: 1. LOX5      2. \_\_\_\_\_      3. \_\_\_\_\_

Matrix: SOIL      Preservation: None      Instrument ID: 3400-5998

% Solids: NA      % Solids Ref. (Batch #): NA

Compounds	Reporting Limit		D.F. *	Concentration ** ug/L, (ug/kg) or ug/kg dry weight	F&F
	ug/L	ug/kg			
1 Benzene	1.0	5.0	5.0	<5.0	
2 Bromodichloromethane	1.0	5.0		↓	
3 Bromoform	1.0	5.0		↓	
4 Bromomethane	2.0	10		<10	
5 Carbon Tetrachloride	1.0	5.0		<5.0	
6 Chlorobenzene	1.0	5.0		↓	
7 Chlorodibromomethane	1.0	5.0		↓	
8 Chloroethane	2.0	10		<10	
9 2-Chloroethylvinyl ether	10	50		<50	
10 Chloroform	1.0	5.0		<5.0	
11 Chloromethane	2.0	10		<10	
12 1,2-Dichlorobenzene	1.0	5.0		<5.0	
13 1,3-Dichlorobenzene	1.0	5.0		↓	
14 1,4-Dichlorobenzene	1.0	5.0		↓	
15 1,1-Dichloroethane	1.0	5.0		↓	
16 1,2-Dichloroethane	1.0	5.0		↓	
17 1,1-Dichloroethene	1.0	5.0		↓	
18 cis-1,2-Dichloroethene	1.0	5.0		↓	
19 trans-1,2-Dichloroethene	1.0	5.0		↓	
20 1,2-Dichloropropane	1.0	5.0		↓	
21 cis-1,3-Dichloropropene	1.0	5.0		↓	
22 trans-1,3-Dichloropropene	1.0	5.0		↓	
23 Ethylbenzene	1.0	5.0		↓	
24 Methylene Chloride	3.0	15		<15	
25 1,1,2,2-Tetrachloroethane	1.0	5.0		<5.0	
26 Tetrachloroethene	1.0	5.0		↓	
27 Toluene	1.0	5.0		↓	
28 1,1,1-Trichloroethane	1.0	5.0		↓	
29 1,1,2-Trichloroethane	1.0	5.0		↓	
30 Trichloroethene	1.0	5.0		↓	
31 Trichlorofluoromethane	1.0	5.0		↓	
32 Vinyl Chloride	1.0	5.0		↓	
33 m and p-Xylene	2.0	10		<10	
34 o-Xylene	1.0	5.0	↓	<5.0	

\* Dilution factor

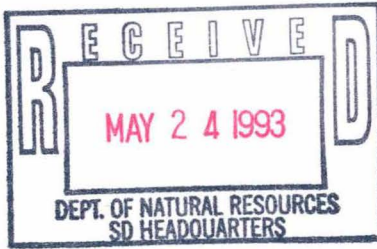
\*\* Concentration equation:  $Concentration (ppb) = \frac{Peak\ response - A}{B}$

Where: A = y-Intercept  
B = Slope

Calc. by/date: YNS-20-93      Reviewed by: Jew 5-20-93      Approved by: Paul 05-20-93



May 20, 1993  
(304733096/1005)



175 N. Corporate Drive  
Suite 100  
Brookfield, WI 53045  
Telephone (414)792-1282  
Facsimile (414)792-1310

Mr. Steve Ales  
Wisconsin Department of Natural Resources  
3911 Fish Hatchery Road  
Fitchburg, WI 53711

RE: Investigative Waste Handling Procedures for the Ripon FF/NN Landfill RI/FS

Dear Steve:

Subsurface conditions encountered during drilling activities for the Ripon FF/NN Landfill investigation have resulted in a change in drilling method. Drilling of unconsolidated deposits at the site was to be completed using hollow stem auger drilling methods, however, large cobbles and boulders present in the glacial deposits at the site have been encountered and have caused auger refusal, resulting in some lost footage. To limit the potential for lost footage, the drilling method has been changed. Air rotary methods will be used in place of the hollow stem auger techniques because the air rotary drilling can drill through most cobbles and boulders.

The air rotary technique produces significantly more investigative waste, most of which is difficult to contain. In our conversation May 17, 1993, we discussed the investigative waste handling requirements for the air rotary drilling at the Ripon FF/NN Landfill RI/FS. This letter confirms our understanding of the previous discussion.

- ◆ Ground water discharged during air rotary drilling will be evaluated for VOC content to determine if treatment is required prior to disposal. One sample of the ground water discharged will be collected and submitted for laboratory analysis of VOCs during air rotary drilling. Based on results of sampling, a disposal alternative will be selected. The alternatives under consideration include discharge to the ground surface or treatment of the discharged ground water at the Ripon waste water treatment facility. If the discharge of the water to the ground surface is approved, care will be taken to ensure

discharged water does not create an unsafe working environment. Precautions will also be taken to prevent the discharged water from entering the ditch to the west of the former Bosveld property to avoid possible drainage to adjacent wetlands.

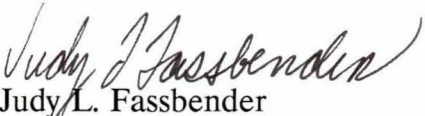
- ◆ One sample of drill cuttings from below the water table will also be analyzed for VOCs prior to disposal. The samples will be collected from the same zones as the discharge water detailed above and analyzed to confirm the presence or absence of VOCs in the investigative wastes. Based on the results, a disposal option will be selected and may include discharge to the ground surface or temporary storage at the landfill, for inclusion in the final remedy.

\* \* \* \* \*

Please call if you have any questions or require additional clarification. Also, please notify us of your agreement with the recommendations by phone, at (414) 792-1282.

Sincerely,

SIMON HYDRO-SEARCH

  
Judy L. Fassbender  
Hydrogeologist  
RI Task Coordinator

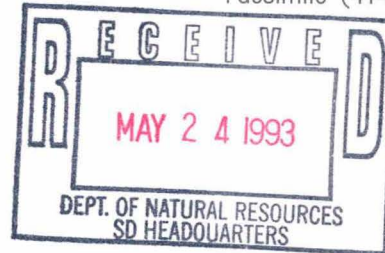
JLF:cb

cc: Mr. Raymond Roder, Whyte & Hirschboeck, S.C.  
Mr. Rick Kubler, Gray, Plant, Mooty, Mooty, and Bennett, P.A.

May 20, 1993  
(304733096/1002)

175 N. Corporate Drive  
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Brookfield, WI 53045  
Telephone (414)792-1282  
Facsimile (414)792-1310

Mr. Steve Ales  
Wisconsin Department of Natural Resources  
3911 Fish Hatchery Road  
Fitchburg, WI 53711



RE: In-Field Modifications from Project Plans for the Ripon FF/NN Landfill RI/FS

Dear Steve:

Field conditions noted during drilling activities have warranted a modifications to the Project Plans as proposed for the Ripon FF/NN landfill. The modification pertains to the construction of the three leachate wells installed on the landfill. In the project plans, leachate well depth is specified as intersecting the water table. This was proposed because of:

- 1) the minimal distance suspected between the water table and the base of the refuse,
- 2) the absence of a landfill liner and therefore
- 3) the probable absence of an unsaturated zone beneath the landfill.

During drilling for the installation of the leachate wells, the base of the fill was noted at a shallower depth than anticipated. There appears to be a thin silty layer, about six to twelve inches thick, at the base of the landfill which is limiting leakage from the landfill to the unconsolidated deposits below. The deposits immediately underlying the silty layer consisted of silty sand which was not saturated.

The existence of the silt layer and unsaturated zone beneath the landfill indicate that leachate migration through the base of the landfill is limited. If the leachate wells extended through the refuse, the silty layer, the unsaturated zone beneath the landfill, and into the water table, it is likely that the leachate wells would create a migration pathway for the leachate to the ground water. As a result, the leachate wells were constructed to the base of the fill material and not to the water table.

Also, one attempt to locate the leachate interceptor trench has been made and was unsuccessful. The attempt was made using split spoon samples collected through the cap, but no evidence of the trench was noted. On May 26 or 27, 1993, a backhoe will be used

to attempt to locate the interceptor trench. Four test pits approximately 1 to 2 feet wide, 3 feet deep, and 10 to 15 feet in length are proposed. The test pits will be aligned perpendicular to the interceptor trench. All materials removed during trenching will be placed back in the excavation.

Please call if you have any questions or require additional clarification. Also, please notify us of your agreement with the recommendations by phone, at (414) 792-1282.

Sincerely,

SIMON HYDRO-SEARCH



Judy L. Fassbender  
Hydrogeologist  
RI Task Coordinator

JLF:cb

cc: Mr. Raymond Roder, Whyte & Hirschboeck, S.C.  
Mr. Rick Kubler, Gray, Plant, Mooty, Mooty, and Bennett, P.A.

May 3, 1993  
(473115113/8001)

175 N. Corporate Drive  
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Brookfield, WI 53005  
Telephone (414) 792-1282  
Facsimile (414) 792-1310



Mr. Steve Ales  
Wisconsin Department of Natural Resources  
3911 Fish Hatchery Road  
Fitchburg, WI 53711

RE: Investigative Waste Handling Procedures for the Ripon FF/NN Landfill RI/FS

Dear Steve:

In recent conversations, we have discussed the investigative waste handling requirements for the Ripon FF/NN Landfill RI/FS. This letter confirms our understanding of previous discussions.

- ◆ Several of the proposed monitor wells are to be located in or near the wetlands adjacent to the landfill. Several permits would be required to discharge drill cuttings, purge water or any other substance to the wetlands. The WDNR has advised that it is unlikely that we could easily obtain these permits and has requested that we avoid discharging any substances to the wetlands. The drill cuttings, development and other purge water produced at the wetland well locations will be removed from the wetland area. The cuttings will be placed at the landfill. The discharge fluids will be stored at the landfill until preliminary laboratory results are received. The fluids will be discharged to the ground surface in the area to the northeast of the landfill if contaminant concentrations are low enough to be discharged without treatment. If the fluids require treatment prior to discharge, arrangements will be made for fluid disposal at the Ripon waste water treatment facility.
  
- ◆ Ground water discharged during air rotary or air hammer drilling for the 350-foot piezometer will be evaluated for VOC content to determine if treatment is required prior to disposal. Two samples of the ground water discharged will be collected and submitted for laboratory analysis of VOCs

during drilling for the deep piezometer. One sample will be collected from the top 25 feet of saturated deposits and the second will be collected from a lower depth to confirm the results from the first sample. Based on results of sampling, a disposal alternative will be selected. The alternatives under consideration include discharge to the ground surface or treatment of the discharged ground water at the Ripon waste water treatment facility. If the discharge of the water to the ground surface is approved, care will be taken to ensure discharged water does not create an unsafe working environment. Precautions will also be taken to prevent the discharged water from entering the ditch to the west of the former Bosveld property to avoid possible drainage to adjacent wetlands.

- ◆ Two samples of drill cuttings from below the water table at the deep piezometer will be analyzed for VOCs prior to disposal. The samples will be collected from the same zones as the discharge water detailed above and analyzed to confirm the presence or absence of VOCs in the investigative wastes. Based on the results, a disposal option will be selected and may include discharge to the ground surface or temporary storage at the landfill, for inclusion in the final remedy.
  
- ◆ During previous conversations, the possibility of collecting water from decontamination procedures was discussed. The amount of decontamination water anticipated to be generated will be minor and will be unlikely to contain high contaminant concentrations. Collection of the decontamination water will be difficult and is probably not warranted given the nature and concentrations anticipated to be encountered. Initially, we plan to screen the decontamination water with an HNu PID prior to discharge. If VOCs are not detected in the decontamination water from the equipment used for leachate

head well installation or for near source monitor wells, we will not contain water used for decontamination. We have selected an area of the landfill property to use as the decontamination pad.

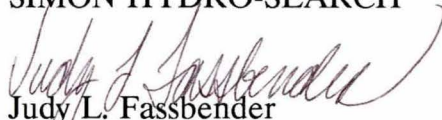
- ◆ Ground water purged from monitor wells during development, testing, and sampling will be temporarily stored in drums near the well until the initial sample results are received. If contaminants are not detectable or present at low concentrations, the purge water will be discharged to the ground surface near the originating monitor wells. The amount of purge water generation anticipated and the level of contamination present will not likely cause additional environmental concern if discharged at the ground surface. Arrangements will be made to dispose of any purge water found to be significantly impacted at the Ripon waste water treatment plant.

\* \* \* \* \*

Please call if you have any questions or require additional clarification. Also, please notify us of your agreement with the recommendations by phone, at (414) 792-1282.

Sincerely,

SIMON HYDRO-SEARCH

  
Judy L. Fassbender  
Hydrogeologist  
RI Task Coordinator

JLF:cb

cc: Ray Roder, Whyte & Hirschboeck  
Rick Kubler, Gray, Plant, Mooty, Mooty & Bennett  
John Baker, Cooper Industries



**State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES**

101 South Webster Street

Box 7921

Madison, Wisconsin 53707

SOLID WASTE TELEFAX 608-267-2768

TELEFAX 608-267-3579

TDD 608-267-6897

George E. Meyer  
Secretary

April 14, 1993

Ms. Sue Courter, Hydrogeologist  
Omni Engineers  
303 S. Bluemound Dr.  
Appleton, WI 54194

RECEIVED  
APR 19 1993  
Dept. of Natural Resources  
S. D. Headquarters

File Ref: 4400  
Fond du Lac  
ERP/Proj.

SUBJECT: Ripon FF/NN Landfill Superfund RI/FS Oversight Contract

Dear Courter:

Enclosed are three copies of the Oversight Contract for the above-noted project. Please sign and date two of the copies and return them to me at the above Department address, floor no. SW/3. You may keep the third copy for your records. All contracts for services exceeding \$30,000.00 must be signed by the Governor. Do not proceed with any work under this contract until you receive a notice to proceed from the Department.

Please call if you have any questions on the above at 608-267-2465.

Sincerely,

Marie Stewart, Program Coordinator  
Emergency and Remedial Response Section  
Bureau of Solid and Hazardous Waste

CC: Dave Behn -FN/1  
Steve Ales - SOD



**State of Wisconsin**  
**DEPARTMENT OF NATURAL RESOURCES**  
**Madison, Wisconsin**

THIS AGREEMENT is made and entered into by and between the State of Wisconsin, hereinafter called the "State", by its Department of Natural Resources, hereinafter called the "Department", executing this Agreement, and OMNI ENGINEERS, hereinafter called the "Consultant", for the work included in the proposal entitled: "ESTIMATE OF COST FOR FIELD OVERSIGHT, RIPON LANDFILL REMEDIAL INVESTIGATION" dated APRIL 9, 1993, for the amount not to exceed \$68,187.90 (Sixty-Eight Thousand, One Hundred and Eighty-Seven Dollars and Ninety Cents). This includes \$61,989.00 (Sixty-One Thousand, Nine Hundred Eighty-Nine Dollars and No Cents) stipulated for the proposed Scope of Work and \$6,198.90 (Six Thousand, One Hundred Ninety-Eight Dollars and Ninety Cents) contingency which may be utilized for this project AT THE SOLE DISCRETION OF THE DEPARTMENT.

**WITNESSETH**

**WHEREAS**, the Department proposes development of a project, hereinafter named the "Project", which is described as follows: THE RIPON FF/NN LANDFILL, SUPERFUND RI/FS OVERSIGHT PROJECT,

**WHEREAS**, the Department deems it advisable to engage the services of a Consultant to furnish professional services in connection with this project, and

**WHEREAS**, the Department has authority as provided in Section 23.41 of the Wisconsin Statutes to engage such services; and

**WHEREAS**, the Consultant has signified its willingness to furnish services for the Department;

**NOW THEREFORE**, in consideration of these premises and their mutual and dependent agreements, the parties hereto agree as set forth in the following pages which are annexed hereto and made a part hereof, (Pages 1 to 6, inclusive) and include the GENERAL TERMS AND CONDITIONS; THE PROPOSAL, entitled "ESTIMATE OF COST FOR FIELD OVERSIGHT, RIPON LANDFILL REMEDIAL INVESTIGATION", dated APRIL 9, 1993 ("EXHIBIT A") and THE DEPARTMENT OF NATURAL RESOURCES STATEMENT OF WORK DATED FEBRUARY 15, 1993 ("EXHIBIT B").

**IN WITNESS WHEREOF**, the Department and the Consultant have executed this Agreement.

OMNI ENGINEERS

STATE OF WISCONSIN  
DEPARTMENT OF NATURAL RESOURCES

By \_\_\_\_\_

By \_\_\_\_\_  
George E. Meyer, Secretary

Title \_\_\_\_\_

Date \_\_\_\_\_

Date \_\_\_\_\_

Approved:

\_\_\_\_\_  
TOMMY G. THOMPSON, Governor

Date \_\_\_\_\_

**PROFESSIONAL SERVICES AGREEMENT**  
**GENERAL TERMS AND CONDITIONS**

1. Affirmative Action.
2. Antitrust Assignment.
3. Applicable Law.
4. Approvals or Inspections.
5. Assignment.
6. Cancellation; Termination.
7. Change Orders.
8. Deduction For Uncorrected Work.
9. Deliverables.
10. Disclosure.
11. Dispute Resolution.
12. Entire Agreement; Amendments.
13. Extra Work and Special Cases.
14. Force Majeure.
15. Guaranteed Delivery.
16. Indemnification; Liability.
17. Independent Contractor.
18. Insurance.
19. Inventions, Patents, Trademarks and Copyrights.
20. Late Penalties.
21. No Waiver of Conditions.
22. Nondiscrimination.
23. Ownership of Documents.
24. Ownership of Wastes.
25. Payment.
26. Payment Terms and Invoicing.
27. Period of Agreement.
28. Project Management.
29. Records; Access.
30. Rejection of Defective Materials.
31. Release of Information.
32. Request for Payment; Progress Reports.
33. Safety.
34. Scope of Work.
35. Site Access; Data.
36. Standard of Performance.
37. Survival.
38. Survivors and Assigns.
39. Tax Delinquency.
40. Taxes.
41. Testimony.
42. Titles.
43. Warranty.

\* \* \* \* \*

**THE CONSULTANT shall provide professional services for the project in accordance with the terms and conditions of this Agreement.**

**1. AFFIRMATIVE ACTION.** If the amount of this Agreement is ten thousand dollars (\$10,000) or more the Consultant agrees to submit a written affirmative action plan to the Department within 15 business days after the Agreement commences if an acceptable plan is not already on file with the State of Wisconsin. (Consultants with an annual work force of fewer than ten employees are exempted from this requirement.) Failure to comply with the conditions of this clause may result in the Consultant being declared an "ineligible" contractor, termination of the Agreement, or withholding of payment.

**2. ANTITRUST ASSIGNMENT.** The Consultant and the Department recognize that in actual economic practice, overcharges resulting from antitrust violations are in fact usually borne by the Department. Therefore, the Consultant hereby assigns to the Department any and all claims for such overcharges as to goods, materials or services purchased in connection with this Agreement.

**3. APPLICABLE LAW.** This Agreement shall be governed by the laws of the State of Wisconsin. The Consultant shall at all times comply with all federal, state and local laws, ordinances and regulations in effect during the period of this Agreement.

**4. APPROVALS OR INSPECTIONS.** None of the approvals or inspections performed by the Department shall be construed or implied to relieve the Consultant from any duty or responsibility it has for its professional performance, unless the Department formally assumes such responsibility through a letter from the Department expressly stating that the responsibility has been assumed.

**5. ASSIGNMENT.** Neither this Agreement nor any right or duty in whole or in part by the Consultant under this Agreement may be assigned, delegated or sub-contracted without the written consent of the Department.

**6. CANCELLATION; TERMINATION.** A. The Department reserves the right to cancel this Agreement in whole or in part, without penalty, due to nonappropriation of funds or for failure of the Consultant to comply with terms, conditions, or specifications of this Agreement.

B. The Department may terminate this Agreement for any reason at any time upon not less than 10 days' written notice to the Consultant.

C. In the event of termination the Department shall pay the Consultant for that portion of the work satisfactorily performed prior to the date of termination.

D. If this Agreement is cancelled or terminated by the Department for reasons other than the failure of the Consultant to comply with terms, conditions or specifications of this Agreement, the Consultant shall also be entitled to reasonable cancellation or termination costs relating to costs incurred by the Consultant for commitments which had become firm prior to the cancellation or termination.

E. Upon cancellation or termination under PARAGRAPH A. or B., above, the Consultant shall promptly discontinue all affected work (unless the notice of termination directs otherwise), and deliver or otherwise make available to the Department all data, drawings, specifications, reports, estimates, summaries and such other information and materials as may have been accumulated by the Consultant in performing this Agreement, whether completed or in progress.

**7. CHANGE ORDERS.** A. A change order is a written order to the Consultant signed by the Department, issued after the execution of this Agreement, authorizing a change in the work or an adjustment in the Contract Sum or the Contract Time. Change Orders may be initiated by either party at any time.

B. Changes in work shall be within the general scope of the Agreement, consisting of additions, deletions or other revisions; the Contract Sum and the Contract Time being adjusted accordingly. Complete documentation of additional work, cost changes, and contract time shall be provided to the Department by the Consultant.

C. No adjustments to the Contract Sum or the Contract Time may be made for any changes performed by the Consultant that have not been ordered by the Department.

**8. DEDUCTION FOR UNCORRECTED WORK.** If the Department deems it expedient to accept defective work or work not performed in accordance with the Agreement, the difference in value, together with a fair allowance for the damages, may be deducted from the payments that are owed to the Consultant under this Agreement.

**9. DELIVERABLES.** Deliverables are defined as those items included in the Agreement's time schedule.

**10. DISCLOSURE.** If a state public official (as defined under section 19.42, Wis. Stats.), a member of a state public official's immediate family, or any organization in which a state public official or a member of the official's immediate family owns or controls a ten percent (10%) interest, is a party to this Agreement, and if this Agreement involves payment of more than three thousand dollars (\$3,000) within a twelve (12) month period, this

Agreement is voidable by the State unless appropriate disclosure is made according to section 19.45 (6), Wis. Stats., before signing the Agreement. Disclosures shall be made to the State of Wisconsin Ethics Board, 125 South Webster Street, Madison, Wisconsin 53707 (Telephone 608-266-8123).

**11. DISPUTE RESOLUTION.** In the event that a dispute arises between the Department's project manager and the Consultant's project manager, either party may request a conference between the Department's Director of the Bureau of Solid and Hazardous Waste Management and the Consultant's project manager's supervisor (or designee) to resolve the dispute.

**12. ENTIRE AGREEMENT; AMENDMENTS.** This Agreement, together with the specifications in the proposal and referenced parts and attachments, shall constitute the entire agreement and previous communications or agreements pertaining to the subject matter of this Agreement are hereby superseded. Any contractual revisions including cost adjustments and time extensions may be made only by a written amendment to this Agreement, signed by both parties prior to the ending date of this Agreement.

**13. EXTRA WORK AND SPECIAL CASES.** If the Department desires to have the Consultant perform work or render services in connection with this project, other than provided for by the expressed intent of this Agreement, this will be considered as Extra Work, subject to a change order, or extension to this Agreement, setting forth the nature and scope thereof and the compensation therefor as determined by mutual agreement between the parties. Work under a change order or extension may not proceed unless and until it is authorized by the Department.

**14. FORCE MAJEURE.** A. The Consultant shall cause all of its work to be performed within the time limits set forth in this Agreement unless performance is delayed by events that constitute a force majeure. For purposes of this Agreement, a "force majeure" is an event which is not foreseeable, is beyond the control of the Consultant and delays performance of any obligations required by this Agreement, including, but not limited to, delays caused by the Department, delays in obtaining property access or delays in obtaining any necessary permit or license after a complete application is made.

B. The Consultant shall notify the Department in writing no later than five (5) calendar days after the discovery of any event which the Consultant contends is a force majeure. Such notification shall describe the anticipated length of the delay, the cause or causes of the delay, the measures taken and to be taken by the

Consultant to minimize the delay, and the timetable by which these measures will be implemented. The Consultant shall have the burden of demonstrating that the event is a force majeure. The Department shall promptly provide the Consultant with a written decision as to whether and why the event does or does not constitute a force majeure after receiving notification from the Consultant. If the Consultant does not agree with the findings of the Department project management staff, then a conference with the Department's Director of the Bureau of Solid and Hazardous Waste Management will be arranged with the Consultant to resolve the force majeure issue.

C. If the Department agrees that a delay is attributable to a force majeure, the time period for a performance under this Agreement shall be extended for a reasonable time period attributable to the event constituting a force majeure.

**15. GUARANTEED DELIVERY.** Failure of the Consultant to adhere to delivery schedules as specified or to promptly replace rejected materials shall render the Consultant liable for all costs in excess of the Agreement price when alternate procurement is necessary. Excess costs shall include the Department's administrative costs.

**16. INDEMNIFICATION; LIABILITY.** A. The Consultant agrees to save, keep harmless, defend and indemnify the State, the Department and all their officers, employees and agents, against any and all liability, claims and costs for injury to or death of any person or persons, and for loss or damage to any property (state or other) caused by or arising out of any wilful misconduct, negligent act, error or omission by the Consultant or any of its agents, representatives, subcontractors or employees occurring in connection with or in any way incident to or arising out of performance of this Agreement. This PARAGRAPH does not apply to liability, claims and costs to the extent that they result from the wilful misconduct, negligent act, error or omission of the State, the Department or their officers, employees or agents.

B. The Department recognizes and agrees that its employees are subject to liability as provided by sections 893.82 and 895.46, Wis. Stats. Therefore, its employees will be liable for their acts under these provisions and will not be acting on behalf of or as agents of the Consultant.

**17. INDEPENDENT CONTRACTOR.** The Department agrees that the Consultant shall have sole control of the method, hours worked, and time and manner of any performance under this Agreement other than as specifically provided herein. The Department reserves the right only to inspect the job site or premises for the purpose of insuring that the performance is progressing or has been completed in compliance with the Agreement.

The Department takes no responsibility for supervision or direction of the performance of the Agreement to be performed by the Consultant or the Consultant's employees or agents. The Department further agrees that it will exercise no control over the selection and dismissal of the Consultant's employees or agents.

**18. INSURANCE.** The Consultant shall maintain, during the term of this Agreement, worker's compensation insurance as required by Wisconsin Statutes for all employees engaged in the work; comprehensive automobile liability insurance; and public liability and property damage insurance against any claim(s) which might occur in carrying out the Agreement. Minimum coverages are \$1,000,000 single limit liability or \$500,000 bodily injury per person and \$1,000,000 per occurrence and \$500,000 property damage. The comprehensive automobile liability insurance policy and the public liability insurance policy shall include the "Department of Natural Resources and its employees" as additional named-insureds. Insurance certificates shall be provided to the Department indicating this coverage, counter-signed by an insurer licensed to do business in Wisconsin, and covering the period of the Agreement.

**19. INVENTIONS, PATENTS, TRADEMARKS AND COPYRIGHTS.** A. The Consultant hereby assigns to the Department the entire right, title and interest for the entire world in and to all work performed, writings, formulas, designs, models, drawings, photographs, design inventions and other inventions made, conceived or reduced to practice or authored by the Consultant or the Consultant's employees, either solely or jointly with others, while performing this Agreement or with use of information, materials or facilities of the Department received or used by the Consultant during the period in which the Consultant is retained by the Department or its successors under this Agreement or any extensions or renewals of this Agreement.

B. The Consultant shall promptly disclose to the Department all works, writings, formulas, designs, models, drawings, photographs, design inventions and other inventions made, conceived or reduced to practice or authored by the Consultant or the Consultant's employees in the course of the performance of this Agreement.

C. The Consultant shall sign, execute and acknowledge or cause to be signed, executed and acknowledged without cost, but at the expense of the Department, any and all documents and to perform such acts as may be necessary, useful or convenient for the purpose of securing to the Department or its nominees, patent, trademark or copyright protection throughout the world upon all such works, writings, formulas, designs, models, drawings, photographs, design inventions and

other inventions, title to which the Department may acquire in accordance with the provisions of this SECTION.

D. The Consultant has acquired or shall acquire from each of its employees the necessary rights to all such works, writings, formulas, designs, models, drawings, photographs, design inventions and other inventions made by such employees within the scope of their employment by the Consultant in performing services under this Agreement. The Consultant shall obtain the cooperation of each such employee to secure to the Department or its nominees the rights to such works, writings, formulas, designs, models, drawings, photographs, design inventions and other inventions as the Department may acquire in accordance with the provisions of this SECTION.

**20. LATE PENALTIES.** A. The Consultant shall be liable for the payment of penalties to the Department of the sums set forth below for each week that the Consultant fails to submit a report or document required under this Agreement's time schedule unless the Department determines that such delay is attributable to a force majeure as defined in SECTION 14., above, or a different schedule is agreed to by the parties, in writing, before the date the report or document is due. Penalties, if applicable, shall be due and payable by the Consultant within fifteen (15) calendar days of receipt of notification from the Department assessing the penalties. These penalties shall accrue in the amount of \$500 for the first week and \$1,000 for each week thereafter, for each report or document which is overdue. The Department may subtract penalties which accrue under this SECTION from payments that are owed to the Consultant under this Agreement.

B. Assessment of penalties under this SECTION does not preclude the Department from pursuing any other remedies or sanctions because of the Consultant's failure to comply with any of the terms of this Agreement, including a suit to enforce the terms of this Agreement.

C. With respect to any individual failure to submit a report or document required under this Agreement's time schedule, the Department may at its sole discretion, in whole or in part, waive its right to penalties otherwise due under this SECTION.

**21. NO WAIVER OF CONDITIONS.** The failure of either party to insist on strict performance of this Agreement does not constitute a waiver of any of the provisions of this Agreement or a waiver of any default of the other party.

**22. NONDISCRIMINATION.** In connection with the performance of work under this Agreement, the Consultant agrees not to discriminate against any employee or applicant for employment because of age,

race, religion, color, handicap, sex, physical condition, developmental disability as defined in section 51.01 (5), Wis. Stats., sexual orientation or national origin. This provision shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. Except with respect to sexual orientation, the Consultant further agrees to take affirmative action to ensure equal employment opportunities. The Consultant agrees to post in conspicuous places, available for employees and applicants for employment, notices to be provided by the Department setting forth the provisions of this nondiscrimination clause. Failure to comply with the conditions of this clause may result in the Consultant being declared an "ineligible" contractor, termination of the Agreement, or withholding of payment.

**23. OWNERSHIP OF DOCUMENTS.** Upon completion of the services provided for in this Agreement, or upon payment for services as provided for in SECTION 7., all specifications, charts, sketches, drawings and other documents, whether finished or not, shall become the property of the Department.

**24. OWNERSHIP OF WASTES.** The Department acknowledges that the Consultant is not, by virtue of this Agreement, the owner of any waste materials generated as a result of the services performed by the Consultant under this Agreement.

**25. PAYMENTS.** A. The Consultant shall be paid by the Department for the completed work or services rendered under this Agreement at the price set forth elsewhere in this Agreement, and for "Extra Work", if any, at the compensation set forth in the approved orders covering the Extra Work.

B. Such payment shall be full compensation for work performed or services rendered and for all labor, material, supplies, equipment and incidentals necessary to complete the work.

**26. PAYMENT TERMS AND INVOICING.** Payment shall be considered timely if the payment is mailed, delivered, or transferred by the later of the following:

A. The date specified on a properly completed invoice for the amount specified in the order or Agreement, or

B. Within thirty (30) days after receipt of a properly completed invoice or receipt and acceptance of the property or service under the order or Agreement or within thirty (30) days after receipt of an improperly completed invoice or receipt and acceptance of the property or service under the order or Agreement,

whichever is later if the Department does not notify the sender of receipt of an improperly completed invoice within ten (10) working days after it receives the invoice of the reason it is improperly completed.

**27. PERIOD OF AGREEMENT.** This Agreement shall commence upon its signing by both parties (including approval by the Governor of the State if required) and shall follow the schedule developed in the proposal, during which period all performance as described in this Agreement shall be fully completed to the satisfaction of the Department.

**28. PROJECT MANAGEMENT.** The Department's project manager for this project is MR. STEVE ALES located in the Department's SOUTHERN DISTRICT Headquarters Office in FITCHBRYG, WISCONSIN. The Consultant has identified MS. SUE COURTER as its project manager. If either the Consultant or the Department changes its project manager for this project, notification of this change shall be sent to the other party within ten days of such a change with the name of the new project manager included.

**29. RECORDS, ACCESS.** The Consultant shall, for a period of three (3) years after completion and acceptance by the Department, maintain books, records, documents and other evidence directly pertinent to performance on work under this Agreement in accordance with generally accepted accounting principles and practices. The Consultant shall also maintain the financial information and data used in the preparation or support of the cost submission in effect on the date of execution of this Agreement and a copy of the cost summary submitted to the Department. The Department, its agents and duly-authorized representatives shall have access to such books, records, documents, and other evidence for the purpose of inspection, audit and copying. The Consultant shall provide proper facilities for such access, inspection and copying. In addition, those records which relate to any dispute, appeal or litigation, or the settlement of claims arising out of such performance, or costs or items to which an audit exception has been taken, shall be maintained and made available until three years after the date of resolution of such dispute, appeal, litigation, claim or exception.

**30. REJECTION OF DEFECTIVE MATERIALS.** The Department may reject materials and workmanship which are defective or it may require their correction. Rejected workmanship shall be satisfactorily corrected, and rejected materials shall be removed from the project site without charge to the Department. If the Consultant does not correct such condemned work and remove rejected materials within a reasonable time, fixed by

written notice, the Department may remove them and charge the expense to the Consultant.

**31. RELEASE OF INFORMATION.** The Consultant may not issue press releases or provide information to any third party regarding the project without the prior written approval of the Department.

**32. REQUEST FOR PAYMENT; PROGRESS REPORTS.** The Consultant shall submit invoices to the Department on a monthly basis during the progress of the work for partial payment on account, for the work completed and accepted to date. Pay request formats shall match as closely as possible to the cost proposal format. Each category from the cost proposal shall detail, by task, the hours and costs of each staff level. All invoices detailing the Consultant's work and subcontracted work shall be attached. Copies of all staff time sheets or summary time data used to invoice pay requests should be attached to the invoice. Unless the Department directs otherwise, all receipts for equipment, materials and other expenses shall be attached to the pay request. The pay request along with a monthly progress report shall be sent directly to the Department's project manager.

**33. SAFETY.** The Consultant shall initiate, maintain and provide coordination of safety precautions and programs in connection with its services. However, the Consultant is not responsible for the elimination or abatement of safety hazards created or otherwise resulting from work at the project site carried on by other persons or firms directly employed by the Department as separate consultants or contractors. The Department agrees to require any such separate consultants or contractors to comply with federal, state and local safety laws and regulations and to comply with all reasonable requests and directions of the Consultant for the elimination or abatement of any safety hazards at the project site.

**34. SCOPE OF WORK.** Subject to the terms and conditions set forth in this Agreement, the Department engages the Consultant for the furnishing of services in the area of EVALUATION OF THE RI/FS WORKPLANS AND OVERSIGHT OF THE RESPONSIBLE PARTY'S CONSULTANTS FIELD WORK as specifically described in Exhibit "A" entitled: "ESTIMATE OF COST FOR FIELD OVERSIGHT, RIPON LANDFILL REMEDIAL INVESTIGATION" dated APRIL 9, 1993, and in Exhibit "B" entitled; "STATEMENT OF WORK" by the Department of Natural Resources, dated FEBRUARY 15, 1993, copies of which are attached to and made a part of this Agreement, and for such other tasks as may be mutually agreed upon in writing between the Consultant and the Department.

**35. SITE ACCESS; DATA.** A. Unless the Scope of Work provides otherwise, the Department shall obtain or provide reasonable access for the Consultant to the project site when necessary and at any reasonable time requested.

B. The Department shall attempt to provide the Consultant with all relevant data and information in its possession regarding the project site. However, in providing such data and information, the Department assumes no responsibility for its accuracy, reliability or completeness.

**36. STANDARD OF PERFORMANCE.** The Consultant's services shall be performed with the usual thoroughness, skill and competence of the consulting profession, in accordance with the standard for professional services prevailing at the time those services are rendered.

**37. SURVIVAL.** These General Terms and Conditions shall survive the completion of the services under this Agreement and the termination of this Agreement for any cause.

**38. SUCCESSORS AND ASSIGNS.** The Department and the Consultant each bind themselves, their partners, successors, assigns and legal representatives to the other party to this Agreement and to the partners, successors, assigns and legal representatives of the other party with respect to all covenants of this Agreement.

**39. TAX DELINQUENCY.** Consultants which have a delinquent Wisconsin tax liability may have their payments offset by the State.

**40. TAXES.** The Department is required to pay the Wisconsin excise or occupation tax on its purchase of beer, liquor, wine, cigarettes, tobacco products, motor vehicle fuel and general aviation fuel. However, it is exempt from payment of all federal tax and Wisconsin sales or use tax on its purchases. The State of Wisconsin does not issue a tax exempt number for state agencies. The Department may be subject to other states' taxes on its purchases in that state depending on the laws and of that state. Consultants performing construction activities are required to pay state use tax on the cost of materials.

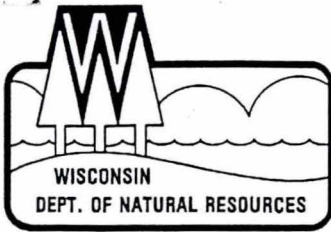
**41. TESTIMONY.** The Consultant shall make its employees available to testify at administrative hearings and in court on behalf of the Department regarding the work conducted under this Agreement. Any costs associated with such testimony shall be billed to the Department on an itemized invoice. The hourly rates charged for testifying and for travel to and from the hearing or court proceeding may not exceed the rates listed on the Consultant's Classification Rate Schedule in effect at the time that the testimony is given.

**42. TITLES.** The headings or titles of SECTIONS of this Agreement are used for convenience and ease of reference and are not intended to limit the scope or intent of the SECTIONS.

**43. WARRANTY.** With respect to any construction work or construction activities performed under this Agreement, except where a longer warranty period is provided by the manufacturer or supplier of any equipment or materials, the Consultant warrants that for one (1) year the work will be free from defects in material or workmanship and that all construction services and material furnished shall be in accordance with the Department's specifications or the proposal. This warranty shall survive acceptance and payment and shall not be exclusive. Manufacturers' warranties received by the Consultant which are applicable to any items furnished by the Consultant shall survive acceptance and payment, and shall run to the Department, its successors and assigns, and may not be exclusive. The Consultant shall obtain any warranties which vendors, contractors and subcontractors would give in normal commercial practice. At the Department's option, the Consultant shall either promptly repair or replace defective items and work after receipt of the Department's written notice of a defect.

- END -

*Routing + File Copy*



George E. Meyer  
Secretary

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Southern District Headquarters  
3911 Fish Hatchery Road  
Fitchburg, Wisconsin 53711  
TELEPHONE 608-275-3266  
TELEFAX 608-275-3338

March 31, 1993

File Ref: Ripon FF/NN Superfund Site

Mr. Ray Roder  
Whyte & Hirschboeck  
One East Main, Suite 300  
P.O. Box 2996  
Madison, WI 53701-2996

SUBJECT: Ripon FF/NN RI/FS Workplans

Dear Mr. Roder:

The Department of Natural Resources received the revised RI/FS workplans for the Ripon FF/NN landfill on March 18, 1993. The plans were revised based upon comments submitted to you in a letter dated February 12, 1993.

The Department approves the RI/FS workplan, the Sampling and Analysis Plan, the Quality Assurance Project Plan and the Data Management Plan for the Ripon FF/NN landfill subject to the following conditions:

1. Section 4, Page 5 of the RI/FS workplan has been revised to include a deep piezometer (approximately 350') at a location to be determined based upon results from other monitoring well drilling, but it will probably be near the old Bosveld well. Should this piezometer indicate concentrations of VOCs in excess of groundwater enforcement standards, additional piezometers will be necessary to define the degree and extent of contamination.
2. Section 11 of the Sampling and Analysis Plan lists the methods for investigative waste. The plan calls for field testing of water and cuttings prior to discharge.

The proposed monitoring well locations have a couple of wells very near the wetlands southwest and north of the site. All of the cuttings, drilling fluids and water must be contained from these wells. A discharge of the drilling wastes into the wetlands would involve NR 103, Wis. Adm. Code and possibly Section 404 of the Clean Water Act. A Section 404 permit, administered by the Corps of Engineers, is needed for discharge of fill into a wetland. By containerizing and collecting all of the drilling wastes, the PRP group can avoid having to obtain the 404 permit and also avoid the NR 103 evaluation on impact to the wetland.



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3. Table 4-1 of the QAPP contains some minor errors that need to be addressed. The errors relate to the sample container for metals analysis. The Department recommends that a conference call take place between Charlene Khazae and myself of the Department, and Judy Fassbender of Simon Hydro-Search. I will contact Ms. Fassbender to make arrangements for the conference call.

Under Section IV.C.7 of contract #SF-92-01 between the Department and the Ripon PRP group, the field work must start within 30 days of Department approval of the workplans. The first aspects of the field investigation shall start the week of May 3, 1993.

Should you have any questions regarding this letter, please contact me at 275-3310. Please notify the members of the Ripon PRP group of this approval letter.

Sincerely,



Stephen M. Ales  
District Hydrogeologist

cc: Patty Hanz - LC/5  
Jane Lemcke - SW/3  
Charlene Khazae - SW/3  
Judy Fassbender, Simon Hydro-Search, 175 N. Corporate Drive, Suite 100,  
Brookfield, WI 53045

175 N. Corporate Drive  
Suite 100  
Brookfield, WI 53045  
Telephone (414)792-1282  
Facsimile (414)792-1310

March 17, 1993

File Ref: Ripon FF/NN Superfund Site

Mr. Steve Ales  
Wisconsin Department of Natural Resources  
3911 Fish Hatchery Road  
Fitchburg, WI 53711

SUBJECT: RI/FS Workplan

Dear Mr. Ales:

Simon Hydro-Search has revised the Project Plans in response to the Wisconsin Department of Natural Resources (WDNR) and the Wisconsin Department of Health and Social Services (DHSS) comments on the Remedial Investigation/Feasibility Study (RI/FS) workplans for the Ripon FF/NN landfill site. Simon Hydro-Search' responses to comments are underlined.

**Work Plan Comments**

<u>Section</u>	<u>Page</u>	<u>Comment</u>
3.4	6&7	Language should be added to this section which states that should barrels, drums, or some other potential source of contamination is uncovered during investigation of the magnetic anomalies, that an addendum to the workplans will be submitted which addresses the proper testing and removal of the source areas.  <u>This language has been added.</u>
4	5	This section states that there will be 10 borings up to 100' deep. This depth is not sufficient. The replacement well at the house just south of the landfill was 350' deep and had consistently high levels of vinyl chloride. This section, and the drilling program needs to have some borings/piezometers that reach this depth. Borings P-105, P-106 and P-107 are the best locations for drilling to the 350' depth.  <u>One 350-foot piezometer has been proposed for installation on the Former Bosveld Property. The exact location of the piezometer will be selected based on the initial round of ground-water samples and water elevation of the first 11 water table wells and 8 piezometers installed at the site.</u>
4	8	Investigative units 2C and 2D don't exist. I think these should be 4A and 4B. Please correct. Also, the surface water and sediment sampling is under investigative units 4a and 4B, not investigative unit 3.  <u>This has been corrected.</u>
4.4.1	9	The sixth sentence of this paragraph pertaining to "Fewer parameters may be included in the analysis..." shall be removed. All the residential wells shall be sampled early in the investigation, at about the same time as the leachate head

wells are sampled. See comments for Fig. 8-2 of the Workplans.

This sentence has been revised to indicate that private wells will be sampled for TCL VOCs early in the investigation. If sampling results from two rounds of samples from the leachate head wells and the monitor wells indicate there may be other contaminants of concern in the private water supply wells, the private wells will be resampled for these contaminants.

7 1 There is no EPA remedial project manager for this site. EPA will provide Superfund support and federal ARARs. Please remove reference to EPA's project manager and Quality Assurance Section.

This has been revised.

Figure 8-2 The schedule calls for private well sampling after developing a short list of parameters from the leachate sampling. This needs to be changed. The private wells shall be sampled at the same time as the first round of leachate sampling. These wells will be sampled for volatiles, semi-volatiles and inorganic parameters. It should be noted in the text (section 9.4.2 of the SAP) that should any of the private wells have detects of volatile, semi volatiles, or elevated levels of metals, the wells will be re-sampled.

The schedule has been revised to indicate private well sampling will coincide with the first round of leachate sampling. However, the private wells will be sampled for volatiles only at that time. If leachate and monitor well sampling indicates other parameters may be present at the private wells or VOCs from the landfill are detected in the first sampling round, the well or wells in question will be resampled.

WP Table 4-8 The number of field blanks needs to be corrected for monitoring wells. Round I will include 19 field samples and 2 blanks are needed. Round II will include up to 24 field samples and 3 blanks are needed. Round III will include up to 5 field samples and 1 blank is needed. Blanks total 6. Also, a footnote explaining that field blanks are unnecessary for surface water should be included. Footnote E could be changed to "Field blanks for private well and surface water are not needed since sample containers will be filled directly."

The table has been revised to include the requested information.

**Sampling and Analysis Plan Comments**

<u>Section</u>	<u>Page</u>	<u>Comment</u>
5	2	5.3-There is some confusion on DQO's. DQO's define and specify the quality of the data required to support the decisions of the project. DQO's are determined based on the end use of the data to be collected. The Data Quality Objective Levels (I-V), refer to analytical levels. These levels define the quality (certainty/uncertainty) of the data. Field screening for the various gases would produce data at Level II. We cannot change the quality of the data already generated simply because we need it for another purpose. If, in fact, higher quality data (Level V) is needed to evaluate the environmental pathway, then we must consider collecting gas samples and sending these to a laboratory for analysis. This could be at all sampling sites or a percentage of samples

for field data confirmation. What further confuses this issue is that SUMMA canisters are mentioned in some of the tables but no where in the text. This need's to be resolved.

This has been resolved. All landfill gas data will be DQO Level II. References to SUMMA Canisters have been removed.

- 6.4.1 2&3 This section states that if debris representing potential contaminant sources is uncovered, then the soil will be sampled for TCL organics (volatiles and semi-volatiles), and TAL inorganics. PCB's and pesticides shall also be added to this list. Changes should be made to the rest of the SAP to accommodate this additional potential sampling.

The addition of PCBs and pesticides has been made.

- 7.1 1 This is a point of clarification. The leachate interceptor trench was installed to reduce the seeps along the east edge of the fill. Where does the PVC line and trench drain the water to? Was a sump into the soil constructed to catch this liquid?

The trench was installed to limit seeps to the ground surface. The PVC line and trench hold the water, preventing surface exposure, but allowing percolation out of the landfill. There is no sump to catch liquid accumulations. No change was made to the text.

- 7.4.1 3&4 The leachate head wells are to be installed to the base of the fill. Based upon the water elevations within the wells, the water table is at, or just below the waste. The three leachate head wells shall therefore be drilled until water is encountered, not just to the base of the fill. Water samples from beneath the base of the fill will provide better information on what contaminants are entering the water table. The text should be changed to reflect this difference in drilling, and the last paragraph on page 4 shall be removed.

These revisions have been made.

- 8.4.1 4&5 This section shall be changed to reflect the additional drilling depth needed for the piezometers. See comments for Section 4, page 5 of the work plan.

A 350-foot piezometer and vertical ground-water profile location have been added.

- 9.1 1-3 The Department of Health and Social Services has requested that surface soil samples be collected from the top three inches (3") of the soil in order that the results can be used to determine any possible direct contact exposure pathway.

The text has been revised to show that the samples will be collected from 0 to 0.25 feet below grade.

- 9.4.2 6&7 This section shall include text which states that should the sampling results in any of the private wells have detects of volatiles, semi-volatiles, or elevated levels of inorganics, the wells shall be re-sampled.

The text has been revised to indicate the private wells will be sampled initially for volatiles. The wells will be resampled for additional parameters if leachate and monitor well sampling results indicate potential sources of contamination other than VOCs. The wells may also be resampled for volatiles if PALs are exceeded during the initial sampling.

9.4.2 and 9.4.3      There is an error in the text. The figure showing proposed sampling locations is Fig. 9-3 of the SAP, not Fig. 9-1.

This has been revised.

9.6                    9      Please modify the text to show that the private wells will be sampled during the leachate characterization round sampling, and not during the first round of monitoring well sampling.

This has been revised.

11.2                   I recently sent Judy Fassbender of Simon Hydro-Search a copy of the Departments interim guidelines for investigative waste. Containment and disposal of investigative wastes shall follow these guidelines.

We have referenced the memo on interim guidelines in the section.

SAP Table 9-2              See comments for WP Table 4-8.

This has been revised.

SOP 40400                How are samples from the same site but different sampling events designated?

The date of sample collection will be listed and used to delineate sampling rounds.

SOP 40500                2      Item b-Custody seals will be used for all sample coolers. Reference to CLP laboratories may be eliminated for this project. While it is true that CompuChem is a Contract Laboratory, the CL Program will not be utilized for the Ripon Landfill project.

This has been revised as requested.

3                        Item d-Eliminate references to CSL, SAS, and CLP.

This has been removed.

Item e-The air bill numbers should appear on the chain of custody forms also. Include this language in the text.

This language has been added.

SOP 40600                Eliminate "CLP". Also, HSI has an EPA Bottle Requirement that Dr Tsai gave them in February, 1992 that should be included here. WDNR also has a copy if you need it.

This has been revised as requested.

SOP 50200                If head space analysis is to be performed during this investigation, then frequency of field duplicates must be done 1/10 field samples or less. This should be included in the text.

The requested revision has been made.

SOP 80200 4 There is an unfortunate typo in the second paragraph. Sample should be maintained at 4 degrees not 40.

This has been changed.

SOP 80300 2 Same as comment above.

This has also been changed.

SOP 91000 9 Last paragraph-The volume of a trip blank is the same as the investigative sample; usually 3-40 ml VOA vials for lower detection limits. Please correct.

This has been revised as requested.

30 Please eliminate the reference to non-CRL.

The reference to non-CRL has been eliminated.

32 Please add to this list: Cyanide, Semi-volatiles, and PCB/Pesticides.

These have been added.

36 Last paragraph-Samples must be maintained at 4 degrees until they arrive at the lab, not through the analysis. Sample preparation and/or analysis may be performed at elevated temperatures.

This has been revised as requested.

39 An 80-hour time difference for samples, especially the extractable organics, is very excessive. Suggest a 48-hour maximum.

48 hours will be the maximum.

Table (Which follows SOP 91000)-Same comments as above for QAPP Table 4-1.

This has been revised.

General There is no separate SOP or language in the text for the wetland sediment sampling. This should be included.

A SOP for wetland sediment sampling has been added as SOP #80250.

**Comments about the Quality Assurance Project Plans (QAPP)**

<u>Section</u>	<u>Page</u>	<u>Comments</u>
1	6	Level II-The gas sampling (field testing) should be included here.  <u>This has been included.</u>
3	2	The Test Category/Reference Table should be broken down by matrix since this will differ for water or soil.  <u>This has been done.</u>
5	1	5.1-The last word should read "seals".  <u>This has been revised.</u>
7	1	The first paragraph should include leachate, sediment, and surface water samples. Also, please specify that CompuChem will be doing all organic analyses and inorganics for soils.  <u>This has been revised as requested.</u>  7.1-Should specify the methods for drinking water, as detection limits and QC criteria are different.  <u>This has been added.</u>  7.2-Please include the other field parameters such as those for the gas analyses.  <u>These have been added.</u>
8	1	8.3-Please include the leachate with the other aqueous matrices.  <u>Leachate has been added.</u>
10	2	10.1-The external laboratory audits of CompuChem and Warzyn also take place as part of the laboratory certification process. Since both labs are Wisconsin State Certified, this information should be included here.  <u>This has been included.</u>  <u>Two additional revisions have been made to the QAPP:</u>  1. <u>The 10/92 SOW will be used for the organic water samples rather than the 6/91 SOW.</u>  2. <u>The 3/90 SOW detection limits for soil were incorrectly presented on Table 3-6. The correct limits have been inserted on the table.</u>
Figure 1-2		Move the private well sampling up to the same time frame as the leachate well sampling.  <u>The sampling has been moved up as requested.</u>
Table 1-1		Footnote "A" shall be removed for the private well samples since these wells will be sampled for volatile and semi-volatile organics, and inorganic parameters.  <u>This table has been revised. Private wells will be sampled initially for volatiles only.</u>

Table 4-1 (which follows SOP40600 and elsewhere)-Under the heading of "Preservation": Include in aqueous VOA "pH <2".

This has been revised.

Under the heading of "Containers": Three-1 liter amber for aqueous SVOA; Four-40 mls for aqueous VOA; Two-8 oz. for soil/sediment SVOA; and Two-8 oz. for soil/sediment inorganics are superfluous by EPA standards. Please check with the lab(s) doing the analyses to determine the needed volumes.

This has been reduced according to CompuChem requirements.

Also, not all aqueous samples are field filtered, only groundwater. Add a footnote for clarity.

A footnote has been added.

Preservation for mercury should have a footnote for concentrations. The "Region V Sample Handling Manual" has this formula. Please correct.

CompuChem requests only HNO<sub>3</sub> for preservation of mercury.

SUMMA canisters are not mentioned in the text. Please correct this contradiction.

SUMMA canisters have been removed from the text.

Warzyn's SOP

Warzyn needs to provide information pertaining to all QC audits that will be performed for the GFAA, FE, Cold vapor, and Auto Analyzer methods. This should be similar to the description in the ICP SOP, pages 5 and 6. This not only mentions the frequency, but specifies the acceptable limits. Warzyn does not have to rewrite these individual methods; an additional sheet will do. It should include the frequency and acceptable limits for initial and continuing calibration verification standards, initial interference check sample(s), laboratory control standards, all blanks, matrix spike recovery, duplicate relative percent difference, and any other QC audit that may be appropriate for these methods.

This additional information has been included.

**Comments on the Data Management Plan**

<u>Section</u>	<u>Page</u>	<u>Comment</u>
3	6	3.2.3.13-Please reference the location of examples of the chain of custody form(s) and the custody seals.

This has been added.

Appendix B

Is HSI using only their own chain of custody forms? CompuChem and Warzyn have provided examples of theirs, also. If laboratory chain of custody forms are to be used, examples of each must be included here. It is necessary for HSI to include examples of custody seals in this section. They may be either pre-numbered, as described in CompuChem's chain of custody SOP, or the type that are signed and dated.

Simon Hydro-Search will use CompuChem and/or Warzyn chain-of-custody forms for samples going to these labs and Simon Hydro-Search chain-of-custody forms for the material property testing samples. Examples of each have been included. We have also included copies of the custody seals that are the signed and dated variety.




Mr. Steve Ales - March 17, 1993

8.

Should you have any questions regarding the responses, please contact me at (414) 792-1282.

Sincerely,

SIMON HYDRO-SEARCH

  
Judy L. Fassbender  
Hydrogeologist

JLF:cb

Copy: Cara Norland Schultz, WDNR Madison office

1-800-442-4614

Copy



State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Southern District Headquarters  
3911 Fish Hatchery Road  
Fitchburg, Wisconsin 53711  
TELEPHONE 608-275-3266  
TELEFAX 608-275-3338

George E. Meyer  
Secretary

February 12, 1993

File Ref: Ripon FF/NN Superfund Site

Mr. Raymond Roder  
Whyte & Hirschboeck  
One East Main, Suite 300  
P.O. Box 2006  
Madison, WI 53701-2996

SUBJECT: RI/FS Workplan

Dear Mr. Roder:

The Wisconsin Department of Natural Resources (WDNR) and the Wisconsin Department of Health and Social Services (DHSS) has completed it's review of the Remedial Investigation/Feasibility Study (RI/FS) workplans for the Ripon FF/NN landfill site. The plans were prepared by Simon Hydro-Search and were received by WDNR on December 14, 1992.

WDNR is not approving the workplans at this time. Our review comments and necessary changes are listed below:

Work Plan Comments

<u>Section</u>	<u>Page</u>	<u>Comment</u>
3.4	6&7	Language should be added to this section which states that should barrels, drums, or some other potential source of contamination is uncovered during investigation of the magnetic anomalies, that an addendum to the workplans will be submitted which addresses the proper testing <del>and removal</del> of the source areas. <i>S.A.</i>
4	5	This section states that there will be 10 borings up to 100' deep. This depth is not sufficient. The replacement well at the house just south of the landfill was 350' deep and had consistently high levels of vinyl chloride. This section, and the drilling program needs to have some borings/piezometers that reach this depth. Borings P-105, P-106 and P-107 are the best locations for drilling to the 350' depth. <i>OK - talked about</i>
4	8	Investigative units 2C and 2D don't exist. I think these should be 4A and 4B. Please correct. Also, the surface water and sediment sampling is under investigative units 4a and 4B, not investigative unit 3. <i>OK</i>

4.4.1 9 The sixth sentence of this paragraph pertaining to "Fewer parameters may be included in the analysis..." shall be removed. All the residential wells shall be sampled early in the investigation, at about the same time as the leachate head wells are sampled. See comments for Fig. 8-2 of the Workplans. *OK*

*VCS only*

7 1 There is no EPA remedial project manager for this site. EPA will provide Superfund support and federal ARARs. Please remove reference to EPA's project manager and Quality Assurance Section. *OK*

Figure 8-2 The schedule calls for private well sampling after developing a short list of parameters from the leachate sampling. This needs to be changed. The private wells shall be sampled at the same time as the first round of leachate sampling. These wells will be sampled for volatiles, semi-volatiles and inorganic parameters. It should be noted in the text (section 9.4.2 of the SAP) that should any of the private wells have detects of volatile, semi volatiles, or elevated levels of metals, the wells will be re-sampled. *OK*

WP Table 4-8 The number of field blanks needs to be corrected for monitoring wells. Round I will include 19 field samples and 2 blanks are needed. Round II will include up to 24 field samples and 3 blanks are needed. Round III will include up to 5 field samples and 1 blank is needed. Blanks total 6. Also, a footnote explaining that field blanks are unnecessary for surface water should be included. Footnote E could be changed to "Field blanks for private well and surface water are not needed since sample containers will be filled directly." *OK*

Sampling and Analysis Plan Comments

<u>Section</u>	<u>Page</u>	<u>Comment</u>
5	2	5.3-There is some confusion on DQO's. DQO's define and specify the quality of the data required to support the decisions of the project. DQO's are determined based on the end use of the data to be collected. The Data Quality Objective Levels (I-V), refer to analytical levels. These levels define the quality (certainty/uncertainty) of the data. Field screening for the various gases would produce data at Level II. We cannot change the quality of the data already generated simply because we need it for another purpose. If, in fact, higher quality data (Level V) is needed to evaluate the environmental pathway, then we must consider collecting gas samples and sending these to a laboratory for analysis. This could be at all sampling sites or a percentage of samples for field data confirmation. What further confuses this issue is that SUMMA canisters are mentioned in some of the tables but no where in the text. This need's to be resolved.

*Will not be using Summa Canisters*

- 6.4.1        2&3    This section states that if debris representing potential contaminant sources is uncovered, then the soil will be sampled for TCL organics (volatiles and semi-volatiles), and TAL inorganics. PCB's and pesticides shall also be added to this list. Changes should be made to the rest of the SAP to accommodate this additional potential sampling. *discussed*
- 7.1            1        This is a point of clarification. The leachate interceptor trench was installed to reduce the seeps along the east edge of the fill. Where does the PVC line and trench drain the water to? Was a sump into the soil constructed to catch this liquid? *OK*
- 7.4.1        3&4    The leachate head wells are to be installed to the base of the fill. Based upon the water elevations within the wells, the water table is at, or just below the waste. The three leachate head wells shall therefore be drilled until water is encountered, not just to the base of the fill. Water samples from beneath the base of the fill will provide better information on what contaminants are entering the water table. The text should be changed to reflect this difference in drilling, and the last paragraph on page 4 shall be removed. *OK*
- 8.4.1        4&5    This section shall be changed to reflect the additional drilling depth needed for the piezometers. See comments for Section 4, page 5 of the work plan. *discussed*
- 9.1            1-3    The Department of Health and Social Services has requested that surface soil samples be collected from the top three inches (3") of the soil in order that the results can be used to determine any possible direct contact exposure pathway. *OK*
- 9.4.2        6&7    This section shall include text which states that should the sampling results in any of the private wells have detects of volatiles, semi-volatiles, or elevated levels of inorganics, the wells shall be re-sampled. *discussed*
- 9.4.2 and 9.4.3    There is an error in the text. The figure showing proposed sampling locations is Fig. 9-3 of the SAP, not Fig. 9-1. *OK*
- 9.6            9        Please modify the text to show that the private wells will be sampled during the leachate characterization round sampling, and not during the first round of monitoring well sampling. *OK*
- 11.2                    I recently sent Judy Fassbender of Simon Hydro-Search a copy of the Departments interim guidelines for investigative waste. Containment and disposal of investigative wastes shall follow these guidelines. *HSI will ignore this and submit a plan. However, talk w/ WEM about discharges of cuttings / #20 to wetland areas.*
- SAP Table 9-2        See comments for WP Table 4-8. *OK*

- SOP 40400            How are samples from the same site but different sampling events designated?
- SOP 40500    2    Item b-Custody seals will be used for all sample coolers. Reference to CLP laboratories may be eliminated for this project. While it is true that CompuChem is a Contract Laboratory, the CL Program will not be utilized for the Ripon Landfill project.
- 3    Item d-Eliminate references to CSL, SAS, and CLP.
- Item e-The air bill numbers should appear on the chain of custody forms also. Include this language in the text.
- SOP 40600            Eliminate "CLP". Also, HSI has an EPA Bottle Requirement that Dr Tsai gave them in February, 1992 that should be included here. WDNR also has a copy if you need it.
- SOP 50200            If head space analysis is to be performed during this investigation, then frequency of field duplicates must be done 1/10 field samples or less. This should be included in the text.
- SOP 80200    4    There is an unfortunate typo in the second paragraph. Sample should be maintained at 4 degrees not 40.
- SOP 80300    2    Same as comment above.
- SOP 91000    9    Last paragraph-The volume of a trip blank is the same as the investigative sample; usually 3-40 ml VOA vials for lower detection limits. Please correct.
- 30    Please eliminate the reference to non-CRL.
- 32    Please add to this list: Cyanide, Semi-volatiles, and PCB/Pesticides.
- 36    Last paragraph-Samples must be maintained at 4 degrees until they arrive at the lab, not through the analysis. Sample preparation and/or analysis may be performed at elevated temperatures.
- 39    An 80-hour time difference for samples, especially the extractable organics, is very excessive. Suggest a 48-hour maximum.
- Table                (Which follows SOP 91000)-Same comments as above for QAPP Table 4-1.
- General              There is no separate SOP or language in the text for the wetland sediment sampling. This should be included.

## Comments about the Quality Assurance Project Plans (QAPP)

<u>Section</u>	<u>Page</u>	<u>Comments</u>
1	6	Level II-The gas sampling (field testing) should be included here.
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5	1	5.1-The last word should read "seals".
7	1	The first paragraph should include leachate, sediment, and surface water samples. Also, please specify that CompuChem will be doing all organic analyses and inorganics for soils.  7.1-Should specify the methods for drinking water, as detection limits and QC criteria are different.  7.2-Please include the other field parameters such as those for the gas analyses.
8	1	8.3-Please include the leachate with the other aqueous matrices.
10	2	10.1-The external laboratory audits of CompuChem and Warzyn also take place as part of the laboratory certification process. Since both labs are Wisconsin State Certified, this information should be included here.
Figure 1-2		Move the private well sampling up to the same time frame as the leachate well sampling.
Table 1-1		Footnote "A" shall be removed for the private well samples since these wells will be sampled for volatile and semi-volatile organics, and inorganic parameters.
Table 4-1		(which follows SOP40600 and elsewhere)-Under the heading of "Preservation": Include in aqueous VOA "pH <2".  Under the heading of "Containers": Three-1 liter amber for aqueous SVOA; Four-40 mls for aqueous VOA; Two-8 oz. for soil/sediment SVOA; and Two-8 oz. for soil/sediment inorganics are superfluous by EPA standards. Please check with the lab(s) doing the analyses to determine the needed volumes.  Also, not all aqueous samples are field filtered, only groundwater. Add a footnote for clarity.

Preservation for mercury should have a footnote for concentrations. The "Region V Sample Handling Manual" has this formula. Please correct.

SUMMA canisters are not mentioned in the text. Please correct this contradiction.

Warzyn's SOP

Warzyn needs to provide information pertaining to all QC audits that will be performed for the GFAA, FE, Cold vapor, and Auto Analyzer methods. This should be similar to the description in the ICP SOP, pages 5 and 6. This not only mentions the frequency, but specifies the acceptable limits. Warzyn does not have to rewrite these individual methods; an additional sheet will do. It should include the frequency and acceptable limits for initial and continuing calibration verification standards, initial interference check sample(s), laboratory control standards, all blanks, matrix spike recovery, duplicate relative percent difference, and any other QC audit that may be appropriate for these methods.

Comments on the Data Management Plan

<u>Section</u>	<u>Page</u>	<u>Comment</u>
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Appendix B

Is HSI using only their own chain of custody forms? CompuChem and Warzyn have provided examples of theirs, also. If laboratory chain of custody forms are to be used, examples of each must be included here. It is necessary for HSI to include examples of custody seals in this section. They may be either pre-numbered, as described in CompuChem's chain of custody SOP, or the type that are signed and dated.

This is a summary of comments from the WDNr review team and DHSS. As I mention in the opening of this letter, the RI/FS workplans are not approved at this time. In accordance with section IV.C.6 of contract #SF-92-01 between WDNr and the settling PRPs, the settling PRPs shall have 15 days from receipt of this letter to submit the revised RI/FS workplans. The deadline for re-submitting the workplans is March 3, 1993.

Mr. Raymond Roder - February 12, 1993

7.

Please submit copies of this letter to all the settling PRPs.

Should you have any questions regarding this letter, please contact me at (608) 275-3310.

Sincerely,



Stephen M. Ales  
District Hydrogeologist

cc: Maclay Hyde, Gray, Plant, Mooty, Mooty & Bennett, P.A., 3400 City  
Center, 33 South Sixth Street, Minneapolis, MN 55402  
Bob Karnauskas, Simon Hydro-Search, Brookfield Lakes Corporate Center  
XI, 175 N. Corporate Drive, Suite 100, Brookfield, WI 53045  
Jane Lemcke - SW/3  
Charlene Khazae - SW/3  
Linda Meyer - LC/5