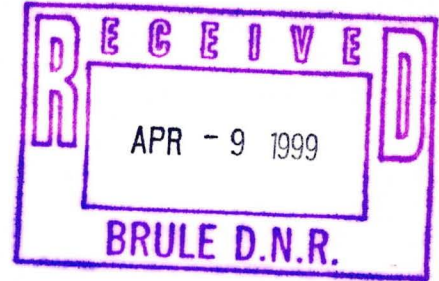




PROFESSIONAL SERVICES
TRANSPORTATION • MUNICIPAL • REMEDIATION
DEVELOPMENT • ENVIRONMENTAL

April 6, 1999

Mr. Chris Saari
Wisconsin Dept. of Natural Resources
P.O. Box 125
6250 South Ranger Road
Brule, WI 54820-0125



Re: Quearm Oil Site, Ashland, Wisconsin
WDNR UID No. 02-02-000105 and 03-02-000975

Dear Mr. Saari:

The purpose of this correspondence is to address some of the items presented to Mr. Fred Gygi, Gygi Heating Company in correspondence dated February 19, 1999. Detailed below are specific items that have been completed.

1. North Star Environmental Construction (North Star) is responsible for demonstrating that the contaminated soil landspread in October 1998 has met applicable closure criteria. North Star representatives have indicated that confirmation samples will be collected in the fall of 1999, approximately one year after the soil was landspread. North Star will submit appropriate landspreading site closure documentation to the Wisconsin Dept. of Natural Resources (WDNR).
2. It is understood that a deed restriction will not be required to identify the residual soil contamination present at the site as the concentration of contaminants are below the new "clay site protocols". The residual contamination will be addressed in the final closure letter provided by WDNR hereby providing appropriate notification to the City of Ashland, potential utility contractors and future land owners.
3. Attached are monitoring well abandonment forms for the site's wells. MSA Professional Services, Inc. (MSA) has not been able to locate monitoring wells MW-1, MW-2 and MW-4 since we became involved in this project in 1997. Monitoring well MW-3 was located and groundwater samples collected during the performance of remedial activities. Monitoring well MW-2 was over excavated and abandoned during the soil excavation activities.

Please contact me if you have any questions.

Sincerely,
MSA Professional Services, Inc.

Brian J. Hegga
Project Manager

BJH:jcp
enc

cc: Fred Gygi, Gygi Heating Company, Ironwood, MI
Fran Washington, North Star Environmental Construction, Chetek, WI

Baraboo, Wisconsin

Beaver Dam, Wisconsin

Friendship, Wisconsin

Madison, Wisconsin

Galena, Illinois

All abandonment work shall be performed in accordance with the provisions of Chapters NR 111, NR 112 or NR 141, Wis. Admin. Code, whichever is applicable. Also, see instructions on back.

(1) GENERAL INFORMATION		(2) FACILITY NAME	
Well/Drillhole/Borehole Location <u>SE 1/4 of SW 1/4 of Sec. 33 ; T. 48 N. R. 4</u> <small>(If applicable)</small>	County <u>Ashland</u>	Original Well Owner (If Known) <u>Quearm Oil Company</u>	
Gov't Lot _____	Grid Number _____	Present Well Owner <u>Quearm Oil Company</u>	
Grid Location _____ ft. <input type="checkbox"/> N. <input type="checkbox"/> S., _____ ft. <input type="checkbox"/> E. <input type="checkbox"/> W.		Street or Route <u>105 West 6th Street</u>	
Civil Town Name <u>Quearm Oil Company</u>		City, State, Zip Code <u>Ashland WI 54806</u>	
Street Address of Well <u>105 West 6th Street</u>		Facility Well No. and/or Name (If Applicable) <u>MW-1</u>	WI Unique Well No. _____
City, Village <u>Ashland</u>		Reason For Abandonment <u>No longer required</u>	
		Date of Abandonment _____	

WELL/DRILLHOLE/BOREHOLE INFORMATION													
<p>(3) Original Well/Drillhole/Borehole Construction Completed On (Date) <u>8/26/92</u></p> <p><input checked="" type="checkbox"/> Monitoring Well Construction Report Available? <input type="checkbox"/> Water Well <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Drillhole <input type="checkbox"/> Borehole</p> <p>Construction Type: <input checked="" type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug <input type="checkbox"/> Other (Specify) _____</p> <p>Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock</p> <p>Total Well Depth (ft.) <u>19</u> Casing Diameter (ins.) _____ <small>(From ground surface)</small></p> <p>Casing Depth (ft.) _____</p> <p>Was Well Annular Space Grouted? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <small>If Yes, To What Depth? _____ Feet</small></p>	<p>(4) Depth to Water (Feet) <u>10</u></p> <p>Pump & Piping Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Liner(s) Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Screen Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Casing Left in Place? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If No, Explain <u>Well could not be located. Appears to have been destroyed during construction activities</u></p> <p>Was Casing Cut Off Below Surface? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Did Sealing Material Rise to Surface? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Did Material Settle After 24 Hours? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Was Hole Retopped? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>(5) Required Method of Placing Sealing Material <input type="checkbox"/> Conductor Pipe-Gravity <input type="checkbox"/> Conductor Pipe-Pumped <input type="checkbox"/> Dump Bailer <input type="checkbox"/> Other (Explain) _____</p> <p>(6) Sealing Materials For monitoring wells and monitoring well boreholes only</p> <table style="width:100%;"> <tr> <td><input type="checkbox"/> Neat Cement Grout</td> <td><input type="checkbox"/> Bentonite Pellets</td> </tr> <tr> <td><input type="checkbox"/> Sand-Cement (Concrete) Grout</td> <td><input type="checkbox"/> Granular Bentonite</td> </tr> <tr> <td><input type="checkbox"/> Concrete</td> <td><input type="checkbox"/> Bentonite - Cement Grout</td> </tr> <tr> <td><input type="checkbox"/> Clay-Sand Slurry</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Bentonite-Sand Slurry</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Chipped Bentonite</td> <td></td> </tr> </table>	<input type="checkbox"/> Neat Cement Grout	<input type="checkbox"/> Bentonite Pellets	<input type="checkbox"/> Sand-Cement (Concrete) Grout	<input type="checkbox"/> Granular Bentonite	<input type="checkbox"/> Concrete	<input type="checkbox"/> Bentonite - Cement Grout	<input type="checkbox"/> Clay-Sand Slurry		<input type="checkbox"/> Bentonite-Sand Slurry		<input type="checkbox"/> Chipped Bentonite	
<input type="checkbox"/> Neat Cement Grout	<input type="checkbox"/> Bentonite Pellets												
<input type="checkbox"/> Sand-Cement (Concrete) Grout	<input type="checkbox"/> Granular Bentonite												
<input type="checkbox"/> Concrete	<input type="checkbox"/> Bentonite - Cement Grout												
<input type="checkbox"/> Clay-Sand Slurry													
<input type="checkbox"/> Bentonite-Sand Slurry													
<input type="checkbox"/> Chipped Bentonite													

Sealing Material Used	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume	Mix Ratio or Mud Weight
	Surface			

(8) Comments: _____

Name of Person or Firm Doing Sealing Work <u>MSA Professional Services, Inc</u>	
Signature of Person Doing Work <u>[Signature]</u>	Date Signed <u>4-5-99</u>
Street or Route <u>1835 N. Stevens St.</u>	Telephone Number <u>(715) 362-3244</u>
City, State, Zip Code <u>Rhinelandia WI 54501</u>	

(10) FOR DNR OR COUNTY USE ONLY	
Date Received/Inspected	District/County
Reviewer/Inspector	
Follow-up Necessary	

All abandonment work shall be performed in accordance with the provisions of Chapters NR 111, NR 112 or NR 141, Wis. Admin. Code, whichever is applicable. Also, see instructions on back.

(1) GENERAL INFORMATION		(2) FACILITY NAME	
Well/Drillhole/Borehole Location	County <u>Ashland</u>	Original Well Owner (If Known) <u>Quearm Oil Company</u>	
(If applicable) <u>SE 1/4 of SW 1/4 of Sec. 33 : T. 48 N. R. 4</u>		Present Well Owner <u>Quearm Oil Company</u>	
Gov't Lot	Grid Number	Street or Route <u>105 West 6th Street</u>	
Grid Location ft. <input type="checkbox"/> N. <input type="checkbox"/> S. ft. <input type="checkbox"/> E. <input type="checkbox"/> W.		City, State, Zip Code <u>Ashland WI 54806</u>	
Civil Town Name <u>Quearm Oil Company</u>		Facility Well No. and/or Name (If Applicable) <u>MW-2</u>	WI Unique Well No. -----
Street Address of Well <u>105 West 6th Street</u>		Reason For Abandonment <u>No Longer Required</u>	
City, Village <u>Ashland</u>		Date of Abandonment <u>12/1/97</u>	

WELL/DRILLHOLE/BOREHOLE INFORMATION	
(3) Original Well/Drillhole/Borehole Construction Completed On (Date) <u>8/27/92</u> <input checked="" type="checkbox"/> Monitoring Well Construction Report Available? <input type="checkbox"/> Water Well <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Drillhole <input type="checkbox"/> Borehole Construction Type: <input checked="" type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug <input type="checkbox"/> Other (Specify) _____ Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock Total Well Depth (ft.) <u>20</u> Casing Diameter (ins.) _____ (From ground surface) Casing Depth (ft.) _____ Was Well Annular Space Grouted? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown If Yes, To What Depth? _____ Feet	(4) Depth to Water (Feet) <u>10</u> Pump & Piping Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Liner(s) Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Screen Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Casing Left in Place? <input type="checkbox"/> Yes <input type="checkbox"/> No If No, Explain <u>Abandoned during soil excavation. Well dug out.</u> Was Casing Cut Off Below Surface? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Did Sealing Material Rise to Surface? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Did Material Settle After 24 Hours? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Was Hole Retopped? <input type="checkbox"/> Yes <input type="checkbox"/> No
(5) Required Method of Placing Sealing Material <input type="checkbox"/> Conductor Pipe-Gravity <input type="checkbox"/> Conductor Pipe-Pumped <input type="checkbox"/> Dump Bailer <input type="checkbox"/> Other (Explain) _____	
(6) Sealing Materials For monitoring wells and monitoring well boreholes only <input type="checkbox"/> Neat Cement Grout <input type="checkbox"/> Sand-Cement (Concrete) Grout <input type="checkbox"/> Concrete <input type="checkbox"/> Bentonite Pellets <input type="checkbox"/> Clay-Sand Slurry <input type="checkbox"/> Granular Bentonite <input type="checkbox"/> Bentonite-Sand Slurry <input type="checkbox"/> Bentonite - Cement Grout <input type="checkbox"/> Chipped Bentonite	

(7) Sealing Material Used	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume	Mix Ratio or Mud Weight
	Surface			

(8) Comments: _____

(9) Name of Person or Firm Doing Sealing Work
MSA Professional Services, Inc
 Signature of Person Doing Work: [Signature] Date Signed: 4-5-99
 Street or Route: 1835 N. Stevens St. Telephone Number: (715) 362-3244
 City, State, Zip Code: Rhinelandre WI 54501

(10) FOR DNR OR COUNTY USE ONLY

Date Received/Inspected	District/County
Reviewer/Inspector	
Follow-up Necessary	

All abandonment work shall be performed in accordance with the provisions of Chapters NR 111, NR 112 or NR 141, Wis. Admin. Code, whichever is applicable. Also, see instructions on back.

(1) GENERAL INFORMATION		(2) FACILITY NAME	
Well/Drillhole/Borehole Location	County <u>Ashland</u>	Original Well Owner (If Known) <u>Quearm Oil Company</u>	
SE 1/4 of SW 1/4 of Sec. <u>33</u> ; T. <u>48</u> N. R. <u>4</u> <input type="checkbox"/> E <input checked="" type="checkbox"/> W (If applicable)		Present Well Owner <u>Quearm Oil Company</u>	
Gov't Lot	Grid Number	Street or Route <u>105 West 6th Street</u>	
Grid Location _____ ft. <input type="checkbox"/> N. <input type="checkbox"/> S., _____ ft. <input type="checkbox"/> E. <input type="checkbox"/> W.		City, State, Zip Code <u>Ashland WI 54806</u>	
Civil Town Name <u>Quearm Oil Company</u>		Factory Well No. and/or Name (If Applicable) <u>MW-3</u>	WI Unique Well No. -----
Street Address of Well <u>105 West 6th Street</u>		Reason For Abandonment <u>NO Longer Required</u>	
City, Village <u>Ashland</u>		Date of Abandonment <u>12/1/97</u>	

WELL/DRILLHOLE/BOREHOLE INFORMATION			
(3) Original Well/Drillhole/Borehole Construction Completed On (Date) <u>8/27/92</u>		(4) Depth to Water (Feet) <u>10</u>	
<input checked="" type="checkbox"/> Monitoring Well <input type="checkbox"/> Water Well <input type="checkbox"/> Drillhole <input type="checkbox"/> Borehole	Construction Report Available? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Pump & Piping Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Liner(s) Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Screen Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Casing Left in Place? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If No, Explain <u>Well destroyed during soil excavation. Unable to locate</u>	
Construction Type: <input checked="" type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug <input type="checkbox"/> Other (Specify) _____		Was Casing Cut Off Below Surface? <input type="checkbox"/> Yes <input type="checkbox"/> No Did Sealing Material Rise to Surface? <input type="checkbox"/> Yes <input type="checkbox"/> No Did Material Settle After 24 Hours? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Was Hole Retopped? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock		(5) Required Method of Placing Sealing Material	
Total Well Depth (ft.) <u>20</u> Casing Diameter (ins.) _____ (From ground surface) Casing Depth (ft.) _____		<input type="checkbox"/> Conductor Pipe-Gravity <input type="checkbox"/> Conductor Pipe-Pumped <input type="checkbox"/> Dump Bailer <input type="checkbox"/> Other (Explain) _____	
Was Well Annular Space Grouted? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown If Yes, To What Depth? _____ Feet		(6) Sealing Materials	
		For monitoring wells and monitoring well boreholes only <input type="checkbox"/> Near Cement Grout <input type="checkbox"/> Sand-Cement (Concrete) Grout <input type="checkbox"/> Concrete <input type="checkbox"/> Clay-Sand Slurry <input type="checkbox"/> Bentonite-Sand Slurry <input type="checkbox"/> Chipped Bentonite	

(7) Sealing Material Used	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume	Mix Ratio or Mud Weight
	Surface			

(8) Comments: _____

(9) Name of Person or Firm Doing Sealing Work <u>MSA Professional Services, Inc</u>	
Signature of Person Doing Work <u>[Signature]</u>	Date Signed <u>4-5-99</u>
Street or Route <u>1835 N. Stevens St.</u>	Telephone Number <u>(715)362-3244</u>
City, State, Zip Code <u>Rhinelander WI 54501</u>	

(10) FOR DNR OR COUNTY USE ONLY	
Date Received/Inspected	District/County
Reviewer/Inspector	
Follow-up Necessary	

All abandonment work shall be performed in accordance with the provisions of Chapters NR 111, NR 112 or NR 141, Wis. Admin. Code, whichever is applicable. Also, see instructions on back.

(1) GENERAL INFORMATION		(2) FACILITY NAME	
Well/Drillhole/Borehole Location	County	Original Well Owner (If Known)	
	Ashland	Quearm Oil Company	
SE 1/4 of SW 1/4 of Sec. 33 : T. 48 N. R. 4		Present Well Owner	
(If applicable)		Quearm Oil Company	
Gov't Lot	Grid Number	Street or Route	
		105 West 6th Street	
Grid Location		City, State, Zip Code	
		Ashland WI 54806	
Civil Town Name		Factory Well No. and/or Name (If Applicable)	
Quearm Oil Company		MW-4	
Street Address of Well		WI Unique Well No.	
105 West 6th Street			
City, Village		Reason For Abandonment	
Ashland		No Longer Required	
		Date of Abandonment	

WELL/DRILLHOLE/BOREHOLE INFORMATION

(3) Original Well/Drillhole/Borehole Construction Completed On		(4) Depth to Water (Feet)	
(Date) 8/27/92		10	
<input checked="" type="checkbox"/> Monitoring Well	Construction Report Available?	Pump & Piping Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable	
<input type="checkbox"/> Water Well	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Liner(s) Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable	
<input type="checkbox"/> Drillhole		Screen Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable	
<input type="checkbox"/> Borehole		Casing Left in Place? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Construction Type:		If No, Explain <u>Reportedly - destroyed when new building foundation was constructed.</u>	
<input checked="" type="checkbox"/> Drilled	<input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug	Was Casing Cut Off Below Surface? <input type="checkbox"/> Yes <input type="checkbox"/> No	
<input type="checkbox"/> Other (Specify)		Did Sealing Material Rise to Surface? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Formation Type:		Did Material Settle After 24 Hours? <input type="checkbox"/> Yes <input type="checkbox"/> No	
<input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock		If Yes, Was Hole Retopped? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Total Well Depth (ft.) 20	Casing Diameter (ins.)	(5) Required Method of Placing Sealing Material	
(From ground surface)		<input type="checkbox"/> Conductor Pipe-Gravity <input type="checkbox"/> Conductor Pipe-Pumped	
Casing Depth (ft.)		<input type="checkbox"/> Dump Bailer <input type="checkbox"/> Other (Explain)	
Was Well Annular Space Grouted? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	Feet	(6) Sealing Materials	
If Yes, To What Depth?		For monitoring wells and monitoring well boreholes only	
		<input type="checkbox"/> Neat Cement Grout	
		<input type="checkbox"/> Sand-Cement (Concrete) Grout	
		<input type="checkbox"/> Concrete <input type="checkbox"/> Bentonite Pellets	
		<input type="checkbox"/> Clay-Sand Slurry <input type="checkbox"/> Granular Bentonite	
		<input type="checkbox"/> Bentonite-Sand Slurry <input type="checkbox"/> Bentonite - Cement Grout	
		<input type="checkbox"/> Chipped Bentonite	

(7) Sealing Material Used	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume	Mix Ratio or Mud Weight
	Surface			

(8) Comments:

(9) Name of Person or Firm Doing Sealing Work
MSA Professional Services, Inc

Signature of Person Doing Work: *Bea Stage* Date Signed: 4-5-99

Street or Route: 1835 N. Stevens St. Telephone Number: (715) 362-3244

City, State, Zip Code: Rhinelander WI 54501

(10) FOR DNR OR COUNTY USE ONLY

Date Received/Inspected: District/County:

Reviewer/Inspector:

Follow-up Necessary: