



STATE OF MICHIGAN
DEPARTMENT OF NATURAL RESOURCES & ENVIRONMENT
LANSING

JENNIFER M. GRANHOLM
GOVERNOR

REBECCA A. HUMPHRIES
DIRECTOR

May 21, 2010

Mr. Douglas A. Donnell
Mika Meyers Beckett & Jones PLC
900 Monroe Avenue NW
Grand Rapids, Michigan 49503

Dear Mr. Donnell:

SUBJECT: Notice of Approval for the Declaration of Restrictive Covenant
Tar Lake Superfund Site, Parcel 05-11-129-007-00
Mancelona Township, Antrim County, Michigan
Site ID No. 05000012

The Michigan Department of Natural Resources and Environment (DNRE)¹, Remediation and Redevelopment Division (RRD), has reviewed the enclosed Declaration of Restrictive Covenant (Declaration), DNRE Reference No. RC-RRD-201-09-005, for the following parcel of property (Property):

Tax Parcel Code 05-11-129-007-00

Environmental conditions present at the Property are being addressed in accordance with the U.S. Environmental Protection Agency's (U.S. EPA) 2002 Record of Decision (ROD); the Documentation of Significant Changes from the Preferred Alternative of the Proposed Plan issued February 25, 2002; an Explanation of Significant Difference (ESD) issued September 27, 2004; and a second ESD issued on September 14, 2009.

Based upon our evaluation of the documents identified above, and the currently known site conditions, the Declaration for the Property is approved subject to the Declaration remaining protective of public health, safety, and welfare, and the environment. To substantively comply with the requirements of Section 20120b(4) of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, MCL 324.5501 *et seq*, the Declaration must be recorded with the Antrim County Register of Deeds within 21 days of your receipt of this approval letter. This approval is subject to the Michigan Private Power Producers submitting, within 90 days of the receipt of this approval letter, a certified copy of the Declaration that includes the liber and page numbers as recorded by

¹ Pursuant to Executive Order 2009-45, dated October 8, 2009, the Michigan Department of Natural Resources and Environment (DNRE) was created and all authorities, duties, functions and responsibilities formerly assigned to the Michigan Department of Environmental Quality (DEQ) were transferred to the DNRE effective January 17, 2010.

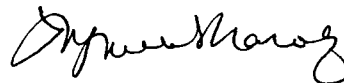
the Register of Deeds Office, to Ms. Patricia A. McKay, Chief, Compliance and Enforcement Section, RRD, DNRE.

This approval letter pertains to the enclosed Declaration only. Any changes not approved by the DNRE that are made to the enclosed Declaration prior to it being filed and recorded with the Register of Deeds will render this DNRE approval null and void.

The DNRE expresses no opinion as to other contaminants beyond those identified and remediated as a part of the ROD that relate to this Property. The DNRE also makes no warranty as to the fitness of this Property for any general or specific use; prospective purchasers or users are advised to use due diligence prior to acquiring or using this Property.

If you have questions, please contact Mr. Bradley Ermisch, Compliance and Enforcement Section, RRD, DNRE, at 517-373-0269, or you may contact me.

Sincerely,



Lynelle Marolf, Acting Chief
Remediation and Redevelopment Division
517-335-1104

Enclosure

cc: Mr. Ben Brower, Project Manager, MP3 Company
Ms. Gail Holland, MP3 Company
Mr. Michael T. Williams, Williams and Beck
Ms. Patricia A. McKay, DNRE
Mr. Bradley Ermisch, DNRE

cc/enc: Mr. Thomas Williams, U.S. EPA
Mr. Terry Stanuch, U.S. EPA
Ms. Karen Cibulskis, U.S. EPA
Mr. Keith Krawczyk, DNRE
Site File

DECLARATION OF RESTRICTIVE COVENANT

**Tar Lake Superfund Site, Mancelona, Antrim County, Michigan
DNRE Site ID No.: 05000012
U.S. EPA Site No.: MID980794655**

Parcel 05-11-129-007-00

DNRE Reference No.: RC-RRD-201-09-005

This Declaration of Restrictive Covenant (Restrictive Covenant) is made on May __, 2010, by Mancelona Private Power Producers (MP3), the Grantor, whose address is 1503 Garfield Road North, Traverse City, Michigan 49686, for the benefit of the Grantee, Michigan Department of Natural Resources and Environment (DNRE), whose address is P.O. Box 30473, Lansing, Ingham County, Michigan 48909-7973.

The purpose of this Restrictive Covenant is to protect the public health, safety, and welfare, and the environment, and to prohibit or restrict activities that could result in unacceptable exposure to environmental contamination present at the property located in Mancelona Township, Antrim County, Michigan, and legally described in Exhibit 1, attached hereto (Property).

The Property is located within the larger Tar Lake Superfund Site (Site), DNRE Site ID No. 05000012. The Site was placed on the National Priorities List (NPL) in September of 1983 and is a facility as that term is defined in Section 101(9) of the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. § 9601 *et seq* (CERCLA) and Section 20101(1)(o) of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, MCL 324.101 *et seq* (NREPA).

A Record of Decision (ROD) has been issued by the United States Environmental Protection Agency (U.S. EPA) for the purpose of carrying out the response activities selected to address environmental contamination at the Site. The Michigan Department of Environmental Quality (now the DNRE) concurred with the ROD in a letter dated May 28, 2002. The Response Activities summarized below are more fully described in the ROD. The ROD also includes the Documentation of Significant Changes from the Preferred Alternative of the Proposed Plan (DSC) issued by the U.S. EPA on February 25, 2002; an Explanation of Significant Difference (ESD) issued September 27, 2004; and a second ESD issued on September 14, 2009 (attached as Exhibit 4), all of which will be implemented by the U.S. EPA in consultation with the DNRE, and all of which are part of the ROD, as that term is used herein.

Summary of Response Activities

From 1889 to 1945, the Site was the manufacturing location for companies producing iron by the charcoal method. Hazardous substances including arsenic, manganese, copper, and other metals, were disposed of as a result of these operations on the Site. The East Tailings Area (ETA) portion of the Tar Lake Superfund Site (depicted in Exhibit 2a), was deleted from the Site on November 21, 2005, and is no longer considered part of the Site. The U.S. EPA's "Direct final notice of partial deletion of the East Tailing Area of the Tar Lake Superfund Site from the National Priorities List" stated that unlimited use and unrestricted access is allowed in the ETA.

Due to the historical operations conducted on the Site which involved hazardous substance use, the Property, excluding the ETA, is being presumptively restricted in accordance with the requirements of the ROD. However, limited sampling conducted by MP3 (see attached Exhibit 5 for sampling results and locations) on the Property has not identified the presence of hazardous substances in concentrations exceeding residential cleanup criteria. The land use and resource restrictions set forth herein will prevent any unacceptable exposures in the event hazardous substances are present in concentrations exceeding the health-based risk criteria for the land uses set forth in the ROD and described below.

The ROD indicates that only industrial, commercial, and recreational land uses are allowed. The 2009 ESD clarifies that both non-potable and potable groundwater uses are potentially permissible at the Site, if the Owner can demonstrate, in accordance with the provisions of the September 2009 ESD, that the proposed use (1) will not interfere with the remedy, (2) will not pose an unacceptable risk to human health, and (3) will not, in the case of a proposed potable use, contain contaminant concentrations at each proposed well location exceeding any applicable drinking water criteria. The Owner may seek appropriate modifications to the land use and resource restrictions set forth herein by submitting a request to the U.S. EPA and the DNRE as provided in Paragraph 5 of this Restrictive Covenant ("Modification/Rescission").

The restrictions contained in this Restrictive Covenant are based upon information available to the U.S. EPA and the DNRE at the time this Restrictive Covenant was filed. Failure of the Response Activities to achieve and maintain the criteria, exposure controls, and requirements specified in the ROD; future changes in the environmental condition of the Property or changes in the applicable cleanup criteria; the discovery of environmental conditions at the Property that were not accounted for in the ROD; or the use of the Property in a manner inconsistent with the restrictions described herein, may result in this Restrictive Covenant not being protective of public health, safety, and welfare, and the environment. Information pertaining to the environmental conditions at the Property and Response Activities undertaken at the Site is on file with the U.S. EPA and the DNRE, Remediation and Redevelopment Division. The DNRE recommends that prospective purchasers or users of the Property undertake appropriate due diligence prior to acquiring or using this Property to determine whether hazardous substances are present on the Property at levels that exceed residential cleanup criteria.

State law, including the "due care" provisions of Section 20107a of the NREPA, applies to the Owner's use and/or occupancy of any property that is a facility (i.e., where residential cleanup criteria are exceeded).

The following exhibits are incorporated into this Restrictive Covenant:

- Exhibit 1 - Legal Descriptions of the Property and the Restricted Area
- Exhibit 2 - Survey of the Property and Restricted Area
- Exhibit 2a - Survey of the ETA and non-ETA portions of the Property
- Exhibit 3 - Description of Allowable Uses
- Exhibit 4 - September 2009 ESD
- Exhibit 5 - MP3 Sampling Results and Locations

Definitions

"East Tailings Area or ETA" shall mean the area deleted from the NPL and is legally described and depicted in Exhibit 2a;

"DNRE" shall mean the Michigan Department of Natural Resources and Environment, its successor entities, and those persons or entities acting on its behalf;

"NREPA" shall mean the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, MCL 324.101 *et seq*;

"Owner" shall mean, at any given time, the then current title holder of the Property or any portion thereof;

"Part 201" shall mean Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, MCL 324.20101 *et seq*;

"Property" shall mean the property with the Property ID Number 05-11-129-007-00, which is legally described in Exhibit 1 and includes: the ETA portion and the non-ETA portion of the Tar Lake Superfund Site, as depicted in Exhibit 2a;

"Response Activities" shall mean, consistent with Section 101(25) of CERCLA, 42 U.S.C. Section 9601(25), such actions that have already been conducted or may be necessary to conduct, any removal, remedy or remedial action, as those terms are defined in Sections 101(23) and 101(24) of CERCLA, 42 U.S.C. §§ 9601(23) and 9601(24), on the Property and/or at the Site, including enforcement activities related thereto;

"Site" shall mean the Tar Lake NPL site, DNRE Site ID No. 05000012, U.S. EPA Site No. MID980794655;

"U.S. EPA" shall mean the United States Environmental Protection Agency, its successor entities, and those persons or entities acting on its behalf.

All other terms used in this document which are defined in Part 3, Definitions, of the NREPA; Part 201; or the Part 201 Administrative Rules (Part 201 Rules), 1990 AACS R 299.5105 *et seq*; shall have the same meaning in this document as in Parts 3 and 201 of the NREPA and the Part 201 Rules, as of the recording date of this Restrictive Covenant.

NOW THEREFORE,

Pursuant to this Restrictive Covenant, MP3, as the current owner of the Property, hereby covenants and declares that the Property, excluding the ETA portion of the Property as legally described and depicted in Exhibit 2a (hereinafter, the "Restricted Area"), shall be subject to the restrictions and conditions set forth below.

1. Restrictions on Land Use: The Owner shall:

Prohibit all uses of the Restricted Area that are not compatible with the industrial category or commercial II, III, and IV subcategories, or are inconsistent with the assumptions and basis for the cleanup criteria established pursuant to Section 20120a(1)(g) and (i) of the NREPA. A non-exclusive list of uses that are compatible with these categories are generally described in Exhibit 3 (Allowable Uses). Outdoor recreational land use is

acceptable provided that the exposure assumptions used in the Human Health Risk Assessment (HHRA) for this Site, dated September 22, 1999, are applied. Those exposure assumptions allow for 6 hours per day 275 days/year (about 5.3 days/week) as a reasonable maximum exposure.

2. Restrictions on Activity: The Owner shall:

- a) Prohibit activities that cause existing contamination to migrate beyond the boundaries of the Restricted Area, increase the cost of Response Activities, or otherwise exacerbate the existing contamination located on the Restricted Area. The term "exacerbation" is more specifically defined in the NREPA.
- b) Prohibit and prevent use of the Restricted Area in a manner that may interfere with Response Activities at the Property, including interim response, remedial action, operation and maintenance, monitoring, or other measures necessary to assure the effectiveness and integrity of the remedial action.
- c) Prohibit the construction and use of wells or other devices on the Restricted Area to extract groundwater for non-potable purposes except as provided below:
 - (i) Wells may be used for non-potable purposes if, prior to the construction and use, the Owner submits a proposal to the U.S. EPA and the DNRE for review in accordance with the 2009 ESD. The proposal shall include the depth, location, and pumping rate of each proposed non-potable well, and demonstrate that the proposed wells will not negatively impact U.S. EPA's remedy. The proposal must include the Owner's certification that the non-potable wells will not be used for potable use.
 - (ii) Wells that are necessary for Response Activities, testing, and monitoring groundwater contamination levels in accordance with plans approved by the DNRE or the U.S. EPA.
 - (iii) Wells and devices associated with short-term dewatering for construction purposes is permitted provided the dewatering, including management and disposal of the groundwater, is conducted in accordance with all applicable local, state, and federal laws and regulations and does not cause or result in a new release, exacerbation of existing contamination, or any other violation of local, state, or federal environmental laws and regulations, including but not limited to, Part 201 of the NREPA.
- d) Prohibit the construction and use of wells or other devices on the Restricted Area to extract groundwater for potable purposes unless such use is consistent with the risk assumptions for drinking water in an industrial and/or commercial II, III, and IV subcategories scenario, and if, prior to the construction and use, the Owner submits a proposal to the U.S. EPA and DNRE for review in accordance with the 2009 ESD. The proposal shall include the depth, location, and pumping rate of each proposed potable well and demonstrate both of the following:
 - (a) The proposed wells will not negatively impact the U.S. EPA's remedy.
 - (b) The proposed wells will not pose unacceptable risk to human health as shown by the information to be provided as set forth on pages 7 and 8 of the 2009 ESD, "Potable Groundwater Use," attached as Exhibit 4.

3. Management of Contaminated Soil, Media, and Debris: The Owner shall manage all soils, media, and/or debris located on the Property in accordance with the applicable requirements of Section 20120c and Part 111 of the NREPA; the Resource Conservation and Recovery Act, 42 U.S.C. § 6901 *et seq*; the administrative rules promulgated thereunder; and all other relevant state and federal laws and regulations.

4. Access: The Owner shall grant to the DNRE and its designated representatives the right to enter the Property at reasonable times for the purpose of determining and monitoring compliance with the ROD and with this Restrictive Covenant, including the right to take samples, inspect the operation of the response activities and inspect any records relating thereto, and to perform any actions necessary to maintain compliance with Part 201 and the ROD.

Nothing in this Restrictive Covenant shall limit or otherwise affect the DNRE's right of entry and access, or authority to take Response Activities as defined in this Restrictive Covenant, as well as in NREPA, and any successor statutory provisions, or other state or federal law.

5. Modification/ Rescission: This Restrictive Covenant may be modified or rescinded only with the written approval of the U.S. EPA and the DNRE. The Owner may request, in writing to the U.S. EPA and the DNRE, at the addresses provided in Paragraph 11 (below), a modification to, or rescission of, this Restrictive Covenant (e.g., modifications to the allowable land or groundwater uses that are consistent with the 2002 ROD and the 2009 ESD requirements). Any approved modification to or rescission of this Restrictive Covenant shall be filed with the appropriate Register of Deeds by the then Owner; a certified copy shall be returned to the DNRE and the U.S. EPA at the addresses provided in Paragraph 11 (below).

6. Enforcement: The State of Michigan, through the DNRE, and the United States of America on behalf of the U.S. EPA as a Third Party Beneficiary, may enforce the restrictions set forth in this Restrictive Covenant by legal action in a court of competent jurisdiction.

7. U.S. EPA Entry, Access, and Response Authority: Nothing in this Restrictive Covenant shall limit or otherwise affect the U.S. EPA's right of entry and access, or authority to undertake Response Activities as defined in this Restrictive Covenant, as well as in CERCLA, the National Contingency Plan, 40 C.F.R. Part 300, and any successor statutory provisions, or other state or federal laws. The Owner consents to officers, employees, contractors, and authorized representatives of the U.S. EPA entering and having continued access to the Property for the purposes described in Paragraph 4 (above).

8. Term: This Restrictive Covenant shall run with the land and shall be binding on the Owner; future owners; and all current and future successors, lessees, easement holders; their assigns, and their authorized agents, employees, or persons acting under their direction and control.

9. Severability: If any provision of this Restrictive Covenant is held to be invalid by any court of competent jurisdiction, the invalidity of such provision shall not affect the validity of any other provision hereof, and all other provisions shall continue unimpaired and in full force and effect.

10. Transfer of Interest: The Owner shall provide notice, at the addresses provided in this document, to the DNRE and to the U.S. EPA of the Owner's intent to transfer any interest in the Property, or any portion thereof, at least fourteen (14) business days prior to consummating the conveyance. A conveyance of title, easement, or other interest in the Property shall not be consummated by the Owner without adequate and complete provision for compliance with the terms and conditions of this Restrictive Covenant and the applicable provisions of Section 20116 of the NREPA. The Owner shall include in any instrument conveying any interest in any portion of

the Property, including but not limited to, deeds, leases, and mortgages, a notice which is in substantially the following form:

NOTICE: THE INTEREST CONVEYED HEREBY IS SUBJECT TO A DECLARATION OF RESTRICTIVE COVENANT, DATED MAY ____, 2010, AND RECORDED WITH THE ANTRIM COUNTY REGISTER OF DEEDS, LIBER _____, PAGE _____.

Notwithstanding the foregoing, it is expressly acknowledged that the above notice, as it applies to conveyance of any part of the Property that is outside the Restricted Area, is limited to the access and related requirements set forth above in Paragraphs 4 and 7, and the remaining restrictions set forth above, applicable to the Restricted Area, do not apply to land located outside the Restricted Area.

11. Notices: Any notice, demand, request, consent, approval, or communication that is required to be made or obtained under this Restrictive Covenant shall be made in writing, and include a statement that the notice is being made pursuant to the requirements of this Restrictive Covenant, and shall be served either personally or sent via first class mail, postage prepaid, as follows:

For the U.S. EPA:

Director
Superfund Division (SR-6J)
U.S. Environmental Protection Agency, Region 5
77 West Jackson Blvd.
Chicago, IL 60604

Send a copy to:
Office of Regional Counsel (C-14J)
U.S. Environmental Protection Agency, Region 5
77 West Jackson Blvd.
Chicago, IL 60604

For the DNRE:

Director
Michigan Department of Natural Resources and Environment
P.O. Box 30473
Lansing, MI 48909-7973

12. Authority to Execute Restrictive Covenant: The undersigned person executing this Restrictive Covenant on behalf of the Owner represents and certifies that he or she is duly authorized and has been empowered to execute this Restrictive Covenant.

IN WITNESS WHEREOF, Mancelona Private Power Producers has caused this Restrictive Covenant to be executed on this _____ day of May, 2010

Signature

Printed Name

Title

EXHIBIT 1

LEGAL DESCRIPTION OF PROPERTY AND RESTRICTED AREA

LEGAL DESCRIPTION

PREPARED FOR: MR2

PARCEL # 05-11-129-007-00

Part of the East One-Half of the Northwest One-Quarter of Section 29, Town 29 North, Range 6 West, Manclona Township, Antrim County, Michigan, more fully described as:

Commencing at the West One-Quarter corner of said Section 29;
 thence North 89°58'07" East, 1322.50 feet,
 along the East and West One-Quarter line of said Section 29,
 to the POINT OF BEGINNING;
 thence North 00°26'19" East, 2645.11 feet,
 along the West One-Eighth line of said Section;
 thence South 89°49'28" East, 669.78 feet,
 along the North line of said Section and the centerline of Elder Road;
 thence South 00°35'52" West, 660.02 feet,
 parallel with the North-South Quarter line of said Section;
 thence South 89°49'28" East, 330.01 feet;
 parallel with the North line of said Section 29;
 thence South 00°35'52" West, 660.79 feet;
 parallel with said North-South Quarter line;
 thence South 89°55'38" East, 330.01 feet;
 thence South 00°35'52" West, 1,320.16 feet,
 along the North-South Quarter line;
 thence South 89°58'07" West, 1,322.50 feet;
 along the South line of said Section to the POINT OF BEGINNING.


Said parcel contains 65.45 acres, more or less.

Subject to the rights of way of Elder over the northerly portion thereof.

Subject to other easements or restrictions, if any.



Gary G. Wilson
2-11-10

PH 231.946.5874 FAX 231.946.3703 www.gourdiefraser.com 123 W. Front Street Traverse City, MI 49684	 gfa Gourdie-Fraser Municipal Development Transportation	Location: PART OF THE EAST HALF OF THE NORTHWEST QUARTER SECTION 29, T. 29 N., R. 6 W. MANCLONA TWP. ANTRIM CO. MI.	DATE: 8-04-09 P/L M/R DRN WK CR MJR 08455-A SHEET 2 of 2
THESE DOCUMENTS ARE PREPARED IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THE CONTRACT FOR THIS PROJECT.			

LEGAL DESCRIPTION

Prepared For: MP3

PARCEL 05-11-129-007-00 RESTRICTED AREA

Part of the East One-half of the Northwest One-quarter of Section 29, Town 29 North, Range 6 West, Manclona Township, Antrim County, Michigan, more fully described as:

Commencing at the West One-quarter Corner of said Section 29;
 thence North 89°58'07" East, 1,322.50 feet,
 along the East – West One-quarter Line of said Section 29,
 to the POINT OF BEGINNING;
 thence North 00°26'19" East, 1,294.67 feet,
 along the West one-eighth line of said Section 29;
 thence South 55°39'15" East, 118.45 feet;
 thence South 32°33'57" East, 407.20 feet;
 thence South 29°35'20" East, 433.58 feet;
 thence East, 65.00 feet;
 thence North 15°26'16" East, 1,529.59 feet;
 thence South 00°35'52" West, 660.79 feet;
 thence South 89°55'38" East, 330.01 feet,
 to a point on the North – South One-quarter Line of said Section 29;
 thence South 00°35'52" West, 1,320.16 feet,
 along the North – South One-quarter Line of said Section 29
 to a point on the East – West One-quarter Line of said Section 29;
 thence South 89°58'07" West, 1,322.50 feet,
 along the East – West One-quarter Line of said Section 29,
 to the POINT OF BEGINNING.

Said Parcel contains 33.63 acres more or less.

Subject to other easements or restrictions, if any.



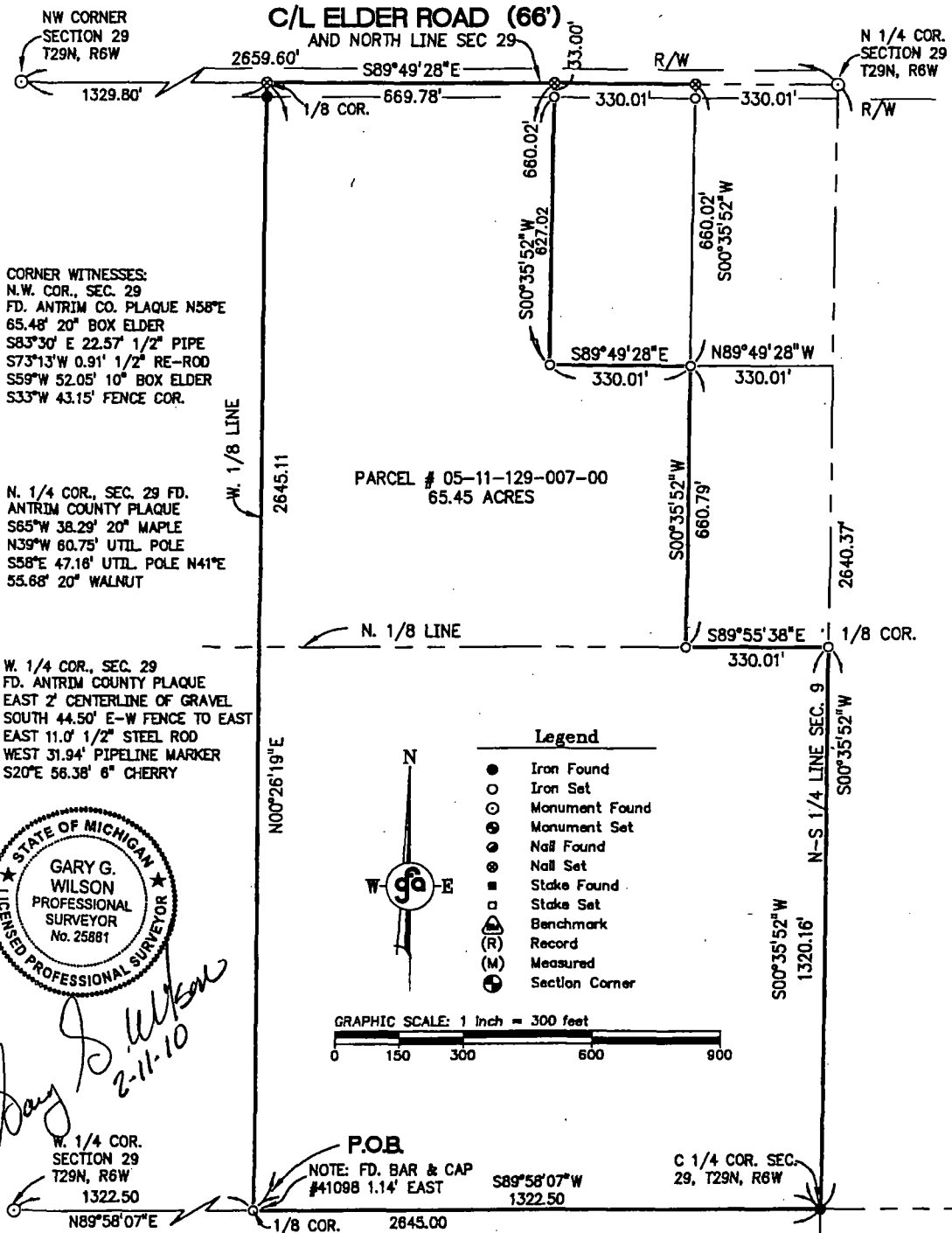
Gary G. Wilson
2-11-10

PREPARED FOR: MP3 PH 231.948.5874 FAX 231.946.3703 WWW.gourdiefrazer.com 123 W. Front Street Traverse City, MI 49684	Gourdiefrazer Municipal Development Transportation	BASIS OF BEARINGS: U.S. STATE PLANE ZONE 2112, NAD 83 Location: PART OF THE EAST 1/2 OF THE NW 1/4 OF SECTION 29, TOWN 29 NORTH, RANGE 06 WEST MANCLONA TOWNSHIP, ANTRIM CO., MI.	DATE: 02-08-10 P.M.: MIKE RADEMAKER D.R.: CDL C.R.: M.J.R. 08455A SHT 2 OF 2
THESE DOCUMENTS ARE PREPARED IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THE CONTRACT FOR THIS PROJECT.			

EXHIBIT 2

SURVEY OF THE PROPERTY AND RESTRICTED AREA

CERTIFICATE OF SURVEY



CORNER WITNESSES:
N.W. COR., SEC. 29
FD. ANTRIM CO. PLAQUE N58°E
65.48' 20" BOX ELDER
S83°30' E 22.57' 1/2" PIPE
S73°13'W 0.91' 1/2" RE-ROD
S59°W 52.05' 10" BOX ELDER
S33°W 43.15' FENCE COR.

N. 1/4 COR., SEC. 29 FD.
ANTRIM COUNTY PLAQUE
S65°W 38.29' 20" MAPLE
N39°W 60.75' UTIL. POLE
S58°E 47.16' UTIL. POLE N41°E
55.68' 20" WALNUT

W. 1/4 COR., SEC. 29
FD. ANTRIM COUNTY PLAQUE
EAST 2' CENTERLINE OF GRAVEL
SOUTH 44.50' E-W FENCE TO EAST
EAST 11.0' 1/2" STEEL ROD
WEST 31.94' PIPELINE MARKER
S20°E 56.38' 6" CHERRY

STATE OF MICHIGAN
GARY G. WILSON
PROFESSIONAL SURVEYOR
No. 25881
LICENSED PROFESSIONAL SURVEYOR

Gary G. Wilson
2-11-10

W. 1/4 COR. SECTION 29 T29N, R6W 1322.50
N89°58'07"E 1/8 COR. 2645.00
NOTE: FD. BAR & CAP #41098 1.14' EAST S89°58'07"W 1322.50
C 1/4 COR. SEC. 29, T29N, R6W

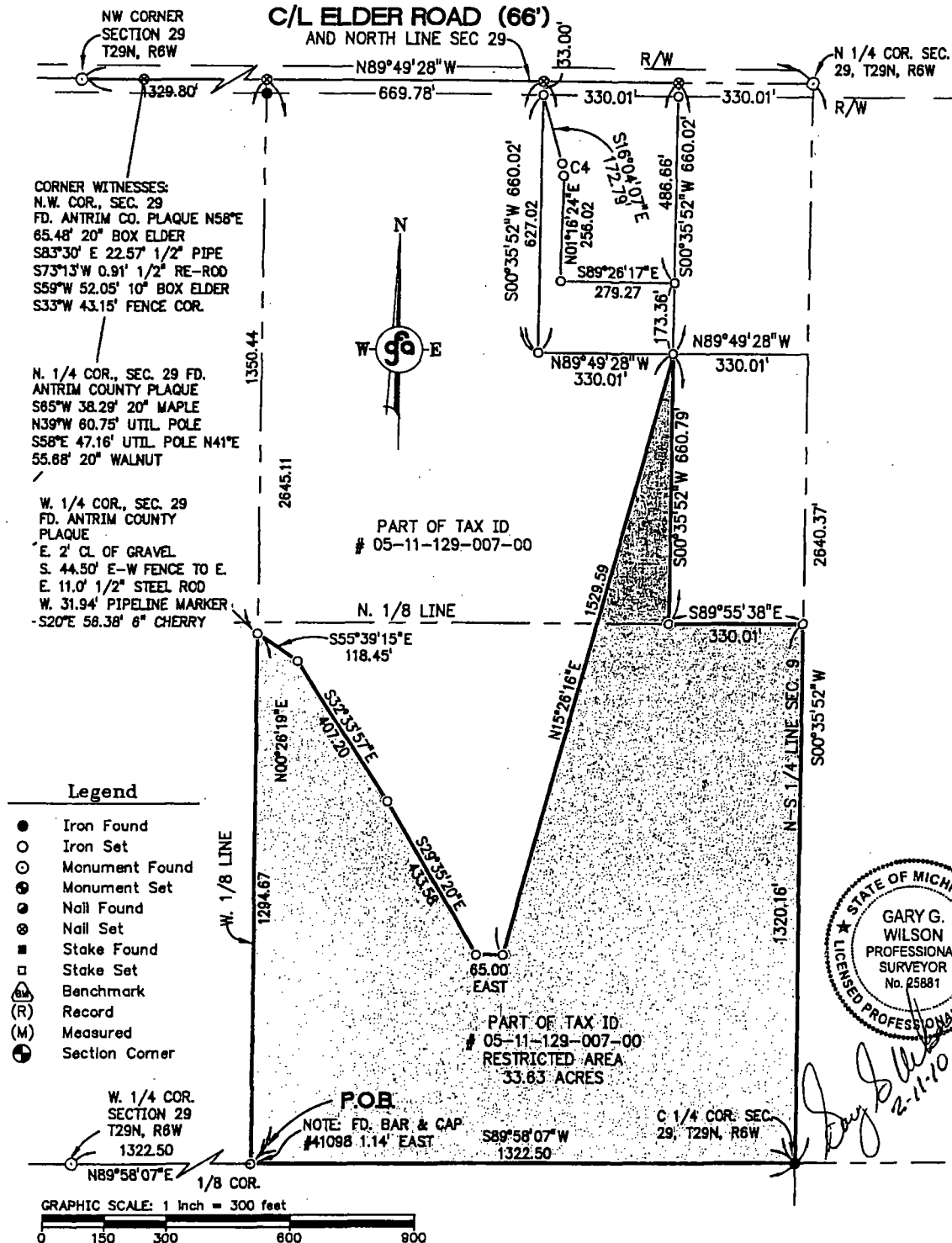
I HEREBY CERTIFY THAT I HAVE SURVEYED AND MAPPED THE HEREON DESCRIBED PARCEL(S) OF LAND; THAT THE RATIO OF CLOSURE OF THE UNADJUSTED FIELD OBSERVATIONS IS 1 IN 5000+ AND WITHIN THE ACCEPTED LIMITS AND THAT I HAVE FULLY COMPLIED WITH THE REGULATIONS OF ACT 132, P.A. 1970, AS AMENDED.

PREPARED FOR: **MR2** BASIS OF BEARINGS: U.S. STATE PLANE COORD. SYSTEM ZONE 2112, NAD83

PH 231.946.5874 FAX 231.946.3703 WWW.gourdiefraser.com 123 W. Front Street Traverse City, MI 49684	<p>Municipal Development Transportation</p>	Location: PART OF THE EAST HALF OF THE NW 1/4 SECTION 29, T29N, R6W MANCERONA TWP, ANTRIM CO, MI	DATE: 8-04-09 P.M.: MJR DR: WEK CR: MJR 08455-A SHT 1 OF 2
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THESE DOCUMENTS ARE PREPARED IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THE CONTRACT FOR THIS PROJECT.

CERTIFICATE OF SURVEY



Gary G. Wilson
2-11-10

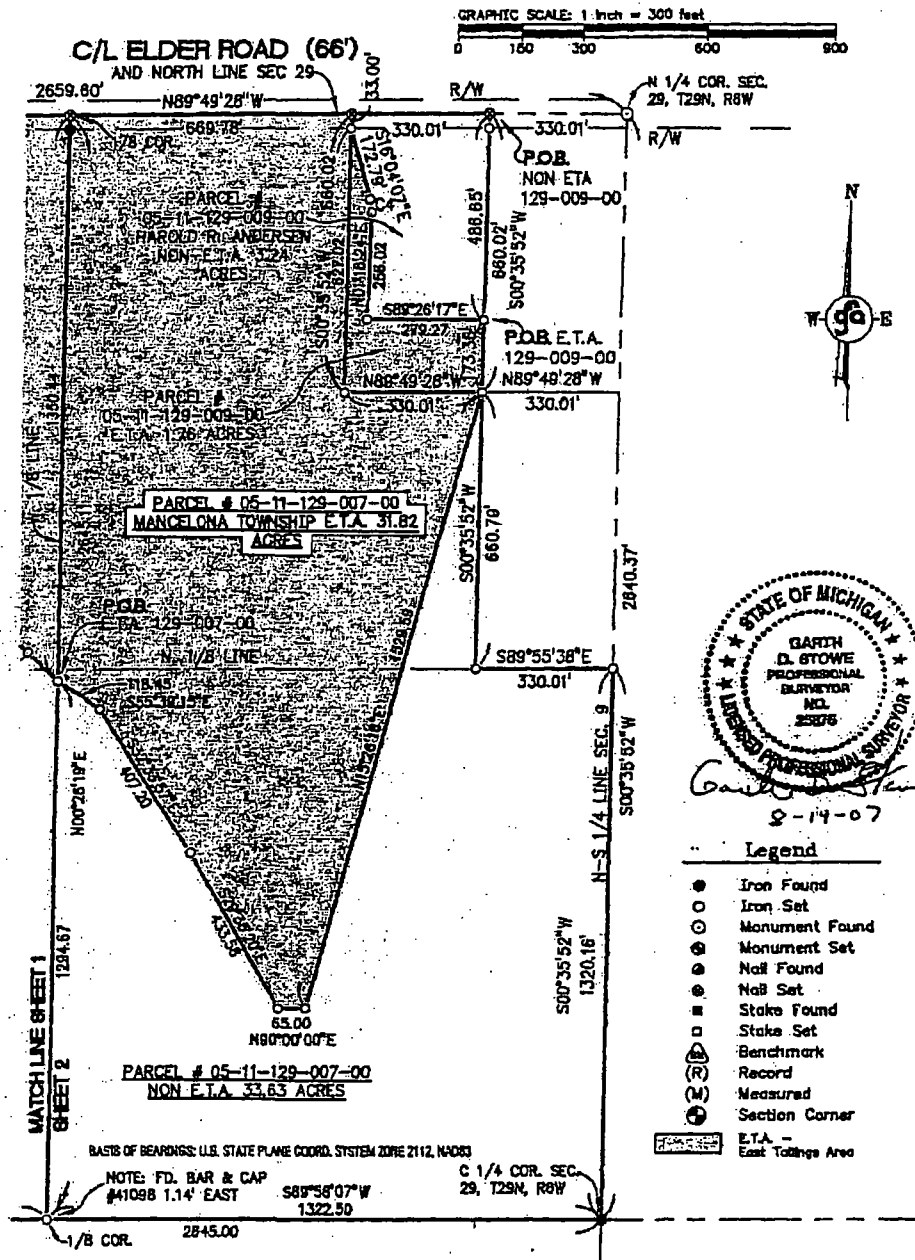
PREPARED FOR: MP3	BASIS OF BEARINGS: U.S. STATE PLANE ZONE 2112, NAD 83	DATE: 02-03-10 P.M.: MIKE RADENMAKER D.R.: CDL C.D.: M.R. 08455A SHT 1 OF 2
PH 231.946.5874 FAX 231.948.3703 WWW.gourdiefrazier.com 123 W. Front Street Traverse City, MI 49684	<p>Gourdie-Frazier Municipal Development Transportation</p>	Location: PART OF THE EAST 1/2 OF THE NW 1/4 OF SECTION 29, TOWN 29 NORTH, RANGE 08 WEST MANCERONA TOWNSHIP, ANTRIM CO., MI.

THESE DOCUMENTS ARE PREPARED IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THE CONTRACT FOR THIS PROJECT.
16 PROJECTS 040488A (PROJ) 040488A (PL) 040488A (CD) 02-10-10 418 (M) MRR/CAJ/REV.

EXHIBIT 2a

SURVEY OF THE ETA AND NON-ETA PORTIONS OF THE PROPERTY

CERTIFICATE OF SURVEY



U.S. ARMY CORPS OF ENGINEERS - DETROIT DISTRICT
U.S. ENVIRONMENTAL PROTECTION AGENCY REGION 5

PREPARED FOR: PH 231.948.5074 FAX 231.948.3703 WWW.gourdiefraser.com 129 W. Front Street Torrance City, MI 49684	<p style="font-size: small;">Municipal Development Transportation</p>	Location: TAR LAKE SITE SURVEY & MAPPING IN THE NW 1/4 SECTION 29, T29N, R8W MANCERONA TWP, ANTRIM CO, MI	DATE: 07-11-07 PLAN: 02 JOB: DFB CASE: 02 07243 SHEET 2 of 9
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THESE DOCUMENTS ARE PREPARED IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THE CONTRACT FOR THIS PROJECT.

LEGAL DESCRIPTION

PREPARED FOR: U. S. ARMY CORPS OF ENGINEERS—DETROIT DISTRICT/
U. S. ENVIRONMENTAL PROTECTION AGENCY REGION 5

PARCEL #05-11-129-007-00 EAST TAILINGS AREA

Part of the East one-half of the Northwest one-quarter of Section 29, Town 29 North, Range 6 West, Mancelona Township, Antrim County, Michigan, more fully described as:

Commencing at the West one-quarter corner of said Section 29;
thence North 89°58'07" East, 1322.50 feet,
along the East and West one-quarter line of said Section 29;
thence North 00°26'19" East, 1294.67 feet,
along the West one-eighth line of said Section 29 to a point on the boundary
line of the Mancelona Township East Tailings Area and to the Point of Beginning;
thence, along said tailings area boundary line, the following 5 courses:
South 55°39'15" East, 118.45 feet;
South 32°33'57" East, 407.20 feet;
South 29°35'20" East, 433.58 feet;
East, 85.00 feet;
North 15°26'16" East, 1529.59 feet;
thence, leaving said tailings area boundary, North 89°49'28" West, 330.01 feet;
thence North 00°35'52" East, 660.02 feet,
to a point on the North line of said Section 29 and centerline of Elder Road;
thence North 89°49'28" West, 669.78 feet,
along said North section line and road centerline to a point on
the West one-eighth line of said Section 29;
thence South 00°26'19" West, 1350.44 feet,
to the Point of Beginning.

Said ETA portion of Parcel #05-11-129-007-00 contains 31.82 acres.

Subject to the right-of-way for Elder Road over the North 33 feet thereof.

Subject to other easements or restrictions, if any.



8-14-07

U. S. ARMY CORPS OF ENGINEERS - DETROIT DISTRICT
PREPARED FOR: U. S. ENVIRONMENTAL PROTECTION AGENCY REGION 5

PH 231.548.5874 FAX 231.548.3703 WWW.gourdiefraser.com 123 W. Front Street Terra Ceia, MI 49684	<p>gfa Gourdie-Fraser Municipal Development Transportation</p>	Location: TAR LAKE SITE SURVEY & MAPPING IN THE NW 1/4 SECTION 29, T29N, R6W MANCELONA TWP, ANTRIM CO, MI	DATE: 07-11-07 PLAN: 08 DL: DFB CDL: 08 07243 SHEET 7 OF 9
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THESE DOCUMENTS ARE PREPARED IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THE CONTRACT FOR THIS PROJECT.

LEGAL DESCRIPTION

PREPARED FOR: U. S. ARMY CORPS OF ENGINEERS—DETROIT DISTRICT/
U. S. ENVIRONMENTAL PROTECTION AGENCY REGION 5

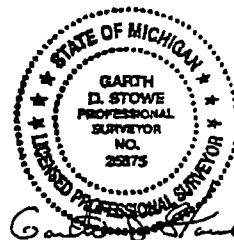
PARCEL #05-11-129-007-00 NON EAST TAILINGS AREA

Part of the East one-half of the Northwest one-quarter of Section 29, Town 29 North, Range 6 West, Mancelona Township, Antrim County, Michigan, more fully described as:

Commencing at the West one-quarter corner of said Section 29;
thence North 89°58'07" East, 1322.50 feet,
along the East and West one-quarter line of said Section 29,
to the Point of Beginning;
thence North 00°26'19" East, 1294.67 feet,
along the West one-eighth line of said Section 29 to a point on the boundary
line of the Mancelona Township East Tailings Area;
thence, along said tailings area boundary line, the following 5 courses:
South 55°39'15" East, 118.45 feet;
South 32°33'57" East, 407.20 feet;
South 29°35'20" East, 433.58 feet;
East, 65.00 feet;
North 15°26'18" East, 1529.59 feet;
thence, leaving said tailings area boundary, South 00°35'52" West, 660.79 feet,
parallel with the North and South one-quarter line of said Section 29
to a point on the North one-eighth line of said Section 29;
thence South 89°55'38" East, 330.01 feet,
along said North one-eighth line to a point on said North and South one-quarter
line;
thence South 00°35'52" West, 1320.16 feet,
along said North and South one-quarter line;
thence South 89°58'07" West, 1322.50 feet,
along said East and West one-quarter line to the Point of Beginning.

Said Non ETA portion of Parcel #05-11-129-007-00 contains 33.63 acres.

Subject to easements or restrictions, if any.



2-14-07

U. S. ARMY CORPS OF ENGINEERS - DETROIT DISTRICT
U. S. ENVIRONMENTAL PROTECTION AGENCY REGION 5

PREPARED FOR:

PH 231.948.5874 FAX 231.948.3703 WWW.gourdiefraser.com 123 W. Frost Street Traverse City, MI 49684	<p>gfa Gourdie-Fraser Municipal Development Transportation</p>	Location: TAR LAKE SITE SURVEY & MAPPING IN THE NW 1/4 SECTION 29, T29N, R6W MANCELONA TWP, ANTRIM CO, MI	DATE 07-11-07 PLOT 08 DL DFG CD: 03 07243 SHEET 6 OF 9
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THESE DOCUMENTS ARE PREPARED IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THE CONTRACT FOR THIS PROJECT.

EXHIBIT 3

DESCRIPTION OF ALLOWABLE USES

DESCRIPTION OF ALLOWABLE USES

ALLOWABLE LAND USE CATEGORIES

Industrial and Commercial Land Use Categories

Activities and uses are extremely variable within the industrial and commercial land uses. The information and general descriptions of allowable land use categories provided below is intended to provide guidance as to the land use and exposure assumptions relied upon by the Michigan Department of Natural Resources and Environment (MDNRE) in developing the cleanup criteria for the specific land use category pursuant to Section 20120a of Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. This information can be used to evaluate if a land use is protective of human health, safety and welfare and the environment given the environmental conditions at the property. For further information please refer to the MDNRE, Remediation Redevelopment Division Operational Memoranda, Operational Memorandum #1: Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, dated December 10, 2004.

1. Industrial Land Use Category.

The primary activity at the property is and will continue to be industrial in nature (e.g., manufacturing, utilities, industrial research and development, petroleum bulk storage). Access to the property is and will continue to be reliably restricted consistent with its use (e.g., by fences, security personnel, or both).

This land use category includes property that is currently zoned industrial or is anticipated to be zoned as industrial. This may include different zoning designations, depending on the community, such as "light industrial" or "heavy industrial," but does not include any use the zoning designation may include that allows for residential use or permanent residence on the property. Inactive or abandoned properties can be included in this category if the use was and/or will be industrial, as described above and access is controlled as necessary to assure unacceptable exposures do not occur. The industrial category does not include farms, gasoline service stations, and other commercial establishments where children may commonly be present.

2. Commercial Land Use Category

The primary activity at the property is and will continue to be commercial in nature (e.g., retail, warehouse, office/business space). This land use category includes property that is currently zoned or anticipated to be zoned as commercial. This may include different zoning designations, depending on the community, such as "community commercial," "regional commercial," "retail," or "office business." Abandoned or inactive commercial properties can be included in this category provided the property land use is consistent with the definition of a commercial land use and included in one of the subcategory definitions described below.

Allowable land uses within the commercial category are extremely varied and broad, encompassing everything from day care centers and schools to gas stations and warehouse operations. The physical setting of commercial properties and the activities which workers and the general public engage in are also extremely variable. Given the breadth of the commercial land use category, it is impossible to assign a single set of "typical" or generic exposure assumptions to characterize the activities of all potentially exposed populations. Consequently, the universe of commercial land uses has been divided into four subcategories based on factors that are critical to the assessment of potential risk (NOTE: Subcategory I is not suitable for this property and is therefore not discussed below). These factors include the potentially exposed populations (workers or general public) and the nature, duration, and frequency of the exposures likely to occur when people occupy, work at, visit, or patronize the facility. If the property is located in or near residential areas and, therefore, may be used by other populations for purposes other than the intended commercial use (e.g., recreational), additional measures (access control or placement of exposure barriers, etc.) may be required to prevent persons involved in the unintended uses from exceeding the exposure assumptions under the applicable subcategory described below.

Subcategory II

This commercial land use subcategory is characterized by the following features. Access to the public is reliably restricted, consistent with its use, by fences, security, or both. Affected surficial soils are located in unpaved or landscaped areas that are frequently contacted by worker populations such as groundskeepers, maintenance workers, or other employees whose primary duties are performed outdoors. The degree of exposure for such employees under subcategory II property is assumed to be equivalent to the exposures used to model outdoor activities in the development of the generic industrial criteria. If groundwater is relied on for drinking water, it is assumed that worker populations receive half of their total daily drinking water exposure from the facility.

This subcategory could include, but is not limited to, the following uses:

- large-scale commercial warehouse operations
- wholesale lumber yards
- building supply warehouses

Subcategory III (low soil intensive)

A subcategory III commercial property is characterized by the following features. Access to the public is unrestricted; however, the general public's occupancy of the property is expected to be intermittent and significantly less in frequency and duration relative to the population working at the facility. Although some of the activities for both worker populations and the general public at a subcategory III commercial property are conducted indoors, a significant component of their activity will likely be outdoors. The worker/receptor population at these commercial facilities is expected to engage in low soil intensive activities. Routine outdoor tasks performed by these workers are unlikely to result in significant physical interaction with the soil. Affected surficial soils are located in unpaved areas that may be contacted, primarily by the worker populations (as may be the cases at gas stations, auto dealerships, or building supply warehouses with unpaved areas). If on-site groundwater is relied on for drinking water, it is assumed that worker populations receive half of their total daily drinking water exposure from the facility.

This subcategory could include, but is not limited to, the following uses:

- Retail gas stations
- Auto service stations
- Auto dealerships
- Retail warehouses selling the majority of their merchandise indoors but including some limited storage or stockpiling of materials in an outdoor yard (building supply, retail flower and garden shops not involving on-site plant horticulture and excluding open air nurseries, tree farms, and sod farms which would fall into an agricultural land use).
- Repair and service establishments including but not limited to, lawn mower, boat, snowmobile, or small appliance repair shops that have small outdoor yards.
- Small warehouse operations

Subcategory IV (high soil intensive)

A subcategory IV commercial property is characterized by the following features. Access to the public is unrestricted, however, the general public's occupancy of the facility is intermittent in frequency and of short duration relative to the worker populations at the facility (i.e., the frequency and duration of general public occupancy at the property is typified by the time necessary to transact business at a retail establishment or to receive personal services). However, at least a portion of the worker population at this type of commercial property conducts most of their work activities outdoors and is expected to engage in high soil intensive activities that will result in significant physical interaction with the soil. Such persons include workers from off-site who work at multiple properties such as commercial landscapers. If groundwater is relied upon for drinking water, worker populations would receive one-half of their total daily drinking water exposure at the facility.

This subcategory could include, but is not limited to, the following uses where landscaping exists or has the potential to exist:

- Professional offices (lawyers, architects, engineers, real estate, insurance, etc.)
- Medical/dental offices and clinics (not including hospitals)
- Banks, credit unions, savings and loan institutions, etc.
- Publicly owned office buildings
- Any retail business whose principal activity is the sale of food or merchandise within an enclosed building
- Personal service establishments which perform services indoors (health clubs, barber/beauty salons, mortuaries, photographic studios, etc.).

EXHIBIT 4

**SEPTEMBER 2009
EXPLANATION OF SIGNIFICANT DIFFERENCE**

EXPLANATION OF SIGNIFICANT DIFFERENCE

**Tar Lake Superfund Site
Mancelona, Michigan**

September 2009

INTRODUCTION TO THE SITE AND STATEMENT OF PURPOSE

This Explanation of Significant Difference (ESD) documents a change in the institutional control (IC) component of the groundwater remedy the United States Environmental Protection Agency (EPA) selected for the Tar Lake Superfund site (site) in Mancelona, Michigan. The cleanup remedy is documented in EPA's Record of Decision (ROD) for the site dated February, 25, 2002, and in an ESD EPA issued on September 27, 2004. EPA is the lead agency for the site and the Michigan Department of Environmental Quality (MDEQ) is the support agency.

EPA is issuing this ESD pursuant to Section 117(c) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. Section 9617(c), as amended by the Superfund Amendments and Reauthorization Act, and Section 300.435(c)(2)(i) of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). These regulations require EPA to publish an ESD when a difference in the remedial action for a site significantly changes, but does not fundamentally alter, the remedy EPA selected in the ROD for the site. More fundamental changes would require EPA to issue a proposed ROD Amendment to the public, and hold a public comment period of at least 30 days.

EPA developed this ESD to clarify the IC requirements restricting groundwater use at the site in the 2002 ROD. The 2002 ROD called for no groundwater use until four consecutive groundwater sampling events indicate contaminant concentrations are below Maximum Contaminant Levels (MCLs) and MDEQ drinking water criteria. Since the "no groundwater use" is a broad standard and could be interpreted to mean both potable and non-potable uses, EPA is clarifying in this document that certain groundwater uses at the site are acceptable.

This ESD will become part of the administrative record file for the site, as noted in the NCP at 40 C.F.R. Section 300.825(a)(2). The administrative record file and information repositories for the site are available at EPA's offices in Chicago, Illinois, and locally in Mancelona, Michigan at the following locations:

EPA Region 5 Superfund Records Center
77 West Jackson Blvd.
7th Floor, Room 711
Chicago, IL 60604
312-353-5821

Hours: Monday to Friday 8:00 am to 4:00 pm

Mancelona Township Library
202 West State Street
Mancelona, MI 49659
231-587-9451

Hours: Tuesday, Wednesday, Friday: 10:00 am to 5:00 pm
Thursday: 12:00 pm to 10:00 pm
Saturday-Monday: Closed

SITE HISTORY, CONTAMINATION AND SELECTED REMEDY

The Tar Lake site is a former iron manufacturing facility (Antrim Iron Works) that operated from about 1882 to 1945. The site is in a rural area about one mile south of Mancelona, Michigan. The site currently includes about 189 acres and covers 13 properties (Figure 1). The site does not include the 45 acre east tailings area (ETA) which EPA determined was acceptable for unrestricted use/unlimited exposure (UU/UE) and deleted from the site in 2005. About 12 acres of the site are fenced and include a groundwater treatment and monitoring system. Parts of the site are used by two businesses and Mancelona Township. About 159 acres of the site have been vacant since 1945.

Antrim Iron Works' manufacturing operations created a tar-like waste residue (tar) which was discharged to a low-lying area of the site called Tar Lake. From 1957 to 1967, a metal products company also disposed waste in the Tar Lake area of the site. Other major operations areas of the site include the iron production area, creosote area, and the retort and chemical production area. Peckham Lake and Nelson Lake were also used for cooling water withdrawal and discharge.

In 1998-1999, EPA conducted a fund-lead removal action and removed 47,043 tons of tar and tar debris from the Tar Lake area (operable unit 1 or OU1). EPA also began a fund-lead remedial investigation/feasibility study (RI/FS) to address the soil below the excavated tar, groundwater and other site areas (OU2).

In 1998, MDEQ installed an on-site in-situ biosparge groundwater treatment system downgradient of the tar removal area. MDEQ also provided residents with bottled water until 2002 when MDEQ connected residents to the Mancelona water supply through a state-funded water supply expansion.

EPA signed the OU2 ROD in 2002. The 2002 ROD included the following major remedy components:

- Continue to operate MDEQ's biosparge groundwater treatment system to prevent groundwater contaminants from moving off-site and return on-site groundwater to drinking water levels.
- Install groundwater circulation and soil bioventing systems in the Tar Lake excavation to increase air flow through soil and groundwater and the aerobic degradation of soil and groundwater contaminants. Restore soil to MDEQ drinking water protection criteria (DWPC) and site-specific values calculated for chemicals for which MDEQ DWPC are not available. Restore groundwater in the Tar Lake excavation to Maximum Contaminant Levels (MCLs) and MDEQ residential drinking water criteria (RDWC).
- Excavate tar in the creosote area and transport to an off-site energy recovery facility.
- Conduct long-term groundwater monitoring to verify the effectiveness of the remedial action and monitor groundwater conditions over time.
- Implement ICs such as restrictive covenants to reduce the potential for exposure to on-site groundwater and restrict residential use at the site. The restrictions on groundwater use will apply until the groundwater is demonstrated to be below MCLs and MDEQ RDWC. The restrictions on residential use will apply until risks associated with residential use are properly assessed and determined to be acceptable.
- Restrictions are not required for off-site groundwater because contaminants detected in off-site groundwater did not exceed health-based drinking water criteria. Further impacts to off-site groundwater will be prevented by the biosparge system.

In 2004, EPA determined it was more cost effective to remove the contaminated soil from the Tar Lake area instead of constructing the groundwater circulation and soil bioventing systems in the excavation. EPA issued an ESD in 2004 changing the remedy from groundwater circulation and soil bioventing to soil excavation and off-site disposal. EPA completed the remedial action soil removal and creosote area tar removal in 2004. EPA estimated the cleanup time for groundwater would be one to three years. In 2005, EPA deleted the 45-acre East Tailings Area (ETA) of the site for unrestricted use/unlimited exposure (UU/UE).

MDEQ continues to operate the biosparge system at the site and conduct routine groundwater monitoring. EPA conducted a Five-Year Review (FYR) for the site in June 2009. The FYR indicates the biosparge system is operating and functioning as designed, and that the soil removal was effective in the south part of the Tar Lake area.

However, groundwater contamination in the north part of the Tar Lake area upgradient of the biosparge system has not decreased to cleanup levels as expected, and is increasing. The increased groundwater contamination is treated by the biosparge system and is not spreading downgradient. However, EPA plans to reassess the cleanup time frame for groundwater in the north part of the Tar Lake area and evaluate whether the biosparge system should be expanded.

Additional information about the Tar Lake site is available in the 2002 ROD, the 2004 ESD, the 2009 FYR and other reports and documents in the administrative record file for the site. The 2002 ROD and 2004 ESD are available on the internet at www.epa.gov/superfund/sites/rods, and the 2009 FYR is available on the internet at www.epa.gov/region5superfund/fiveyear/reviews.

BASIS FOR THE ESD

In 2009, property owners redeveloping a portion of the site requested clarification of the groundwater institutional controls. Specifically, the ROD states (page 25):

Institutional controls would consist of recording legal notices on the property of current owners of the site to reduce the potential for exposure to on-site groundwater and restrict residential land use. EPA would ensure that the current property owners place language in their property deed to explain that no groundwater wells should be installed until on-site groundwater in the shallow drinking water aquifer is below the MCL for benzene (5 ppb) and below the state drinking water standard for 2,4 dimethylphenol (370 ppb). When groundwater monitoring indicates that on-site groundwater is below MCLs and state drinking water standards during four consecutive sampling events, there would no longer be restrictions on groundwater use. Restrictions on off-site groundwater would not be necessary because results of groundwater investigations indicate that although off-site groundwater concentrations are above State of Michigan [aesthetic] drinking water standards for iron and manganese, these concentrations are not above health-based risk levels. Language explaining that only industrial, commercial and recreational land use would be allowed until risks associated with residential land use have been properly assessed [would also be included]. Currently, there are no zoning ordinance (sic) in Antrim County to refer to that would assist with restricting groundwater or land use.

The 2002 ROD did not clarify whether groundwater use was prohibited on the entire site until the groundwater contamination is cleaned up, even if groundwater sampling at a specific property indicates chemical concentrations are below MCLs and MDEQ criteria at that property. Also, the requirements for

groundwater use referenced in the 2002 ROD are drinking water standards (potable use).

EPA's 2002 ROD and 1999 Human Health Risk Assessment did not specifically address non-potable groundwater use at the site (e.g., groundwater used for industrial processes or cooling water). However, MDEQ health-based groundwater criteria for industrial/commercial groundwater volatilization to indoor air inhalation criteria and groundwater contact criteria are significantly greater than the highest levels of groundwater contaminants detected on-site. Therefore, non-potable groundwater use is not expected to pose any unacceptable health risks at the site (Table 1).

Table 1 Maximum Groundwater Concentration Detected On-Site 2004-2008 and MDEQ Non-Potable Groundwater Use Criteria

Chemical	Maximum Concentration Detected On-Site (ug/L)	MDEQ Groundwater Contact Criteria and Risk-Based Screening Levels (ug/L)	MDEQ Industrial/Commercial Groundwater Volatilization to Indoor Air Inhalation Criteria and Risk-Based Screening Levels (ug/L)
Benzene	110	11,000	35,000
2,4-Dimethylphenol	3,500	520,000	NLV
Methylphenols (total)	13,100	810,000	NLV
Arsenic	120	4,300	NLV
Iron	3,000	58,000,000	NLV

NLV - No or Limited Volatilization Potential

The RI indicates the aquifer at the site is a continuous unconfined sand aquifer reported to be up to 400 feet deep, which may contain minor lenses of silt and clay. A 52-hour groundwater pump test conducted at the site in 1995 estimated the transmissivity of the aquifer to be 9,749 ft²/day.

EPA has determined that it is acceptable for groundwater wells to be drilled and used at the Tar Lake site for certain purposes. Therefore, this ESD clarifies that certain groundwater uses at the Tar Lake site would be acceptable.

The current boundary of the Tar Lake site for ICs is shown in Figure 1 (blue and white dashed line). All site areas within the blue and white dashed line - except for the deleted UU/UE ETA shown in red - do not support UU/UE or require additional data and evaluation to support UU/UE.

Restrictions are not required for off-site groundwater because contaminants detected in off-site groundwater did not exceed health-based drinking water criteria. Further impacts to off-site groundwater are prevented by the biosparge system, which has been operating since 1998.

Additional documentation recognizing the need for this ESD may be found in the 2002 ROD and the 2009 FYR, which are in the administrative record file for the site.

DESCRIPTION OF SIGNIFICANT DIFFERENCES/ROD CLARIFICATION

Current Groundwater Use Restrictions in 2002 ROD

The 2002 ROD currently requires EPA to:

... ensure that the current property owners place language in their property deed to explain that no groundwater wells should be installed until on-site groundwater in the shallow drinking water aquifer is below the MCL for benzene (5 ppb) and below the state drinking water standard for 2,4 dimethylphenol (370 ppb). When groundwater monitoring indicates that on-site groundwater is below MCLs and state drinking water standards during four consecutive sampling events, there would no longer be restrictions on groundwater use.

Description of Significant Differences/ROD Clarification

Non-Potable Groundwater Use: Groundwater at the Tar Lake site may be used for non-potable purposes¹ before the biosparge groundwater treatment cleanup is complete², provided the non-potable use of groundwater does not negatively impact EPA's selected remedy for the site, including, but not limited to, the biosparge system and groundwater monitoring wells; or pose an unacceptable risk to human health.

The restrictive covenants or other institutional controls to be implemented at the site will state that groundwater at the site may be used for non-potable purposes provided the property owner submits a proposal to EPA and MDEQ, showing the proposed depth, location and pumping rate of each proposed non-potable well, including an evaluation demonstrating that the expected use of the proposed

¹Non-drinking human consumption purposes, excluding agricultural or livestock purposes.

²Groundwater samples from four consecutive sampling events in the Tar Lake area of the site are below MCLs and MDEQ drinking water criteria, and biosparge treatment is discontinued.

well(s) should not negatively impact EPA's remedy. The proposal must also certify the non-potable wells will not be used for potable use.

EPA, in consultation with MDEQ, may also require the property owner to implement a monitoring plan to confirm the wells are not negatively impacting EPA's remedy in the long-term, and provide appropriate assurances that the property owner will conduct EPA-approved corrective action(s) in consultation with MDEQ, if EPA's remedy is negatively affected and/or is no longer protective due to the property owner's non-potable groundwater use at the site. The property owner must submit final well logs to EPA and MDEQ, and may be required to test the water from the non-potable well(s) or allow EPA, or MDEQ on its behalf, to test the water from the non-potable well(s).

These requirements do not apply to the existing non-potable well at property identification number (PIN) 05-11-130-003-00 (property owned by Moeke Lumber). This well is south of and sidegradient to the biosparge system. This well was in use before EPA's 2002 ROD and before MDEQ constructed the biosparge system at the site. Groundwater monitoring data collected since 1998 indicates this well is not having any negative effect on the biosparge treatment system (e.g., groundwater contaminants are not flowing south toward this well). However, EPA may incorporate this well into the long-term groundwater monitoring program.

Potable Groundwater Use: Groundwater at the Tar Lake site may be used for potable purposes³ before the biosparge groundwater treatment cleanup is complete, provided the potable use of groundwater does not negatively impact EPA's selected remedy for the site, including, but not limited to, the biosparge system and groundwater monitoring wells; or pose an unacceptable risk to human health as specified below.

The restrictive covenants or other institutional controls to be implemented at the site will state that the groundwater at the Tar Lake site may be used for potable purposes provided the property owner submits a proposal to EPA and MDEQ showing the proposed depth, location and pumping rate of each proposed potable well, including an evaluation demonstrating that the expected use of the proposed well(s) should not negatively impact EPA's remedy. In addition, the property owner must also submit groundwater data from four consecutive sampling events from a groundwater monitoring well installed at each proposed well location demonstrating that contaminant concentrations at each proposed

³Groundwater used for human drinking water, and for agricultural and livestock purposes.

well location do not exceed applicable MCLs, MDEQ drinking water criteria, and other applicable or relevant and appropriate criteria.

EPA, in consultation with MDEQ, may also require the property owner to implement a monitoring plan once the potable groundwater well is installed to confirm the well is not negatively impacting EPA's remedy. EPA, in consultation with MDEQ, may also require the property owner to provide appropriate assurances that the property owner will conduct EPA-approved corrective action(s), in consultation with MDEQ, if EPA's remedy is negatively affected and/or is no longer protective due to the property owner's potable groundwater use at the site. The property owner must submit final well logs to EPA and MDEQ, and must allow EPA, or MDEQ on its behalf, to test the water from the potable well(s).

These requirements do not apply to the existing potable well at property identification number (PIN) 05-11-130-003-00. This property is owned by Moeke Lumber and this potable well is south of and sidegradient to the biosparge system. EPA tested this well for phenols and metals during the RI, and the well did not contain any contaminants above MCLs or MDEQ's health-based industrial/commercial drinking water criteria.

The potable well on PIN 05-11-130-003-00 was in use before EPA's 2002 ROD and before MDEQ constructed the biosparge system at the site. Biosparge groundwater monitoring data collected since 1998 indicates the potable well is not having any negative effect on the biosparge treatment system. However, based on EPA's 2009 FYR, EPA is planning to incorporate this potable well into the long-term groundwater monitoring program at the site.

Changes in Expected Outcomes

The 2002 ROD and 2004 ESD stated that the cleanup time frame for groundwater at the site would be one to three years. Groundwater data collected 2004-2009, however, indicates groundwater contamination in the north part of the Tar Lake area has not decreased to cleanup levels as expected, and is increasing.

Based on the FYR, EPA is planning to reassess the cleanup time frame for groundwater and evaluate whether the biosparge system should be expanded. However, this ESD makes it clear that property owners may use on-site groundwater for restricted potable and restricted non-potable purposes, provided the groundwater use does not negatively impact EPA's selected remedy for the site, including, but not limited to, the biosparge system and groundwater monitoring wells; and does not pose an unacceptable risk to human health, subject to the conditions specified in this ESD.

SUPPORT AGENCY COMMENTS

MDEQ concurs with this ESD. MDEQ's letter of concurrence is in Attachment 1.

STATUTORY DETERMINATIONS

EPA has determined that the remedy clarifications in this ESD for potable and non-potable groundwater use at the Tar Lake site satisfy the statutory requirements of CERCLA Section 121. This statute requires EPA to select cleanup remedies that protect human health and the environment; comply with applicable or relevant and appropriate requirements; are cost effective; utilize permanent solutions and alternate treatment technologies to the maximum extent practicable; and satisfy the preference for treatment as a principal element of the remedy.

Because EPA's remedy for the Tar Lake site allows hazardous substances, pollutants or contaminants to remain in on-site soils and groundwater above levels that allow for UU/UE, EPA must conduct a statutory review of the site every five years to ensure the remedy continues to be protective. EPA will complete the next FYR of the Tar Lake site by June 12, 2014.

PUBLIC PARTICIPATION COMPLIANCE

This ESD will be made available to the public by placing it in the administrative record file and the information repositories for the site located at EPA Region 5 and in Mancelona, Michigan. A public notice of this ESD will be published in the Antrim Review. These activities will satisfy the public participation requirements of Section 300.435(c)(2)(i) of the NCP.

Approved by:

Date:



Richard C. Karl, Director
Superfund Division

9-14-09

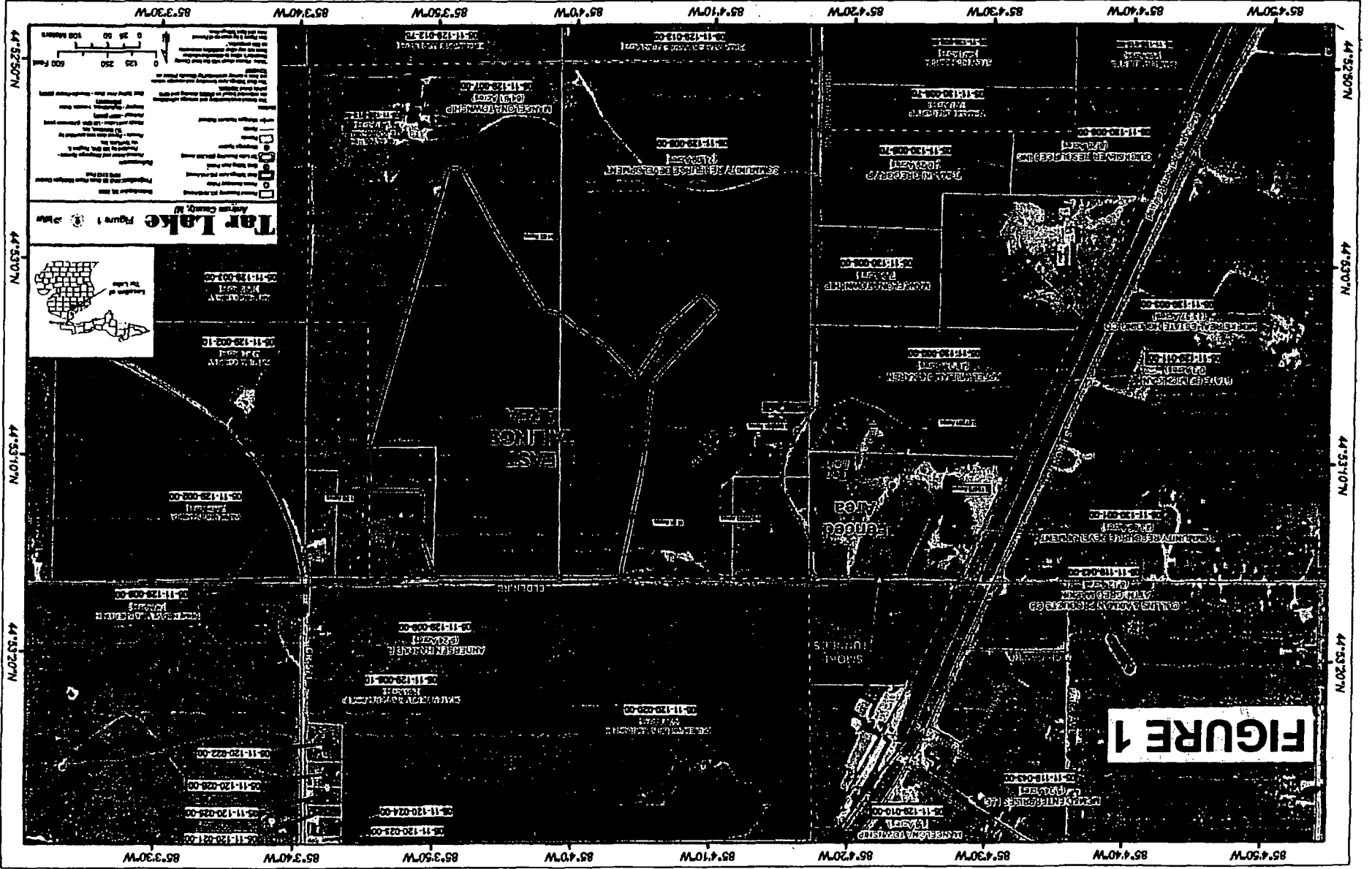


FIGURE 1

Tar Lake Figure 1
 Jackson County, MI

Legend

- Parcel Boundary
- Water
- Highway
- Railroad
- Other

Scale
 0 50 100 200 400 Feet

Projection
 NAD 83
 Michigan State Plane
 Easting: 1000000
 Northing: 4452500
 Spheroid: GRS 80
 Datum: NAD 83
 Units: Feet
 Contour Interval: 10 Feet



Parcel Information

Parcel 1: 00-11-120-001-00
 Parcel 2: 00-11-120-002-00
 Parcel 3: 00-11-120-003-00
 Parcel 4: 00-11-120-004-00
 Parcel 5: 00-11-120-005-00
 Parcel 6: 00-11-120-006-00
 Parcel 7: 00-11-120-007-00
 Parcel 8: 00-11-120-008-00
 Parcel 9: 00-11-120-009-00
 Parcel 10: 00-11-120-010-00
 Parcel 11: 00-11-120-011-00
 Parcel 12: 00-11-120-012-00
 Parcel 13: 00-11-120-013-00
 Parcel 14: 00-11-120-014-00
 Parcel 15: 00-11-120-015-00
 Parcel 16: 00-11-120-016-00
 Parcel 17: 00-11-120-017-00
 Parcel 18: 00-11-120-018-00
 Parcel 19: 00-11-120-019-00
 Parcel 20: 00-11-120-020-00

Owner Information

ANDERSON, JAMES
 BROWN, JAMES
 HARRIS, JAMES
 JONES, JAMES
 SMITH, JAMES
 WILSON, JAMES
 MILLER, JAMES
 DAVIS, JAMES
 GARCIA, JAMES
 MARTIN, JAMES
 THOMAS, JAMES
 JACKSON, JAMES
 WHITE, JAMES
 HENRY, JAMES
 GREEN, JAMES
 ADAMS, JAMES
 BAKER, JAMES
 CAMPBELL, JAMES
 COOPER, JAMES
 FISHER, JAMES
 HAYES, JAMES
 KING, JAMES
 LEWIS, JAMES
 MORGAN, JAMES
 ROSS, JAMES
 STEVENSON, JAMES
 TAYLOR, JAMES
 WALKER, JAMES
 YOUNG, JAMES
 ZIMMERMAN, JAMES

ATTACHMENT 1
STATE LETTER OF CONCURRENCE



JENNIFER M. GRANHOLM
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
LANSING



STEVEN E. CHESTER
DIRECTOR

August 24, 2009

VIA E-MAIL and U.S. MAIL

Ms. Karen Cibulskis
United States Environmental Protection Agency
77 West Jackson Boulevard (SR-6J)
Chicago, Illinois 60604

Dear Ms. Cibulskis:

SUBJECT: Tar Lake Superfund Site (Tar Lake), Explanation of Significant Difference (ESD)

Thanks for the opportunity to review the Tar Lake ESD. The ESD documents a change in the institutional control component of the groundwater remedy the United States Environmental Protection Agency (USEPA) selected for Tar Lake. As the support agency, the Michigan Department of Environmental Quality (MDEQ) reviewed the ESD. The MDEQ's comments were relayed to you via a conference call on August 10, 2009.

Based on the revised draft ESD submitted later that day (August 10, 2009) by the USEPA, it appears that the revised version of the ESD addresses the MDEQ's comments; therefore, please consider this letter as our concurrence with the revised draft Tar Lake ESD.

Sincerely,

Keith Krawczyk
Senior Project Manager
Specialized Sampling Unit
Superfund Section
Remediation and Redevelopment Division
517-335-4103

cc: Mr. Thomas Short, USEPA
Mr. David Kline, MDEQ

EXHIBIT 5

MP3 SAMPLING RESULTS AND LOCATIONS

Williams & Beck Geoprobe Borings & Surface Samples (mg/Kg)

Phase II Investigation December 2008

Analyte (mg/Kg)	SB-1 (0-2')	SB-1 (10'-12')	SB-2 (0-2')	SB-2 (10'-12')	SB-3 (0-2')	SB-3 (10'-12')	SS-3 (Single Drum by Road)	SS-4 (Trash & Drum)	SS-5 (Trash at Rail Road)	State Default Background (mg/Kg)	Residential / Commercial Drinking Water Protection Criteria (mg/Kg)	Groundwater Surface Water Interface Protection Criteria (mg/Kg)	Applicable Criteria For Parcel 007
Aluminum (B)	1,600	660	2,200	640	1,400	770	1,300	1,400	1,300	6,900	1	NA	6,900***
Arsenic	1.1	<1.0	<1.0	<1.0	<1.0	<1.0	1.2	<1.0	<1.0	5.8	4.6	70 (X)	4.6****
Barium (B)	16	3.1	4	3.6	23	3.6	20	12	5.6	75	1,300	290** (G,X)	1,300****
Cadmium (B)	<0.20	<0.20	<0.20	<0.20	<0.20	<0.2	<0.20	<0.20	<0.20	1.2	6	(G,X)	6****
Chromium (B,H)	2.2	1.5	2.7	1.5	1.6	1.5	1.8	1.6	1.8	18 (Total)	30 (Cr-VI)	3.3 (Cr-VI)	30(Cr-VI)****
Copper (B)	1.4	1.4	1.5	1.5	1.9	1.4	1.7	1.4	1.5	32	5,800	(G)	5,800****
Lead (B)	2.1	<1.0	1.3	<1.0	3	1.2	2.8	2.9	1.6	21	700	1,800** (G,X)	700****
Manganese (B)	170	24	28	23	320	37	190	74	40	440	1	38** (G,X)	440****
Mercury (B,Z)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.13	1.7	.05 (M); 0.0012	1.7****
Nickel (B)	NA	NA	NA	NA	NA	NA	NA	NA	NA	20	100	54** (G)	100****
Selenium (B)	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.41	4	0.4	4****
Silver (B)	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	1	4.5	0.1 (M); 0.027	4.5****
Vanadium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	72	190	72****
Zinc (B)	7.4	3.4	8.4	4.6	12	4	8.8	5.3	5.3	47	2,400	120** (G)	2,400****
Iron (B)	2,700	1,500	2,300	1,800	2,100	1,700	2,100	2,300	1,700	12,000	6	NA	12,000****

Yellow = Applicable Criteria

NA = Not Available

Notes (B), (G), (M) and (X): See footnotes that follow the MDEQ Part 201 criteria tables.

** = Value calculated by MDEQ for this site in "Brownfield Redevelopment Assessment Report"

*** = State Default Background

**** = Residential/Commercial Drinking Water Protection Criteria

Williams & Beck Ground Water Samples at Select Monitoring Wells (mg/L)

Phase II Investigation December 2008

Analyte (mg/L)	MW 1A	MW 1B	Residential & Commercial I Drinking Water Criteria & RBSLs (mg/L)	Industrial & Commercial II, III, & IV Drinking Water Criteria & RBSLs (mg/L)	Groundwater / Surface Water Interface Criteria & RBSLs (mg/L)
Aluminum (B)	<0.050	<0.050	0.050 (V)	0.050 (V)	NA
Arsenic	<0.005	<0.005	0.010 (A)	0.010 (A)	0.150 (X)
Barium (B)	<0.100	<0.100	2.0 (A)	2.0 (A)	(G,X)
Cadmium (B)	<0.001	<0.001	0.005 (A)	0.005 (A)	(G,X)
Chromium (B,H)	<0.010	<0.010	0.1 (A)	0.1 (A)	(G,X) {11-CrVI}
Copper (B)	0.0058	<0.004	1.0 (E)	1.0 (E)	(G)
Lead (B)	<0.003	<0.003	0.004 (L)	0.004 (L)	(G,X)
Manganese (B)	<0.020	<0.020	0.050 (E)	0.050 (E)	(G,X)
Mercury (B,Z)	<0.0002	<0.0002	0.002 (A)	0.002 (A)	1.30E-06
Nickel (B)	NA	NA	0.1 (A)	0.1 (A)	(G)
Selenium (B)	<0.005	<0.005	0.050 (A)	0.050 (A)	0.005
Silver (B)	<0.0005	<0.0005	0.034	0.098	0.0002 (M); 0.6E-4
Vanadium	NA	NA	0.0045	0.062	0.012
Zinc (B)	<0.020	<0.020	2.4	5.0 (E)	(G)
Iron (B)	<0.050	<0.050	0.3 (E)	0.3 (E)	NA

Yellow = Applicable Criteria

NA = Not Available

Notes {B}, {E}, {G}, {H}, {L}, {M} {V} {X} and {Z}: See footnotes that follow the MDEQ Part 201 criteria tables.

ELDER ROAD

COORDINATE TABLE

Soil Borings

SB-1	N44.88389	W085.06171
SB-2	N44.88079	W085.06157
SB-3	N44.88159	W085.06539

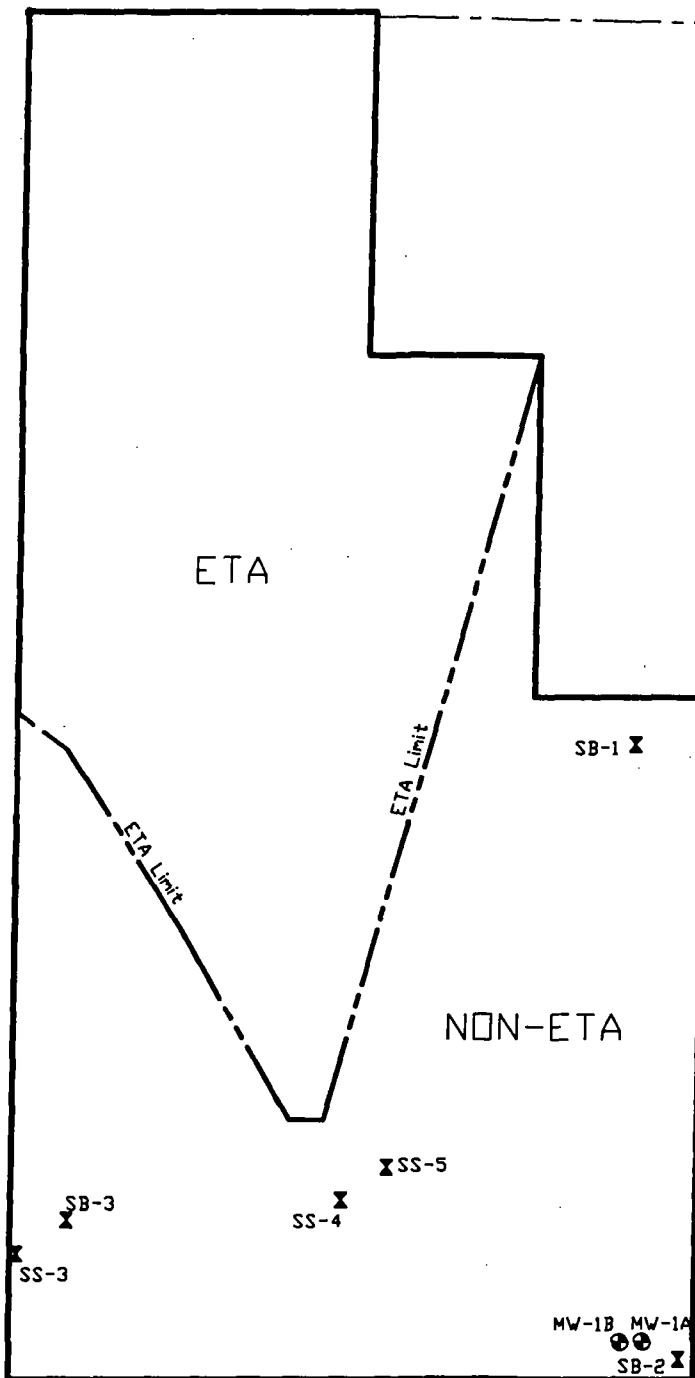
Surface Soil Samples

SS-3	N44.88140	W085.06611
SS-4	N44.88176	W085.06419
SS-5	N44.88190	W085.06367

Monitor Well Locations

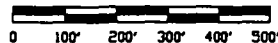
MW-1A	N44.88095	W085.06188
MW-1B	N44.88095	W085.06191

Locations by NAVD 1988
(State Plane Coordinates MI
Central Int'l Feet)



LEGEND

- ⊕ = MONITOR WELL LOCATION
- ⊗ = SOIL SAMPLE LOCATION



D:\Land Projects\1846 For Laha\Parcel 7 Sample Loc 4-28-10.dwg (8/11)

CIVIL
FORENSIC
CONSTRUCTION
ENVIRONMENTAL

WILLIAMS & BECK INC.

CONSULTING ENGINEERS

6586 BELDING RD., NE ROCKFORD, MI 49341

MANCELONA TWP PPN 05-11-129-007-00
NON-ETA SAMPLE LOCATION DRAWING
MANCELONA PRIVATE POWER PRODUCERS, LLC

4/29/10