



December 3, 2014

Mr. Larry Haskin  
City of Oak Creek  
8640 South Howell Avenue  
Oak Creek, WI 53154

Subject: Issuance of a *Certificate of Completion* under the Voluntary Party Liability Exemption (VPLE) Program for the Environmental Investigation and Cleanup of the EPEC Polymers, Inc. (The Boerke Site)  
4240 East Ryan Road, Oak Creek, WI 53154  
FID #: 241869870; BRRS #: 06-41-554566

Dear Mr. Haskin:

In November 2009, the Department of Natural Resources ("the Department") received three VPLE application requests for issuance of *Certificates of Completion* for the parcel referenced above. One of the three requests was made by the subject property owner (EPEC Polymers, Inc.); and the remaining two requests came from the two co-applicants: E.I. DuPont De Nemours & Company (DuPont) and you (on behalf of the City of Oak Creek). You have applied for an exemption from liability under s. 292.15, Wis. Stats., for the property located at 4240 East Ryan Road, Oak Creek, Wisconsin, which is commonly referred to as the EPEC Polymers, Inc. (The Boerke Site). The parcel was addressed under the VPLE process by EPEC Polymers, Inc., and a separate closure letter was issued. However, upon completion of the closure process and as requested in the VPLE applications, the Department issued three separate *Certificates of Completion* for the parcel hereinafter referred to as "the Property".

The Property that is subject of this *Certificate of Completion* is real property owned by EPEC Polymers, Inc., and encompasses approximately 52 acres. The Property is more fully described in Attachment A of the *Certificate of Completion*.

### **Determination**

As you are aware, s. 292.15, Wis. Stats., authorizes the Department to issue a *Certificate of Completion* to a voluntary party that conducts an approved environmental investigation of a property and restores the environment to the extent practicable and minimizes the harmful effects with respect to hazardous substance discharges on or originating from the property. Based on the information received by the Department, the Department has determined that the investigation and restoration (to the extent practicable) of the Property is complete and that all the conditions in s. 292.15(2), Wis. Stats., have been met. Attached is the *Certificate of Completion* for this Property.

While the conditions for issuance of a *Certificate of Completion* have been met, the Property has been entered into the Department's Geographical Information System (GIS) Registry of Closed Sites due to residual soil contamination that remains at the Property. Barrier consisting of soil cover must be maintained in accordance with approved maintenance plans. In addition, varying thicknesses of historic fill soil may require appropriate handling and disposal during redevelopment activities.

Mr. Larry Haskin

RE: Certificate of Completion - EPEC Polymers, Inc. (The Boerke Site)

Oak Creek, WI.

BRRTS #: 06-41-554566

Page 2 of 2

### Conclusions

The Department appreciates the work undertaken by EPEC Polymers, Inc., to investigate and restore to the extent practicable the contamination associated with the Property. The exemption provided by the *Certificate of Completion* applies to any successor or assignee of EPEC Polymers, Inc., if the successor or assignee complies with the appropriate conditions, pursuant to s. 292.15(3), Wis. Adm. Code. If you have any questions or concerns regarding this letter or the *Certificate of Completion*, please call me at (414) 263-8639.

Sincerely,



Eric Amadi - Hydrogeologist

Remediation & Redevelopment Program

Southeast Region - Milwaukee

Attachment: *Certificate of Completion*

cc: Michael Prager - RR/5 (electronic submittal)

Kathryn Huibregtse - Environ International Corporation (electronic submittal)

SER Case File #: 06-41-554566

*State of Wisconsin*  
*Department of Natural Resources*

**CERTIFICATE OF COMPLETION  
OF RESPONSE ACTIONS  
UNDER SECTION 292.15(2)(a), WIS. STATS.**

*Whereas*, the **City of Oak Creek** has applied for an exemption from liability under s. 292.15, Wis. Stats., for the property located at **4240 E Ryan Road, Oak Creek, Wisconsin**, which is commonly referred to as the **EPEC Polymers, Inc. (The Boerke Site)** site, further described in the legal description found on Attachment A (the "Property");

*Whereas*, an environmental investigation of the Property has been conducted and the Wisconsin Department of Natural Resources ("WDNR") has determined that environmental contamination exists at the Property;

*Whereas*, **EPEC Polymers, Inc.** has submitted to the WDNR certain investigation reports and a remedial action plan for the Property which comply with the requirements set forth in chs. NR 700-754, Wis. Adm. Code, consisting of the documents and reports listed in Attachment B;

*Whereas*, in accordance with s. 292.15(2)(a)1, Wis. Stats., the WDNR has determined that an environmental investigation has been conducted which adequately identified and evaluated the nature and extent of the hazardous substance discharges on the Property. The WDNR approved of the site investigation on **February 3, 2012**;

*Whereas*, the WDNR has determined that the historic fill material brought onto or existing at the Property in the past does not qualify as exempt under s. NR 500.08, Wis. Adm. Code. If anyone proposes to do any future construction work on the Property, that person would have to obtain approval Conditional Grant of Exemption for Development on Historic fill from the WDNR under s. NR 506.085, Wis. Adm. Code, prior to initiating any construction on the Property;

*Whereas*, the Property contains soil contamination that exceeds site-specific and/or generic residual contaminant levels ("RCLs") under ch. NR 720, Wis. Adm. Code and requires an engineering control to direct contact. Therefore, the Property will be included on the WDNR's Geographical Information System data base ("the GIS

Registry”) pursuant to s. 292.12(3), Wis. Stats. **EPEC Polymers, Inc.** has submitted to the WDNR all the information necessary to be included on the GIS Registry, pursuant to Wis. Adm. Code;

*Whereas*, on **October 21, 2014**, the WDNR issued a case closure letter for the Property (Attachment C). The owner of this Property shall adhere to, abide by, and maintain the continuing obligations and other requirements that are specified in the attached state case closure letter and maintenance plan(s). The WDNR requires maintenance of a cover or barrier in order to prevent direct contact with and infiltration through residual soil contamination that might otherwise pose a threat to public health and the environment. The closure letter requires that if soil with residual contamination is excavated in the future, the Property owner at the time of excavation must manage the soil in accordance with applicable federal, state and local laws. Also, because of the possibility of vapor intrusion, the closure letter requires property owners and occupants use vapor control technologies in future construction. In addition, the USEPA CERCLA program supervised a remedial action of an arsenic landfill on the Property and required that the owner record a Declaration of Restrictions on the deed on November 1, 2007 which is in affect at this time;

*Whereas*, the WDNR has determined that the response action is complete and is based on the Property being used as for commercial, multi-family residential and recreational purposes in accordance with the Barrier Maintenance Plan (Attachment C). In the event that the cover or barrier that currently exist are removed, the replacement barrier must be equally protective. Because of the residual contamination and certain continuing obligations for this site, before use of this site can be changed to single family residential use, or use by certain sensitive populations, such as a day care center, school, a senior center, hospital or a similar use, or any changes contrary to the Barrier Maintenance Plan, notification of the Department is required at a minimum. Additional sampling and/or cleanup may be required to ensure that the residual contamination levels, existing remedial action and land use is protective;

*Whereas*, if the requirements of this Certificate, the case closure letter or the maintenance plans are not followed, or if the land use changes, the WDNR may take actions under ss. 292.11 or 292.12, Wis. Stats., to ensure compliance with the specified requirements, and the person who owns or controls the Property may no longer qualify for the liability protections under s. 292.15, Wis. Stats.;

*Whereas*, on **October 21, 2014** the WDNR has granted **EPEC Polymers, Inc.** an exemption under **s. NR 140.28(2)(b)**, Wis. Adm. Code for having **Arsenic** in the groundwater above the ch. NR 140 preventive action limit; and

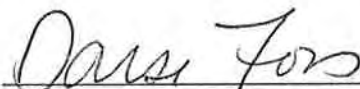
*Whereas*, on **October 21, 2014**, the WDNR determined that response actions necessary to restore the environment were completed.

*Therefore*, based upon the information that has been submitted, the WDNR hereby certifies that the response actions set forth in the WDNR approved remedial action plan for the Property and any other necessary response actions have been completed. Upon issuance of this Certificate, **the City of Oak Creek** and the persons qualified for protection under s. 292.15(3), Wis. Stats., are exempt from the provisions of ss. 289.05(1), (2), (3) and (4), 289.42(1), 289.67, 291.25(1) to (5), 291.29, 291.37, 292.11(3), (4), and (7)(b) and (c) and 292.31(8), Wis. Stats., with respect to the existence of hazardous substances on or originating from the Property, the release of which occurred prior to the date the WDNR approved the environmental investigation required under s. 292.15(2)(a)1., Wis. Stats. However, the person who owns or controls the Property would no longer qualify for this liability exemption if that person fails to maintain or monitor the Property as required by the conditions in this Certificate, the **October 21, 2014** case closure letter, s. 292.12, Wis. Stats., and administrative rules promulgated by the WDNR. Any discharges of a hazardous substance to or from the Property that occur after the date that the environmental investigation was approved will be the responsibility of the current Property owner and any other person who possesses or controls that discharge and any person who caused the discharge.

The protection from liability provided under s. 292.15(2), Wis. Stats., does not apply to any person who has obtained a Certificate of Completion by fraud or misrepresentation, or by knowingly failing to disclose material information or under circumstances in which **the City of Oak Creek** knew or should have known about more discharges of hazardous substances than was revealed by the investigation approved by the WDNR.

Nothing in this Certificate or in s. 292.15, Wis. Stats., affects the authority of the WDNR to exercise any powers or duties under applicable laws other than ss. 289.05(1), (2), (3) and (4), 289.42(1), 289.67, 291.25(1) to (5), 291.29, 291.37, 292.11(3), (4), and (7)(b) and (c) and 292.31(8), Wis. Stats., with respect to any release or threatened release of contaminants at the Property, or the right of the WDNR to seek relief available against any person who is not entitled to protection from liability under s. 292.15, Wis. Stats., with respect to such release or threatened release.

SIGNED AND CERTIFIED this 20 day of November, 2014.



Darsi Foss, Director  
Bureau for Remediation and Redevelopment  
Wisconsin Department of Natural Resources

**ATTACHMENT A  
LEGAL DESCRIPTION  
EPEC Polymers, Inc. (The Boerke Site)**

See attached 11/8/13 Statement of Legal Property Description Accuracy for EPEC Polymers, Inc. Site and Boundary Survey

**Statement of Legal Property Description Accuracy**

FOR

EPEC Polymers, Inc. Site  
(EPEC Site)  
4240 Ryan Road  
Oak Creek, WI  
BRRTS No.06-41-554566

This statement is to verify that the following legal description of the above referenced property for the purpose of listing this site in the GIS Registry of Closed Remediation Sites, is complete and accurate to the best of my knowledge.

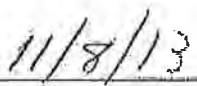
The following legal description of the above-mentioned property is described as follows on the Certified Survey Map of the property dated December 16, 2008:

That part of the Southwest 1/4 of Section 24, Township 5 North, Range 22 East, in the City of Oak Creek, Milwaukee County, Wisconsin, bounded and described as follows:

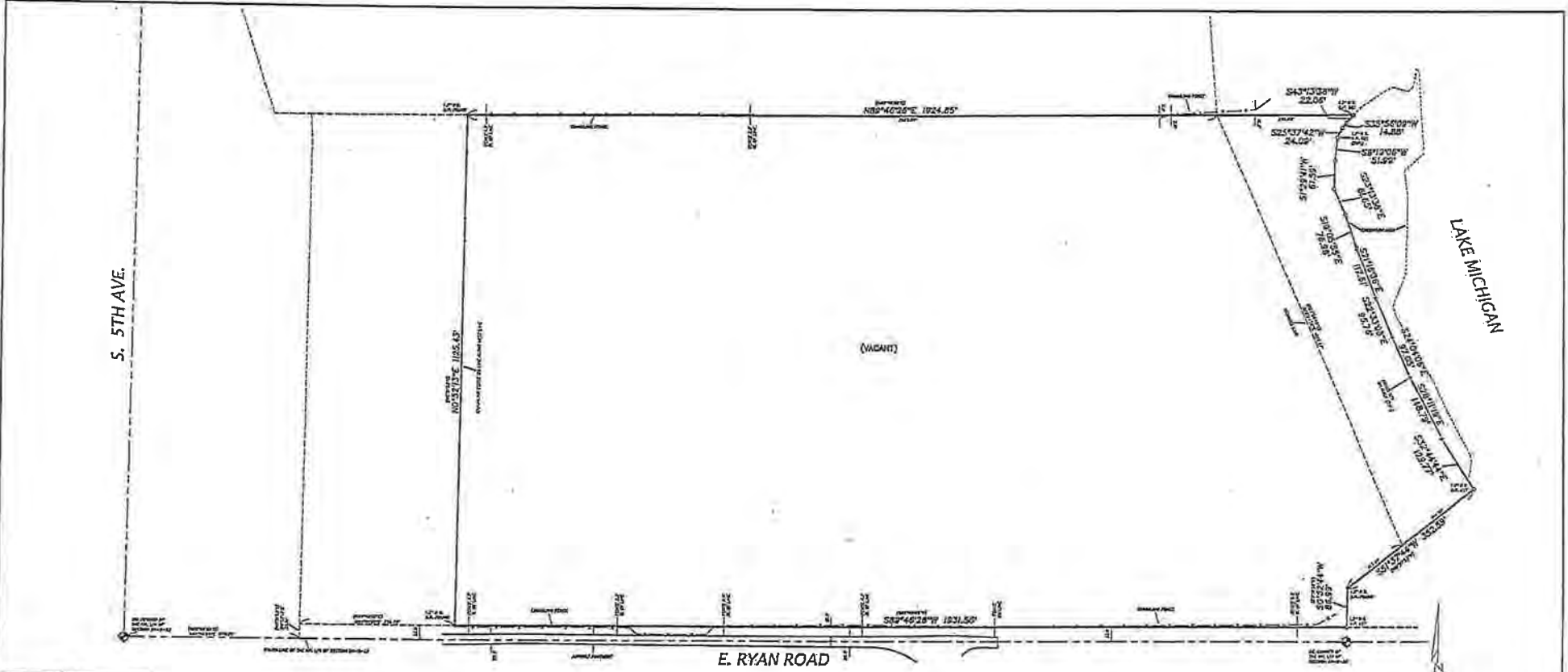
Commencing at the Southwest corner of the Southwest 1/4 of said Section, thence N89°46'26"E along the South line of said Section, 379.29 feet to a point; thence N0°52'13"E, 33.01 feet to a point on the North line of E. Ryan Road, thence N89°46'26"E along said North line, 338.42 feet to the point of beginning; thence N0°52'13"E, 1125.43 feet; thence N89°46'26"E, 1924.85 feet; thence S43°13'38"W, 22.06 feet; thence S35°56'09"W, 14.88 feet; thence S25°37'42"W, 24.09 feet; thence S6°19'06"W, 51.99 feet; thence S1°29'41"W, 61.59 feet; thence S23°13'38"E, 61.65 feet; thence S19°05'55"E, 76.98 feet; thence S21°16'36"E, 117.61 feet; thence S22°33'08"E, 95.76 feet; thence S24°04'06"E, 97.05 feet; thence S28°11'19"E, 148.79 feet; thence S32°44'44"E, 129.77 feet; thence S51°37'44"W, 352.59 feet to a point on the East line of said Southwest 1/4 Section; thence S0°52'44"W along said East line, 86.99 feet to a point in the North line of E. Ryan Road; thence S89°46'26"W along said North line, 1931.56 feet to the point of beginning.

Said Parcel containing 2,260,890 sq. ft/51.903 acres of land, more or less.

  
Signature

  
Date

Joseph Wiley, Project Manager for EPEC Polymers, Inc.  
Printed / Typed Name and Title



**LEGEND**

DOTTED CROSS (X) + OF AS  
 PROPERTY CORNER ○ 40' min.  
 PAVED ROAD △  
 CONCRETE MONUMENT □  
 ELECTRIC POSTAL □  
 TELEPHONE POSTAL □  
 CUP POSTAL □  
 GAS NOCK A  
 POWER POLE □  
 FENCE CORNER □  
 SIGN —  
 CASTING MARKER ○  
 CRYSTAL —→

FENCE LINE ————  
 PROPERTY LINE ————  
 HOOT-TO-HOT ————  
 EASEMENT LINE ————  
 C.A. ROAD ————  
 CONCRETE PIPE ————  
 DISINTEGRATED PAV ———— ( )  
 UTILITIES ————  
 BURIED GAS ————  
 BURIED OIL ————  
 BURIED TELEPHONE ————  
 OVERHEAD ELECTRIC ————  
 SANITARY SEWER ————  
 STONE MARKER ————  
 MARK ————

**LEGAL DESCRIPTION:**

That part of the Southwest 1/4 of Section 24, Township 5 North, Range 22 East, in the City of Oak Creek, Milwaukee County, Wisconsin, bounded and described as follows:

Commencing at the Southwest corner of the Southwest 1/4 of said section, thence North 02°40'28" East along the South line of said Section, 379.28 feet to a point thence North 02°40'28" East, 33.01 feet to a point on the North line of East Ryan Road, thence North 02°40'28" East along said North line 325.43 feet to the point of beginning thence North 02°40'28" East, 112.43 feet to a point thence North 89°48'03" East, 102.77 feet to a point on a recorder line of Lake Michigan thence South 22°24'47" East along said recorder line, 1026.57 feet to a point thence South 3°27'23" West, 113.05 feet to the East line of said Southwest 1/4 section thence South 02°40'28" East along said East line, 55.59 feet to a point on the North line of East Ryan Road thence South 83°40'07" West along said North line, 1031.58 feet to the point of beginning, including those lands between the aforesaid described meander line and the shore of Lake Michigan.

**Existing Easements:**  
 All that part of the Southwest 1/4 of the Southwest 1/4 and the Southwest 1/4 of the Southwest 1/4 of Section 24, Township 5 North, Range 22 East, located in the City of Oak Creek, Milwaukee County, Wisconsin, bounded and described as follows:

Commencing at the Southwest corner of said Southwest 1/4, thence North 02°40'28" East along the West line of said Southwest 1/4, 418.83 feet thence South 02°40'28" East, 228.87 feet to the point of beginning thence along the following courses: North 22°44'44" East, 153.76 feet; North 22°17'18" East, 148.78 feet; North 24°04'08" West, 97.03 feet; North 22°33'03" West, 85.03 feet; North 21°16'38" West, 117.61 feet; North 02°40'28" East, 21.00 feet; North 22°42'42" East, 24.00 feet; North 02°40'28" East, 61.29 feet; North 02°40'28" East, 41.26 feet; North 83°50'48" East, 66.25 feet; North 84°44'23" East, 10.72 feet; South 72°30'04" East, 21.16 feet; South 72°02'27" East, 12.54 feet; South 47°42'58" East, 4.95 feet; South 13°27'47" East, 20.23 feet; North 02°40'28" East, 2.94 feet; South 67°42'58" East, 14.45 feet; North East, 11.47 feet; South 02°40'28" East, 88.00 feet; South 02°40'28" East, 08.02 feet; South 47°10'42" West, 57.36 feet; South 07°04'07" West, 81.64 feet; South 02°40'28" West, 82.43 feet; South 21°02'02" West, 81.82 feet; South 21°02'02" West, 75.01 feet; South 12°33'33" East, 21.57 feet; South 20°40'18" East, 137.35 feet; South 22°17'07" East, 82.34 feet; South 22°17'07" East, 108.79 feet; South 19°07'18" East, 18.23 feet; South 68°23'48" West, 40.84 feet to the point of beginning.

**LOCAL PARTIAL EASEMENT AS FOLLOWS:**

That part of the Southwest 1/4 of Section 24, Township 5 North, Range 22 East, in the City of Oak Creek, Milwaukee County, Wisconsin, bounded and described as follows:

Commencing at the Southwest corner of the Southwest 1/4 of said Section, thence North 02°40'28" East along the South line of said Section, 379.28 feet to a point thence North 02°40'28" East, 33.01 feet to a point on the North line of East Ryan Road, thence North 02°40'28" East along said North line 325.43 feet to the point of beginning thence North 02°40'28" East, 112.43 feet to a point thence North 89°48'03" East, 102.77 feet to a point on a recorder line of Lake Michigan thence South 22°24'47" East along said recorder line, 1026.57 feet to a point thence South 3°27'23" West, 113.05 feet to the East line of said Southwest 1/4 section thence South 02°40'28" East along said East line, 55.59 feet to a point on the North line of East Ryan Road thence South 83°40'07" West along said North line, 1031.58 feet to the point of beginning.

**Notes:**  
 1. SEE RECORDS AND REFERENCES TO DATE NORTH OF THE PROPERTY THIS PLANS CORRESPONDENCE WITH THE CITY OF OAK CREEK, MILWAUKEE COUNTY, WISCONSIN, RANGE 22 EAST, TOWNSHIP 5 NORTH, RANGE 22 EAST, SECTION 24-3-22. MARK ROAD REFERENCE.

**SURVEY CERTIFICATE**

I have surveyed the above described property and the above map is a true representation thereof and shows the size and location of the property, its exterior boundaries, the location and dimensions of all visible structures thereon, boundary fences, appurtenant easements, roadways, and visible encroachments, if any.

This survey is made for the exclusive use of the present owners of the property, and also those who purchase, mortgage, or otherwise dispose thereof within one (1) year from date hereof.

12-10-2008  
 Date

James C. Schneider  
 Surveyor - 5-2127

**Seal:** NORTH SHORE ENGINEERING & LAND SURVEYORS, INC. (Seal)

**SEAL:** MILWAUKEE COUNTY, WISCONSIN (Seal)

**SEAL:** SURVEYOR (Seal)

**SEAL:** NORTH SHORE ENGINEERING & LAND SURVEYORS, INC. (Seal)

**NOTES:**

1. SEE RECORDS AND REFERENCES TO DATE NORTH OF THE PROPERTY THIS PLANS CORRESPONDENCE WITH THE CITY OF OAK CREEK, MILWAUKEE COUNTY, WISCONSIN, RANGE 22 EAST, TOWNSHIP 5 NORTH, RANGE 22 EAST, SECTION 24-3-22. MARK ROAD REFERENCE.

**SURVEY CERTIFICATE**

I have surveyed the above described property and the above map is a true representation thereof and shows the size and location of the property, its exterior boundaries, the location and dimensions of all visible structures thereon, boundary fences, appurtenant easements, roadways, and visible encroachments, if any.

This survey is made for the exclusive use of the present owners of the property, and also those who purchase, mortgage, or otherwise dispose thereof within one (1) year from date hereof.

12-10-2008  
 Date

James C. Schneider  
 Surveyor - 5-2127

**GRAPHIC SCALE**

1 INCH = 100 FEET

DATE	BY	REV.	BY	DATE

**BOUNDARY SURVEY**

**FOR**  
**M/W/H**  
**MONTGOMERY WATSON HARZA**

9180 S. 5th Avenue -  
 Oak Creek, WI

PROJECT NAME	DATE	APPROVED

NORTH SHORE ENGINEERING & LAND SURVEYORS, INC.  
 Consulting Engineers & Land Surveyors  
 2412 N. Paul Wegman Rd., Wauwatosa, Wisconsin 53225  
 (262) 249-4000 • FAX: (262) 243-2537  
 www.northshoreeng.com



**ATTACHMENT B**  
**INVESTIGATION AND REMEDIAL ACTION PLAN REPORTS**  
**EPEC Polymers, Inc. (The Boerke Site)**

- August 1, 1985. *Interim Report, Investigative & Remedial Activities, Former Carrolville Plant, Oak Creek, Wisconsin.* O.H. Materials company of Minnesota
- October 14, 1994. *Potential Hazardous Waste Site Preliminary Assessment.* United States Environmental Protection Agency
- March 31, 1995. *Action Memorandum – Request for a \$2 Million Exemption for Time-Critical Removal Action at Boerke site, Oak Creek, Wisconsin.* United States Environmental Protection Agency
- September 1995. *Administrative Order by Consent V-W-95-C-309, Engineering Evaluation and Cost Analysis (EE/CA).* United States Environmental Protection Agency
- May 20, 1996. *Removal Site Evaluation/Engineering Evaluation/Cost Analysis Report, Boerke Site, Oak Creek, Wisconsin.* DuPont Environmental Remediation Services
- February 19, 1997. *Final Soil Removal Activity Report, Former DuPont Facility, Oak Creek, Wisconsin.* DuPont Environmental Remediation Services
- April 7, 1997. *Focused Site Investigation Results, Former DuPont Property.* STS Consultants
- December 8, 1998. *Investigation Report, E.M. Boerke Family Trust Property, Oak Creek, Wisconsin.* The Traverse Group
- April 22, 1999. *First Amendment to the Administrative Order by Consent V-W-95-C-309.* United States Environmental Protection Agency
- November 23, 1999. *Declaration of Covenants, Conditions and Restrictions.* Milwaukee County Register's Office
- December 17, 1999. *Supplemental Investigation (SI) Report.* Harding Lawson Associates
- July 6, 2000. *Removal Site Evaluation/ Engineering Evaluation/ Cost Analysis.* Environmental Strategies Corp
- July 29, 2002. *Pre-Design Investigation Technical Memorandum, Boerke Site, Oak Creek, Wisconsin.* MWH Americas, Inc.
- August 28, 2002. *Technical Memorandum - Proposed Arsenic in Soil Clean-up Value for the Boerke Site, Oak Creek, WI.* United States Environmental Protection Agency
- January 7, 2003. *Supplemental Soil Investigation Technical Memorandum, Boerke Site, Oak Creek, Wisconsin.* MWH Americas, Inc.
- February 2003. *Administrative Order by Consent V-W-03-C-736.* United States Environmental Protection Agency
- June 26, 2003. *Removal Action Work Plan, Boerke Site, 4240 East Ryan Road, Oak Creek, Wisconsin.* MWH Americas, Inc.
- October 2, 2003. *Removal Action Work Plan Modification.* MWH Americas, Inc.
- March 30, 2004 with Revisions Submitted August 30, 2004. *Construction Completion Report, Boerke Site, 4240 East Ryan Road, Oak Creek, Wisconsin.* MWH Americas, Inc.
- August 16, 2004. *Post Removal Site Control Plan, Boerke Site, Oak Creek, Wisconsin.* MWH Americas, Inc.

- May 23, 2005. *2004 Annual Report, Boerke Site, Oak Creek, Wisconsin*. MWH Americas, Inc.
- May 17, 2006. *Notice of Completion Letter, Brad Bradley (U.S. EPA) to Pat McGee (DuPont Legal) and Kim Lesniak (El Paso Energy Corporation)*. United States Environmental Protection Agency
- May 19, 2006. *2005 Annual Report, Boerke Site, Oak Creek, Wisconsin*. MWH Americas, Inc.
- April 27, 2007. *2006 Annual Report, Boerke Site, Oak Creek, Wisconsin*. MWH Americas, Inc.
- November 7, 2007. *Declaration of Covenants, Conditions and Restrictions*. Milwaukee County Register's Office
- February 29, 2008. *2007 Annual Report, Boerke Site, Oak Creek, Wisconsin*. MWH Americas, Inc.
- March 13, 2009. *2008 Annual Report, Boerke Site, Oak Creek, Wisconsin*. MWH Americas, Inc.
- August 2009. *Phase I Environmental Site Assessment Report, EPEC Polymers, Inc., Oak Creek, Wisconsin*. Oneida Total Integrated Enterprises (formerly T N & Associates, Inc.)
- September 28, 2009. *Technical Memorandum - EPEC Polymers Debris Removal and Swale Vegetation Management – September 2-3, 2009*. MWH Americas, Inc.
- October 13, 2009. *Notification of Site Closeout, Email from Keary Cragan (U.S. EPA) to Sam Tellen (EPEC Polymers, Inc.)*. United States Environmental Protection Agency
- March 2010. *2009 Annual Report, Boerke Site, Oak Creek, Wisconsin*. MWH Americas, Inc.
- January 18, 2011. *Site Investigation Addendum, EPEC Polymers, Inc. Site, 4240 East Ryan Road, Oak Creek, Wisconsin*. MWH Americas, Inc.
- March 29, 2011. *Site Investigation Addendum - EPEC Polymers Site Letter, March 29, 2011 letter from Eric Amadi (WDNR) to Sam Tellen (EPEC Polymers, Inc.)*. Wisconsin Department of Natural Resources
- June 27, 2011. *Site Investigation Addendum – Supplemental Groundwater Sampling, EPEC Polymers, Inc. Site, 4240 East Ryan Road, Oak Creek, Wisconsin*. MWH Americas, Inc.
- December 2, 2011. *Email from Eric Amadi (WDNR) to Jon Pohl (MWH Americas, Inc.) indicating no further groundwater sampling was required*. Wisconsin Department of Natural Resources
- March 2011. *2010 Annual Report; EPEC Site; Oak Creek, Wisconsin*. MWH Americas, Inc.
- January 26, 2012. *Supplemental Investigation Addendum, Delineation Sampling Results and Conceptual Remedial Action Approach, EPEC Polymers, Inc. Site, Oak Creek, Wisconsin, BRRTS# 06-41-554566*. MWH Americas, Inc.
- February 2012. *2011 Annual Report; EPEC Polymers, Inc. Site; Oak Creek, Wisconsin*. MWH Americas, Inc.
- February 3, 2012. *Site Investigation Addendum - Delineation Sampling Results and Conceptual Remedial Action Approach - EPEC Polymers Site, February 3, 2012 letter from Eric Amadi (WDNR) to Joe Wiley (EPEC Polymers, Inc.)*. Wisconsin Department of Natural Resources

- April 16, 2012. "Hot Spot" Area Delineation Sampling Results Summary, EPEC Polymers, Inc. Site, 4240 East Ryan Road, Oak Creek, Wisconsin. MWH Americas, Inc.
- June 1, 2012. "Hot Spot" Area Delineation Sampling Results Summary; and Request for Well Abandonment Approval - EPEC Polymers Inc. Site, June 1, 2012 letter from Eric Amadi (WDNR) to Joe Wiley (EPEC Polymers, Inc.). Wisconsin Department of Natural Resources
- June 11, 2012. Final Remedial Action Plan, EPEC Polymers, Inc. Site, Oak Creek, Wisconsin, BRRTS # 06-41-554566. MWH Americas, Inc.
- July 19, 2012. Final Remedial Action Plan - EPEC Polymers Inc. Site, July 19, 2012 letter from Eric Amadi (WDNR) to Joe Wiley (EPEC Polymers, Inc.). Wisconsin Department of Natural Resources
- July 19, 2012. VPLE Design Report - Oak Creek EPEC Site, 4240 East Ryan Road, Oak Creek, Wisconsin. URS Corporation
- September 21, 2012. VPLE Design Report - EPEC Polymers Inc. Site, 4240 East Ryan Road, Oak Creek, Wisconsin, Approval Letter from Eric Amadi (WDNR) to Joe Wiley (EPEC). Wisconsin Department of Natural Resources
- January 1, 2013. 2012 Annual Report; EPEC Polymers, Inc.; Oak Creek, Wisconsin, MWH Americas, Inc.
- February 13, 2013. Final Report and Closeout Documentation; In Situ Stabilization of Arsenic in Soil; Former Newport Chemical and Dye Site; Oak Creek, Wisconsin.  
ENTACT
- April 1, 2014. 2013 Annual Report; EPEC Polymers, Inc.; Oak Creek, Wisconsin. MWH Americas, Inc.
- April 2, 2014. Request for Approval for Access Road Construction in the Arsenic Excavation Boundary Area, Letter from Jon Pohl (MWH) to Sheri Bianchin (U.S. EPA). MWH Americas, Inc.
- April 3, 2014. Transmittal of Well Filling & Sealing Form 3300-005 for All Groundwater Monitoring Wells at EPEC Polymers, Inc. Site, April 3, 2014 Letter from Jon Pohl (MWH) to Eric Amadi (WDNR). MWH Americas, Inc.
- May 1, 2014. VPLE Barrier Construction Completion Report; EPEC Polymers, Inc. Site; Oak Creek, Wisconsin. URS Corporation
- October 21, 2014. Final Case Closure with Continuing Obligations, EPEC Polymers, Inc. (The Boerke Site), October 21, 2014 Letter from Eric Amadi (WDNR) to Joe Wiley (EPEC Polymers, Inc.). Wisconsin Department of Natural Resources
- Case file for EPEC Polymers, Inc. (The Boerke Site), WDNR FID# 241869870

**ATTACHMENT C**  
**Closure Letter and Cap Maintenance Plan**  
**EPEC Polymers, Inc. (The Boerke Site)**

See Attached **October 21, 2014**, Case Closure Letter and cap maintenance plan for the **EPEC Polymers, Inc. (The Boerke Site)** site.



October 21, 2014

Mr. Joe Wiley  
Kinder Morgan  
1001 Louisiana Street  
Houston, TX 77002

**KEEP THIS DOCUMENT WITH YOUR PROPERTY RECORDS**

Subject: Final Case Closure with Continuing Obligations  
EPEC Polymers, Inc. (The Boerke Site)  
4240 E. Ryan Road, Oak Creek, WI 53154  
FID #: 241869870; BRRTS #: 02-41-531534 & 06-41-554566

Dear Mr. Wiley:

The Department of Natural Resources (DNR) considers EPEC Polymers, Inc. site closed, with continuing obligations. No further investigation or remediation is required at this time. However, you, future property owners, and occupants of the property must comply with the continuing obligations as explained in the conditions of closure in this letter. Please read over this letter closely to ensure that you comply with all conditions and other on-going requirements. Provide this letter and any attachments listed at the end of this letter to anyone who purchases, rents or leases this property from you. For residential property transactions, you may be required to make disclosures under s. 709.02, Wis. Stats.

This final closure decision is based on the correspondence and data provided, and is issued under chs. NR 726 and 727, Wis. Adm. Code. The Southeast Region Closure Committee reviewed the request for closure to determine compliance with state laws and standards and to maintain consistency in the closure of these cases.

The subject property (Site) is about 52 acres and is currently undeveloped and vacant. Arsenic containing waste material generated from the former dye manufacturing facility (the Allis Chalmers/DuPont site, located to the north of the Site), was transported along the western portion of the Site and disposed of in a wetland area in the south central portion of the Site. Operation of the dye manufacturing facility ceased in the early 1900s. The arsenic-containing waste was excavated along with other impacted soils and disposed offsite in 2003/2004, at the direction of the U.S. EPA Administrative Order by Consent No. V-W-03-C-736, issued in 2002. The portion of the Site where the removal action was performed is referred to as the Arsenic Excavation Boundary Area (AEBA) and is shown on **Figure A1: Barrier Maintenance Plan, Appendix A - Institutional Controls, EPEC Polymers, Inc. Site, Oak Creek, WI, dated 2/7/2014**. Groundwater monitoring was also conducted to determine if the remaining arsenic impacted soils were leaching to the groundwater.

In 2009, the Site was accepted into the Voluntary Party Liability Exemption (VPLE) program. Additional investigation was conducted to determine the degree and extent of the soil and groundwater contamination. Contaminants of concern included: polynuclear aromatic hydrocarbons (PAHs); and RCRA metals. Remedial activities have been performed to address this contamination including in-situ stabilization of the detected elevated levels of arsenic ("hot spot") area and placement of clean soil cover. The residual contaminated soil and groundwater still remain in place at the Site.

Mr. Joe Wiley  
RE: Final Case Closure with Continuing Obligations  
EPEC Polymers, Inc. (The Boerke Site)  
Oak Creek, WI.  
BRRTS #: 02-41-531534 & 06-41-554566  
Page 2 of 6

To satisfy the case closure conditions, the Site was required to be placed on the GIS registry due to the residual impacted soil left in place. The continuing obligations are meant to address any potential exposure to the residual contamination. The conditions of closure and continuing obligations required were based on the property being used for commercial/residential (multi-family residential)/industrial and recreational purposes as shown on **Figure A1: Barrier Maintenance Plan, Appendix A - Institutional Controls, EPEC Polymers, Inc. Site, Oak Creek, WI, dated 2/7/2014.**

#### Continuing Obligations

The continuing obligations for this site are summarized below. Further details on actions required are found in the section Closure Conditions.

- Residual soil contamination exists that must be properly managed should it be excavated or removed.
- A soil cover must be maintained over contaminated soil and the DNR must approve any changes to this barrier.
- Remaining soil contamination could result in vapor intrusion if future construction activities occur. Vapor control technologies will be required for occupied buildings, unless the property owner assesses the potential for vapor intrusion, and the DNR agrees that vapor control technologies are not needed.

The DNR fact sheet, "Continuing Obligations for Environmental Protection", RR-819, helps to explain a property owner's responsibility for continuing obligations on their property. The fact sheet may be obtained at <http://dnr.wi.gov/files/PDF/pubs/rr/RR819.pdf>.

#### GIS Registry

This site will be included on the Bureau for Remediation and Redevelopment Tracking System (BRRTS on the Web) at <http://dnr.wi.gov/topic/Brownfields/clean.html>, to provide public notice of residual contamination and of any continuing obligations. The site can also be viewed on the Remediation and Redevelopment Sites Map (RRSM), a map view, under the Geographic Information System (GIS) Registry layer, at the same web address.

DNR approval prior to well construction or reconstruction is required for all sites shown on the GIS Registry, in accordance with s. NR 812.09 (4) (w), Wis. Adm. Code. This requirement applies to private drinking water wells and high capacity wells. To obtain approval, complete and submit Form 3300-254 to the DNR Drinking and Groundwater program's regional water supply specialist. This form can be obtained on-line at <http://dnr.wi.gov/topic/wells/documents/3300254.pdf>.

All site information is also on file at the Southeast Regional DNR office, at 2300 N. Dr. Martin Luther King, Jr. Drive, Milwaukee, WI. This letter and information that was submitted with your closure request application, including any maintenance plan and maps, can be found as a Portable Document Format (PDF) in BRRTS on the Web.

Mr. Joe Wiley  
RE: Final Case Closure with Continuing Obligations  
EPEC Polymers, Inc. (The Boerke Site)  
Oak Creek, WI.  
BRRTS #: 02-41-531534 & 06-41-554566  
Page 3 of 6

### Prohibited Activities

Certain activities are prohibited at closed sites because maintenance of a barrier is intended to prevent contact with any remaining contamination. When a barrier is required, the condition of closure requires notification of the DNR before making a change, in order to determine if further action is needed to maintain the protectiveness of the remedy employed. The following activities are prohibited on any portion of the property where, a soil cover, an engineered cover or other barrier, is required, as shown on the attached map, **Figure 2: Barrier Maintenance Plan, Inspection and Maintenance Area, EPEC Polymers, Inc. Site, Oak Creek, WI, dated 11/11/2013, unless prior written approval has been obtained from the DNR:**

- removal of the existing barrier or cover;
- replacement with another barrier or cover;
- excavating or grading of the land surface;
- filling on covered or paved areas;
- plowing for agricultural cultivation;
- construction or placement of a building or other structure;
- changing the use or occupancy of any portion of the property contrary to the "land use restriction plan", as shown on **Figure A1: Barrier Maintenance Plan, Appendix A - Institutional Controls, EPEC Polymers, Inc. Site, Oak Creek, WI, dated 2/7/2014.**

### Closure Conditions

Compliance with the requirements of this letter is a responsibility to which the current property owner, and any subsequent property owners must adhere. DNR staff will conduct periodic prearranged inspections to ensure that the conditions included in this letter and the attached maintenance plan are met. If these requirements are not followed, the DNR may take enforcement action under s. 292.11, Wis. Stats. to ensure compliance with the specified requirements, limitations or other conditions related to the property.

Please send written notifications in accordance with the following requirements to:

Department of Natural Resources  
Attn: Remediation and Redevelopment Program Environmental Program Associate  
2300 N. Dr. Martin Luther King, Jr. Drive  
Milwaukee, WI 53212

Residual Soil Contamination (ch. NR 718, chs. 500 to 536, Wis. Adm. Code or ch. 289, Wis. Stats.)

Soil contamination remains on the west/northwest and northeast portions of the site as indicated on the attached map, **Figure B.2.c, Pre/Post Remaining Soil Contamination, EPEC Polymers, Inc. Site, Oak Creek, WI.** Residual soil impacts also remain on the eastern portion of the Site in the vicinity of SB-15, SB-77 and SB-80, as shown on the attached map, **Figure 1. Barrier Maintenance Plan, Investigation Sampling Locations, EPEC Polymers, Inc. Site, Oak Creek, WI.** If soil in the specific locations described above is excavated in the future, the property owner or right-of-way holder at the time of excavation must sample and analyze the excavated soil to determine if contamination remains. If sampling confirms that contamination is present, the property owner or right-of-way holder at the time of excavation will need to determine whether the material is considered solid or hazardous waste and

Mr. Joe Wiley  
RE: Final Case Closure with Continuing Obligations  
EPEC Polymers, Inc. (The Boerke Site)  
Oak Creek, WI.  
BRRTS #: 02-41-531534 & 06-41-554566  
Page 4 of 6

ensure that any storage, treatment or disposal is in compliance with applicable standards and rules. Contaminated soil may be managed in accordance with ch. NR 718, Wis. Adm. Code, with prior DNR approval. In addition, all current and future owners and occupants of the property and right-of-way holders need to be aware that excavation of the contaminated soil may pose an inhalation or other direct contact hazard and as a result special precautions may need to be taken to prevent a direct contact health threat to humans.

Depending on site-specific conditions, construction over contaminated soils or groundwater may result in vapor migration of contaminants into enclosed structures or migration along newly placed underground utility lines. The potential for vapor inhalation and means of mitigation should be evaluated when planning any future redevelopment, and measures should be taken to ensure the continued protection of public health, safety, welfare and the environment at the site.

Cover or Barrier (s. 292.12 (2) (a), Wis. Stats., s. NR 726.15, s. NR 727.07 Wis. Adm. Code)

The soil cover that exists in the location shown on the **attached map, Figure 2: Barrier Maintenance Plan Inspection and Maintenance Area, EPEC Polymers, Inc. Site, Oak Creek, WI, dated 11/11/2013**, shall be maintained in compliance with **the attached barrier maintenance plan (BMP)** in order to prevent direct contact with residual soil contamination that might otherwise pose a threat to human health. Also, compliance with the **Institutional Controls and the Soil Management Plan (associated with this BMP)** is a requirement that shall be met.

A cover or barrier for industrial land uses, or certain types of commercial land uses may not be protective if the use of the property were to change such that a residential exposure would apply. This may include, but is not limited to single or multiple family residences, a school, day care, senior center, hospital or similar settings. In addition, a cover or barrier for multi-family residential housing use may not be appropriate for use at a single family residence.

The cover approved for the "Clean Cover Soil Area (CCSA)" of this closure, as shown on **Figure A1: Barrier Maintenance Plan, Appendix A - Institutional Controls, EPEC Polymers, Inc. Site, Oak Creek, WI, dated 2/7/2014**, was designed to be protective for a multi-family residential use setting. Before using the property for single family residential purposes, you must notify the DNR at least 45 days before taking an action, to determine if additional response actions are warranted.

A request may be made to modify or replace a cover or barrier. The replacement or modified cover or barrier must be protective of the revised use of the property, and must be approved in writing by the DNR prior to implementation.

The attached maintenance plan and inspection log (DNR form 4400-305) are to be kept up-to-date and on-site. Inspections shall be conducted annually, in accordance with the attached barrier maintenance plan. Submit the inspection log to the DNR only upon request.



Mr. Joe Wiley  
RE: Final Case Closure with Continuing Obligations  
EPEC Polymers, Inc. (The Boerke Site)  
Oak Creek, WI.  
BRRTS #: 02-41-531534 & 06-41-554566  
Page 5 of 6

Vapor Mitigation or Evaluation (s. 292.12 (2), Wis. Stats., s. NR 726.15, s. NR 727.07, Wis. Adm. Code)

Vapor intrusion is the movement of vapors coming from volatile chemicals in the soil or groundwater, into buildings where people may breathe air contaminated by the vapors. Vapor mitigation systems are used to interrupt the pathway, thereby reducing or preventing vapors from moving into the building.

Future Concern:

Due to site historical information, chlorinated volatile organic compounds may remain in soil and/or groundwater at the west/northwest/southwest and/or eastern portion of the property, as shown on the attached maps: **Figure B.2.c, Pre/Post Remaining Soil Contamination, EPEC Polymers, Inc. Site, Oak Creek, WI, and Figure 1. Barrier Maintenance Plan, Investigation Sampling Locations, EPEC Polymers, Inc. Site, Oak Creek, WI**, at levels that may be of concern for vapor intrusion in the future, depending on construction and occupancy of a building. Therefore, before a building is constructed and/or an existing building is modified, the property owner must notify the DNR at least 45 days before the change. Vapor control technologies are required for construction of occupied buildings unless the property owner assesses the vapor pathway and DNR agrees that vapor control technologies are not needed.

Chapter NR 140, Wis. Adm. Code Exemption

Recent groundwater monitoring data at this Site indicates that for Arsenic at monitoring well, MW-4 (**Figure B.3.b, Groundwater Isoconcentration, EPEC Polymers, Inc. Site, Oak Creek, WI**), contaminant level exceeds the NR 140 preventive action limit (PAL), but is below the enforcement standard (ES). The DNR may grant an exemption to a PAL for a substance of public health concern, other than nitrate, pursuant to s. NR 140.28 (2) (b), Wis. Adm. Code, if all of the following criteria are met:

1. The measured or anticipated increase in the concentration of the substance will be minimized to the extent technically and economically feasible.
2. Compliance with the PAL is either not technically or economically feasible.
3. The enforcement standard for the substance will not be attained or exceeded at the point of standards application. [Note: at this site the point of standards application is all points where groundwater is monitored.]
4. Any existing or projected increase in the concentration of the substance above the background concentration does not present a threat to public health or welfare.

Based on the information you provided, the DNR believes that these criteria have been or will be met, because of the implemented response actions such as the in-situ stabilization of the elevated arsenic ("hot spot") area and the placement of clean soil cover. Therefore, pursuant to s. NR 140.28, Wis. Adm. Code, an exemption to the PAL is granted for arsenic at monitoring well MW-4. Please keep this letter, because it serves as your exemption.

Mr. Joe Wiley  
RE: Final Case Closure with Continuing Obligations  
EPEC Polymers, Inc. (The Boerke Site)  
Oak Creek, WI.  
BRRTS #: 02-41-531534 & 06-41-554566  
Page 6 of 6

In Closing

Please be aware that the case may be reopened pursuant to s. NR 727.13, Wis. Adm. Code, for any of the following situations:

- if additional information regarding site conditions indicates that contamination on or from the site poses a threat to public health, safety, or welfare or to the environment,
- if the property owner does not comply with the conditions of closure, with any deed restrictions applied to the property, or with a certificate of completion issued under s. 292.15, Wis. Stats, or
- a property owner fails to maintain or comply with a continuing obligation (imposed under this closure approval letter).

The DNR appreciates your efforts to restore the environment at this site. If you have any questions regarding this closure decision or anything outlined in this letter, please contact Eric Amadi at 414.263.8639, or at [Eric.Amadi@Wisconsin.gov](mailto:Eric.Amadi@Wisconsin.gov).

Sincerely,



Pamela A. Mylotta, Team Supervisor  
Remediation & Redevelopment Program  
Southeast Region, Milwaukee

Attachments:

- Figure A1: Barrier Maintenance Plan, Appendix A - Institutional Controls, EPEC Polymers, Inc. Site Oak Creek, WI, dated 2/7/2014  
Figure B.3.b: Groundwater Isoconcentration, EPEC Polymers, Inc. Site, Oak Creek, WI.  
Figure B.2.c: Figure B.2.c, Pre/Post Remaining Soil Contamination, EPEC Polymers, Inc. Site, Oak Creek, WI.  
Figure 1: Barrier Maintenance Plan, Investigation Sampling Locations, EPEC Polymers, Inc. Site Oak Creek, WI  
Figure 2: Barrier Maintenance Plan, Inspection and Maintenance Area, EPEC Polymers, Inc. Site, Oak Creek, WI, dated 11/11/2013.

Barrier Maintenance Plan  
Institutional Controls: Land Use Restricted Areas  
Soil Management Plan  
Inspection Log, DNR Form 4400-305

cc: Jonathan Pohl - MWH, Inc. (letter only, electronic submittal)  
Larry Haskin - City of Oak Creek, 8640 S. Howell Avenue, Oak Creek, WI 53154  
Kathryn Huibregtse - ENVIRON International Corporation (letter only, electronic submittal)  
SER Case File #: 02-41-531534 & 06-41-554566  
Bill Phelps, DG/5

**Barrier Maintenance Plan  
EPEC Polymers, Inc. Site**

## **FINAL COVER BARRIER MAINTENANCE PLAN**

**EPEC Polymers, Inc. Site  
Oak Creek, Wisconsin**

**October 2014**

Property located:

*4240 E. Ryan Road*

*Oak Creek, Wisconsin*

FID# 241869870

BRRTS # 06-41-554566 & 02-41-531534

Tax# 86-89-993001

*The following Figures are part of this Barrier Maintenance Plan:*

Figure 1 – Investigation Sampling Locations.

Figure 2 – Inspection and Maintenance Area.

Figure 3 – Future Property Use Areas.

Figure 4 – Final Barrier Engineering As-Built.

Appendix A, Figure A1 – Institutional Controls.

Appendix A, Figure A2 – Arsenic Excavation Boundary Area.

Appendix A, Figure A3 – Boundary of Clean Soil Cover Area.

Appendix A, Figure A4 – Boundary of No Cover Soil Area.

### **1.0 Introduction**

This document is the Barrier Maintenance Plan (BMP) for the soil barrier that covers the EPEC Polymers, Inc. Site (the "Site"). The barrier area is divided into two sub-areas as shown in Figure A1. These areas include the Clean Cover Soil Area (the "CCSA") and the Arsenic Excavation Boundary Area (the "AEBA"). There is a third sub-area of the Site that is designated as the No Cover Soil Area (the "NCSA") which does not have a soil barrier and; therefore, is not subject to this BMP. However, the NCSA is subject to groundwater and vapor intrusion restrictions as listed in the institutional controls.

This BMP has been prepared consistent with applicable requirements of the Wisconsin Administrative Code ("WAC"). The BMP is required because the final environmental remedy requires an engineered barrier across the Site to prevent direct contact with the historically contaminated soil and/or fill material. Another integral part of the final environmental remedy is the institutional controls that have been established for the Site. These institutional controls are described in detail in Appendix A of this BMP.

This BMP is intended to address routine inspection and maintenance of the installed soil barrier. Planned activities that will disturb the soil barrier will require notification of and approval by the Wisconsin Department of Natural Resources (WDNR). In addition, if these activities expose historically contaminated soil and/or fill below the soil cover, the requirements of the Soil Management Plan (SMP) will need to be followed.

This BMP, the associated institutional control (deed restriction) document (Appendix A), and the SMP contain all the restrictions applicable to future development of the Site. At present there are no conflicts

between the deed restriction document and the BMP and SMP. In the future, any conflicts between the deed restrictions and proposed modifications to the BMP and/or SMP shall be resolved in favor of the deed restrictions.

The property owner(s), in order to maintain the integrity of the barrier, will maintain a copy of this BMP on Site or at a nearby location such as Oak Creek City Hall and make it available to all interested parties (i.e., employees, contractors, future property owners, tenants, etc.) for their use.

More site-specific information about this property may be found in:

- The case file in the WDNR Southeast regional office;
- Bureau of Remediation and Redevelopment Tracking System (BRRTS) on the Web (WDNR's internet based data base of contaminated sites): <http://dnr.wi.gov/botw/SetUpBasicSearchForm.do>; and
- GIS Registry PDF file for further information on the nature and extent of contamination: <http://dnrmaps.wisconsin.gov/imf/imf.jsp?site=brrts2>.

## **2.0 WDNR Notification, Approval and Documentation**

Prior to any planned disturbance of the minimum two-foot thick clean soil barrier layer the property owner will notify the WDNR of the activity and obtain prior approval from WDNR consistent with the requirements of WAC Chapter NR 718, Chapter NR 727, and the WDNR issued "Closure Letter". Unless otherwise defined in the WAC or closure letter, "disturbance" means any excavation or future construction activities **on or within** the soil barrier layer.

WDNR will determine what additional information will be required to evaluate and approve the specified disturbance activity. If WDNR approves the disturbance, it will be determined what documentation will be required for that activity. This documentation will be completed after the approved actions are finalized. If the barrier is modified, an updated barrier map shall be filed with the WDNR for placement in the GIS Registry. All required work plans and documentation, as required by WDNR, shall be prepared by a "qualified environmental professional" as defined in NR 712.

The property owner should review the "Closure Letter" found on the WDNR's online Bureau for Remediation and Redevelopment Tracking System (BRRTS) prior to notifying the WDNR so that they have an understanding of the restrictions currently in place.

## **3.0 Description of Contamination**

Soil and/or fill material on the Site are contaminated primarily with arsenic and Polycyclic Aromatic Hydrocarbons (PAHs). Figure 1 shows the locations of the samples used to define and delineate the nature and extent of soil contamination at the Site. An area on the western portion of the Site contained arsenic concentrations above the Resource Conservation and Recovery Act (RCRA) Toxicity Characteristic Leaching Procedure (TCLP) based criteria of 5 mg/l. In 2013, this area was remediated by in-situ stabilization during remedial construction, in accordance with the approved Final Remedial Action Plan (FRAP) for the Site. The remediated soil was then relocated to a designated location on the Eastern Portion of the adjacent Allis Chalmers/DuPont Site, where it was covered with the final barrier. The results of this arsenic remediation activity are documented in the Construction Completion Report (URS, April 2014).

Prior to the 2013 arsenic treatment activities, a separate removal action was completed in the AEBA under the oversight of the United States Environmental Protection Agency (EPA) in 2003/2004. The AEBA had been a historic disposal area, located on the south central portion of the Site, for wastes from the former Newport Chemical facility on the adjacent property. The AEBA also includes impacted soils along the drainage swale from the disposal area to the east portion of the Site. The primary contaminants of concern were arsenic and PAHs. Approximately 20,400 tons of hazardous waste and 35,400 tons of special waste were excavated from this area and disposed off-site. A soil barrier layer, ranging in thickness from 1 foot to 10 feet, was placed over the excavated area and deed restrictions were instituted within the footprint of the disposal area limiting future land use. Groundwater monitoring was performed upgradient and downgradient of the AEBA from 2004 through 2011. This historic monitoring of the groundwater at the Site has indicated that the arsenic and PAH concentrations are below the established Enforcement Standards for these compounds.

#### **4.0 Description of the Barrier to be Maintained**

The entire barrier area subject to the inspection and maintenance requirements of this BMP is shown on Figure 2 in diagonal red cross-hatch. Initially, a minimum two-foot thick clean soil barrier layer has been placed over this designated area of the Site. The soil barrier in the CCSA will be covered over or replaced over time with permanent buildings, roads and walkways; and parking areas consistent with the Future Property Use Areas, shown in Figure 3. Any contaminated soil below the existing barrier which is disturbed during construction of these components in the CCSA will be managed according to the SMP for this Site. Figure A1 identifies relevant areas where industrial, commercial, condominium, and multi-family residential development under common land ownership will be permitted (the "Authorized Uses"). Future development will not include any uses which are not Authorized Uses.

Currently, the AEBA has between one foot and ten feet of clean soil barrier on top of contaminated soil that was placed during the 2003/2004 removal action. No modification either above or below this barrier is allowed per deed restriction.

This BMP is focused primarily on the initially placed soil barrier that has been constructed according to the design documents prepared in July 2012 and provides general maintenance guidance for other components of the AEBA barrier. The area addressed by this Plan is shown on Figure 2. The as-built location and topography for the CCSA barrier are shown on Figure 4.

Through the CCSA and over a small portion of the AEBA, the City will construct a road built to specifications determined by the City Engineer. The construction of the road over the identified portion of the AEBA will be subject to prior approval by the United States Environmental Protection Agency (EPA) or WDNR, where appropriate. The road will follow a path identical to that shown in Figures 2, 3, 4 and A1. At the location identified on the figures where the road will traverse the AEBA and associated swale, the road will include either a storm water management feature (i.e. box culvert) or foundations for above grade crossing.

#### **5.0 Barrier Purpose**

The barriers on this Site will consist of various components that will serve as barrier to limit direct contact with the underlying soil and historic fill material that might otherwise pose a threat to human health. The specific configuration of the barrier layer in the CCSA will be modified and is anticipated to include

building slabs, parking lots, roadways as well as vegetated soil cover as the development proceeds. Based on the current and future use of the property, the barrier should function as intended unless disturbed. Because of the hydrogeological conditions beneath the Site and the groundwater quality, there is no permeability requirement for the barrier, and the barrier is not intended to perform as an infiltration barrier. Surface water infiltration will be reduced and as such, precipitation run-off will be managed as described in the barrier configuration design and as-built drawing set.

#### **6.0 Vapor Intrusion Mitigation System for Buildings or Structures**

There are currently no buildings or inhabitable structures on-Site. No enclosed building or structure shall be constructed on the property unless a WDNR-approved vapor intrusion mitigation system that meets the objective of protecting human health is installed, or as the alternative, a vapor intrusion assessment is performed in accordance with guidelines issued by WDNR. A vapor mitigation system would not be installed if not required by the finding of the vapor intrusion assessment; contingent upon WDNR's approval of said assessment. Since any vapor intrusion mitigation system needs to be maintained in perpetuity, any future modifications to the buildings need to take in account the long-term integrity of this system.

#### **7.0 Annual Inspection**

The barrier overlying the contaminated soil and/or fill soils, as depicted on Figure 1, will be inspected once a year. The annual inspections shall be conducted in the spring after all snow and ice are gone and once vegetation is starting to re-emerge. The inspection shall identify and document any deterioration, cracks, erosion and other potential problems that can allow direct contact with underlying soil and fill materials. The inspections will also be performed to evaluate damage due to settling, loss of vegetation, exposure to the weather, wear from traffic, increasing age and other factors that can lead to additional deterioration of the barrier layer. A log of the inspections and any repairs will be maintained by the property owner on a Barrier Inspection and Maintenance Log (attached). The log will include recommendations for necessary repair of any areas where underlying soil and or fill are exposed or are likely to become exposed. Once repairs are completed, they will be documented in the inspection log.

#### **8.0 Maintenance Activities**

If problems with the barrier are noted during the annual inspections or are brought to the attention of the property owner at any other time during the year, repairs will be scheduled as soon as practical. Repairs can include patching and filling operations, or they can include larger resurfacing or construction operations. In the event that necessary maintenance or authorized development activities expose the underlying soil below the barrier layer, the exposed soil is to be assumed contaminated and handled according to the requirements of the SMP. For future planned development in the CCSA which will disturb subsurface soils below the barrier (i.e. deeper than two feet), the SMP must be followed (which includes obtaining WDNR's approval prior to and after the development activity). The excavated soil must be handled, stored and disposed of by the owner in accordance with applicable local, state and federal law.

## **8.0 Prohibition of Activities**

### **8.1 Prohibition of Activities in the CCSA**

Development is allowed in the CCSA consistent with the Authorized Uses listed on Figure A1. In the event the barrier overlying the CCSA is disturbed, removed or replaced, the replacement barrier must be equally protective. Any replacement barrier will be subject to the same maintenance and inspection guidelines as outlined in this BMP and modified, if necessary, to reflect the different barrier components and will remain consistent with the existing barriers unless indicated otherwise by the WDNR or its successor.

Any groundwater well installation or the withdrawal of groundwater from beneath the CCSA shall be prohibited unless expressly required and approved by the WDNR in writing. Withdrawal of any water from any well required by WDNR is expressly limited to sample collection only, in accordance with industry standard procedures for groundwater sample collection.

### **8.2 Prohibition of Activities in the AEBA**

Any activities that are not park, passive recreational use, or open space are prohibited in the AEBA. All commercial, residential, and industrial development of the AEBA is prohibited. Any replacement of cover material with another barrier, excavation, or grading of the land surface, filling, plowing for agricultural cultivation, or construction or placement of a building or other structure is prohibited.

**The City is permitted to build the road at the location shown on Figure A1 in the AEBA provided the City complies with applicable regulatory approval procedure for barrier disturbance for such road construction. The road will be built to specifications determined by the City engineer.** The road will not disturb contaminated soil located beneath the clean soil cover barrier. It is also not anticipated that contaminated soils will be disturbed where the roadway crosses the former AEBA based upon the current plans for the crossing. However, if any contaminated soil is encountered, it will be handled according to the requirements of the SMP.

Any groundwater well installation or the withdrawal of groundwater from beneath the AEBA shall be prohibited unless expressly required and approved by the WDNR in writing. Withdrawal of any water from any well required by WDNR is expressly limited to sample collection only, in accordance with industry standard procedures for groundwater sample collection.

## **9.0 Amendment or Withdrawal of Maintenance Plan**

This Maintenance Plan can be amended or withdrawn by the property owner and their successors with the written approval of the WDNR.



**Contact Information**

May 2014

Property Owner

City of Oak Creek  
Gerald R. Peterson, City Administrator  
8640 South Howell Avenue  
Oak Creek, WI 53154  
414 768-6504

Signature

---

Environmental Consultant:

Kathryn Huibregtse  
ENVIRON International Corporation  
175 Corporate Drive, Suite 160  
Brookfield, WI 53045 262-901-0082

WDNR Project Manager:

Mr. Eric Amadi  
2300 North M.L. King Jr. Drive  
Milwaukee, WI 53212  
414 263-8639

***BRRTS#: 06-41-554566 EPEC Polymers, Inc. Site Barrier Inspection and Maintenance Log***

<b>Inspection Date:</b>	<b>Inspector:</b>	<b>Condition of Barrier:</b>	<b>Recommendations:</b>	<b>Has Recommended Maintenance From Previous Inspection Been Implemented?</b>

**FIGURES**

**APPENDIX A  
INSTITUTIONAL CONTROLS**

### **Institutional Controls: Land Use Restricted Areas**

The Site is divided into three distinct areas: the Arsenic Excavation Boundary Area (the "AEBA"), and the Clean Cover Soil Area (the "CCSA"), and the No Soil Cover Area (the "NSCA"). The following presents the land use restrictions associated with each of these areas.

#### ***Arsenic Excavation Boundary Area (AEBA)***

The AEBA is designated on Figure A1 as a red horizontal hatched area. Figure A2 illustrates the surveyed boundaries of this area along with its legal description. The AEBA is where excavation work was performed in 2003 and 2004 and was backfilled with 1 foot to 10 feet of clean soil barrier. Soils below this barrier contain arsenic concentrations that exceed 40 milligrams per kilogram (mg/kg). For this area, the following Land Use Restrictions apply:

- A. Subject to United States Environmental Protection Agency (EPA) or Wisconsin Department of Natural Resources (WDNR) approval, where appropriate, the City is authorized to construct a road, the location of which is shown on Figure A1. With the exception of the road shown on Figure A1 and described immediately below, any activities that are not park, passive recreational use, or open space are prohibited in the AEBA. All commercial, residential, and industrial development of the AEBA is prohibited. With the exception of the road discussed below, any replacement of cover material with another barrier, excavation or grading of the land surface, filling, plowing for agricultural cultivation, or construction or placement of a building or other structure is prohibited.

The City is permitted to construct a road in the location shown on Figure A1 in the AEBA provided the City obtains and complies with applicable regulatory approval by EPA or WDNR for barrier disturbance for such road construction. After EPA or WDNR approval, the road will be built to specifications determined by the City engineer. Barrier soil disturbances required for construction of the road in the AEBA will be managed according to the Barrier Maintenance Plan (BMP) for this Site and applicable state and federal law.

- B. Any groundwater well installation or the withdrawal of groundwater from beneath the AEBA shall be prohibited unless expressly required and approved by the WDNR or EPA in writing for groundwater sampling. Withdrawal of any water from any well required by WDNR or EPA is expressly limited to sample collection only, in accordance with industry standard procedures for groundwater sample collection.
- C. All owners of the AEBA shall comply with the obligations and restrictions in the BMP relating to the property, as approved by WDNR.

### ***Clean Cover Soil Area***

The CCSA is designated on Figure A1 as a magenta vertical hatched area. Figure A3 illustrates the surveyed boundaries of this area along with its legal description. These soils have been covered by a minimum 2-foot clean soil barrier to prevent direct contact. For this area, the following Land Use Restrictions apply:

- A. Subject to paragraph B, all types of development shall be permitted in the CCSA. All owners of the CCSA shall comply with the obligations and restrictions in the Barrier Maintenance Plan (BMP) and the Soil Management Plan (SMP) relating to the property, as approved by the Wisconsin Department of Natural Resources (WDNR).
- B. Industrial, commercial, condominium, and residential development on the CCSA shall be permitted; provided, however, that any such residential development shall be limited to multi-family housing with the land under common ownership where there is an oversight body responsible for enforcing compliance with the BMP and SMP for each such residential development. No single family homes will be permitted.
- C. Any groundwater well installation or the withdrawal of groundwater from beneath the CCSA is prohibited unless expressly required and approved by the WDNR in writing. Withdrawal of any water from any well required by WDNR is expressly limited to sample collection only, in accordance with industry standard procedures for groundwater sample collection.
- D. Any enclosed buildings or structures on the CCSA that are intended for occupancy, including, but not limited to, industrial, residential or commercial buildings, restroom facilities, kiosks or concession stands, shall not be constructed unless a WDNR-approved vapor intrusion mitigation system that meets the objective of protecting human health is installed, or as the alternative, a vapor intrusion assessment is performed in accordance with guidelines issued by the State of Wisconsin. A vapor mitigation system would not be installed if not required by the finding of the vapor intrusion assessment; contingent upon WDNR's approval of said assessment. Since any vapor intrusion mitigation system needs to be maintained in perpetuity, any future modifications to the buildings need to take in account the long-term integrity of this system.
- E. Any construction or excavation activities on the CCSA shall comply with the SMP for the property, as approved by WDNR.

### ***No Cover Soil Area (NCSA)***

The NCSA is designated on Figure A1 as a green diagonal hatched area. Figure A4 illustrates the surveyed boundaries of this area along with its legal description. For this area, the following Land Use Restrictions apply:

- A. Any groundwater well installation or the withdrawal of groundwater from beneath the NCSA is prohibited unless expressly required and approved by the WDNR in writing. Withdrawal of any water from any well required by WDNR is expressly limited to sample collection only, in accordance with industry standard procedures for groundwater sample collection.
- B. Any enclosed buildings or structures on the NCSA that are intended for occupancy, including, but not limited to, industrial, residential or commercial buildings, restroom facilities, kiosks or concession stands shall not be constructed unless a WDNR-approved vapor intrusion mitigation system that meets the objective of protecting human health is installed, or as the alternative, a vapor intrusion assessment is performed in accordance with guidelines issued by the State of Wisconsin. A vapor mitigation system would not be installed if not required by the finding of the vapor intrusion assessment; contingent upon WDNR's approval of said assessment. Since any vapor intrusion mitigation system needs to be maintained in perpetuity, any future modifications to the buildings need to take in account the long-term integrity of this system.

10644634.1

**Soil Management Plan  
EPEC Polymers, Inc. Site**



**Final Soil Management Plan**  
**EPEC Polymers, Inc. Site**  
**Oak Creek, Wisconsin**

**October 2014**

Property located at: (see total  
property map on Figure 5)  
*4240 E. Ryan Road*  
*Oak Creek, Wisconsin*

FID# 241869870

BRRTS # 06-41-554566 & 02-41-531534

Tax# 86-89-993001

*The following figure is part of this Soil Management Plan:*

Figure 5 – Soil Management Plan

**1.0 Introduction**

This document is the Soil Management Plan (SMP) for the EPEC Polymers, Inc. Site (the “Site”), as shown on Figure 5. This SMP has been prepared consistent with requirements of Chapter NR 700 Wisconsin Administrative Code (“WAC”). The soil management activities relate to the historically contaminated soil and/or fill materials (the “Historic Soil”) that may be encountered during post-remedial action construction activities in support of future (i.e. after 2013) Site use. Soil and/or fill material in the CCSA are generally contaminated with arsenic and Polycyclic Aromatic Hydrocarbons (PAHs), herein referred to as Contaminants of Concern (COCs). Soils in an area in the CCSA on the western portion of the Site had arsenic concentrations at levels above the Resource Conservation and Recovery Act (RCRA) hazardous waste threshold (5 mg/l) when tested using the Toxicity Characteristic Leaching Procedure (TCLP). This area was remediated during remedial construction, in accordance with the approved Final Remedial Action Plan (FRAP) for the Site, and the remediated soils were relocated to the eastern portion of the adjacent Former Allis Chalmers/DuPont site, where the soils were consolidated with similar stabilized soil from two areas on the western Former Allis Chalmers/DuPont site and then covered with a clean soil barrier.

The final VPLE environmental remedy, as approved by the Wisconsin Department of Natural Resources (WDNR), requires placement and maintenance of a minimum two foot thick clean soil barrier (“barrier”) in the CCSA to prevent direct contact with the historically contaminated soil. This barrier has been constructed in the required areas of the Site.

## **2.0 WDNR Notification, Approval and Documentation**

Prior to any planned disturbance of the minimum two-foot thick clean soil barrier layer, the property owner will notify the WDNR of the activity and obtain prior approval from WDNR consistent with the requirements of WAC Chapter NR 718, Chapter NR 727, and the WDNR issued "Closure Letter". Unless otherwise defined in the WAC or closure letter, "disturbance" means any excavation or future construction activities **on or within** the soil barrier layer. Based on current/applicable rules and guidance, WDNR will determine what additional information will be required to evaluate and approve the specified disturbance activity. If WDNR approves the disturbance, it will be determined what documentation will be required for that activity. This documentation will be completed after the approved actions are finalized. One possible form of documentation is the "Impacted Subsurface Soil Disturbance Log" attached to this SMP. If the barrier is modified, an updated barrier map shall be filed with the WDNR for placement in the GIS Registry. All required work plans and documentation, as required by WDNR, shall be prepared by a "qualified environmental professional" as defined in NR 712.

The property owner should review the "Closure Letter" found on the WDNR's online Bureau for Remediation and Redevelopment Tracking System (BRRTS) prior to notifying the WDNR so that they have an understanding of the restrictions currently in place.

## **3.0 Area Subject to the Requirements of the SMP**

This SMP applies to the area designated as the CCSA as shown on Figure 5. Development of the Arsenic Excavation Boundary Area (the "AEBA") is governed by the Barrier Maintenance Plan (BMP) for the Site and relevant deed restriction documents. At present there are no conflicts between the BMP, SMP and the deed restriction documents. In the future, any conflicts between any deed restrictions and proposed modifications to the BMP and/or SMP shall be resolved in favor of the deed restrictions.

## **4.0 Purpose and Goal**

The purpose of this SMP is to provide a framework for managing any potentially impacted Historical Soil that may be encountered during future investigation, development and construction in the CCSA. Authorized Uses in the CCSA include industrial, commercial, condominium, and multi-family residential development under common land ownership. Specifically, this SMP establishes appropriate management protocols for potentially impacted soil that is uncovered, excavated, temporarily stockpiled, graded, moved, or otherwise handled during and after future investigation and development-related construction activities. In general, all on site soils below the cap are considered impacted based upon previous testing during the site investigations. Any excavated soil must be segregated and either reused on site under a barrier layer or characterized and disposed at a licensed off-site facility. The replaced or modified barrier layer must be equally protective and is subject to applicable maintenance and inspection

requirements as outlined in the barrier maintenance plan. During construction activities associated with development on the Site, soils that are excavated from depths below the barrier (below two feet) for foundation, roadway, utility trench, or other construction, will be inspected for signs of potential contamination including staining, discoloration, odors, oily sheens, etc.

A copy of this SMP will be provided to the City of Oak Creek (City) who is to be the initial property owner after issuance of the VPLE Certificate of Completion and Site closure. Consistent with the requirements of the site closure, the City must provide a copy to any developer or future property owner, future tenant, and any General Contractor overseeing construction work. It is important that all personnel responsible for working with soil in the CCSA of the Site (including equipment operators) are familiar with this SMP. The minimum two foot thick WDNR-approved soil barrier over the contaminated soil and/or fill areas will serve as a barrier to limit direct contact with the underlying soil and historic fill material and must be maintained in accordance with the Site BMP. Based on the current and future use of the property, the barrier should function as intended unless disturbed. Because of the hydrogeological conditions beneath the Site and the groundwater quality, there is no permeability requirement for the barrier, and the barrier is not intended to perform as an infiltration barrier.

This SMP will be included in Attachment D to the Case Closure – GIS Registry (Form 4400-202) for the Site. Any post-remedial construction (i.e. after 2013) intrusive activities conducted at the Site in the CCSA will be subject to approval of the WDNR and consistent with the procedures contained in this SMP.

#### **5.0 Qualified Environmental Professional**

All future intrusive work on the Site must be planned and performed consistent with NR 712. Specifically, future barrier disturbance work must be performed under the supervision of a professional engineer, a hydrogeologist, or a scientist (a “qualified environmental professional”), as defined by NR 712.

#### **6.0 Soil Management Protocol**

This soil management protocol is intended to provide a simple set of guidelines for managing soils beneath the barrier. This soil management protocol relies on existing data to establish the framework to be followed. The comprehensive site investigation approved by the WDNR under the VPLE process has provided an extensive data set that identifies generally low level metals and PAHs across the site. Areas of elevated arsenic that were found have been treated and relocated to the eastern side of the property. Given this existing data, this plan assumes that all below-barrier soils are contaminated. If soil from below the barrier is excavated, it must be managed according to this plan. Prior to excavation, the excavating party must notify the WDNR that it intends to disturb the barrier. Soil excavated from below the barrier can be

replaced under a soil barrier onsite or disposed of at a licensed off-site facility. Before replacing excavated soil beneath a barrier or disposing of excavated soil offsite, excavated soil will be temporarily stored onsite in accordance with the procedures outlined in NR 718.

It is intended that this protocol be in compliance with NR 718 "Management of Contaminated Soil or Solid Wastes Excavated during Response Actions." By complying with the technical requirements of NR 718 (or successor regulations), the integrity (i.e. protectiveness of human health and the environment) of the previously completed remedial action will be maintained. WDNR will make final determination as to the applicability and appropriateness of specific technical requirements of NR 718 during their interactions with the property owner and their environmental professional.

The general steps to be taken during all future intrusive activities permitted in the CCSA are as follows:

1. Determine the exact location of the disturbance area and the bottom depth of any excavation;
2. If the disturbance area is on, within or beneath the soil barrier layer, the property owner shall notify the WDNR regarding the project (per Section 2.0 above). Any excavation typically greater than 2 feet deep can anticipate encountering Historical Soils;
3. The property owner shall have its qualified environmental professional review the amount of soil to be excavated and the duration for which the excavated soil will be exposed before being placed back beneath a barrier or transported off site;
4. After reviewing the items in number 3 above, the qualified environmental professional shall identify applicable temporary storage measures in NR 718 that are necessary to contain excavated soil before it is replaced beneath a barrier or disposed of off-site.;
5. Historical Soil will be separated and stored as required by NR 718 unless otherwise approved by the WDNR. Any contaminated soil brought to the surface shall be managed in such a way as to not contaminate other clean soils including cover soils or materials at the ground surface. Sub-barrier soil from an excavation shall be managed as if it is contaminated.
6. Soils from the excavation that are returned to the excavation shall be returned in the order in which they were removed.
7. Soils from the excavation that are re-used under nearby structures or pavement shall be placed below the modified barrier layer after the modification is approved by WDNR.
8. Soils from the excavation that cannot be reused on site must be disposed off-site in a licensed facility must be characterized and manifest according to local, state and federal requirements as well as the requirements of the disposal facility.

9. After construction activities are completed, the disturbance footprint must have a barrier that is equally protective of human health and the environment, in accordance with the Site BMP and as determined and approved by WDNR.
10. Documentation of proposed changes to the barrier layer will be provided to the WDNR for its approval and use in updating the closure records and GIS registry.

### **7.0 Health and Safety Requirements**

During any excavation and soil handling activities involving material from below the clean soil barrier, all actions shall be conducted in accordance with a Site-specific environmental Health & Safety Plan (HASP) complying with the Occupational Safety and Health Administration (OSHA) standard for Hazardous Waste Operation and Emergency Response (HAZWOPER), 29 CFR 1910.120 and other applicable state and local requirements.

### **8.0 Soil Staging and Controls**

Management of excavated contaminated soils will occur in accordance with the requirements of the WAC. If a temporary staging area is needed, it will be designated to temporarily stockpile the excavated materials. Soil stockpiles will conform to the requirements of NR718 with regards to location, placement of soil on an impervious base (e.g., concrete, asphalt, plastic sheeting,), cover and anchoring. Excavated soils that are to be disposed of off-site shall be done so at a licensed facility in accordance with all local, state, and federal laws. Copies of the material shipping records associated with the disposal of the material shall be maintained by the City or current property owner, and provided contemporaneously to WDNR. Waste characterization sampling for off-site disposal shall be completed at the frequency required by the disposal facility. Copies of any laboratory analysis results shall be maintained by the Site owner and be provided to WDNR for review as part of the barrier disturbance approval review. Soil barrier disturbed during development activities will be repaired or replaced in compliance with the BMP.

### **9.0 Amendment or Withdrawal of Soil Management Plan**

This SMP cannot be amended or withdrawn by the future property owner(s) and their successors without the written approval of the WDNR.

## **10.0 Contact Information**

May 2014:

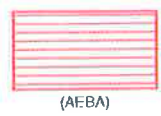
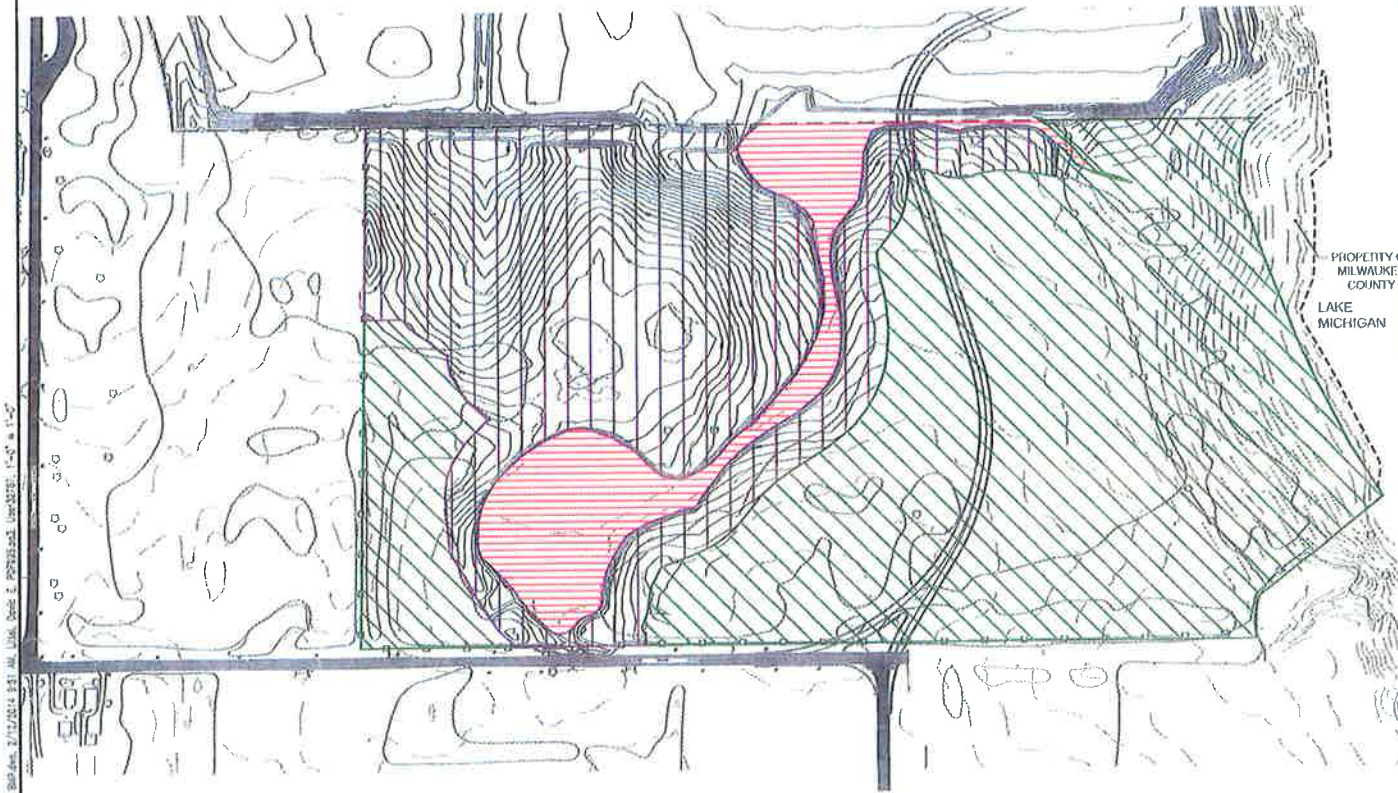
Property Owner                      City of Oak Creek  
Gerald R. Peterson, City Administrator  
8640 South Howell Avenue  
Oak Creek, WI 53154  
414-768-6504

Environmental Consultant:        Kathryn Huibregtse  
ENVIRON International Corporation  
175 Corporate Drive, Suite 160  
Brookfield, WI 53045  
262-901-0082

WDNR Project Manager:          Mr. Eric Amadi  
2300 North M.L. King Jr. Drive  
Milwaukee, WI 53212  
414-263-8639

***BRRTS#: 06-41-554566 EPEC Polymers, Inc. Site Impacted Subsurface Soil Disturbance Log***

<b>Type of Disturbance Activity:</b>	<b>Proposed Date of Disturbance Activity:</b>	<b>Date of Supplemental Subsurface Soil Sampling and Results, If Applicable:</b>	<b>Specific Subsurface Soil Management Plan:</b>	<b>Dates of WDNR Approval of Disturbance and Post-Disturbance Reporting:</b>



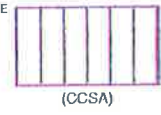
**Arsenic Excavation Boundary Area (AEBA)**

A. Subject to United States Environmental Protection Agency (EPA) or Wisconsin Department of Natural Resources (WDNR) approval, where appropriate, the City is authorized to construct a road, the location of which is shown in Figure A1. With the exception of the road shown in Figure A1 and described immediately below, any activities that are not park, passive recreational use, or open space are prohibited in the AEBA. All commercial, residential, and industrial development of the AEBA is prohibited. With the exception of the road discussed below, any replacement of cover material with another barrier, excavation or upgrading of the land surface, filling, plowing for agricultural cultivation, or construction or placement of a building or other structure is prohibited.

The City is permitted to construct a road in the location shown in Figure A1 in the AEBA provided the City obtains and complies with applicable regulatory approval by EPA or WDNR for barrier disturbance for such road construction. After EPA or WDNR approval, the road will be built to specifications determined by the City engineer. Barrier soil disturbances required for construction of the road in the AEBA will be managed according to the Barrier Maintenance Plan (BMP) for this Site and applicable state and federal law.

B. Any groundwater well installation or the withdrawal of groundwater from beneath the AEBA shall be prohibited unless expressly required and approved by the WDNR or EPA in writing for groundwater sampling. Withdrawal of any water from any well required by WDNR or EPA is expressly limited to sample collection only, in accordance with industry standard procedures for groundwater sample collection.

C. All owners of the AEBA shall comply with the obligations and restrictions in the BMP relating to the property, as approved by WDNR.



**Clean Cover Soil Area (CCSA) (western portion of DuPont property and parts of EPEC property)**

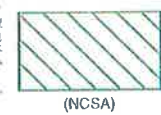
A. Subject to paragraph B, all types of development shall be permitted in the CCSA. All owners of the CCSA shall comply with the obligations and restrictions in the Barrier Maintenance Plan (BMP) and the Soil Management Plan (SMP) relating to the property, as approved by the Wisconsin Department of Natural Resources (WDNR).

B. Industrial, commercial, condominium, and residential development on the CCSA shall be permitted; provided, however, that any such residential development shall be limited to multi-family housing with the land under common ownership where there is an oversight body responsible for enforcing compliance with the BMP and SMP for each such residential development. No single family homes will be permitted.

C. Any groundwater well installation or the withdrawal of groundwater from beneath the CCSA is prohibited unless expressly required and approved by the WDNR in writing. Withdrawal of any water from any well required by WDNR is expressly limited to sample collection only, in accordance with industry standard procedures for groundwater sample collection.

D. Any enclosed buildings or structures on the CCSA that are intended for occupancy, including, but not limited to, industrial, residential or commercial buildings, restroom facilities, kiosks or concession stands, shall not be constructed unless a WDNR-approved vapor intrusion mitigation system that meets the objective of protecting human health is installed, or as the alternative, a vapor intrusion assessment is performed in accordance with guidelines issued by the State of Wisconsin. A vapor intrusion system would not be installed if not required by the finding of the vapor intrusion assessment; contingent upon WDNR's approval of said assessment. Since any vapor intrusion mitigation system needs to be maintained in perpetuity, any future modifications to the buildings need to take in account the long-term integrity of this system.

E. Any construction or excavation activities on the CCSA shall comply with the SMP for the property, as approved by WDNR.



**No Cover Soil Area (NCSA) (PARTS OF EPEC PROPERTY)**

A. Any groundwater well installation or the withdrawal of groundwater from beneath the NCSA is prohibited unless expressly required and approved by the WDNR in writing. Withdrawal of any water from any well required by WDNR is expressly limited to sample collection only, in accordance with industry standard procedures for groundwater sample collection.

B. Any enclosed buildings or structures on the NCSA that are intended for occupancy, including, but not limited to, industrial, residential or commercial buildings, restroom facilities, kiosks or concession stands shall not be constructed unless a WDNR-approved vapor intrusion mitigation system that meets the objective of protecting human health is installed, or as the alternative, a vapor intrusion assessment is performed in accordance with guidelines issued by the State of Wisconsin. A vapor intrusion system would not be installed if not required by the finding of the vapor intrusion assessment; contingent upon WDNR's approval of said assessment. Since any vapor intrusion mitigation system needs to be maintained in perpetuity, any future modifications to the buildings need to take in account the long-term integrity of this system.

Wisconsin Department of Natural Resources, Division of Geology and Land Use, 480 North Walnut Street, Madison, WI 53706-1000, 608-261-3000



DESIGNED BY:  
M. BRILL  
DRAWN BY:  
D. LITTEL  
DATA QUALITY CHKD:  
M. BRILL  
APPROVED BY:

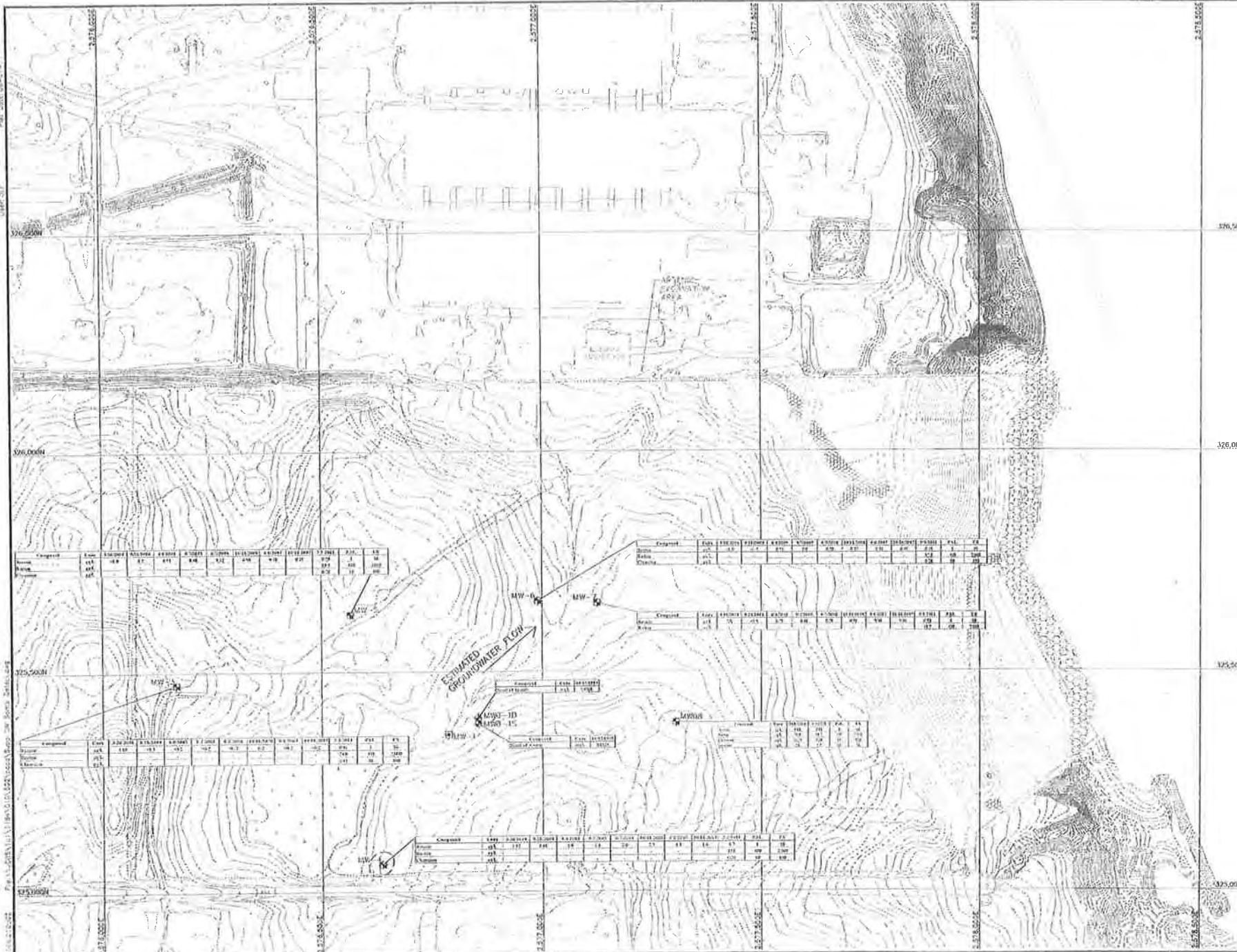


**BARRIER MAINTENANCE PLAN**  
**APPENDIX A - INSTITUTIONAL CONTROLS**

**EPEC POLYMERS, INC. SITE**  
**OAK CREEK, WISCONSIN**

PROJECT NO:  
18986417  
DATE:  
2/7/14  
FIGURE NO:  
**A1**





- Legend**
- Property Line
  - Contour Line
  - Paved Road
  - Dirt Road
  - Water
  - Wetland
  - Fence Line
  - Extent of Prior Excavation
  - MW 7 Existing MWH Monitoring Well Location and Number

- Notes**
1. Topographic base map obtained from an aerial survey performed by Aero-Metric, Inc., Sheboygan, Wisconsin, dated November 3, 2001.
  2. Excavation area boundaries taken from drawing provided by North Shore Engineering, Inc. titled, "Volumes at Boerke Site".
  3. µg/L -- Micrograms per Liter
  4. The groundwater enforcement standard for arsenic is 10 µg/L per NR140.10.
  5. As of November 2012, all monitoring wells have been abandoned.

- Sources:**
1. Interim Report Investigative & Remedial Activities, Former Carrollville Plant, OIIM, 1985
  2. Final Report for Remedial Action at the Mills-Chalmers Site, OIIM, 1989
  3. Investigation Report, E.M. Boerke Family Trust Property The Traverse Group, 1993
  4. Removal Site Evaluation/Engineering Evaluation/Cost Assessment, ESC, 2000
  5. Construction Completion Report, MWH, 2004
  6. Phase 1 Environmental Site Assessment Report, EPEC Polymers, Inc., STN JV-START, 2009



Parameter	Unit	10/11/12	10/12/12	10/13/12	10/14/12	10/15/12	10/16/12	10/17/12	10/18/12	10/19/12	10/20/12	10/21/12	10/22/12	10/23/12	10/24/12	10/25/12	10/26/12	10/27/12	10/28/12	10/29/12	10/30/12	10/31/12
Arsenic	µg/L	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5

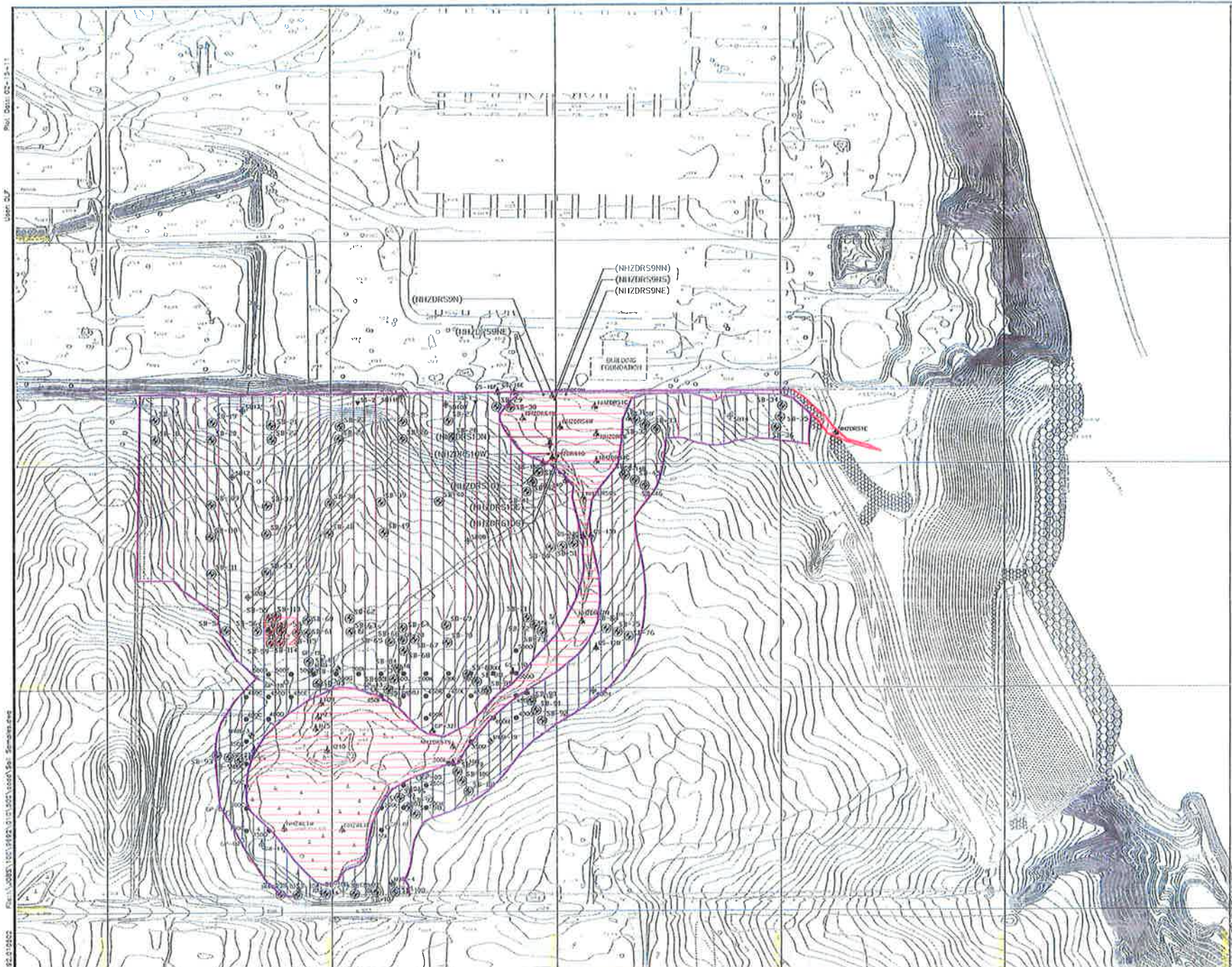
Parameter	Unit	10/11/12	10/12/12	10/13/12	10/14/12	10/15/12	10/16/12	10/17/12	10/18/12	10/19/12	10/20/12	10/21/12	10/22/12	10/23/12	10/24/12	10/25/12	10/26/12	10/27/12	10/28/12	10/29/12	10/30/12	10/31/12
Arsenic	µg/L	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5

Parameter	Unit	10/11/12	10/12/12	10/13/12	10/14/12	10/15/12	10/16/12	10/17/12	10/18/12	10/19/12	10/20/12	10/21/12	10/22/12	10/23/12	10/24/12	10/25/12	10/26/12	10/27/12	10/28/12	10/29/12	10/30/12	10/31/12
Arsenic	µg/L	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5

Parameter	Unit	10/11/12	10/12/12	10/13/12	10/14/12	10/15/12	10/16/12	10/17/12	10/18/12	10/19/12	10/20/12	10/21/12	10/22/12	10/23/12	10/24/12	10/25/12	10/26/12	10/27/12	10/28/12	10/29/12	10/30/12	10/31/12
Arsenic	µg/L	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5

Parameter	Unit	10/11/12	10/12/12	10/13/12	10/14/12	10/15/12	10/16/12	10/17/12	10/18/12	10/19/12	10/20/12	10/21/12	10/22/12	10/23/12	10/24/12	10/25/12	10/26/12	10/27/12	10/28/12	10/29/12	10/30/12	10/31/12
Arsenic	µg/L	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5

Parameter	Unit	10/11/12	10/12/12	10/13/12	10/14/12	10/15/12	10/16/12	10/17/12	10/18/12	10/19/12	10/20/12	10/21/12	10/22/12	10/23/12	10/24/12	10/25/12	10/26/12	10/27/12	10/28/12	10/29/12	10/30/12	10/31/12
Arsenic	µg/L	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5



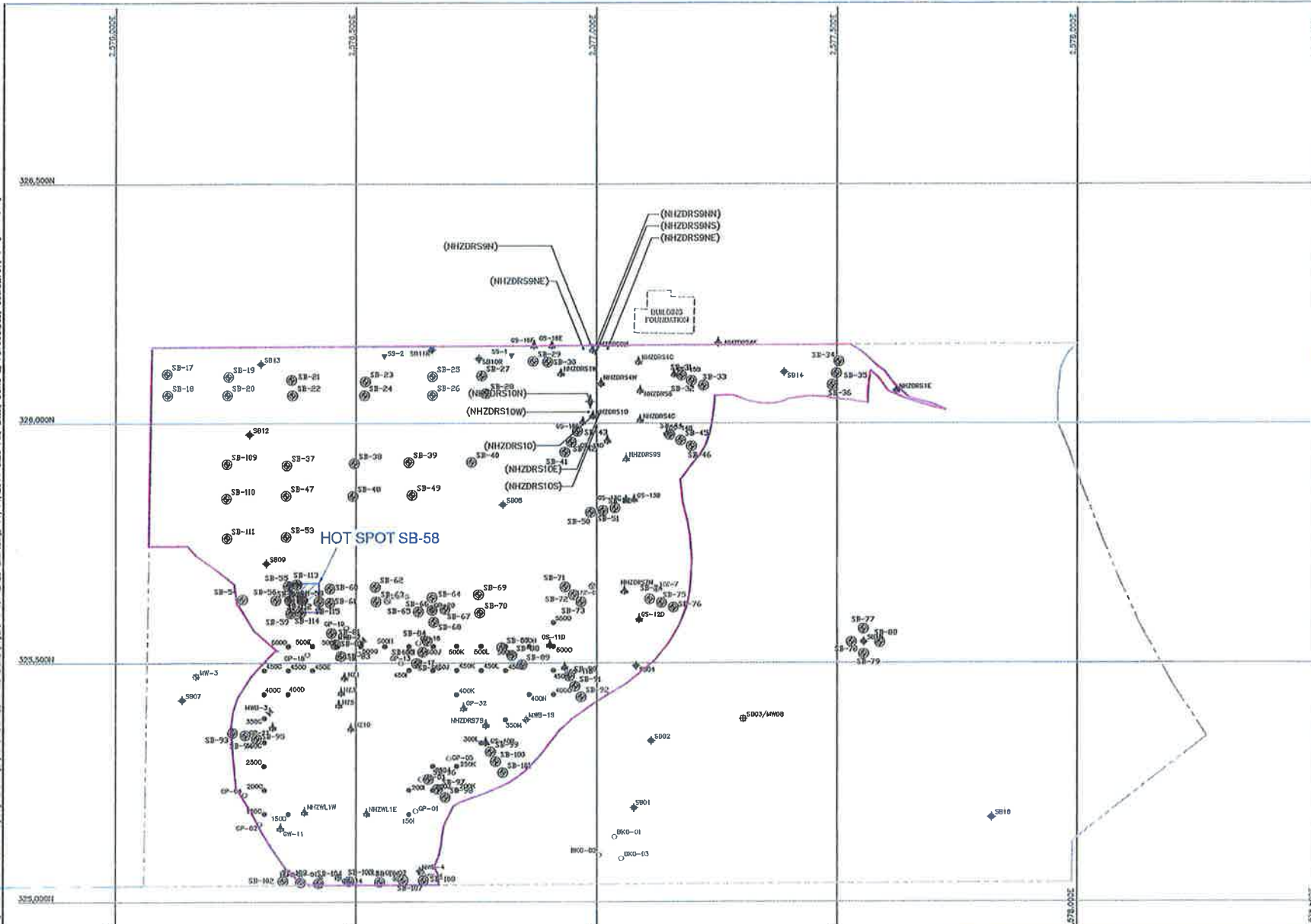
- Legend**
- Property Line
  - Contour Line
  - Water
  - Wetland
  - Fence Line
  - Existing Monitoring Well Location and Number
  - Supplemental VPLE Sampling Location and Number
  - New Monitoring Well Location and Number
  - MWH Wetland Sample Location and Number
  - MWH Sample Location and Number
  - MWH Sample Location and Number
  - MWH Confirmation Sample Location
  - O.H. Materials Co. Sample Location and Number
  - Dupont Soil Boring/Geoprobe Location and Number
  - HLA Soil Boring/Geoprobe Location and Number
  - HLA Monitoring Well Location and Number
  - Traverse Group Sample Location and Number
  - Extent of Clean Soil Barriers
  - Arsenic Excavation Boundary Area (AEBA) -1 foot to 10 feet of clean soil barrier
  - Clean Cover Soil Area (CCSA) -2 feet of clean soil barrier
  - Former elevated arsenic area, ("Hot Spot Area") stabilized and relocated during remedial action

- Notes**
1. Topographic base map obtained from an aerial survey performed by Aero-Metric, Inc., Sheboygan, Wisconsin, dated November 3, 2001.
  2. Excavation area boundaries taken from drawing provided by North Shore Engineering, Inc. titled, "Volumes at Boerke Site".
- Sources:**
1. Interim Report, Investigative & Remedial Activities, Former Carrollville Plant, OHM, 1985
  2. Final Report for Remedial Action at the Allis-Chalmers Site, OIIM, 1989
  3. Investigation Report, E.M. Boerke Family Trust Property, The Traverse Group, 1998
  4. Removal Site Evaluation/Engineering Evaluation/Cost Assessment, ESC, 2000
  5. Construction Completion Report, MWH, 2004
  6. Phase I Environmental Site Assessment Report, EPEC Polymers, Inc., STN JV-START, 2009



DESIGNED _____ DRAWN _____ CHECKED _____		SUBMITTED BY _____ DATE _____		EPEC POLYMERS, INC. ONE CHICAGO, WISCONSIN	EPC/DP/STP REMEDIATION SOIL CHARACTERIZATION	SHEET R.2.c
SCALE: 1" = 100' 0 1/2 1 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE		DATE _____				

V:\Projects\Dupont\Oak Creek\CAD\VPLE Case Closure\_Registry.dwg\November 2014\_Revision\Figure 1 for EPEC EMP.dwg, 11/14/2014, 6:26 PM, JMH, David E. PDP985.dwg, User32757, 1'-0" = 1'-0"



- Legend**
- Property Line
  - Contour Line
  - Water
  - Wetland
  - Fence Line
  - Existing Monitoring Well Location and Number
  - Supplemental VPLE Sampling Location and Number
  - New Monitoring Well Location and Number
  - MWH Wetland Sample Location and Number
  - MWH Sample Location and Number
  - MWH Sample Location and Number
  - MWH Confirmation Sample Location
  - O.H. Materials Co. Sample Location and Number
  - Dupont Soil Boring/Geoprobe Location and Number
  - HLA Soil Boring/Geoprobe Location and Number
  - HLA Monitoring Well Location and Number
  - Traverse Group Sample Location and Number
  - Extent of soil with concentrations exceeding the arsenic SSRCL and/or total carcinogenic PAH RCL.
  - Former Elevated Arsenic Area stabilized and removed during Remedial Action in 2013

- Notes**
1. Topographic base map obtained from an aerial survey performed by Aero-Metric, Inc., Sheboygan, Wisconsin, dated November 3, 2001.
  2. Excavation area boundaries taken from drawing provided by North Shore Engineering, Inc. titled, "Volumes at Boerke Site".

- Sources:**
1. Interim Report, Investigative & Remedial Activities, Former Carrollville Plant, OHM, 1985
  2. Final Report for Remedial Action at the Allis-Chalmers Site, OHM, 1989
  3. Investigation Report, E.M. Boerke Family Trust Property, The Traverse Group, 1996
  4. Removal Site Evaluation/Engineering Evaluation/Cost Assessment, ESC, 2000
  5. Construction Completion Report, MWH, 2004
  6. Phase I Environmental Site Assessment Report, EPEC Polymers, Inc., STN JV-STARK, 2009

DESIGNED BY:  
**M. BRILL**  
 DRAWN BY:  
**D. LITTEL**  
 DATA QUALITY CHKD:  
**M. BRILL**  
 APPROVED BY:

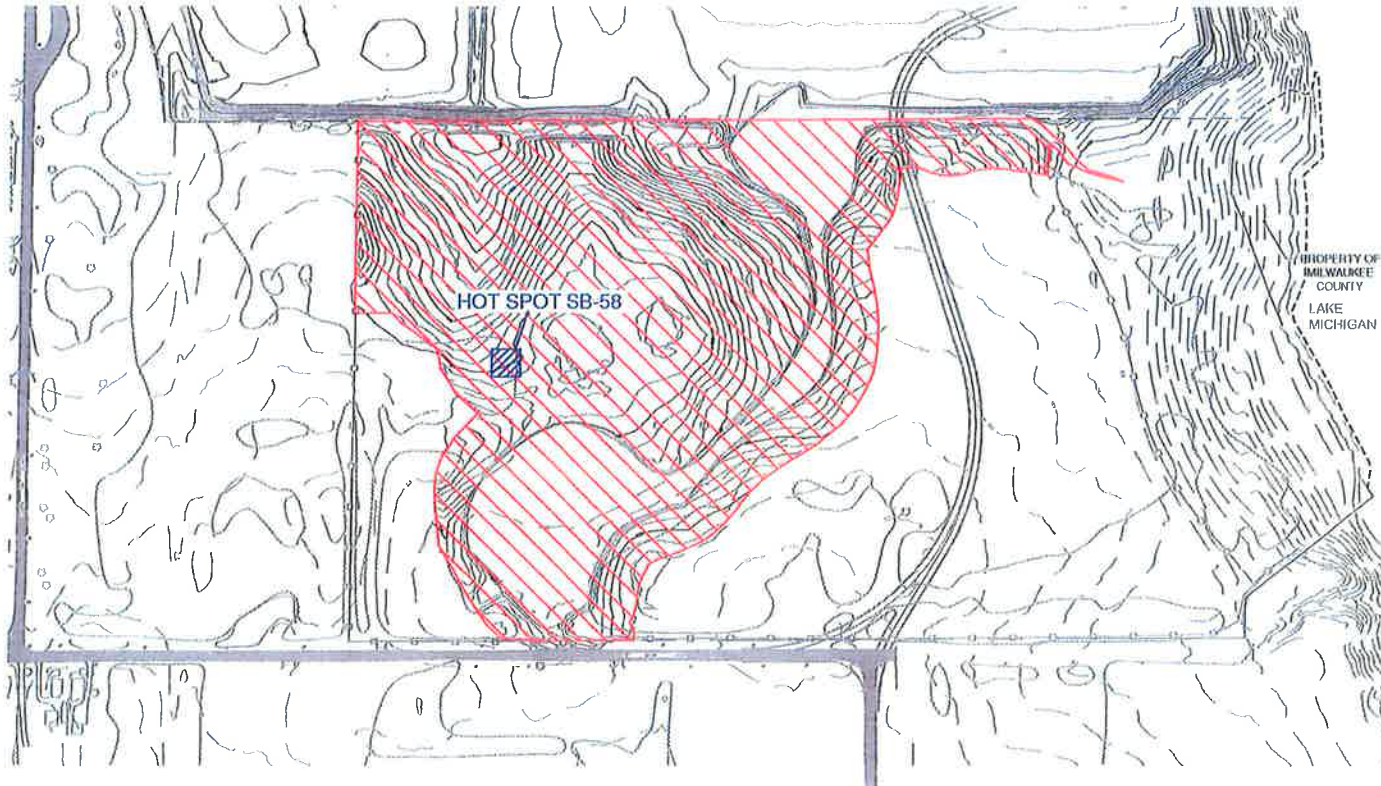


**BARRIER MAINTENANCE PLAN**  
**Investigation Sampling Locations**

**EPEC POLYMERS, INC. SITE**  
**OAK CREEK, WISCONSIN**

PROJECT NO.	18986417
DATE	11/11/13
FIGURE No.	1

A:\Projects\04041206\_Conestoga\URS\_E-Data\_Site\Site\as-built\Number-014\_Redown\Fig. 2 for EPEC Site.dwg, 11/14/2013, 9:05 AM, D:\E. Davis, E. P. 2013, 1:2" = 1'-0"



Area subject to Inspection and Maintenance requirements of the Barrier Maintenance Plan



Former Elevated Arsenic Area stabilized and removed during Remedial Action in 2013



DESIGNED BY:  
**M. BRILL**  
 DRAWN BY:  
**D. LITTEL**  
 DATA QUALITY CKD:  
**M. BRILL**  
 APPROVED BY:



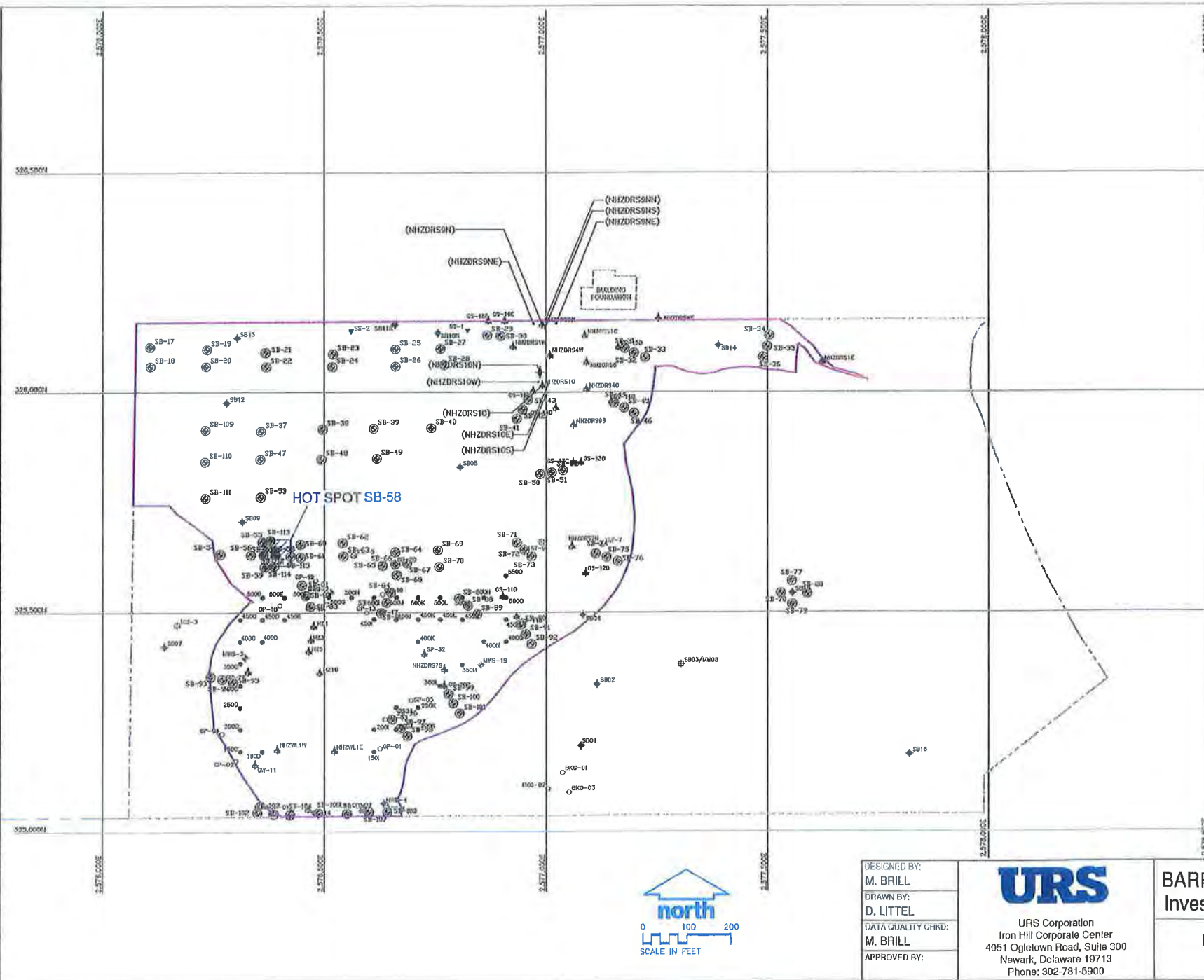
URS Corporation  
 Iron Hill Corporate Center  
 4051 Ogletown Road, Suite 300  
 Newark, Delaware 19713  
 Phone: 302-781-5900

**BARRIER MAINTENANCE PLAN**  
 Inspection and Maintenance Area

EPEC POLYMERS, INC. SITE  
 OAK CREEK, WISCONSIN

PROJECT NO.	18986417
DATE	11/11/13
FIGURE No:	2

W:\Projects\DuPont\Oak Creek\CD\VPLE Des. Closure Regulatory drawings\November 2014\_Revision\Figure 1 for EPEC BMAP.dwg, 11/14/2014 8:26 PM, User: David E. PDP095, User: David E. PDP095, 11-0" = 1'-0"



**Legend**

- Property Line
- Contour Line
- Water
- Wetland
- Fence Line
- Existing Monitoring Well Location and Number
- Supplemental VPLE Sampling Location and Number
- New Monitoring Well Location and Number
- MWH Wetland Sample Location and Number
- MWH Sample Location and Number
- MWH Confirmation Sample Location
- O.H. Materials Co. Sample Location and Number
- Dupont Soil Boring/Geoprobe Location and Number
- HLA Soil Boring/Geoprobe Location and Number
- HLA Monitoring Well Location and Number
- Traverse Group Sample Location and Number
- Extent of soil with concentrations exceeding the areneic SSRCL and/or total carcinogenic PAH RCL.
- Former Elevated Arsenic Area stabilized and removed during Remedial Action in 2013

**Notes**

1. Topographic base map obtained from an aerial survey performed by Aero-Metric, Inc., Sheboygan, Wisconsin, dated November 3, 2001.
2. Excavation area boundaries taken from drawing provided by North Shore Engineering, Inc. titled, "Volumes at Boerke Site".

**Sources:**

1. Interim Report, Investigative & Remedial Activities, Former Carrollville Plant, OHM, 1985
2. Final Report for Remedial Action at the Allis-Chalmers Site, OHM, 1989
3. Investigation Report, E.M. Boerke Family Trust Property, The Traverse Group, 1998
4. Removal Site Evaluation/Engineering Evaluation/Cost Assessment, ESC, 2000
5. Construction Completion Report, MWH, 2004
6. Phase I Environmental Site Assessment Report, EPEC Polymers, Inc., STN JV-START, 2009

DESIGNED BY:  
**M. BRILL**  
 DRAWN BY:  
**D. LITTEL**  
 DATA QUALITY CHKD:  
**M. BRILL**  
 APPROVED BY:





URS Corporation  
 Iron Hill Corporate Center  
 4051 Ogletown Road, Suite 300  
 Newark, Delaware 19713  
 Phone: 302-781-5900

**BARRIER MAINTENANCE PLAN**  
**Investigation Sampling Locations**  
  
**EPEC POLYMERS, INC. SITE**  
**OAK CREEK, WISCONSIN**

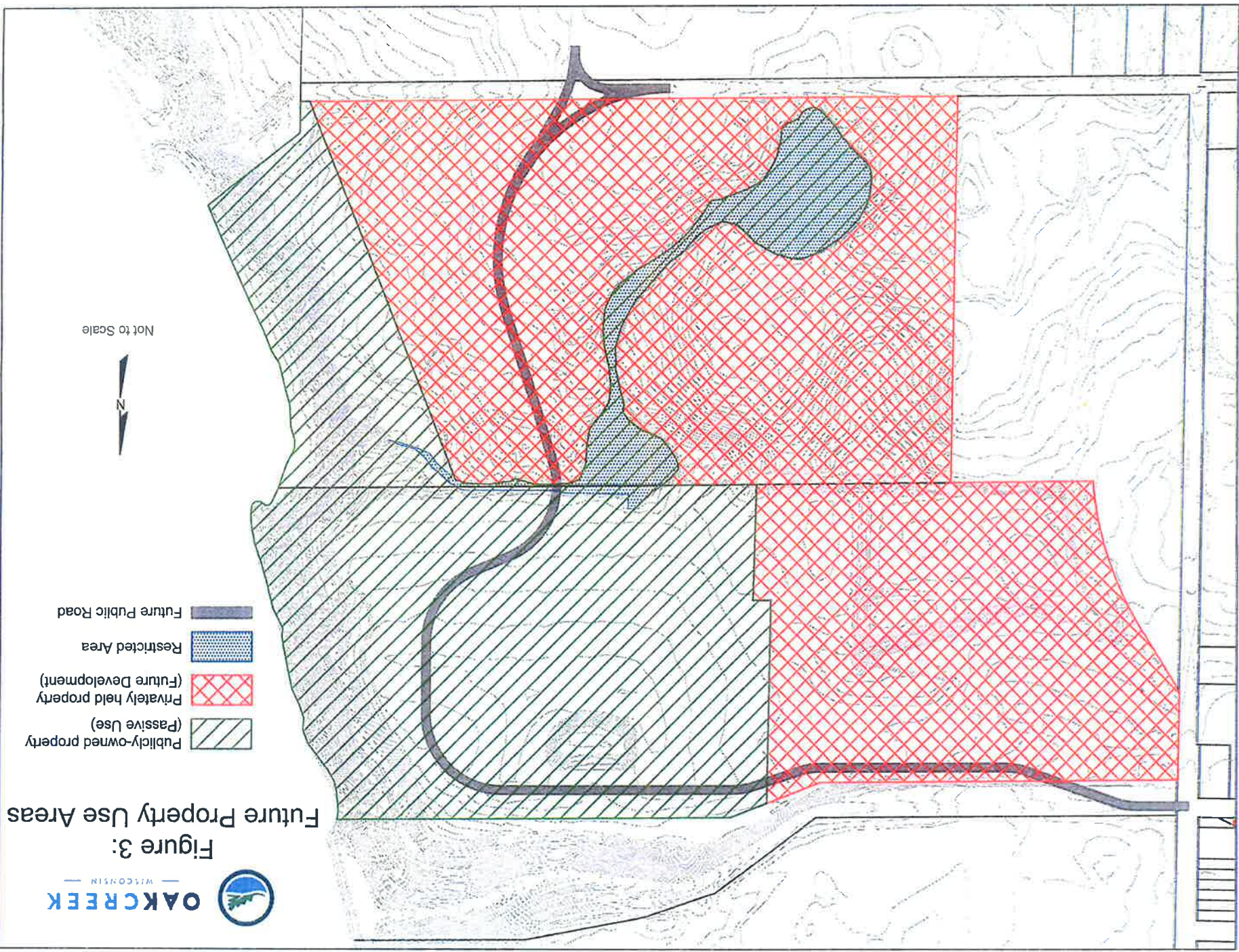
PROJECT NO.	18986417
DATE	11/11/13
FIGURE No:	1



Figure 3:  
Future Property Use Areas

-  Publicly-owned property (Passive Use)
-  Privately held property (Future Development)
-  Restricted Area
-  Future Public Road

Not to Scale





**URS**  
 400 COLLEGE ROAD, SUITE 300  
 NEWARK, NJ 07102  
 WWW.URS.COM

NO.	DESCRIPTION	DATE	BY

SCALE OF THE  
 HORIZONTAL  
 VERTICAL  
 1" = 100'  
 1" = 20'  
 ALL DIMENSIONS SHALL BE AS SHOWN UNLESS OTHERWISE NOTED  
 SCALE ACCORDINGLY

**BARRIER MAINTENANCE PLAN**  
 Final Barrier Engineering A-B-616

EFEC Polymers, Inc. Site  
 Oak Creek, Wisconsin

DESIGNED BY: ...  
 CHECKED BY: ...  
 REVIEWED BY: ...  
 APPROVED BY: ...

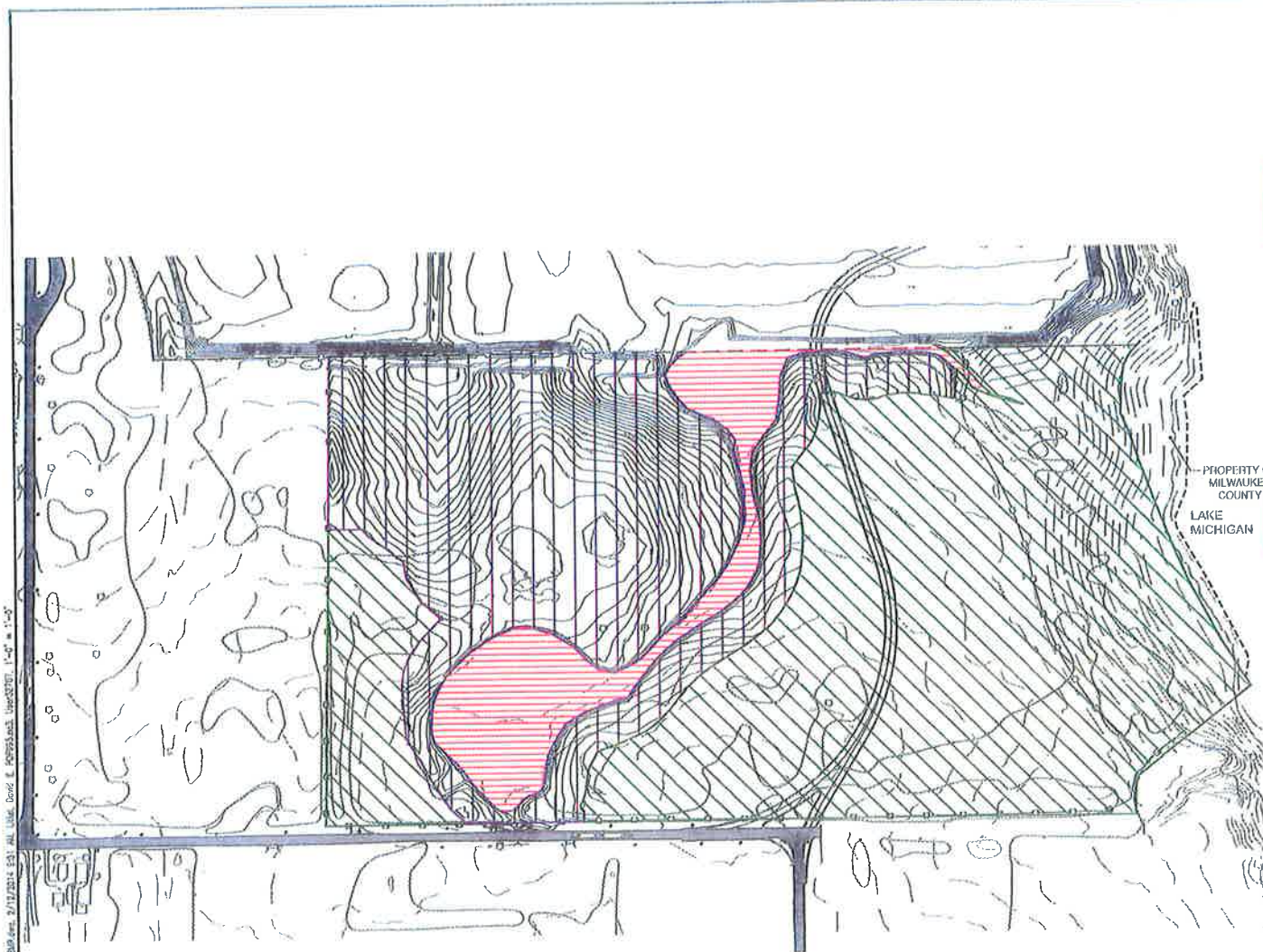
DATE: 10/16/15

PROJECT NO: 10000294

FIGURE NO: 4

NOTICE: ALL SURVEY DATA SHOWN ON THIS DRAWING PROVIDED BY EXCELRION CONTRACTORS, INC. OAK CREEK, WI 53154.

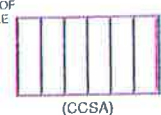




**Arsenic Excavation Boundary Area (AEBA)**

A. Subject to United States Environmental Protection Agency (EPA) or Wisconsin Department of Natural Resources (WDNR) approval, where appropriate, the City is authorized to construct a road, the location of which is shown in Figure A1. With the exception of the road shown in Figure A1 and described immediately below, any activities that are not park, passive recreational use, or open space are prohibited in the AEBA. All commercial, residential, and industrial development of the AEBA is prohibited. With the exception of the road discussed below, any replacement of cover material with another barrier, excavation or upgrading of the land surface, tilling, plowing for agricultural cultivation, or construction or placement of a building or other structure is prohibited.

The City is permitted to construct a road in the location shown in Figure A1 in the AEBA provided the City obtains and complies with applicable regulatory approval by EPA or WDNR for barrier disturbance for such road construction. After EPA or WDNR approval, the road will be built to specifications determined by the City engineer. Barrier soil disturbances required for construction of the road in the AEBA will be managed according to the Barrier Maintenance Plan (BMP) for this Site and applicable state and federal law.



B. Any groundwater well installation or the withdrawal of groundwater from beneath the AEBA shall be prohibited unless expressly required and approved by the WDNR or EPA in writing for groundwater sampling. Withdrawal of any water from any well required by WDNR or EPA is expressly limited to sample collection only, in accordance with industry standard procedures for groundwater sample collection.

C. All owners of the AEBA shall comply with the obligations and restrictions in the BMP relating to the property, as approved by WDNR.

**Clean Cover Soil Area (CCSA) (western portion of DuPont property and parts of EPEC property)**

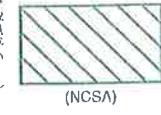
A. Subject to paragraph B, all types of development shall be permitted in the CCSA. All owners of the CCSA shall comply with the obligations and restrictions in the Barrier Maintenance Plan (BMP) and the Soil Management Plan (SMP) relating to the property, as approved by the Wisconsin Department of Natural Resources (WDNR).

B. Industrial, commercial, condominium, and residential development on the CCSA shall be permitted; provided, however, that any such residential development shall be limited to multi-family housing with the land under common ownership where there is an oversight body responsible for enforcing compliance with the BMP and SMP for each such residential development. No single family homes will be permitted.

C. Any groundwater well installation or the withdrawal of groundwater from beneath the CCSA is prohibited unless expressly required and approved by the WDNR in writing. Withdrawal of any water from any well required by WDNR is expressly limited to sample collection only, in accordance with industry standard procedures for groundwater sample collection.

D. Any enclosed buildings or structures on the CCSA that are intended for occupancy, including, but not limited to, industrial, residential or commercial buildings, restroom facilities, kiosks or concession stands, shall not be constructed unless a WDNR-approved vapor intrusion mitigation system that meets the objective of protecting human health is installed, or as the alternative, a vapor intrusion assessment is performed in accordance with guidelines issued by the State of Wisconsin. A vapor mitigation system would not be installed if not required by the finding of the vapor intrusion assessment; contingent upon WDNR's approval of said assessment. Since any vapor intrusion mitigation system needs to be maintained in perpetuity, any future modifications to the buildings need to take in account the long-term integrity of this system.

E. Any construction or excavation activities on the CCSA shall comply with the SMP for the property, as approved by WDNR.



**No Cover Soil Area (NCSA) (PARTS OF EPEC PROPERTY)**

A. Any groundwater well installation or the withdrawal of groundwater from beneath the NCSA is prohibited unless expressly required and approved by the WDNR in writing. Withdrawal of any water from any well required by WDNR is expressly limited to sample collection only, in accordance with industry standard procedures for groundwater sample collection.

B. Any enclosed buildings or structures on the NCSA that are intended for occupancy, including, but not limited to, industrial, residential or commercial buildings, restroom facilities, kiosks or concession stands shall not be constructed unless a WDNR-approved vapor intrusion mitigation system that meets the objective of protecting human health is installed, or as the alternative, a vapor intrusion assessment is performed in accordance with guidelines issued by the State of Wisconsin. A vapor mitigation system would not be installed if not required by the finding of the vapor intrusion assessment; contingent upon WDNR's approval of said assessment. Since any vapor intrusion mitigation system needs to be maintained in perpetuity, any future modifications to the buildings need to take in account the long-term integrity of this system.

PROPERTY OF  
MILWAUKEE  
COUNTY  
LAKE  
MICHIGAN



DESIGNED BY:  
M. BRILL  
DRAWN BY:  
D. LITTEL  
DATA QUALITY CHKO:  
M. BRILL  
APPROVED BY:

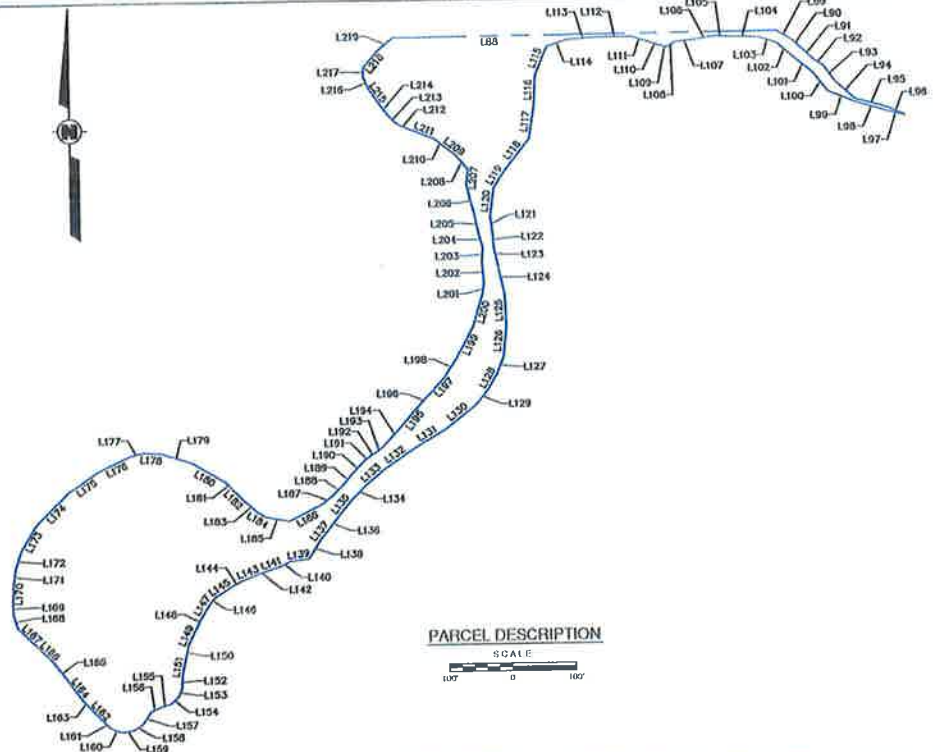
**URS**  
URS Corporation  
Iron Hill Corporate Center  
1051 Oglethorn Road, Suite 300  
Newark, Delaware 19713  
Phone: 302-781-5900

**BARRIER MAINTENANCE PLAN**  
**APPENDIX A - INSTITUTIONAL CONTROLS**  
  
**EPEC POLYMERS, INC. SITE**  
**OAK CREEK, WISCONSIN**

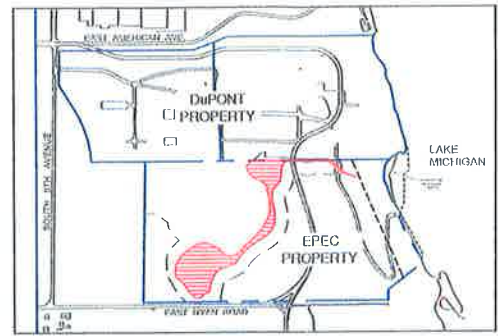
PROJECT NO.  
18986417  
DATE  
2/7/14  
FIGURE No.  
A1

\sproject\Drawings\03a\_CoverSoil\NCSA\_ArsenicExcavationBoundary.dwg  
 Date: 2/7/2014 10:41 AM  
 User: D:\Users\mbrill\Documents\Projects\18986417

V:\Projects\Current\Oak Creek\OAK\_CREEK\Drawings\Plan A2 to A1 DuPont and EPEC BMAP.dwg, 2/12/2014 10:59 AM, David E. Pappas, 1'-0" = 1'-0"



PARCEL DESCRIPTION  
SCALE: 1" = 100'



KEY MAP  
SCALE: 1" = 500'



**Arsenic Excavation Boundary Area (AEBA)**

A. Subject to United States Environmental Protection Agency (EPA) or Wisconsin Department of Natural Resources (WDNR) approval, where appropriate, the City is authorized to construct a road, the location of which is shown in Figure A1. With the exception of the road shown in Figure A1 and described immediately below, any activities that are not park, passive recreational use, or open space are prohibited in the AEBA. All commercial, residential, and industrial development of the AEBA is prohibited. With the exception of this road discussed below, any replacement of cover material with another barrier, excavation or upgrading of the land surface, filling, plowing for agricultural cultivation, or construction or placement of a building or other structure is prohibited.

The City is permitted to construct a road in the location shown in Figure A1 in the AEBA provided the City obtains and complies with applicable regulatory approval by EPA or WDNR for barrier disturbance for such road construction. After EPA or WDNR approval, the road will be built to specifications determined by the City engineer. Barrier disturbance required for construction of the road in the AEBA will be managed according to the Barrier Maintenance Plan (BMP) for this Site and applicable state and federal law.

D. Any groundwater well installation or the withdrawal of groundwater from beneath the AEBA shall be prohibited unless expressly required and approved by the WDNR or EPA in writing for groundwater sampling. Withdrawal of any water from any well required by WDNR or EPA is expressly limited to sample collection only, in accordance with industry standard procedures for groundwater sample collection.

C. All owners of the AEBA shall comply with the obligations and restrictions in the BMP relating to the property, as approved by WDNR.

Line #/Curve #	Length	Bearing/Delta	Radius
L88	804.91	S89° 46' 15.05"W	
L89	28.85	N56° 34' 14.00"W	
L90	19.10	N47° 07' 18.00"W	
L91	27.59	N46° 28' 06.00"W	
L92	17.20	N54° 27' 44.00"W	
L93	33.60	N36° 31' 44.00"W	
L94	40.36	N46° 00' 46.00"W	
L95	51.92	N74° 21' 28.00"W	
L96	29.86	N86° 02' 15.00"W	
L97	27.68	S77° 28' 18.00"E	
L98	52.20	S73° 18' 03.00"E	
L99	46.62	S87° 17' 08.00"E	
L100	35.81	S35° 54' 33.00"E	
L101	43.28	S49° 41' 09.00"E	
L102	31.89	S48° 48' 51.00"E	
L103	30.38	S72° 45' 31.00"E	
L104	50.04	S87° 42' 34.00"E	
L105	19.03	S58° 59' 14.00"E	
L106	31.40	N80° 50' 16.00"E	
L107	31.14	N84° 28' 21.00"E	

Line #/Curve #	Length	Bearing/Delta	Radius
L108	14.42	N58° 16' 36.00"E	
L109	7.07	S81° 52' 12.00"E	
L110	23.30	S71° 33' 54.00"E	
L111	27.20	S72° 53' 50.00"E	
L112	50.00	N90° 00' 00.00"E	
L113	50.09	N98° 33' 59.00"E	
L114	33.53	N72° 38' 48.00"E	
L115	48.85	N22° 53' 29.00"E	
L116	50.09	N3° 29' 01.00"E	
L117	52.61	N8° 44' 48.00"E	
L118	81.22	N38° 22' 03.00"E	
L119	34.67	N33° 13' 54.00"E	
L120	46.39	N7° 25' 53.00"E	
L121	25.18	N6° 50' 34.00"W	
L122	25.08	N4° 34' 28.00"W	
L123	20.40	N11° 18' 38.00"W	
L124	56.29	N12° 18' 28.00"W	
L125	50.04	N2° 17' 28.00"W	
L126	50.23	N5° 42' 38.00"E	
L127	28.93	N21° 48' 05.00"E	

Line #/Curve #	Length	Bearing/Delta	Radius
L128	28.85	N29° 14' 58.00"E	
L129	30.61	N38° 22' 03.00"E	
L130	64.03	N51° 20' 25.00"E	
L131	58.31	N69° 02' 10.00"E	
L132	60.48	N55° 47' 03.00"E	
L133	34.06	N49° 45' 49.00"E	
L134	33.24	N46° 13' 08.00"E	
L135	34.83	N39° 10' 25.00"E	
L136	29.21	N38° 02' 49.00"E	
L137	15.82	N39° 48' 20.00"E	
L138	37.22	N30° 41' 59.00"E	
L139	31.28	N82° 38' 51.00"E	
L140	17.89	N83° 28' 08.00"E	
L141	22.14	N71° 33' 54.00"E	
L142	13.93	N88° 57' 45.00"E	
L143	25.63	N68° 28' 36.00"E	
L144	20.59	N60° 56' 43.00"E	
L145	29.68	N57° 22' 51.00"E	
L146	12.81	N38° 39' 35.00"E	
L147	16.64	N32° 44' 07.00"E	

Line #/Curve #	Length	Bearing/Delta	Radius
L148	33.12	N28° 53' 12.00"E	
L149	23.26	N25° 27' 48.00"E	
L150	25.71	N13° 29' 46.00"E	
L151	25.50	N11° 16' 38.00"E	
L152	20.02	N2° 51' 49.00"E	
L153	13.00	N22° 37' 12.00"E	
L154	17.89	N47° 17' 28.00"E	
L155	19.92	N82° 28' 28.00"E	
L156	14.32	N85° 13' 29.00"E	
L157	24.41	N34° 59' 31.00"E	
L158	16.64	N57° 15' 53.00"E	
L159	16.28	N80° 33' 48.57"E	
L160	18.97	S71° 33' 54.00"E	
L161	19.10	S47° 07' 18.00"E	
L162	28.17	S43° 27' 07.00"E	
L163	23.35	S43° 15' 51.00"E	
L164	28.02	S34° 46' 28.00"E	
L165	44.20	S37° 38' 51.00"E	
L166	55.90	S63° 28' 08.00"W	
L167	44.55	S45° 54' 34.00"E	

Line #/Curve #	Length	Bearing/Delta	Radius
L168	22.14	S16° 28' 08.00"E	
L169	21.02	S2° 43' 35.00"E	
L170	28.17	S3° 58' 43.00"E	
L171	22.20	S7° 45' 58.00"W	
L172	29.41	S17° 49' 08.00"W	
L173	51.11	S30° 34' 45.00"W	
L174	70.01	S45° 34' 43.00"W	
L175	60.48	S59° 47' 03.00"W	
L176	55.04	S65° 17' 51.00"W	
L177	20.62	S75° 57' 50.00"W	
L178	30.07	N88° 11' 09.00"W	
L179	52.50	N72° 15' 18.00"W	
L180	58.31	N59° 02' 10.00"W	
L181	15.56	N45° 00' 00.00"W	
L182	29.00	N43° 39' 10.00"W	
L183	25.50	N48° 10' 47.00"W	
L184	15.28	N56° 23' 33.00"W	
L185	37.66	N79° 17' 13.00"W	
L186	52.63	S14° 18' 01.00"E	
L187	25.61	S51° 20' 29.00"W	

Line #/Curve #	Length	Bearing/Delta	Radius
L188	22.63	S45° 00' 00.00"W	
L189	22.02	S39° 26' 21.00"W	
L190	28.17	S43° 27' 07.00"W	
L191	16.40	S92° 25' 53.00"W	
L192	7.21	S96° 18' 38.00"W	
L193	15.81	S55° 16' 17.00"W	
L194	55.90	S42° 49' 31.00"W	
L195	19.21	S38° 38' 39.00"W	
L196	47.42	S42° 28' 10.00"W	
L197	25.91	S41° 59' 14.00"W	
L198	35.51	S32° 20' 51.00"W	
L199	56.38	S27° 28' 28.00"W	
L200	52.20	S16° 41' 57.00"W	
L201	18.25	S8° 27' 44.00"W	
L202	35.13	S4° 53' 57.00"E	
L203	22.09	S5° 11' 40.00"W	
L204	25.96	S16° 38' 32.00"E	
L205	25.50	S11° 16' 38.00"E	
L206	52.63	S14° 18' 01.00"E	
L207	24.19	S7° 07' 30.00"W	

Line #/Curve #	Length	Bearing/Delta	Radius
L208	30.61	S38° 22' 03.00"E	
L209	17.80	S51° 50' 34.00"E	
L210	24.21	S81° 42' 38.00"E	
L211	40.85	S88° 27' 32.00"E	
L212	23.26	S84° 32' 12.00"E	
L213	17.89	S47° 17' 28.00"E	
L214	26.40	S37° 18' 14.00"E	
L215	27.46	S33° 06' 41.00"E	
L216	21.02	S25° 20' 46.00"E	
L217	14.00	S0° 00' 00.00"E	
L218	38.86	S40° 36' 09.00"W	
L219	31.08	S50° 49' 35.00"W	

DESIGNED BY:  
M. BRILL  
DRAWN BY:  
D. LITTEL  
DATA QUALITY CHECKED BY:  
M. BRILL  
APPROVED BY:

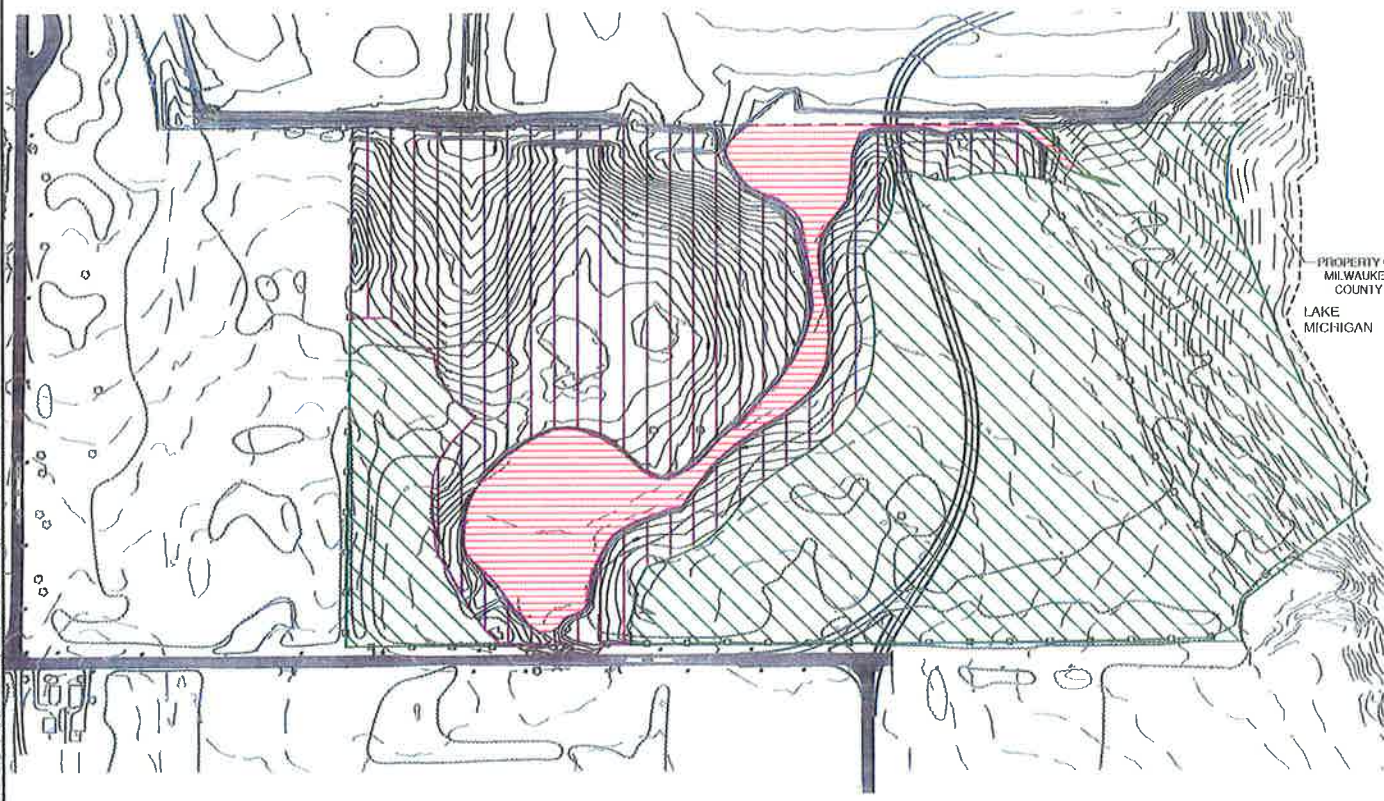


BARRIER MAINTENANCE PLAN  
APPENDIX A - INSTITUTIONAL CONTROLS  
Arsenic Excavation Boundary Area  
  
EPEC Polymers, Inc. Site  
OAK CREEK, WISCONSIN

PROJECT NO.  
18986417  
DATE:  
2/7/14  
FIGURE NO.  
A2



Wisconsin DNR Job: DuPont/CCS/AEBA/Soil Management Plan 1.00 07/25/13 08:14 AM. User: D. Littell. Date: 11/11/13. Scale: 1"=200'.



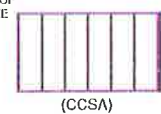
**Arsenic Excavation Boundary Area (AEBA)**

A. Subject to United States Environmental Protection Agency (EPA) or Wisconsin Department of Natural Resources (WDNR) approval, where appropriate, the City is authorized to construct a road, the location of which is shown in Figure A1. With the exception of the road shown in Figure A1 and described immediately below, any activities that are not park, passive recreational use, or open space are prohibited in the AEBA. All commercial, residential, and industrial development of the AEBA is prohibited. With the exception of the road discussed below, any replacement of cover material with another barrier, excavation or upgrading of the land surface, plowing for agricultural cultivation, or construction or placement of a building or other structure is prohibited.

The City is permitted to construct a road in the location shown in Figure A1 in the AEBA provided the City obtains and complies with applicable regulatory approval by EPA or WDNR for barrier disturbance for such road construction. After EPA or WDNR approval, the road will be built to specifications determined by the City engineer. Barrier soil disturbances required for construction of the road in the AEBA will be managed according to the Barrier Maintenance Plan (BMP) for this Site and applicable state and federal law.

B. Any groundwater well installation or the withdrawal of groundwater from beneath the AEBA shall be prohibited unless expressly required and approved by the WDNR or EPA in writing for groundwater sampling. Withdrawal of any water from any well required by WDNR or EPA is expressly limited to sample collection only, in accordance with industry standard procedures for groundwater sample collection.

C. All owners of the AEBA shall comply with the obligations and restrictions in the BMP relating to the property, as approved by WDNR.



**Clean Cover Soil Area (CCSA) (western portion of DuPont property and parts of EPEC property)**

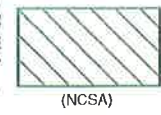
A. Subject to paragraph B, all types of development shall be permitted in the CCSA. All owners of the CCSA shall comply with the obligations and restrictions in the Barrier Maintenance Plan (BMP) and the Soil Management Plan (SMP) relating to the property, as approved by the Wisconsin Department of Natural Resources (WDNR).

B. Industrial, commercial, condominium, and residential development on the CCSA shall be permitted; provided, however, that any such residential development shall be limited to multi-family housing with the land under common ownership where there is an oversight body responsible for enforcing compliance with the BMP and SMP for each such residential development. No single family homes will be permitted.

C. Any groundwater well installation or the withdrawal of groundwater from beneath the CCSA is prohibited unless expressly required and approved by the WDNR in writing. Withdrawal of any water from any well required by WDNR is expressly limited to sample collection only, in accordance with industry standard procedures for groundwater sample collection.

D. Any enclosed buildings or structures on the CCSA that are intended for occupancy, including, but not limited to, industrial, residential or commercial buildings, restroom facilities, kiosks or concession stands, shall not be constructed unless a WDNR-approved vapor intrusion mitigation system that meets the objective of protecting human health is installed, or as the alternative, a vapor intrusion assessment is performed in accordance with guidelines issued by the State of Wisconsin. A vapor intrusion system would not be installed if not required by the finding of the vapor intrusion assessment; contingent upon WDNR's approval of said assessment. Since any vapor intrusion mitigation system needs to be maintained in perpetuity, any future modifications to the buildings need to take in account the long-term integrity of this system.

E. Any construction or excavation activities on the CCSA shall comply with the SMP for the property, as approved by WDNR.



**No Cover Soil Area (NCSA) (PARTS OF EPEC PROPERTY)**

A. Any groundwater well installation or the withdrawal of groundwater from beneath the NCSA is prohibited unless expressly required and approved by the WDNR in writing. Withdrawal of any water from any well required by WDNR is expressly limited to sample collection only, in accordance with industry standard procedures for groundwater sample collection.

B. Any enclosed buildings or structures on the NCSA that are intended for occupancy, including, but not limited to, industrial, residential or commercial buildings, restroom facilities, kiosks or concession stands shall not be constructed unless a WDNR-approved vapor intrusion mitigation system that meets the objective of protecting human health is installed, or as the alternative, a vapor intrusion assessment is performed in accordance with guidelines issued by the State of Wisconsin. A vapor intrusion system would not be installed if not required by the finding of the vapor intrusion assessment; contingent upon WDNR's approval of said assessment. Since any vapor intrusion mitigation system needs to be maintained in perpetuity, any future modifications to the buildings need to take in account the long-term integrity of this system.



DESIGNED BY:  
M. BRILL

DRAWN BY:  
D. LITTELL

DATA QUALITY CHECK:  
M. BRILL

APPROVED BY:

**URS**

URS Corporation  
Iron Hill Corporate Center  
4051 Oglethorpe Road, Suite 300  
Newark, Delaware 19713  
Phone: 302-781-5900

**SOIL MANAGEMENT PLAN**

EPEC POLYMERS, INC. SITE  
OAK CREEK, WISCONSIN

PROJECT NO:  
18986417

DATE:  
11/11/13

FIGURE No:  
5