FIFTH FIVE-YEAR REVIEW REPORT FOR WHEELER PIT SUPERFUND SITE LAPRAIRIE COUNTY, WISCONSIN

Prepared by

U.S. Environmental Protection Agency
Region 5
Janesville, Wisconsin

Margaret M. Guerriero
Acting Director
Superfund Division

9/15/2017
Date

Table of Contents

LIST OF ABBREVIATIONS & ACRONYMS

CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
EPA	United States Environmental Protection Agency
ESD	Explanation of Significant Difference
FYR	Five-Year Review
GIS	Geographic Information System
ICs	Institutional Controls
LTS	Long-term Stewardship
MCL	Maximum Contaminant Level
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NPL	National Priorities List
O&M	Operation and Maintenance
PAL	Preventative Action Limit
PRP	Potentially Responsible Party
RAO	Remedial Action Objectives
ROD	Record of Decision
RPM	Remedial Project Manager
SARA	Superfund Amendments and Reauthorization Act
Site	Wheeler Pit Superfund Site
TBC	To be considered
WAC	Wisconsin Administrative Code
WDNR	Wisconsin Department of Natural Resources

I. INTRODUCTION

The purpose of a Five-Year Review (FYR) is to evaluate the implementation and performance of a remedy in order to determine if the remedy is and will continue to be protective of human health and the environment. The methods, findings, and conclusions of reviews are documented in five-year review reports such as this one. In addition, FYR reports identify issues found during the review, if any, and document recommendations to address them.

The United States Environmental Protection Agency (EPA) is preparing this five-year review pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 121, consistent with the National Contingency Plan (NCP); 40 Code of Federal Regulations (C.F.R.) Section 300.430(f)(4)(ii), and considering EPA policy.

This is the fifth FYR for the Wheeler Pit Superfund Site (Site). The triggering action for this statutory review is the September 17, 2012 FYR. The FYR has been prepared due to the fact that hazardous substances, pollutants, or contaminants remain at the site above levels that allow for unlimited use and unrestricted exposure (UU/UE).

The Wheeler Pit Superfund Site Five-Year Review was led by Karen Mason-Smith, EPA Remedial Project Manager (RPM). EPA notified the Wisconsin Department of Natural Resources (WDNR) about the initiation of the FYR. The review began on September 18, 2016.

Site Background

The Site is located in rural La Prairie Township approximately 1.5 miles east of the City of Janesville and directly northwest of the intersection of County Highway O (Old Delavan Road) and County Highway J. It is a disposal pit located on approximately 3.75 acres. This area was previously owned and operated as a sand and gravel pit by the Chicago, Milwaukee, St. Paul and Pacific Railroad Company, a predecessor in interest to CMC Heartland Partners (CMC)[1]. In 1956, General Motors (GM)[2] leased a portion of the pit area from the railroad company for waste disposal. GM disposed of general refuse at the Site between 1956 and 1960. It disposed of paint spray booth sludges, residue from a part hanger stripping system, clarifier sludges and powerhouse coal ashes from its Janesville assembly plant between 1960 and 1974. The Site ceased accepting wastes in 1971 and was capped with soil in 1975.

The surrounding land use is primarily agricultural, although a sand and gravel mining pit lies adjacent to the Site. A small asphalt plant operates north of the Site; and the Rock County Highway Department maintains a salt storage facility directly east of the Site. A low density residential area is located south of the Site.

---

[1] The Janesville and Southeastern Railway Company purchased the Wheeler Pit property in 1900. Its successor, the Chicago Milwaukee, St. Paul and Pacific Railroad Company a.k.a. the Milwaukee Road went into bankruptcy between 1977 and 1985, when it reorganized and its assets vested in the renamed CMC Real Estate Corporation. That company's assets were later transferred to the Chicago Milwaukee Corporation. The Wheeler Pit Site was among the assets the Chicago Milwaukee Corporation spun off to CMC Heartland Partners, which abandoned the property before it filed for bankruptcy in 2006.

[2] GM filed for bankruptcy in 2009.

FIVE-YEAR REVIEW SUMMARY FORM

SITE IDENTIFICATION		
Site Name: Wheeler Pit		
EPA ID: WID980610620		
Region: 5	**State:** WI	**City/County:** Janesville/Rock
SITE STATUS		
NPL Status: Deleted		
Multiple OUs? No	**Has the site achieved construction completion?** Yes	
REVIEW STATUS		
Lead agency: EPA *[If "Other Federal Agency", enter Agency name]*:		
Author name (Federal or State Project Manager): Karen Mason-Smith, Remedial Project Manager		
Author affiliation: EPA Region 5		
Review period: 09/18/2016 – 08/15/2017		
Date of site inspection: 09/08/2017		
Type of review: Statutory		
Review number: 5		
Triggering action date: 09/17/2012		
Due date ***(five years after triggering action date)***: 09/17/2017		

II. RESPONSE ACTION SUMMARY

The following section summarizes response actions and other historical information. In response to concern over the potential for contaminant releases, GM and WDNR sampled Site monitoring wells and nearby water supply wells in April 1981. Elevated levels of trichloroethylene, chromium, zinc and barium were found in some monitoring wells. EPA listed the Site on the National Priorities List (NPL) in September 1984.

Basis for Taking Action

In 1987, two potentially responsible parties (PRPs), GM and CMC, signed an administrative consent order with EPA to perform a Remedial Investigation/Feasibility Study (RI/FS) to study the contamination and evaluate remedial actions for the Site. The RI found that the waste/fill covered about 3.4 acres and ranged from 0-23 feet deep. The deepest part of the waste/fill was found to be

approximately 10 feet above the groundwater table. Sampling of the waste and soil showed the following:

- Toluene, ethyl benzene and xylenes concentrations in the waste from 3,300 to 508,000 parts per billion (ppb).

- Phthalates concentrations in the waste material ranging from 450 to 630,000 ppb.

- Polynuclear Aromatic Hydrocarbons (PAH) concentrations in the waste from 9,520 to 152,000 ppb.

- Nine metals found in elevated concentrations in the waste material: antimony, barium, copper, cadmium, chromium, lead, mercury, nickel and zinc.

Groundwater sampling found several chlorinated benzene compounds, including chlorobenzene, and 1,3 and 1,4 dichlorobenzene. It also detected concentrations of arsenic, chromium, iron and manganese. Wis. Admin. Code Ch. NR 140 establishes a two-tiered system of numerical groundwater standards: an Enforcement Standard (ES) which is generally equivalent to the maximum contaminant level (MCL) set under the federal Safe Drinking Water Act, and a lower Preventative Action Level (PAL) (generally 10-20% of the ES) which triggers the need for remedial response or other action at a facility. The 1,4 dichlorobenzene concentrations exceeded the PAL. The iron and manganese concentrations exceeded the ES.

The contaminants of concern for the Site were determined to be 1,4-dichlorobenzene, arsenic, chromium, iron and manganese. An EPA risk assessment determined that a hypothetical user of a well placed directly into the center of the waste fill would face an unacceptable lifetime cancer risk and that a hypothetical Site worker would face an unacceptable non-carcinogenic inhalation risk from waste volatilization. In addition, a lack of action would create a potential for further erosion of the existing landfill cover and thus for further exposure to landfill wastes. Based on these risks, EPA determined a remedial action was required for the Site.

Response Actions

PRPs conducted the Remedial Design/Remedial Action (RD/RA) EPA selected in a Record of Decision (ROD) dated September 28, 1990, under a UAO EPA issued in 1991. The Site achieved Construction Completion with the signing of the Preliminary Close-Out Report on December 29, 1992, based on the remedy selected in the ROD. All cleanup goals for the site have been achieved for groundwater and soil that may affect current and reasonably anticipated future land uses. EPA deleted the Site from the NPL on April 20, 2004 (Figure 1). The delisting notice described the Site as a 3.82-acre parcel. 69 Fed. Reg. 7837, 7874 (Feb. 20, 2004).

The remedy for the Site included a multilayer landfill cap, institutional controls (ICs), and monitored natural attenuation of contaminated groundwater. On June 16, 2003, EPA issued an Explanation of Significant Differences (ESD), deleting manganese from the contaminants of concern. The ROD identified the following Remedial Action Objectives (RAOs) for source control and groundwater contamination:

• Reduce the threat of direct contact with ash waste material.

• Reduce the infiltration of water into the waste which could lead to further groundwater impacts.
• Achieve compliance with PALs where technically and economically feasible.

The major components of the source control remedy EPA selected in the ROD include the following:

1. A multilayer Resource Conservation and Recovery Act Subtitle D cap consisting of the following layers from top to bottom: a 6-inch topsoil layer; a frost protective soil layer at least 18 inches thick; a drainage layer and a 2-foot clay layer.
2. Consolidation of the waste material from the Frank Brothers property to the north under the cap at the Site.
3. ICs including deed restrictions and landfill development restrictions.

The groundwater remedy consisted of the following:

1. Monitoring wells at the Site to assess the projected decrease in groundwater contamination.
2. Monitoring several private wells located downgradient of the Site to assess the potential impacts to human health.

The cleanup goals established for the groundwater contamination in the ROD were the State of Wis. Admin. Code Chapter NR 140's PALs, which are generally equivalent to federal MCLs set under the Safe Drinking Water Act: Arsenic: 5ug/L; Chromium: 5 ug/L; Iron: 150 ug/L; Manganese: 25 ug/L; and 1,4-dichlorobenzene: 15 ug/L.

Status of Implementation

The only remedial components EPA has implemented since the 2012 FYR are ICs. The landowner recorded an Environmental Deed Restriction and Environmental Protection Easement on December 3, 2014.

Institutional Control

ICs are used to restrict property use, maintain the integrity of the remedy, and assure the long-term protectiveness for areas which do not allow for UU/UE. A summary of the implemented ICs for the Site is listed in Table 1 and ICs are further discussed below. A map showing the area in which the ICs apply is included in Appendix D as Figure 2.

Table 1: Summary of Planned and/or Implemented ICs

Media, engineered controls, and areas that do not support UU/UE based on current conditions	ICs Needed	ICs Called for in the Decision Documents	Impacted Parcel(s)	IC Objective	Title of IC Instrument Implemented and Date (or planned)
Formerly CMC Heartland Partners Property (Current Property Owner is AA & EE Properties, LLC) - Constructed landfill cap identified in Figure 2.	Yes	Yes	Parcel# 1: 6-10-28.2	Prohibit commercial/ industrial, agricultural and residential uses. Prohibit interference with landfill cap construction, operation and maintenance	**Restrictive Covenants**: Declaration of Restrictive Covenant recorded at Rock County recorder's office

Media, engineered controls, and areas that do not support UU/UE based on current conditions	ICs Needed	ICs Called for in the Decision Documents	Impacted Parcel(s)	IC Objective	Title of IC Instrument Implemented and Date (or planned)
				(O&M), monitoring and efficacy of the remedy. Prohibit use of groundwater- see below. Prohibits any construction, installation or use of any buildings, wells, pipes, roads, ditches or any other structures that would affect the remedy.	on June 20, 1997. Environmental Deed Restriction and Environmental Protection Easement recorded at Rock County Courthouse on December 3, 2014. **WDNR Geographic Information System (GIS) Registry-** information device which serves to give notice of land use restrictions and as a GIS mapping tool. **Title Commitment:** EPA completed a Title Commitment for the Site on March 25, 2011, and updated it in June 17, 2014 and July 2014, to ensure no inconsistent encumbrances exist.
Roger Frank Property - Area of Soil neighboring landfill treated to industrial cleanup standards identified in Figure 2.	Yes	Yes	Parcel# 2: 6-10-29.1	Best efforts to ensure that: Prohibit commercial/ industrial, agricultural and residential use. Prohibit interference with landfill cap	**Restrictive Covenants**: Declaration of Restrictive Covenant recorded at Rock County Recorder's office on May 26, 1995.

Media, engineered controls, and areas that do not support UU/UE based on current conditions	ICs Needed	ICs Called for in the Decision Documents	Impacted Parcel(s)	IC Objective	Title of IC Instrument Implemented and Date (or planned)
				construction, O&M, monitoring and efficacy of the remedy. Prohibit any construction, installation or use of any buildings, wells, pipes, roads, ditches or any other structures that would affect the remedy. Prohibit use of groundwater- see below.	**WDNR GIS Registry-** information device which serves to give notice of land use restrictions and as a GIS mapping tool. **Title Commitment:** EPA completed the original Title Commitment on March 25, 2011, and updated it in June 17, 2014 and July 2014, to ensure no inconsistent encumbrances exist.
Groundwater (onsite and off-site) – See Figure 2.	Yes	Yes	Parcel# 1: 6-10-28.2 Parcel# 2: 6-10-29.1	Prohibit installation of drinking water wells. Prohibit use of groundwater.	See the above Restrictive Covenants. **Wis. Admin. Code (Ch. 112):** State restrictions on the installation of drinking water supply wells within 1200 feet of a landfill.
Other Remedial Components	Yes	Yes	Parcel# 1: 6-10-28.2 Parcel# 2: 6-10-29.1	Prohibit interference with landfill cap construction, O&M, monitoring and efficacy of the remedy.	See the above Restrictive Covenants.

Status of ICs and Access Restrictions

The ROD required ICs, including deed restrictions limiting land use and groundwater use. CMC and Roger Frank signed Declarations of Restricted Covenant upon Real Estate at the Site in 1997 and 1995

respectively. The remedy removed waste disposed on a portion of the neighboring Frank Brothers property, which lies about 50 feet north of the landfill, and deposited that waste in the landfill at the CMC property on the Site. The Frank Brothers property is currently part of the fenced area surrounding the Site, but it was only used to provide additional working space around the capped landfill area at the Site after wastes were consolidated. Therefore, requiring the fence and ICs only on the CMC property is consistent with the description of the Site and the ROD, which requires use of ICs on the landfill property.

ICs have been reviewed and evaluated and all required ICs are in place and effective on the Site property. ICs recorded on December 3, 2014, for the Site property, including the landfill property, satisfy the requirements of the ROD. The neighboring Frank property includes a 1995 Declaration of Restrictive Covenant.

The ROD did not specify what restrictions would be placed on the property to limit land and groundwater use, but the restrictions recorded on the Site property containing the landfill, prohibit commercial/ industrial, agricultural and residential uses; interference with landfill cap construction, O&M, monitoring and efficacy of the remedy; use of groundwater; and construction, installation or use of any buildings, wells, pipes, roads ditches or any other structures that would affect the remedy. In addition, the Declaration of Restrictive Covenant recorded on the neighboring Frank Brothers property requires best efforts to restrict the use and access to insure those activities are prohibited on that property.

Current Compliance

Based on inspections and discussions with WDNR and the landowner, EPA is not aware of Site or media uses which are inconsistent with the stated objectives to be achieved by the ICs. No Site uses which are inconsistent with the implemented ICs or remedy IC objectives have been noted during the Site inspection.

Long-term Stewardship

Long-term protectiveness at the Site requires compliance with land and groundwater use restrictions to assure the remedy continues to function as intended. To assure proper maintenance and monitoring of effective ICs, long-term stewardship (LTS) procedures need to be developed. Plans incorporating LTS procedures (e.g., a LTS Plan) should include the mechanisms and procedures for inspecting and monitoring compliance with the ICs as well as communications procedures. An annual report should be prepared to demonstrate that the Site was inspected to ensure no inconsistent uses have occurred, to certify that ICs remain in place and are effective, and to document that any necessary contingency actions have been executed.

IC Follow-up Actions Needed:

An LTS Plan (or equivalent document) needs to be developed containing procedures to ensure that the remedy continues to function as intended. These procedures should include the mechanisms and procedures for inspecting and monitoring compliance with the ICs as well as communications procedures. An annual report should be prepared to demonstrate: that the Site was inspected to ensure no inconsistent uses have occurred; that ICs remain in place and are effective; and that any necessary

contingency actions have been executed. Results of IC reviews should be provided to EPA in an annual ICs report and with a certification that the ICs remain in-place and are effective.

Systems Operations/Operation & Maintenance

WDNR abandoned all of the on-site and off-site wells at the Site, with the exception of the two private residence wells in October 2012. There have been no updated O&M activities at the Site since that time; however, the landowner plans to conduct O&M activities in the near future.

III. PROGRESS SINCE THE LAST REVIEW

This section includes the protectiveness determinations and statements from the last five-year review as well as the recommendations from the last five-year review and the current status of those recommendations.

Table 2: Protectiveness Determinations/Statements from the 2012 FYR

OU #	Protectiveness Determination	Protectiveness Statement
1/Sitewide	Short-term Protective	The remedy implemented at the Wheeler Pit Site is currently protective of human health and the environment in the short-term. The landfill cap is preventing direct contact with waste materials and minimizing the flow of water through the waste mass. Site use is consistent with deed and land use restrictions. Ground water cleanup goals have been achieved at the Site. However, in order for the remedy to be protective in the long-term, O&M activities and a review of the institutional controls need to be conducted. ICs need to be optimized and recorded where needed to ensure that the remedy continues to function as intended. Long-term protectiveness at the Site requires compliance with land and ground water use restrictions. Long-term stewardship and monitoring is necessary to ensure compliance with the use restrictions by recording, implementing, maintaining and/or monitoring effective ICs and site remedy components.

Table 3: Status of Recommendations from the 2012 FYR

OU #	Issue	Recommendations	Current Status	Current Implementation Status Description	Completion Date (if applicable)
1	ICs are required and evaluated, but are not in place and/or effective. ICs must continue to be evaluated to	IC evaluation activities will be conducted and deed restrictive covenants will be revised and/or recorded where	Completed	ICs were reviewed and evaluated. An Environmental Deed Restriction and Environmental Protection Easement was recorded at Rock County	12/03/2014

OU #	Issue	Recommendations	Current Status	Current Implementation Status Description	Completion Date (if applicable)
	ensure the remedy continues to function as intended.	necessary.		Courthouse on December 3, 2014. All required ICs are in place and effective on the Site property.	
1	Effective ICs must be recorded, implemented, maintained and/or monitored to ensure continued protectiveness of the remedy.	An IC Plan will be developed by EPA to incorporate the results of the IC evaluation activities and plan for additional IC activities as needed.	Completed	An Environmental Deed Restriction and Environmental Protection Easement was recorded at Rock County Courthouse on December 3, 2014. An IC Plan will be developed by EPA and WDNR by 09/30/2018.	12/03/2014
1	O&M activities lapsed in 2008, prior to GM's bankruptcy. Wisconsin conducted O&M activities in August 2012.	O&M activities will be conducted.	Ongoing	Under Discussion	NA

IV. FIVE-YEAR REVIEW PROCESS

Community Notification & Involvement

A public notice announcing this FYR was published in the Gazette newspaper on April 20, 2017. A copy of the notice is included in Appendix C. No comments or concerns were received from the public regarding the Site. The results of the review and the report will be made available at the Site information repository located at Hedberg Public Library, 316 S. Main Street in Janesville, Wisconsin and on EPA's webpage at: https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0505115.

Data Review

After conducting groundwater sampling at the Site in October 2012, WDNR abandoned all of the on-site and off-site monitoring wells except for the two private residence wells. WDNR did not sample the two residential wells near the Site during their last sampling events in August and October 2012. EPA sampled a residential well (PW-3) on August 9, 2011 and the results were non-detect with the exception of di(2-ethylhexyl) phthalate, or DEHP below EPA and State cleanup levels in method blank samples. The other residential well (PW-2) has not been sampled since May 2007, when all of the analytical results were below EPA and State cleanup levels. Analytical results for all of the wells

sampled were non-detect for contaminants of concern or below the groundwater cleanup goals. There have been no updated O&M activities at the Site.

Site Inspection

A Site inspection was performed by the EPA RPM (Karen Mason-Smith) and landowner (William Yoss), on September 8, 2017. The purpose of the inspection is to assess the protectiveness of the remedy. The Site Inspection Checklist is included in Appendix D.

The gate and part of the fence had been removed and barbed wire was used to replace one section of the top of the fence that looked damaged on the Frank Brothers property. As stated above in the ICs section, the Frank Brothers property is currently part of the area surrounding the Site that is not required to be fenced. Another part of the fence had been moved back approximately 50-100 feet by Roger Frank (Frank Brothers property owner) off Frank Brother's property to be included on the Site. The landfill cap is in need of mowing, parts of the the fence need to be repaired, and the Site needs routine maintenance. Tree growth and other vegetation was also observed growing at the Site, and need to be removed. Security of the Site has been compromised by the unauthorized removal of the entrance gate and part of the fence. Vegetation is so overgrown on the fence that you cannot see the Superfund Site sign. There have been no updated O&M activities at the Site; however, the landowner plans to conduct O&M activities in the near future. The inspection concluded that the site remedy remains protective in the short-term; however routine O&M is recommended to maintain the integrity of the landfill.

V. TECHNICAL ASSESSMENT

QUESTION A: Is the remedy functioning as intended by the decision documents?

Yes. The review of documents and the results of the site inspection indicate that the remedy is functioning as intended by the ROD, as modified by the ESD. The Resource Conservation and Recovery Act Subtitle D cap has achieved the RAOs of preventing direct contact with the wastes and also in preventing water from coming into contact with the waste and impacting groundwater quality. Groundwater cleanup goals have been achieved at the Site.

Frank Brother's Asphalt Shingle Company's large dump trumps currently serve as a barrier where the front gate and additional fencing was taken down, preventing access to the Site. Maintenance of the cap, fencing and other areas at the Site have been neglected after GM went bankrupt and abandoned O&M activities in 2009. However, the landfill did not appear to be breached during the 2017 site visit. The landowner also plans to add new warning signs and conduct O&M activities at the Site in the near future. The fence and gate at the Site's entrance should be replaced. EPA plans to discuss this O&M issue with WDNR and Roger Frank, such as mowing grass on landfill cap, clearing vegetation, repairing the fence, and posting no trespassing signs by 09/30/2018.

Implementation of Institutional Controls and Other Measures

ICs are in place and effective at the Site. As stated earlier in this FYR, ICs recorded on December 3, 2014, for the Site property, including the landfill property, satisfy the requirements of the ROD. Site use is consistent with current deed and land use restrictions.

The Site achieved the Site-wide Ready for Anticipated Use designation by EPA on September 30, 2016 because the Site met the following requirements:

- All cleanup goals in the ROD or other decision document have been achieved for any media that may affect current and reasonably anticipated future land uses, so that there are no unacceptable risks.
- All institutional or other controls required in the ROD or identified as part of the response action to help ensure long-term protection have been put in place.

QUESTION B: Are the exposure assumptions, toxicity data, cleanup levels, and remedial action objectives (RAOs) used at the time of the remedy selection still valid?

Yes. The exposure assumptions, toxicity data, cleanup levels, and RAOs used at the time of the remedy selection still valid exposure assumptions, toxicity data, cleanup levels, and RAOs used at the time of the remedy selection are still valid.

Changes in Standards and To Be Considered

The State of Wisconsin PALs, which are the cleanup goals for the Site, have not changed since the 2002 FYR for three of the four contaminants of concern (chromium, iron and 1-4 dichlorobenzene). The PALs remain at 10 ug/l for chromium, 150 ug/l for iron and 15 ug/l for 1,4 dichlorobenzene. The PAL for arsenic has decreased from 5 ug/l to 1 ug/l. The previous PAL for arsenic of 5 ug/l is less than both the newly enacted federal MCL and the Wisconsin ES, both of which are 10 ug/l. In addition, the 5 ug/l arsenic concentration represents an approximate 10^{-4} (1 in 10,000) cancer risk which is within EPA's acceptable cancer risk range of 10^{-4} to 10^{-6}. Therefore, the current site arsenic cleanup goal of 5 ug/l is still considered to be protective.

Changes in Exposure Pathways, Toxicity and Other Contaminant Characteristics

There are no new exposure pathways or changes to existing exposure pathways. Land use has not changed, nor is it expected to change, to create new exposure pathways. There have been no newly identified contaminants or unanticipated toxic byproducts from the remedy. The physical site conditions have not changed in a way that would affect the remedy. Neither toxicity factors for contaminants of concern nor standardized risk assessment methodologies have changed in a way that could affect the protectiveness of the remedy.

Expected Progress Towards Meeting RAOs

As stated above, WDNR abandoned all of the on-site and off-site monitoring wells except for the two private residence wells after conducting groundwater sampling at the Site in October 2012. WDNR did not sample the two private wells near the Site during their last sampling events in August and October 2012. As stated above in the Data Review section of this FYR, analytical results for all of the wells sampled were non-detect for contaminants of concern or below the groundwater cleanup goals. There have been no updated O&M activities at the Site; however, the landowner plans to conduct some O&M activities in the near future, such as mowing grass on the landfill cap, clearing vegetation, repairing the fence, and posting no trespassing signs by 09/30/2018.

QUESTION C: Has any other information come to light that could call into question the protectiveness of the remedy?

No.

VI. ISSUES/RECOMMENDATIONS

Issues/Recommendations

OU(s): 1/Sitewide	Issue Category: Operations and Maintenance.			
	Issue: O&M activities lapsed in 2013, after Wisconsin conducted O&M activities in August and October 2012.			
	Recommendation: Develop an O&M Plan and implement O&M activities.			
Affect Current Protectiveness	**Affect Future Protectiveness**	**Party Responsible**	**Oversight Party**	**Milestone Date**
No	Yes	EPA/State/ Landowner	EPA/State	09/30/2018

OU(s): 1/Sitewide	Issue Category: Institutional Controls			
	Issue: Procedures are not in place to ensure LTS of ICs.			
	Recommendation: Develop and implement LTS procedures (e.g., a LTS Plan or incorporate such procedures in the Site O&M Plan) for monitoring and tracking compliance with existing ICs, and providing an annual certification to EPA that the ICs remain in place and are effective.			
Affect Current Protectiveness	**Affect Future Protectiveness**	**Party Responsible**	**Oversight Party**	**Milestone Date**
No	Yes	EPA/State/ Landowner	EPA/State	09/30/2018

VII. PROTECTIVNESS STATEMENT

OU1 and Sitewide Protectiveness Statement(s)	
Operable Unit: OU1/Sitewide	*Protectiveness Determination:* Short-term Protective
Protectiveness Statement: The remedy implemented at the Wheeler Pit Site is currently protective of human health and the environment. The landfill cap is preventing direct contact with waste materials and minimizing the flow of water through the waste mass. Site use is consistent with deed and land use restrictions. Ground water cleanup goals have been achieved at the Site. ICs are in place and effective at the Site. However, in order for the remedy to be protective in the long-term, the following actions need to be taken to ensure protectiveness: develop an O&M Plan and implement O&M activities; and develop and implement LTS procedures (e.g., a LTS Plan or incorporate such procedures in the Site O&M Plan) for monitoring and tracking compliance with existing ICs, and providing an annual certification that the ICs remain in place and are effective.	

VIII. NEXT REVIEW

The next five-year review report for the Wheeler Pit Superfund Site is required five years from the completion date of this review.

APPENDIX A – REFERENCE LIST

1. Record of Decision: Wheeler Pit Landfill, EPA Region 5, September 28, 1990

2. Explanation of Significant of Differences, Wheeler Pit Superfund Site, La Prairie Township, EPA Region 5, June 16, 2003

3. Final Remedial Action Report for Wheeler Pit Superfund Site, Rock County, Wisconsin, Conestoga-Rovers & Associates, September 2003

4. Five Year Review Report, Wheeler Pit Landfill, La Prairie Township, Rock County, Wisconsin, United States Environmental Protection Agency, Region V, September 2002

5. Five Year Review Report, Wheeler Pit Landfill, La Prairie Township, Rock County, Wisconsin, Wisconsin Department of Natural Resources, September 2007

6. OIG Audit: EPA's Report for PW-3 Residential Well Sampling at Wheeler Pit, Wisconsin Superfund Site, Seagull Environmental Technologies, Inc., August 14, 2011
7. Office of Inspector General (OIG) Evaluation Report, September 8, 2010

8. Data Validation for OIG Audit Closeout (August 26, 2011)

9. Closeout of OIG Audit (September 6, 2011)

10. Final OIG Audit Results Notification Letter to PW-3 Resident from EPA Region 5 (September 30, 2011)

11. Title Commitment Wheeler Pit Site La Prairie Township, Wisconsin, prepared by River Title Company (March 25, 2011 and July 2014)

12. Site-wide Ready for Anticipated Use Determination Memo (EPA, December 3, 2014)

APPENDIX B – SITE CHRONOLOGY

Table 5. Chronology of Significant Site Events	
Event	**Date**
General Motors (GM) leases land for waste disposal	1956
GM disposes of fly ash and paint wastes	1960-1974
GM ceases operations and places soil cap on fill.	1975
Proposed to NPL	September 8, 1983
Final Listing on NPL	September 21, 1984
RI/FS	1987-1990
ROD	September 28, 1990
Unilateral Administrative Order (UAO)	May 3, 1991
Remedial Action Construction - Source Control	October 1992
O&M Plan	1992
Preliminary Closeout Report (PCOR)	December 29, 1992
Construction Completion Report	April 1993
First FYR Report	April 8, 1997
Second FYR Report	September 18, 2002
ESD	June 16, 2003
Final Close-Out Report (FCOR)	October 24, 2003
Site Delisted from NPL	April 20, 2004
Third Five-Year Review Report	September 18, 2007

Table 5. Chronology of Significant Site Events	
Event	**Date**
Office of Inspector General (OIG) Audit	May 2008
GM goes bankrupt and ceases O&M	2008
OIG Final Evaluation Report	September 2010
EPA conducted OIG Audit sampling	August 9 – 10, 2011
EPA Data Validation for Close-out of OIG Audit	August 26, 2011
Closeout of OIG Audit	September 6, 2011
Institutional Control (IC) Evaluation	April 20, 2012
WDNR inspection and monitoring	August 28, 2012
SWRAU Determination completed	September 30, 2016
Draft Fifth Five-Year Review	September 15, 2017

APPENDIX C – PUBLIC NOTICE

EPA Begins Review of Wheeler Pit Landfill Superfund Site

LaPrairie Township, Wisconsin

U.S. Environmental Protection Agency is conducting a status review of the Wheeler Pit Landfill Superfund site at County Trunk highways O and J in LaPrairie Township, Rock County, Wisconsin. The Superfund law requires regular checkups of sites that have been cleaned up – with waste managed on-site – to make sure the cleanup continues to protect people and the environment. This is the fifth five-year review of this site.

EPA's cleanup of ground water contaminated with arsenic, chromium, zinc, and barium consisted of a multilayer cap, a fence around the site, waste consolidation, long-term groundwater monitoring, institutional controls, and natural processes. Wheeler Pit was deleted from the Superfund list in 2004.

More information is available at the Hedberg Public Library, 316 S. Main St., Janesville, and at www.epa.gov/superfund/wheeler-pit. The review should be completed by September.

The five-year-review report is an opportunity for you to tell EPA about site conditions and any concerns you have. Contact:

Susan Pastor
Community Involvement Coordinator
312-353-1325
pastor.susan@epa.gov

Karen Mason-Smith
Remedial Project Manager
312-886-6150
mason-smith.karen@epa.gov

You may also call EPA toll-free at 800-621-8431, 8:30 a.m. to 4:30 p.m., weekdays.

APPENDIX D – SITE INSPECTION CHECKLIST

Site Inspection Checklist

I. SITE INFORMATION

Site name: Wheeler Pit	**Date of inspection:** August 9, 2011
Location and Region: Janesville, Wisconsin; LaPrairie Township, Rock County; Region 5	**EPA ID:** WID980610620
Agency, office, or company leading the five-year review: EPA Region 5	**Weather/temperature:** Cloudy/65 F

Remedy Includes: (Check all that apply)

- X Landfill cover/containment
- X Access controls
- X Institutional controls
- ☐ Groundwater pump and treatment
- ☐ Surface water collection and treatment
- ☐ Other _____
- X Monitored natural attenuation
- ☐ Groundwater containment
- ☐ Vertical barrier walls

Attachments: ☐ Inspection team roster attached ☐ Site map attached

II. INTERVIEWS (Check all that apply): **No interviews were conducted since this a Superfund deleted site.**

1. **O&M site manager:** None
   Interviewed at site: None

Problems; suggestions; remarks: General Motors (GM), as a responsible party, suspended O&M activities at the site in 2008 after going bankrupt. O&M activities have not been conducted at the Site since WDNR collected groundwater samples and abandoned the on-site and off-site wells in October 2012, with the exception of two residential wells (PW-2 and PW-3). The landowner (Yoss) plans to conduct some O&M activities at Wheeler Pit in the near future.

2. **O&M staff**: None
   Name _____ Title _____ Date _____
   Interviewed ☐ at site ☐ at office ☐ by phone Phone no. _____

Problems, suggestions; ☐ Report attached _____

3. **Local regulatory authorities and response agencies** (i.e., State and Tribal offices, emergency response office, police department, office of public health or environmental health, zoning office, recorder of deeds, or other city and county offices, etc.) Fill in all that apply. **N/A**

   Agency _____
   Contact _____ _____ _____ _____
   Name Title Date Phone no.
   Problems; suggestions; ☐ Report attached _____

4. **Other interviews** (optional) ☐ Report attached.

III. ON-SITE DOCUMENTS & RECORDS VERIFIED (Check all that apply)

1. **O&M Documents**

☐ O&M manual	☐ Readily available	☐ Up to date	☐ N/A
☐ As-built drawings	☐ Readily available	☐ Up to date	☐ N/A
☐ Maintenance logs	☐ Readily available	☐ Up to date	☐ N/A

Remarks: No documents were available on-site

2. **Site-Specific Health and Safety Plan** ☐ Readily available ☐ Up to date ☐ N/A
☐ Contingency plan/emergency response plan ☐ Readily available ☐ Up to date ☐ N/A

Remarks: No documents were available on-site

3. **O&M and OSHA Training Records** ☐ Readily available ☐ Up to date ☐ N/A

Remarks: No records were available on-site

4. **Permits and Service Agreements**

☐ Air discharge permit	☐ Readily available	☐ Up to date	X N/A
☐ Effluent discharge	☐ Readily available	☐ Up to date	X N/A
☐ Waste disposal, POTW	☐ Readily available	☐ Up to date	X N/A
☐ Other permits	☐ Readily available	☐ Up to date	X N/A

Remarks: No documents were available on-site

5. **Gas Generation Records** ☐ Readily available ☐ Up to date ☐ N/A
Remarks: No documents were available on-site

6. **Settlement Monument Records** ☐ Readily available ☐ Up to date ☐ N/A
Remarks: No documents were available on-site

7. **Groundwater Monitoring Records** ☐ Readily available ☐ Up to date ☐ N/A
Remarks: No documents were available on-site

8. **Leachate Extraction Records** ☐ Readily available ☐ Up to date ☐ N/A
Remarks: No documents were available on-site

9. **Discharge Compliance Records**

☐ Air	☐ Readily available	☐ Up to date	☐ N/A
☐ Water (effluent)	☐ Readily available	☐ Up to date	☐ N/A

Remarks: No documents were available on-site

10. **Daily Access/Security Logs**
☐ Readily available ☐ Up to date ☐ N/A

Remarks: No documents were available on-site

IV. O&M COSTS

1. **O&M Organization**

☐ State in-house	☐ Contractor for State
☐ PRP in-house	☐ Contractor for PRP
☐ Federal Facility in-house	☐ Contractor for Federal Facility
☐ Other __	

2. **O&M Cost Records**
☐ Readily available ☐ Up to date
☐ Funding mechanism/agreement in place
Original O&M cost estimate Not reviewed ☐ Breakdown attached

Total annual cost by year for review period if available

From_____ To_____ _____ ☐ Breakdown attached
Date Date Total cost

From_____ To_____ _____ ☐ Breakdown attached
Date Date Total cost

From_____ To_____ _____ ☐ Breakdown attached
Date Date Total cost

From_____ To_____ _____ ☐ Breakdown attached
Date Date Total cost

From_____ To_____ _____ ☐ Breakdown attached
Date Date Total cost

3. **Unanticipated or Unusually High O&M Costs During Review Period**
Describe costs and reasons: __O&M costs are not reviewed as part of the state oversight process

V. ACCESS AND INSTITUTIONAL CONTROLS X Applicable ☐ N/A

A. Fencing

1. **Fencing damaged** ☐ Location shown on site map ☐ Gates secured ☐ N/A

Remarks: Fencing needs to be repaired

B. Other Access Restrictions

1. **Signs and other security measures** ☐ Location shown on site map ☐ N/A

Remarks: Signs in place

C. Institutional Controls (ICs)

1. **Implementation and enforcement**
Site conditions imply ICs not properly implemented ☐ Yes ☐ No ☐ N/A
Site conditions imply ICs not being fully enforced ☐ Yes ☐ No ☐ N/A

Type of monitoring (*e.g.*, self-reporting, drive by) drive by
Frequency Once to date
Responsible party/agency: landowner
Contact None

Name Title Date Phone no.

Reporting is up-to-date **X** Yes ☐ No ☐ N/A
Reports are verified by the lead agency **X** Yes ☐ No ☐ N/A

Specific requirements in deed or decision documents have been met **X** Yes ☐ No ☐ N/A
Violations have been reported ☐ Yes ☐ No X N/A
Other problems or suggestions: ☐ Report attached ☐ None

2. **Adequacy** **X** ICs are adequate __ ICs are inadequate ☐ N/A
Remarks_____

D. General

1. **Vandalism/trespassing** ☐ Location shown on site map **X** No vandalism evident
Remarks _____

2. **Land use changes on site** ☐ N/A
Remarks: None

3. **Land use changes off site** ☐ N/A
Remarks: None

VI. GENERAL SITE CONDITIONS

A. Roads **X** Applicable ☐ N/A

1. **Roads damaged** ☐ Location shown on site map **X** Roads adequate ☐ N/A
Remarks _____

B. Other Site Conditions

Remarks: The fence needs repair, lawn needs mowing and trees are overgrown on parts of the landfill.

VII. LANDFILL COVERS X Applicable

The lawn needs mowing and trees are overgrown on parts of the landfill.

VIII. VERTICAL BARRIER WALLS ☐ Applicable X N/A

IX. GROUNDWATER/SURFACE WATER REMEDIES X Applicable

A. Groundwater Extraction Wells, Pumps, and Pipelines ☐ Applicable X N/A

1. **Pumps, Wellhead Plumbing, and Electrical**
☐ Good condition ☐ All required wells properly operating ☐ Needs Maintenance X N/A
Remarks _____

2. **Extraction System Pipelines, Valves, Valve Boxes, and Other Appurtenances**
☐ Good condition ☐ Needs Maintenance
Remarks: Not applicable

3. **Spare Parts and Equipment**
☐ Readily available ☐ Good condition ☐ Requires upgrade ☐ Needs to be provided
Remarks: Not applicable

B. Surface Water Collection Structures, Pumps, and Pipelines ☐ Applicable **X N/A**

C. Treatment System ☐ Applicable **X N/A**

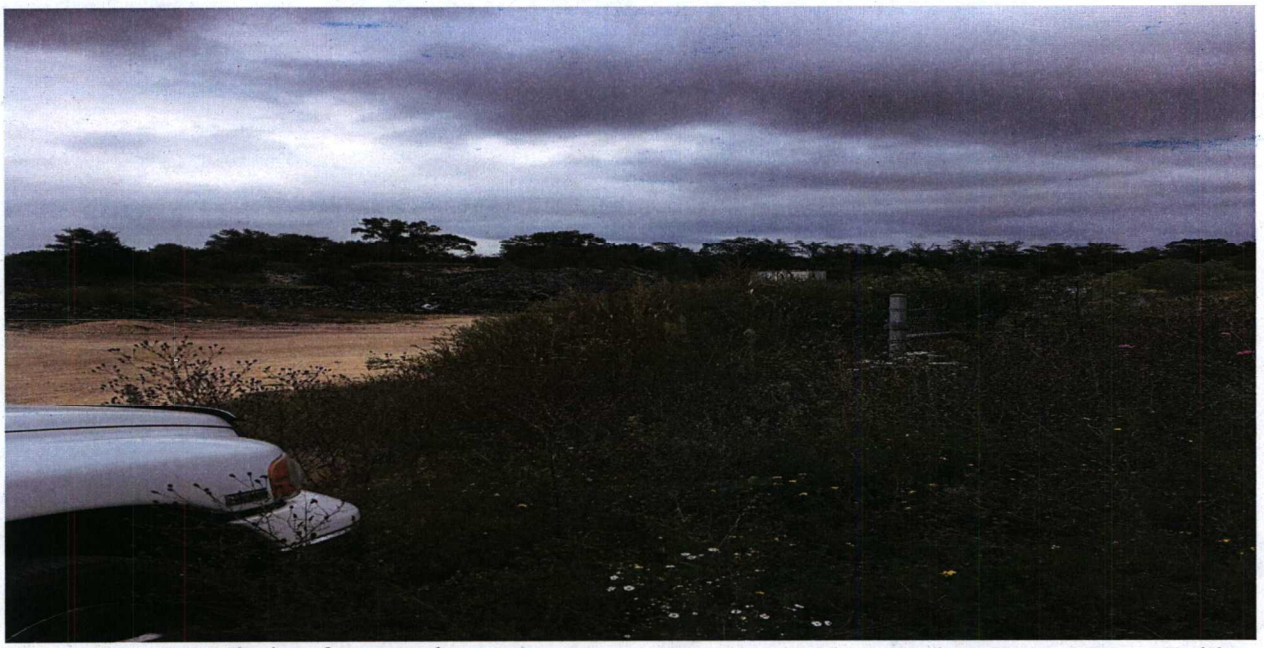
1. **Treatment Train** (Check components that apply)
☐ Metals removal ☐ Oil/water separation ☐ Bioremediation
☐ Air stripping ☐ Carbon adsorbers
☐ Filters _____
☐ Additive (*e.g.*, chelation agent, flocculent) _____
☐ Others _____

	☐ Good condition ☐ Needs Maintenance ☐ Sampling ports properly marked and functional ☐ Sampling/maintenance log displayed and up to date ☐ Equipment properly identified ☐ Quantity of groundwater treated annually_____ ☐ Quantity of surface water treated annually_____ Remarks: N/A_____
2.	**Electrical Enclosures and Panels** (properly rated and functional) X N/A ☐ Good condition ☐ Needs Maintenance Remarks_____
3.	**Tanks, Vaults, Storage Vessels** X N/A Good condition ☐ Proper secondary containment ☐ Needs Maintenance Remarks_____ _____
4.	**Discharge Structure and Appurtenances** X N/A ☐ Needs Maintenance Remarks_____ _____
5.	**Treatment Building(s)** X N/A Good condition (esp. roof and doorways) ☐ Needs repair Remarks_____
6.	**Monitoring Wells** (pump and treatment remedy) _ Properly secured/locked _ Functioning __ Routinely sampled __ Good condition __ All required wells located ☐ Needs Maintenance X N/A Remarks _____
D. Monitoring Data	
8.	**Monitoring Data** _ Is incomplete at this time __ Is routinely submitted on time __ Is of acceptable quality
Monitoring data suggests:	
D. Monitored Natural Attenuation (MNA): MNA appears to be working at this site, although a formal MNA implementation plan was not the required in the 1990 ROD.	
X. OTHER REMEDIES (Not applicable)	
XI. OVERALL OBSERVATIONS	
A.	**Implementation of the Remedy:** At this time, the remedies chosen in the site ROD have not been implemented fully at this delisted site. Currently, the site access and incomplete institutional controls appear to be functioning to minimize risks from the site.
B.	**Adequacy of O&M:** O&M is inadequate at the site during this time
C.	**Early Indicators of Potential Remedy Problems:** None at this time
D.	**Opportunities for Optimization:** None at this time

APPENDIX E – SITE PHOTOS

Photograph #1 – Access gate and road off County Highway O to Wheeler Pit (Photographer: Karen Mason-Smith, EPA Region 5 RPM, September 8, 2017).

Photograph #2 – Wheeler Pit fence and access road (Photographer: Karen Mason-Smith, EPA Region 5 RPM, September 8, 2017).



Photograph #3 – Missing fence and entrance gate at Wheeler Pit (Photographer: Karen Mason-Smith, EPA Region 5 RPM, September 8, 2017).

Photograph #4 – Wheeler Pit Landfill (Photographer: Karen Mason-Smith, EPA Region 5 RPM, September 8, 2017).

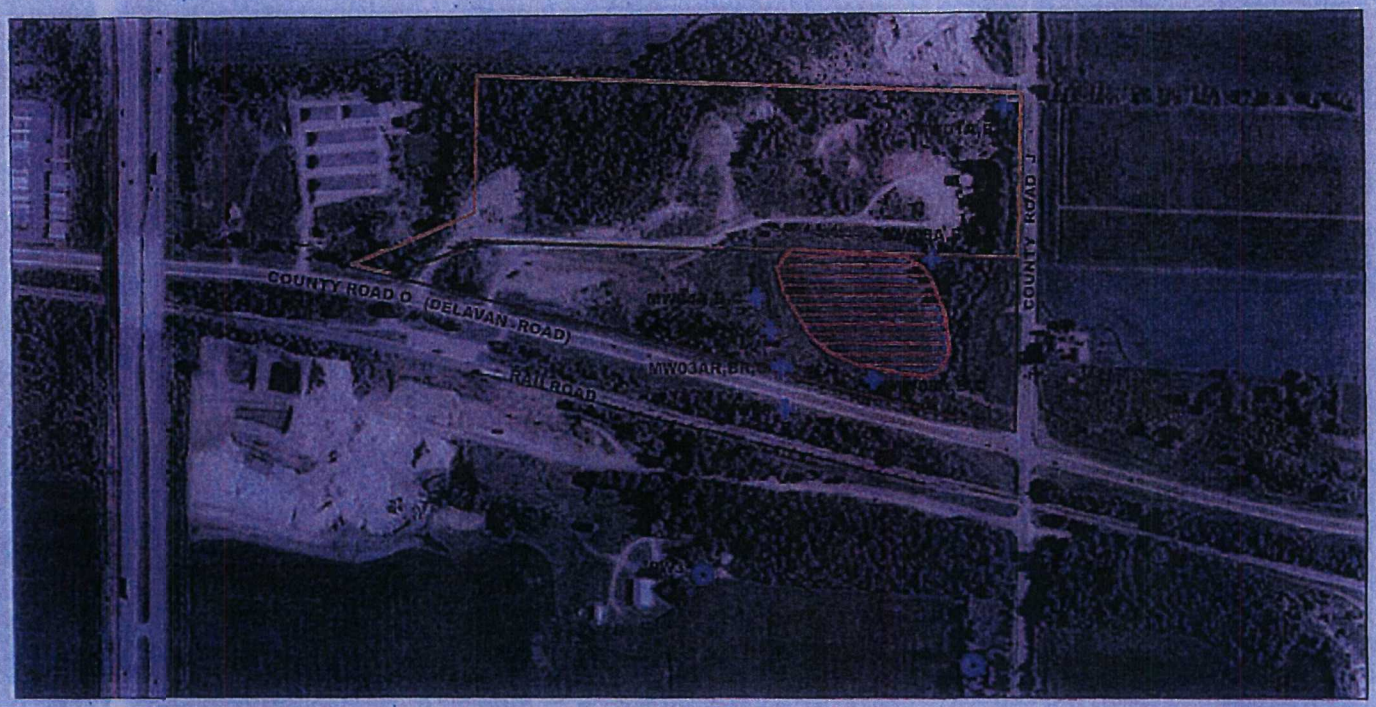
APPENDIX F – SITE MAPS

Site Base Map

Superfund
U.S. Environmental Protection Agency

Wheeler Pit
Rock County, WI

WID980610620



Legend

- Parcel 6-10-29.1
- Parcel 6-10-28.2
- Well Nests
- Fence boundary
- Approx Cap Limit
- Approx Private Well

0 240 480 720 960 Feet

N

Figure2

GEOS
Groundwater Evaluation and Optimization System

Created by Cesar Capacete
U.S. EPA Region 5 on 4/17/12

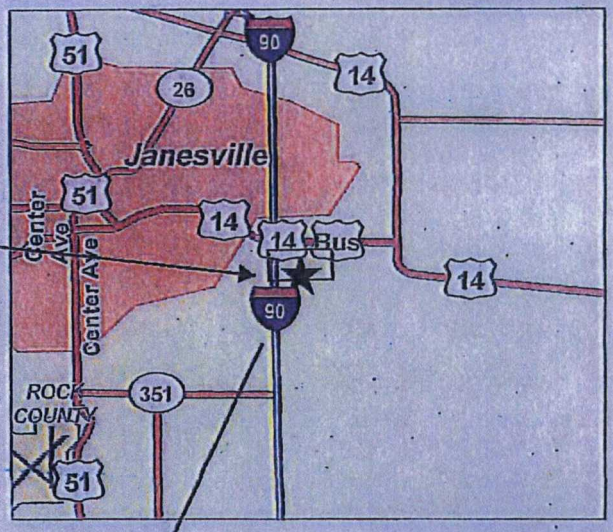
Site Location

Superfund
U.S. Environmental Protection Agency

Wheeler Pit
Rock County, WI

WID980610620

State



County

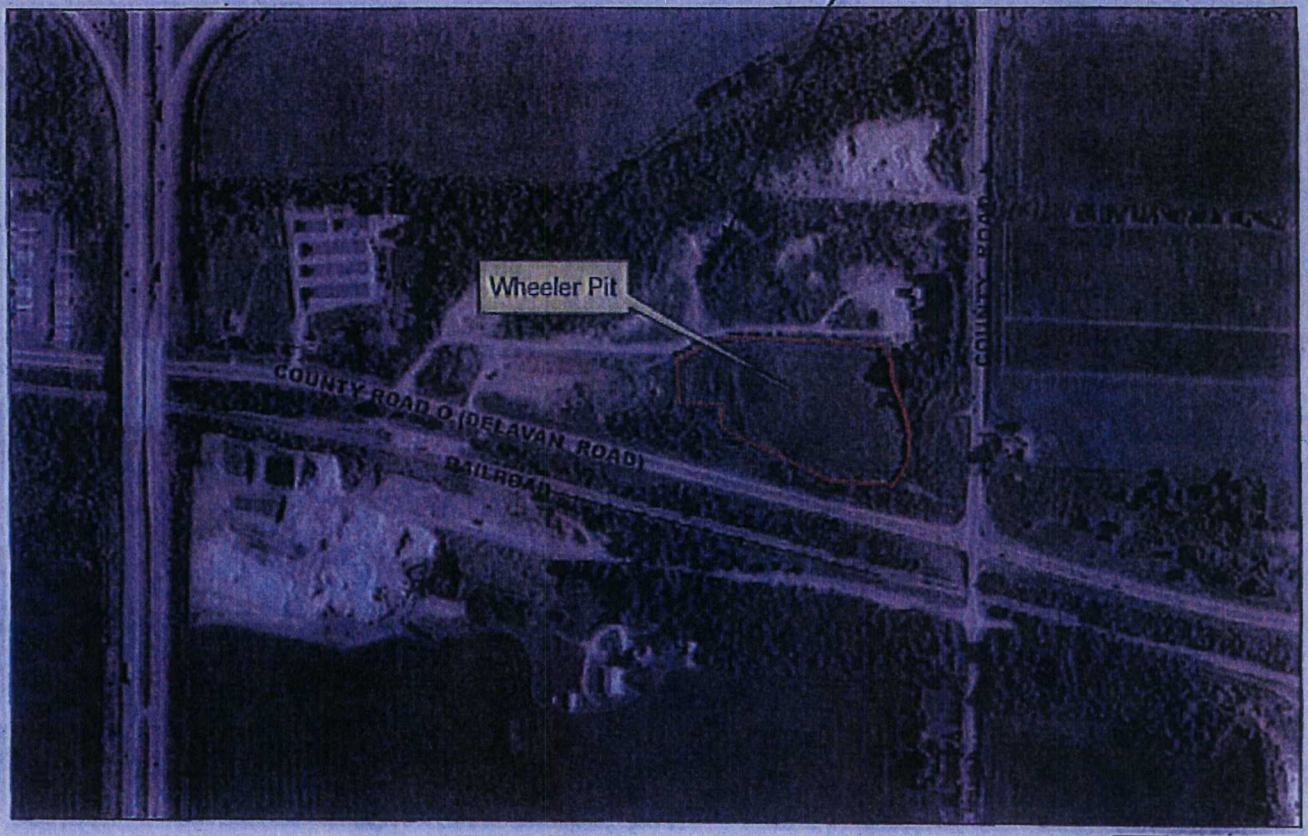


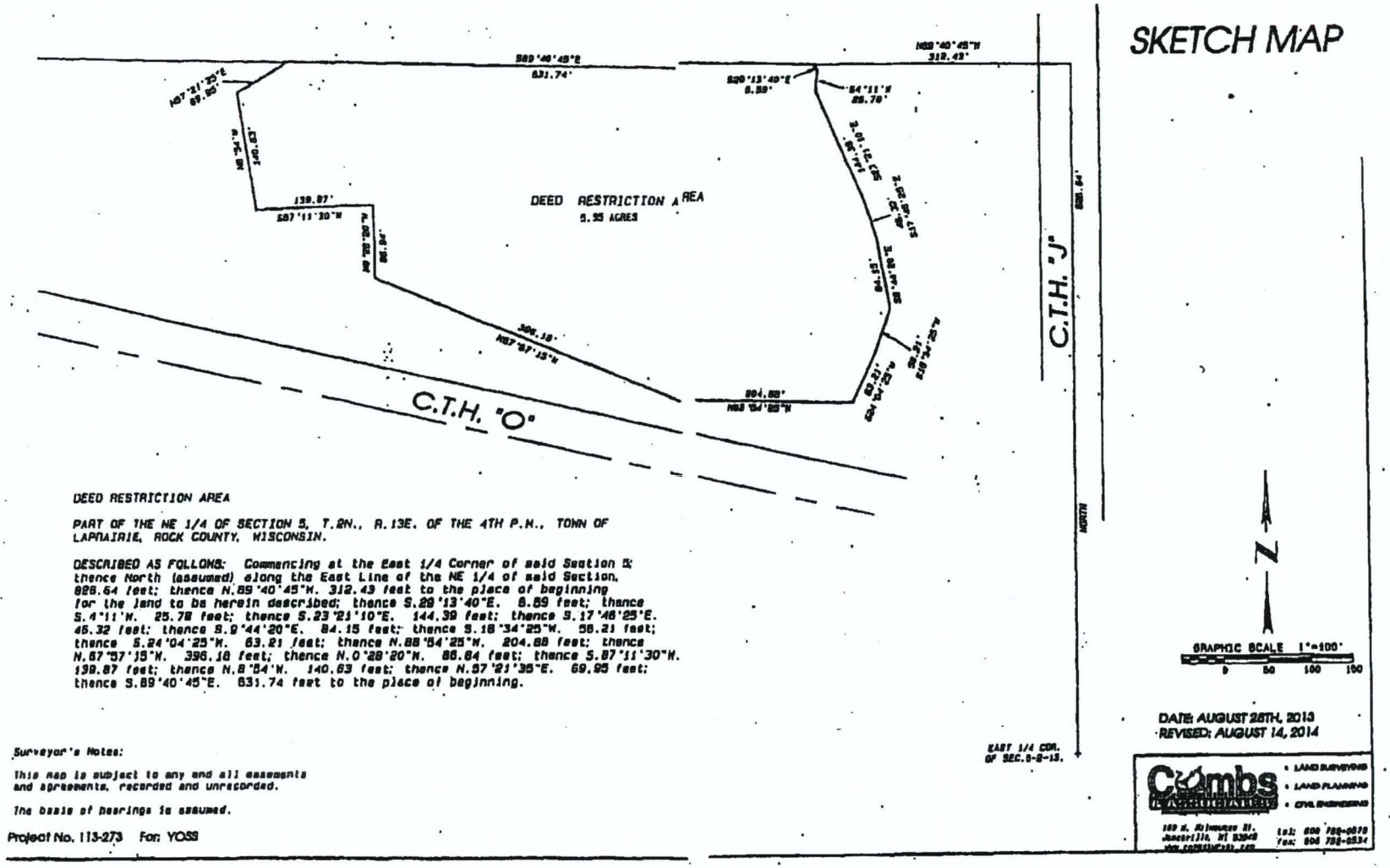
Figure 1

0 350 700 1,400 Feet

N

Produced by Cesar Capacete
U.S. EPA Region 5 on 04/17/12

SKETCH MAP



DEED RESTRICTION AREA

PART OF THE NE 1/4 OF SECTION 5, T.2N., R.13E. OF THE 4TH P.M., TOWN OF LAPRAIRIE, ROCK COUNTY, WISCONSIN.

DESCRIBED AS FOLLOWS: Commencing at the East 1/4 Corner of said Section 5; thence North (assumed) along the East Line of the NE 1/4 of said Section, 826.64 feet; thence N.89°40'45"W. 312.43 feet to the place of beginning for the land to be herein described; thence S.29°13'40"E. 8.89 feet; thence S.4°11'W. 25.78 feet; thence S.23°21'10"E. 144.39 feet; thence S.17°48'25"E. 45.32 feet; thence S.9°44'20"E. 84.15 feet; thence S.18°34'25"W. 56.21 feet; thence S.24°04'25"W. 63.21 feet; thence N.88°54'25"W. 204.88 feet; thence N.87°57'15"W. 396.18 feet; thence N.0°28'20"W. 86.84 feet; thence S.87°11'30"W. 139.87 feet; thence N.8°54'W. 140.63 feet; thence N.57°21'35"E. 69.95 feet; thence S.89°40'45"E. 631.74 feet to the place of beginning.

Surveyor's Notes:

This map is subject to any and all easements and agreements, recorded and unrecorded.

The basis of bearings is assumed.

Project No. 113-273 For: YOSS

DATE: AUGUST 28TH, 2013
REVISED: AUGUST 14, 2014

Combs Land Surveying
• LAND SURVEYING
• LAND PLANNING
• CIVIL ENGINEERING
169 N. Blivaukee St.
Janesville, WI 53548
tel: 608 756-0078
fax: 608 756-0534

Figure 3