



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

US EPA RECORDS CENTER REGION 5



475672

REPLY TO THE ATTENTION OF:

MEMORANDUM

SUBJECT: Request for Approval and Funding for a Time-Critical Removal Action at the Waunakee Alloy Site, Waunakee, Dane County, Wisconsin (Site ID # C56H)

FROM: Andrew Maguire, On-Scene Coordinator
Emergency Response Branch 2

THRU: Samuel Borries, Chief 
Emergency Response Branch 2

TO: Richard C. Karl, Director
Superfund Division

I. PURPOSE

The purpose of this memorandum is to request and document your approval for the EPA to expend up to \$970,303 to conduct a time-critical removal action at the Waunakee Alloy Site (Site) in Waunakee, Dane County, Wisconsin. The proposed response actions are necessary in order to mitigate threats to public health, welfare, and the environment posed by the presence of uncontrolled hazardous substances at the Site, an abandoned metal castings facility. The hazardous substances present at the Site include polychlorinated biphenyls (PCBs), elemental mercury, and flammable and corrosive waste streams.

The proposed time-critical removal action will mitigate the threats by properly identifying, consolidating, packaging, removing and disposing off-site the abandoned hazardous substances, pollutants and contaminants at a CERCLA-approved disposal facility in accordance with 40 C.F.R. § 300.440 (EPA's Off-Site Rule). Additional Site activities will include Site security, perimeter air monitoring, and removing other contaminated debris from the Site.

This response action will be conducted in accordance with Section 104(a)(1) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. § 9604(a)(1), and 40 C.F.R. § 300.415 of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) to abate or eliminate the immediate threats posed to the public health and/or the environment. The uncontrolled condition of the

hazardous substances present at the Site requires that this action be classified as a time-critical removal action.

There are no nationally significant or precedent setting issues associated with the proposed response at this Site.

II. SITE CONDITIONS AND BACKGROUND

CERCLIS ID: WIN000505832

Category: Time-Critical Removal Action

A. Site Description

1. Removal Site Evaluation

The Site is the former location of the Waunakee Alloy Castings Corporation which ceased operations in 2009. The Site contains one large main building where casting operations occurred and five smaller surrounding outbuildings that contain molds and other artifacts that were needed in the facility's processes when it was still in operation. A small office building is located in the southwest corner of the Site. There are various hazardous material issues throughout the Site.

In March 2007, BT2 Inc. for Stone House Development, Inc. conducted a Phase II Environmental Site Assessment (Phase II ESA). Samples were taken from sediment/dirt that had accumulated on the floors inside the transformer rooms. In the west transformer room, PCBs (Aroclor-1248) were found at a concentration of 65.4 mg/kg, which is above the EPA Removal Management Level (RML) of 24 mg/kg for Aroclor-1248 in residential soils. In the east transformer room, PCBs (Aroclor-1254) were found at a concentration of 34.0 mg/kg which is above the EPA RML of 3.4 mg/kg for Aroclor-1254 in residential soils. There are also several abandoned transformers on-site that are suspected to contain PCB oils as well.

In October 2014, Ayres Associates for the Village of Waunakee (VW) conducted a Phase I ESA in the main building along with a pre-demolition hazardous materials assessment. During the hazardous materials field assessment within the building, field personnel identified a pallet of leaking electrical capacitors containing high concentrations of PCBs. A release of elemental mercury was also identified in the vicinity of the pallet of leaking capacitors, as well as on top of the capacitors. According to the Phase I ESA, there were at least three separate puddles of free mercury that extend from 4 square feet to 42 square feet. The PCB oil mixed with the free mercury. Ayres Associates subsequently retained North Shore Environmental Construction Inc., on behalf of the owner, to contain the release. On August 27, 2014, North Shore Environmental placed the capacitors into two steel drums and vacuumed the visible liquid mercury from the floor of the facility into a plastic drum. The release areas were covered with plastic sheeting secured with sandbags. However, the waste and capacitors have not been removed from the property due to complications with disposing of mixed hazardous waste containing both PCBs and

mercury. It is unknown how the mercury was spilled or where it came from and there was no assessment performed beyond the visual mercury cleanup. In January 2015, Ayres Associates for the VW conducted a Phase II ESA. This Phase II sampled locations outside of the main building and determined that the contamination had not migrated off-site. However, based on the presence of PCBs above the EPA RML for residential soil, elemental mercury contamination throughout the interior of the main building, and abandoned containers of flammables and corrosives throughout the Site, the VW referred the Site to Wisconsin Department of Natural Resources (WDNR).

In an e-mail dated March 4, 2015, WDNR formally requested assistance from the EPA to determine if the Site met the criteria for a time-critical removal action.

On March 19 and 31, 2015, EPA and its contract personnel arrived at the Site to conduct a Site Assessment. Activities performed during the Site Assessment included:

- documenting Site conditions;
- measuring volatile organic chemicals using a Multi-RAE photo ionization detector;
- screening areas for mercury contamination using a Lumex Mercury Vapor Analyzer (Lumex);
- collecting samples from totes, drums and containers; and
- submitting the samples for commercial laboratory analysis.

On March 19, 2015, during the initial walk around the perimeter of the building, EPA observed a lack of site security and evidence that animals have accessed the Site. The Site's buildings have countless broken windows, gaping holes in the walls, and the entire back (east side) of the main building is open to the environment. The top of the fence lacked barbed wire the entire way around the Site. The backyards of adjacent homes abut the Site fencing with wood stacks, trees and other items allowing easy access points. There is a prominent and developed path made by animals leading from underneath the fence on the south side of the Site to the building and into one of the windows inside the facility. WDNR has informed EPA of multiple instances where Waunakee Police caught children trespassing on the Site. Access to the Site is a problem because of the potential exposure to hazardous substances and the likelihood that people or animals will track contaminants off-site. EPA also observed eight transformers sitting outside of one of the outbuildings and only one of them had an affixed non-PCB containing sticker. EPA anticipates that the other transformers contain PCBs because of their age and lack of an affixed non-PCB sticker.

Once the Site walk was completed around the perimeter, EPA entered the main building of the facility with a Lumex to inspect the area where mercury had spilled and to observe the conditions of the rest of the building. In the room where the mercury spill had previously occurred, there are two areas covered in plastic sheeting that is weighed down by sand bags. These two areas are the locations where the mercury was collected in August 2014. EPA did not disturb these areas because of suspected very high levels of mercury. EPA observed numerous small mercury beads on the ground throughout the

area that wasn't covered with plastic sheeting. The main building's floor is covered with foundry sand and animal tracks were noticeable on the sand. Mercury was found on the sandy floor. Breathing zone mercury vapor concentrations were relatively low maxing out at 0.170 micrograms per cubic meter of air ($\mu\text{g}/\text{m}^3$). EPA and the Agency for Toxic Substances and Disease Registry (ATSDR) established a mercury vapor concentration of less than 1 $\mu\text{g}/\text{m}^3$ for normal occupancy for most sensitive persons. Temperatures were in the low 40s Fahrenheit with plenty of ventilation, likely contributing to the low concentrations. Near surface concentrations were 18.5 $\mu\text{g}/\text{m}^3$ in areas not covered in plastic. Given the visual evidence with verification from the Lumex, mercury contamination exists in multiple locations throughout the Site. As discussed above, the documented access issues at the Site exacerbate the threat of tracking mercury contamination off-site and causing a threat to human health and the environment.

On March 31, 2014, EPA returned to the Site to further document mercury contamination and sample containers of unknown substances on-site. Breathing zone mercury vapor concentrations were 0.550 $\mu\text{g}/\text{m}^3$. Temperatures were in the low 60s Fahrenheit with plenty of ventilation, likely contributing to the low concentrations. Near surface concentrations were 25 $\mu\text{g}/\text{m}^3$ in suspect areas not covered in plastic. In areas that were covered in plastic, near surface concentrations were $>55 \mu\text{g}/\text{m}^3$. These higher concentrations coincided with visual observations of mercury beads and indicate extensive mercury contamination on-site.

During the Site Assessment, EPA observed a number of containers of various sizes throughout the buildings including 6- 330 gallon totes with an epoxy solution; 6- 55 gallon drums with an epoxy solution; 3- 55 gallon drums with the previously mentioned mercury and mercury/PCB contaminated waste; and a number of smaller containers with flammable and corrosive wastes. EPA collected six waste samples from containers abandoned on-site including two of the 330 gallon totes. The samples were submitted for commercial laboratory analysis and the analytical results documented that ignitable and corrosive wastes are present on the Site. The analytical results from two of the container samples (WA-1-0315 (tote) & WA-3-0315 (small container)) documented liquid having a flashpoint less than 140 degrees Fahrenheit ($^{\circ}\text{F}$). These container sample results meet the characteristic of ignitability per 40 CFR § 261.21. The pH results from 3 of the smaller container samples (WA-4-0315, WA-5-0315, WA-6-0315) documented liquid having a pH that is <2 or >12.5 (SU). The results meet the characteristic of corrosivity as defined under 40 C.F.R. § 261.22. Table B-1 summarizes EPA's Site Assessment sampling results.

2. Physical Location

The Site is located at 201 N. Madison Street in the Village of Waunakee, Dane County, Wisconsin. The geographical coordinates of the site are 43.194000 north latitude and -89.450623 west longitude. A location map is provided in Figure A-1.

The Site consists of a 550 by 300-foot (approximately 4.5 acre) lot along North Madison Street just outside of downtown Waunakee. The Site contains one large main building

where casting operations occurred, but also five smaller surrounding outbuildings that contain molds and other artifacts that were needed in the facility's processes. A small office building is located in the southwest corner of the Site. A map showing the layout of the Site is displayed in Figure A-2. The Site is located in a mixed, light commercial and residential area. The lot is bordered to the north by a residential neighborhood and Prospect Road; to the east by a residential neighborhood and Pleasant Drive; to the south by a children's playground, Six Mile Creek, and Cross Street; and to the west by residential homes and North Madison Street.

An environmental justice ("EJ") analysis was performed and is contained in Attachment IV. Screening of the surrounding area used Region 5's EJ Screen Tool (which applies the interim version of the national EJ Strategic Enforcement Assessment Tool (EJSEAT)). Region 5 has reviewed environmental and demographic data for the area surrounding the site at 201 N. Madison Street, Waunakee, Wisconsin, and determined there is a low potential for EJ concerns at this location.

3. Site Characteristics

The Site is the location of the former Waunakee Alloy Castings facility. The Site's ground surface is relatively flat. Observations during the Site Assessment showed that the Site's buildings contain hazardous substances and are in various stages of dilapidation. Several buildings have broken windows and the main building has a large opening that allows for potential access by trespassers and wildlife. The Site is fenced, but, as discussed above in Section II.A., the fence will not prevent trespassers from accessing the Site.

4. Release or threatened release into the environment of a hazardous substance, or pollutant or contaminant

A threat of release of hazardous substances, pollutants, or contaminants is present at the Site due to the presence of PCB and mercury contamination and of ignitable and corrosive chemicals in totes, drums and containers. EPA and other entities documented the presence of hazardous substances and pollutants during several assessment activities since 2007. Table B-1 summarizes analytical results from the samples taken during EPA's March 2015 Site Assessments.

The deteriorating drums and containers are stored adjacent to ignitable materials in buildings that have been abandoned for numerous years. Free beads of elemental mercury exist on-site and could be tracked off-site and into homes, vehicles and/or businesses. PCB contamination exists in foundry sand within the main building and in oils contained in on-site transformers and capacitors.

The Site is currently abandoned and vacant without security to prevent trespassers from accessing the Site. According to local authorities, trespassers have accessed the Site and prominent animal prints show evidence of animals accessing the Site. Trespassing may

result in a potential exposure of mercury and other hazardous substances to human health and a release or threatened release of hazardous substances to the environment

5. NPL status

The Site is not on the National Priorities List (NPL).

6. Maps, pictures and other graphic representations

The Site Location Map, Site Layout Map, and the Photo Documentation Log are included as Figures A-1, A-2 and A-3, respectively.

A. Other Actions to Date

I. Previous actions

Previous actions have been documented in section II.A.1, above.

II. Current Actions

There are currently no activities ongoing at the Site.

B. State and Local Authorities' Roles

In an e-mail dated March 4, 2015, WDNR formally requested assistance from the EPA to determine if the Site met the criteria for a time-critical removal action.

WDNR and local authorities do not have the ability to remove the hazardous substances from the Site.

III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

The conditions at the Site present an imminent and substantial threat to the public health or welfare, or the environment, and meet the criteria for a time-critical removal action in 40 C.F.R. § 300.415(b)(2), as follows:

Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants;

During the Site Assessment, EPA observed that the Site's buildings contain hazardous substances and are in various stages of dilapidation. There were several broken windows at ground level allowing potential access by trespassers and wildlife. A large opening to the main building provides access to unsecured hazardous substances within a few feet of

the opening. The Site is fenced; however, trespassing has occurred and further access is likely.

Analytical results from the Site Assessments indicate that hazardous substances, as defined by Section 101(14) of CERCLA, 42 C.F.R. § 9601, are present at the Site and represent an actual or potential exposure threat to nearby human populations. The actual or potential exposure may come from hazardous waste in containers that are in poor condition and rusted or open to the elements with evidence of spills, containers that contain unknown contents or PCB and elemental mercury contamination on the building's floors. In addition to PCBs and mercury, other hazardous substances present at the Site include corrosive and ignitable waste.

Previous assessments documented PCB contamination on-site above residential RMLs and mercury contamination. Analytical results identified samples WA-1-0315 and WA-3-0315 having flash points less than 140 degrees F, and samples WA-4-0315, WA-5-0315, and WA-6-0315 exceeding pH levels <2 or >12.5 . According to 40 C.F.R. § 261.24, these sample results satisfy the criteria for RCRA hazardous waste that is characteristic for ignitability (D001), and corrosivity (D002).

Residential properties are adjacent to the Site, and the Site is currently vacant with a lack of security and unsecured hazardous substances. Trespassing is likely and the possibility of an accidental or intentional release of hazardous material or direct contact with hazardous materials is substantial. Potential exposure could occur through dermal, inhalation, or ingestion of these hazardous substances.

Below is a summary of probable health effects from human exposure to mercury and PCBs from the Agency for Toxic Substances and Disease Registry toxicological profiles.

Mercury: The nervous system is very sensitive to all forms of mercury. Methylmercury and metallic mercury vapors are more harmful than other forms, because more mercury in these forms reaches the brain. Exposure to high levels of metallic, inorganic, or organic mercury can permanently damage the brain, kidneys, and developing fetus. Effects on brain functioning may result in irritability, shyness, tremors, changes in vision or hearing, and memory problems. Short-term exposure to high levels of metallic mercury vapors may cause effects including lung damage, nausea, vomiting, diarrhea, increases in blood pressure or heart rate, skin rashes, and eye irritation (ATSDR, 1999).

PCBs: The most commonly observed health effects in people exposed to large amounts of PCBs are skin conditions such as acne and rashes. Studies in exposed workers have shown changes in blood and urine that may indicate liver damage. PCB exposures in the general population are not likely to result in skin and liver effects. Most of the studies of health effects of PCBs in the general population examined children of mothers who were exposed to PCBs. Animals that ate food containing large amounts of PCBs for short periods of time had mild liver damage and some died. Animals that ate smaller amounts of PCBs in food over several weeks or months developed various kinds of health effects, including anemia;

acne-like skin conditions; and liver, stomach, and thyroid gland injuries. Other effects of PCBs in animals include changes in the immune system, behavioral alterations, and impaired reproduction. PCBs are not known to cause birth defects. (ATSDR, 2014).

Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers that may pose a threat of release;

As discussed above, monitoring and analytical results from samples collected during the Site Assessments indicate that mercury, PCBs, corrosive and flammable substances are present at the Site and stored in a manner that poses an actual or potential threat of release.

Due to the Site being vacant for numerous years, the unrestricted access, and the deteriorating condition of the containers, a potential release could be anticipated.

Weather conditions that may cause hazardous substances, pollutants, or contaminants to migrate or be released;

As discussed above, based on the deteriorating structural condition of the Site building, the presence of mercury and PCB contamination within a few feet of an open access area, and open hazardous waste containers or ones in poor condition, a weather-related release or migration of hazardous materials can likely occur. This is especially true given the variable weather conditions in Waunakee. Waunakee receives an average yearly precipitation of 34.44 inches; average temperatures range from 11 to 82 °F. Winter temperatures are normally below freezing with regular snowfall. Weather conditions will contribute to the further deterioration of the building.

Threat of fire or explosion;

Reconnaissance during the Site Assessment documented the presence of lighter fluid, paint thinners, partially full aerosol cans, and various other potentially flammable and combustible materials. Two waste samples collected during the Site Assessment had flashpoints below 140 °F and, therefore, represent materials considered hazardous for the characteristic of ignitability. These and other potentially flammable wastes may ignite when moderately heated or exposed to relatively high ambient temperatures. If such an event occurs, contaminants could become airborne and affect the nearby population.

The availability of other appropriate Federal or state response mechanisms to respond to the release;

WDNR has notified EPA that the State agency does not have the resources to respond to this Site. In an e-mail dated March 4, 2015, the WDNR formally requested assistance from EPA to determine if the Site met the criteria for a removal action.

IV. ENDANGERMENT DETERMINATION

Given the Site conditions, the nature of the known and suspected hazardous substances on the Site, and the potential exposure pathways described in Sections II, and III above, actual or threatened release of hazardous substances from the Site, if not addressed by implementing the response actions selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, welfare, or the environment.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

1. Proposed action description

The response actions described in this memorandum directly address actual or potential releases of hazardous substances on Site, which may pose an imminent and substantial endangerment to public health, or welfare, or the environment. Removal activities on-site will include:

- a. develop and implement a Site-specific Health and Safety Plan, including an Air Monitoring Plan, and a Site Emergency Contingency Plan;
- b. develop and implement a Site Security Plan;
- c. inventory, sample and perform hazard characterization, in compliance with a Site-specific QA/QC Plan, on all substances contained in totes, drums, containers, soils, water, and surfaces;
- d. consolidate and package all hazardous substances, pollutants and contaminants for transportation and off-site disposal including totes, drums, containers, contaminated surfaces, contaminated water, and contaminated soil;
- e. transport and dispose of all characterized hazardous substances, pollutants, wastes, or contaminants at a RCRA/TSCA/CERCLA approved disposal facility in accordance with EPA's Off-Site Rule;
- f. take any other response actions to address any release or threatened release of a hazardous substance, pollutant or contaminant that the EPA OSC determines may pose an imminent and substantial endangerment to public health or the environment.

The removal action will be conducted in a manner that is not inconsistent with the NCP. The OSC has initiated planning for the provision of post-removal Site control consistent with 40 C.F.R. § 300.415(l) of the NCP. However, elimination of hazardous substances, pollutants and contaminants that pose a substantial threat of release are expected to greatly minimize substantial requirements for post-removal Site controls.

Off-Site Rule

All hazardous substances, pollutants, or contaminants removed off-site pursuant to this removal action shall be treated, stored, or disposed of at a facility in compliance, as determined by EPA, with the EPA's Off-Site Rule.

2. Contribution to remedial performance

The proposed action will not impede future actions based on available information. At this time, it is not known if long-term remedial actions will be needed for this Site.

3. Engineering Evaluation/Cost Analysis (EE/CA)

Not Applicable

4. Applicable or relevant and appropriate requirements (ARARs)

All applicable and relevant and appropriate requirements (ARARs) of federal and state law will be complied with to the extent practicable considering the exigencies of the situation. The OSC sent a letter to Jason Lowery of WDNR, requesting state ARARs for the Site. Mr. Lowery responded to EPA's letter on May 21, 2015 and identified state ARARs. These ARARs will be complied with to the extent practicable.

5. Project Schedule

The removal activities are expected to take forty on-site working days to complete.

B. Estimated Costs

The detailed cleanup contractor cost is presented in Attachment I and the Independent Government Cost Estimate is presented in Attachment III. Estimated project costs are summarized below:

REMOVAL ACTION PROJECT CEILING ESTIMATE	
<u>Extramural Costs:</u>	
<u>Regional Removal Allowance Costs:</u>	
Total Cleanup Contractor Costs (This cost category includes estimates for ERRS, subcontractors, Notices to Proceed, and Interagency Agreements with Other Federal Agencies. Include a 20% contingency)	\$ 751,702
<u>Other Extramural Costs Not Funded from the Regional Allowance:</u>	
Total START, including multiplier costs	\$ 92,040
Subtotal Extramural Costs	\$ 843,742
Extramural Costs Contingency (15% of Subtotal, Extramural Costs)	\$ 126,561
TOTAL REMOVAL ACTION PROJECT CEILING	\$ 970,303

The response actions described in this memorandum directly address actual or threatened releases of hazardous substances, pollutants, or contaminants at the Site which may pose an imminent and substantial endangerment to public health and safety, and to the environment. These response actions do not impose a burden on the affected property disproportionate to the extent to which the property contributes to the conditions being addressed.

VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

Given the Site conditions, the nature of the hazardous substances and pollutants or contaminants documented on Site, and the potential exposure pathways to nearby populations described in Section II, III, IV, and V above, actual or threatened releases of hazardous substances and pollutants or contaminants from this Site, if not addressed by implementing or delaying the response actions selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, welfare, or the environment, increasing the potential that hazardous substances will be released, thereby threatening the adjacent population and the environment.

VII. OUTSTANDING POLICY ISSUES

None.

VIII. ENFORCEMENT

For administrative purposes, information concerning the enforcement strategy for this Site is contained in the Enforcement Confidential Addendum.

The total EPA costs for this removal action based on full-cost accounting practices that will be eligible for cost recovery are estimated to be \$1,716,900¹:

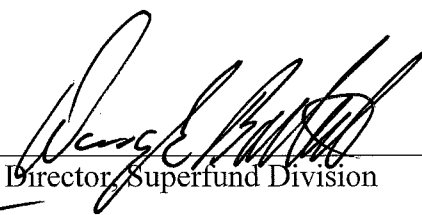
$$(\$970,303 + \$120,000) + (57.47\% \times \$1,090,303) = \$1,716,900$$

IX. RECOMMENDATION

This decision document represents the selected removal action for the Site, located in Waunakee, Dane County, Wisconsin, developed in accordance with CERCLA, as amended, and is not inconsistent with the NCP. This decision is based upon the Administrative Record for the Site (Attachment II). Conditions at the Site meet the NCP criteria for removal at 40 C.F.R. § 300.415(b) and, therefore, I recommend your approval of the proposed removal action. The total removal action project ceiling, if approved, will be \$970,303. Of this, as much as \$878,263 comes from the Regional removal allowance.

You may indicate your decision by signing below.

APPROVED


Director, Superfund Division

DATE:

6/30/2015

DISAPPROVE

Director, Superfund Division

DATE:

Enforcement Addendum

Figures:

- A-1 Site Location Map
- A-2 Site Layout Map
- A-3 Photographic Documentation

Tables:

- B-1 Laboratory Analytical Results

¹Direct Costs include direct extramural costs and direct intramural costs. Indirect costs are calculated based on an estimated indirect cost rate expressed as a percentage of site-specific direct costs, consistent with the full cost accounting methodology effective October 2, 2000. These estimates do not include pre-judgment interest, do not take into account other enforcement costs, including Department of Justice costs, and may be adjusted during the course of a removal action. The estimates are for illustrative purposes only and their use is not intended to create any rights for responsible parties. Neither the lack of a total cost estimate nor deviation of actual total costs from this estimate will affect the United States' right to cost recovery.

Attachments:

- I. Detailed Cleanup Contractor Cost Estimate
- II. Administrative Record Index
- III. Independent Government Cost Estimate
- IV. Environmental Justice Analysis

cc: B. Schlieger, EPA HQ

L. Nelson, U.S. DOI, **w/o Enf. Addendum**,
(email: Lindy_Nelson@ios.doi.gov)

Jason B. Lowery, WDNR, **w/o Enf. Addendum**
(email: jason.lowery@wisconsin.gov)

BCC PAGE HAS BEEN REDACTED

**NOT RELEVANT TO SELECTION
OF REMOVAL ACTION**

ENFORCEMENT ADDENDUM

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ENFORCEMENT CONFIDENTIAL

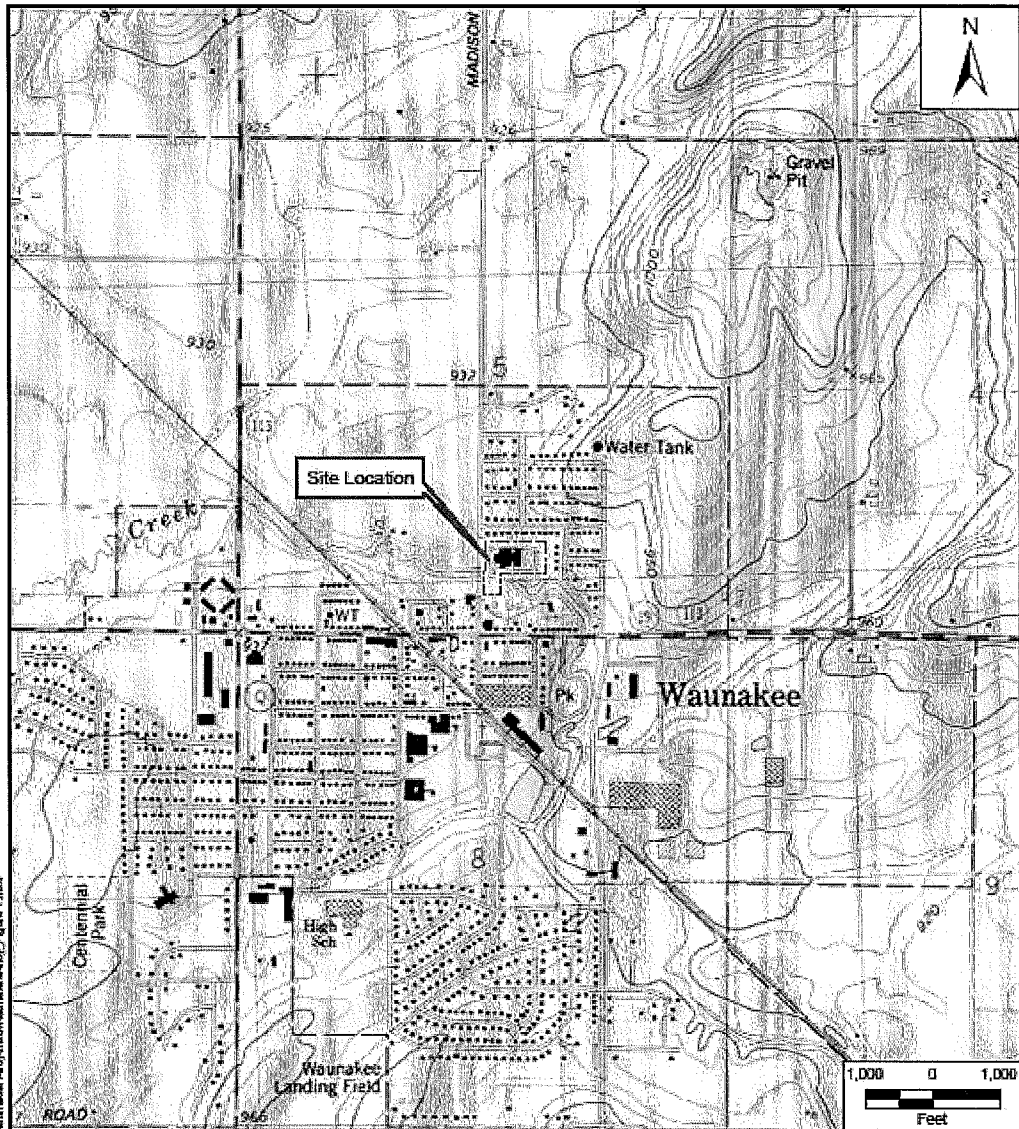
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FOIA EXEMPT

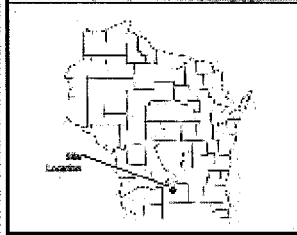
NOT RELEVANT TO SELECTION

OF REMOVAL ACTION

FIGURE A-1
SITE LOCATION MAP



File Path: G:\GORDON\START (A)\Waunakee\Waunakee Alloy\mod\WaunakeeAlloy_Figure 1.mxd



LEGEND

Approximate Site Boundary

Source: Modified from USGS, Waunakee, Wisconsin
7.5-Minute (1:24,000 Scale) Topographic Map, 1984.

Waunakee Alloy
Waunakee, Wisconsin

Figure 1
Site Location Map

TETRA TECH

Prepared For: USEPA
Prepared By: Tetra Tech, Inc.

Date Saved: 3/23/2015

EPA License No.: EP-55-13471 1000 No.: 503-5001-1502-0000 Coordinate System: NAD 83 StatePlane Wisconsin County Spheroid: Spheroid: NAD 83 Datum: NAD 83

FIGURE A-2
SITE LAYOUT MAP



File Path: C:\GIS\2007-08-21\Waunakee Alloy\Map\Waunakee Alloy\Figure 2.mxd



LEGEND

Approximate Site Boundary

Waunakee Alloy
Waunakee, Wisconsin

Figure 2
Site Layout Map



Prepared For: USEPA

Prepared By: Tetra Tech, Inc.

Date Saved: 4/10/2015

Source: Modified from Bing Maps (2011-2012)
EPA License No.: LP-82-13-01 100 No.: 231-021-1823-028 Software System: Arc 10.1.1.0.0 Windows Auxiliary System: Population Monitor Auxiliary System: System 2013 11.0.0.0

FIGURE A-3
PHOTOGRAPHIC DOCUMENTAION



Photographic Documentation

Client: U.S. EPA Region 5

Site Name: Waukegan Alloy Site

Location: 201 N. Madison St., Waukegan, Dane Cty, WI

Date: March 19 & 31, 2015

Prepared by: Tetra Tech, Inc.

Photographer: Andrew Kleist

TDD Number: S05-0001-1503-009

Photograph No. 1

Photograph Date: 3/31/15

Photograph Time: 08:30

Description: Photo showing the front view of the property.



Photograph No. 2

Photograph Date: 3/19/15

Photograph Time: 10:57

Description: Photo showing transformers on the property. There are no "Non-PCB" stickers present on any of these transformers.





Photographic Documentation

Client: U.S. EPA Region 5

Site Name: Waunakee Alloy Site

Location: 201 N. Madison St., Waunakee, Dane Cty, WI

Date: March 19 & 31, 2015

Prepared by: Tetra Tech, Inc.

Photographer: Andrew Kleist

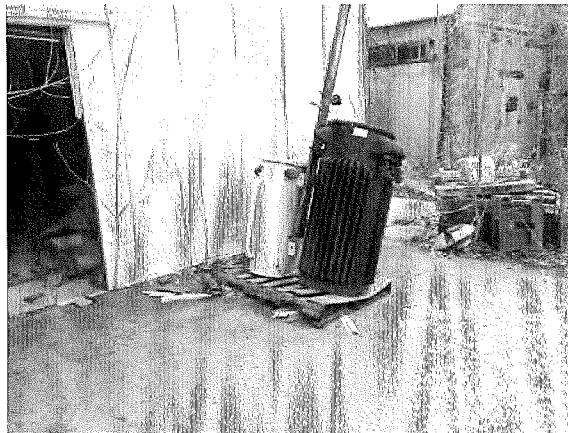
TDD Number: S05-0001-1503-009

Photograph No. 3

Photograph Date: 3/19/15

Photograph Time: 10:57

Description: Photo showing transformers on the property. There is a "Non-PCB" sticker present on the white transformer to the left, none on the right.



Photograph No. 4

Photograph Date: 3/19/15

Photograph Time: 11:18

Description: Photo broadly showing the room where mercury spill occurred.





Photographic Documentation

Client: U.S. EPA Region 5

Site Name: Waunakee Alloy Site

Location: 201 N. Madison St., Waunakee, Dane Cty, WI

Date: March 19 & 31, 2015

Prepared by: Tetra Tech, Inc.

Photographer: Andrew Kleist

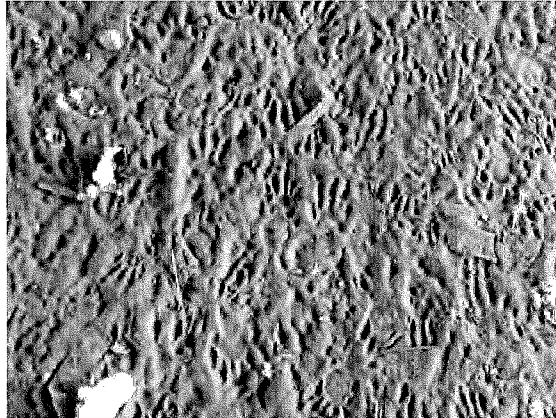
TDD Number: S05-0001-1503-009

Photograph No. 5

Photograph Date: 3/19/15

Photograph Time: 11:16

Description: Photo showing animal tracks on the floor of the room where the mercury spill occurred.



Photograph No. 6

Photograph Date: 3/19/15

Photograph Time: 11:16

Description: Photo showing the drums where the mercury and PCB/mercury mixed waste has been collected.





Photographic Documentation

Client: U.S. EPA Region 5

Site Name: Waunakee Alloy Site

Location: 201 N. Madison St., Waunakee, Dane Cty, WI

Date: March 19 & 31, 2015

Prepared by: Tetra Tech, Inc.

Photographer: Andrew Kleist

TDD Number: S05-0001-1503-009

Photograph No. 9

Photograph Date: 3/19/15

Photograph Time: 11:43

Description: Photo showing a children's playground bordering the southeast side of the property.



Photograph No. 10

Photograph Date: 3/19/15

Photograph Time: 11:49

Description: Photo showing totes located in southwest room which are labeled as flammable/combustible.

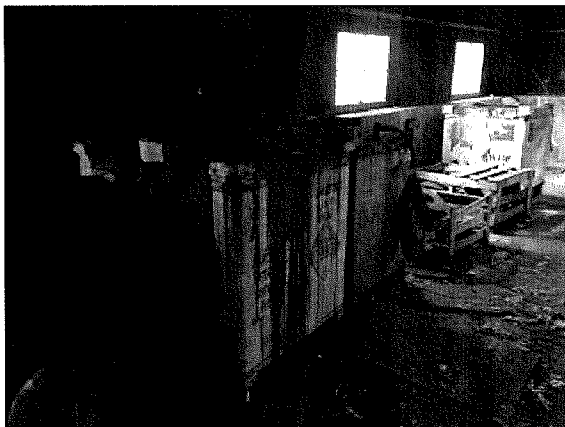


TABLE B-1

U.S. EPA ANALYTICAL RESULTS
WAUNAKEE ALLOY SITE
WAUNAKEE, DANE COUNTY, WISCONSIN

Sample ID	Ignitability Regulatory Level	Flashpoint	pH Regulatory Level	pH
WA-1-0315	<140°	133.9°	<2 or >12.5	N/A
WA-2-0315		>140°		N/A
WA-3-0315		110°		N/A
WA-4-0315		N/A		<1
WA-5-0315		N/A		13.3
WA-6-0315		N/A		1

ATTACHMENT I

DETAILED CLEANUP CONTRACTOR ESTIMATE

HAS BEEN REDACTED – ONE PAGE

NOT RELEVANT TO SELECTION

OF REMOVAL ACTION

ATTACHMENT II

U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL ACTION

ADMINISTRATIVE RECORD
FOR THE
WAUNAKEE ALLOY SITE
WAUNAKEE, DANE COUNTY, WISCONSIN

ORIGINAL
MAY, 2015

<u>NO.</u>	<u>SEMS ID</u>	<u>DATE</u>	<u>AUTHOR</u>	<u>RECIPIENT</u>	<u>TITLE/DESCRIPTION</u>
1	918514	3/1/07	BT2 Inc.	Stone House Development Inc.	Phase 2 Site Assessment Report
2	918512	10/1/14	Ayres Associates	Village of Waunakee	Phase I Site Assessment Report
3	918513	1/1/15	Ayres Associates	Village of Waunakee	Phase II Site Assessment Report
4	918517	3/10/15	Lowery, J., WDNR	Ribordy, M., U.S. EPA	Email re: Request for U.S. EPA Removal Assistance
5	918515	4/9/15	Kleist, A., Tetra Tech	Maguire, A., U.S. EPA	Draft Trip Report for Waunakee Alloy Site
6	918516	5/11/15	Maguire, A., U.S. EPA	Lowery, J., WDNR	Letter re: Request for ARARs
7	-	-	Maguire, A., U.S. EPA	Karl, R., U.S. EPA	Action Memorandum re: Request for a Time-Critical Removal Action at the Waunakee Alloy Site <i>(Portions of this document have been redacted)</i>

ATTACHMENT III

INDEPENDENT GOVERNMENT COST ESTIMATE

HAS BEEN REDACTED – TWO PAGES

NOT RELEVANT TO SELECTION

OF REMOVAL ACTION

ATTACHMENT IV

ENVIRONMENTAL JUSTICE ANALYSIS WAUNAKEE ALLOY SITE WAUNAKEE, DANE COUNTY, WISCONSIN



EJSCREEN Report

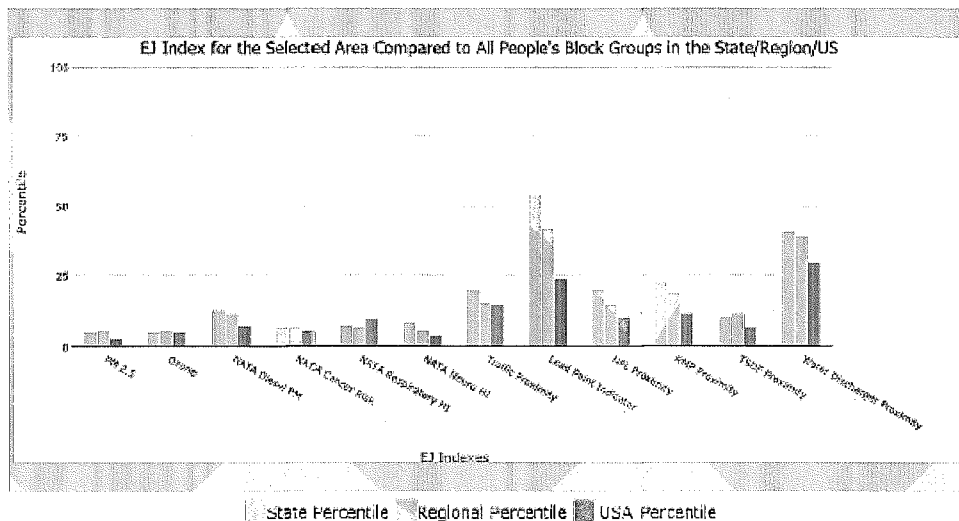


for 1 mile Ring Centered at 43.194379,-89.451723, WISCONSIN, EPA Region 5

Approximate Population: 6733

Wanakee Alloy

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
EJ Indexes			
EJ Index for PM2.5	5	6	3
EJ Index for Ozone	5	8	5
EJ Index for NATA Diesel PM	13	12	8
EJ Index for NATA Air Toxics Cancer Risk	7	7	6
EJ Index for NATA Respiratory Hazard Index	8	7	10
EJ Index for NATA Neurological Hazard Index	9	8	4
EJ Index for Traffic Proximity and Volume	20	18	15
EJ Index for Lead Paint Indicator	54	42	24
EJ Index for Proximity to NPL sites	20	15	11
EJ Index for Proximity to RMP sites	23	19	12
EJ Index for Proximity to TSDFs	11	12	7
EJ Index for Proximity to Major Direct Dischargers	41	39	30



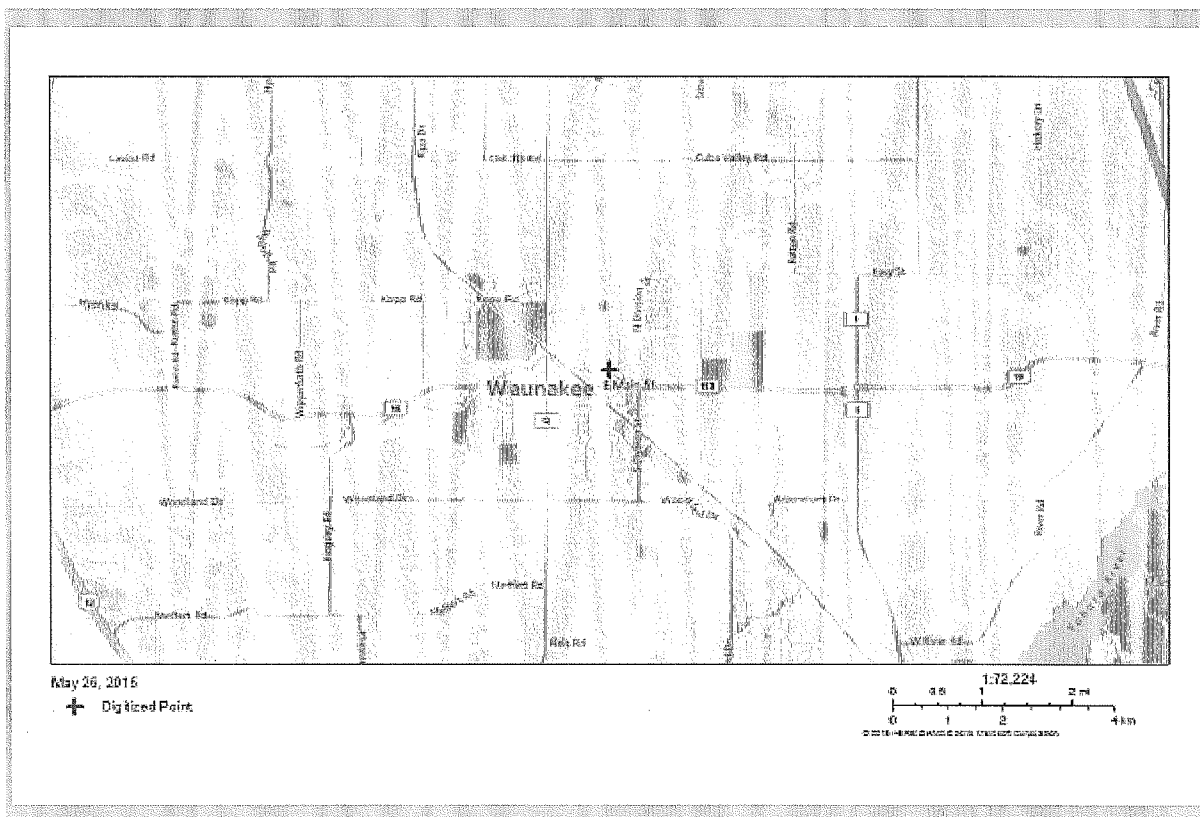
This report shows environmental, demographic, and EJ indicator values. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports.

May 26, 2016

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Wanakee Alloy





EJSCREEN Report

for 1 mile Ring Centered at 43.194379, -89.451723, WISCONSIN, EPA Region 5

Approximate Population: 6733

Wanakee Alloy



Selected Variables	Raw Data	State Avg.	%ile in State	EPA Region Avg.	%ile in EPA Region	USA Avg.	%ile in USA
Environmental Indicators							
Particulate Matter (PM 2.5 in $\mu\text{g}/\text{m}^3$)	10.2	9.82	55	10.8	26	9.78	57
Ozone (ppb)	42.5	41.2	72	44.4	28	48.1	28
NATA Diesel PM ($\mu\text{g}/\text{m}^3$) [*]	0.485	0.724	48	0.712	<50th	0.824	<50th
NATA Cancer Risk (lifetime risk per million) [*]	38	43	48	42	<50th	49	<50th
NATA Respiratory Hazard Index [*]	1.5	1.8	59	1.5	50-60th	2.3	<50th
NATA Neurological Hazard Index [*]	0.066	0.072	57	0.067	50-60th	0.083	60-70th
Traffic Proximity and Volume (daily traffic count/distance to road)	33	82	58	69	57	110	48
Lead Paint Indicator (% Pre-1960 Housing)	0.12	0.39	18	0.4	23	0.3	39
NPL Proximity (site count/km distance)	0.046	0.089	45	0.086	53	0.096	49
RMP Proximity (facility count/km distance)	0.11	0.38	37	0.33	32	0.31	37
TSDF Proximity (facility count/km distance)	0.03	0.036	80	0.051	58	0.054	59
Water Discharger Proximity (facility count/km distance)	0.04	0.21	15	0.23	7	0.25	8
Demographic Indicators							
Demographic Index	12%	23%	27	28%	21	35%	13
Minority Population	9%	17%	55	24%	43	36%	24
Low Income Population	15%	30%	21	32%	21	34%	21
Linguistically Isolated Population	0%	2%	61	2%	59	5%	45
Population With Less Than High School Education	4%	10%	21	12%	20	14%	18
Population Under 5 years of age	7%	6%	59	6%	58	7%	58
Population over 64 years of age	12%	14%	43	13%	48	13%	50

^{*} The National-Scale Air Toxics Assessment (NATA) is EPA's ongoing, comprehensive evaluation of air toxics in the United States. EPA developed the NATA to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that NATA provides broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. More information on the NATA analysis can be found at: <http://www.epa.gov/ttn/atw/nata/main/index.html>.

For additional information, see: www.epa.gov/environmentaljustice

EJSCREEN is a screening tool for pre-decisional use only. It can help identify areas that may warrant additional consideration, analysis, or outreach. It does not provide a basis for decision-making, but it may help identify potential areas of EJ concern. Users should keep in mind that screening tools are subject to substantial uncertainty in their demographic and environmental data, particularly when looking at small geographic areas. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports. This screening tool does not provide data on every environmental impact and demographic factor that may be relevant to a particular location. EJSCREEN outputs should be supplemented with additional information and local knowledge before taking any action to address potential EJ concerns.

May 28, 2015

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