



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

March 15, 2022

REPLY TO THE ATTENTION OF:

S-6J

MEMORANDUM

SUBJECT: Request for Approval and Funding for a Time-Critical Removal Action at the Chudnow Iron and Metal Co. Inc. Site, 5401 W State Street Milwaukee, Milwaukee County, Wisconsin 53208 (Site ID #C5SY)

FROM: Robert Kondreck, On-Scene Coordinator
Emergency Response Section 3

THRU: Samuel Borries, Chief
Emergency Response Branch 2

TO: Douglas Ballotti, Director
Superfund & Emergency Management Division

I. PURPOSE

This purpose of this memorandum is to request and document your approval to expend up to \$1,873,922 to conduct a time-critical removal action at Chudnow Iron and Metal Co. Inc. (Chudnow Metals) (the Site) located at 5401 W. State Street Milwaukee, Milwaukee County, Wisconsin 53208.

The proposed response actions are necessary to mitigate threats to public health, welfare, and the environment posed by the release or threat of release of hazardous substances at the Site. The U.S. Environmental Protection Agency (EPA) documented the presence of hazardous substances at the Site, as defined by Section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), such as lead and polychlorinated biphenyls (PCBs).

The time-critical removal actions proposed are to further define contaminated berm material; remove contaminated berm material; verify that the threat is mitigated and if not remove additional material; place cap over area if contamination cannot be fully removed; prepare pollutants and contaminants for transportation and off-site disposal in accordance with the EPA Off-Site Rule, 40 Code of Federal Regulations (C.F.R.) § 300.440; and initiate post-removal site control measures.

Response actions will be conducted in accordance with Section 104(a)(1) of 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 threat posed to public health and/or the environment by the release or threat of release of the hazardous substances at the Site. The uncontrolled conditions of the hazardous substances present at the Site, and the potential threats they present require that this action be classified as a time-critical removal action. EPA's actions will require approximately 40 working days to complete.

There are no nationally significant, or precedent-setting issues associated with the Site.

II. SITE CONDITIONS AND BACKGROUND

SEMS ID: WIN000520549
Category: Time-Critical Removal Action

The 1.1-acre Chudnow Metals site is located at 5401-5425 W. State Street in Milwaukee, Wisconsin. Chudnow Metals operated as a scrap/salvage yard since the 1950s, accepting all types of waste material (autos, appliances, etc.) (AR#5). Scraping operations ceased in 2001 leaving several scrap metal-debris-soil piles throughout the southern portion of the Site. In 2003, the current property owner, State Street LLC (State Street), purchased the site.

The Site is currently occupied by Happy Paws, a "Doggy Daycare, Kennel, and Dog Grooming" business that was established in 2014. One structure exists on-site in addition to several fenced off outdoor areas, some of which are on concrete and others on AstroTurf. The remaining portions of the Site include a parking lot and an undeveloped area containing a berm with metals and PCB concentrations above EPA removal management levels (RMLs).

A. Site Description

Following State Street's purchase of the property in 2003, the scrap metal-debris-soil piles were consolidated in the southeastern portion of the Site (AR#6). In 2004 the piles were sifted to remove scrap metals and debris and redistributed in a berm across the southern portion of the Site. The Wisconsin Department of Natural Resources (WDNR) inspected the Site in 2004 following a complaint of dust caused by the sifting (AR#5). WDNR notified the contractor performing the work that if there is a release of hazardous substances it must be reported.

WDNR was notified in December 2004 of the releases caused by underground storage tanks (USTs) and salvage yard operations. Hazardous substances identified in the release reporting letter included Resource Conservation and Recovery Act (RCRA) metals, chlorinated solvents, gasoline, and other volatile organic compounds (VOCs). PCBs were not identified in this release reporting letter. After the notification was received, WDNR issued a Responsible Party (RP) letter to State Street notifying the owner of its responsibility under Wisconsin statutes to investigate and remediate the Site.

1. Removal Site Evaluation

From 2000 to 2003 there were three investigations conducted on the property (AR#5). Results of the investigation indicated VOCs, polycyclic aromatic hydrocarbons (PAHs), metals, and PCBs in the soil. In addition, one composite sample collected in 2003 and analyzed with the Toxicity Characteristic Leachate Procedure (TCLP) method exceeded the TCLP regulatory limit for lead of 5.0 milligrams per liter (mg/L). According to 40 CFR 261.24, this sample represents a material that meets the definition of hazardous waste for the characteristic of toxicity. These investigations were done prior to the Site being regraded in 2005 and 2012 and therefore the present-day locations of these samples are unknown. Based on aerials accessed through UW-Madison Geography Departments database (<https://geodata.wisc.edu>) the Site does not appear to have been regraded substantially after 2013. Therefore, samples collected from 2013 to present day will be considered in situ and used to describe the threat to determine the removal action.

In 2012, State Street requested case closure based on previous investigations (AR#5). WDNR denied its request for case closure and requested additional sampling. In July and August 2013, 11 test pits (TP-1 through TP-11) were excavated to characterize the material in the berm in addition to four soil borings (P-11 through P-14) to evaluate the extent of contamination (AR#6). Samples were collected at various depths throughout the berm and submitted for metals, PCB, VOC, and PAH laboratory analysis. No samples were found to contain VOCs or PAHs above EPA Removal Management Levels (RMLs). All four near surface (less than three feet) test pit samples contained lead above the EPA Industrial RML of 800 parts per millions (ppm) and one sample (TP-11: 2FT) contained total PCBs above 50 ppm. Total PCBs equal to or greater than 50 ppm are regulated for disposal under the EPA TSCA program. The EPA RMLs for PCBs are determined for individual PCB aroclors (i.e. PCB-1248). A summary of near surface (i.e. less than 3-feet) PCB and lead concentrations exceeding criteria are provided in the table below. Near surface results are focused upon due to the direct contact and migration threat that it poses.

2013 Near Surface PCB and Lead Analytical Results

| Sample Location | Depth (ft bgs) | PCB-1248 (ppm) | PCB-1254 (ppm) | Total PCBs (ppm) | Lead (ppm) |
|-----------------|----------------|----------------|----------------|------------------|------------|
| TP-3 | 1 | 12.9 | 17.2 | 33.2 | 3,160 |
| TP-5 | 2 | 6.87 | 11.9 | 20.8 | 6,460 |
| TP-10 | 2 | 16.2 | 20.7 | 40.0 | 3,980 |
| TP-11 | 2 | 32.1 | 34.4 | 71.2† | 2,700 |
| EPA RML & TSCA | | 23 | 24 | 50† | 800 |

Sample results highlighted in Red exceeded EPA RMLs

† 50 ppm of total PCBs is regulated for disposal under the TSCA

bgs below ground surface

ft feet

PCBs Polychlorinated Biphenyls

ppm parts per million

RML Removal Management Levels (for lead and individual PCB aroclor (i.e. PCB-1248) results)

TSCA Toxic Substances Control Act (for PCB results)

Three test pit soil samples collected at depths greater than three feet contained total PCBs above 50 ppm and all samples contained lead over the EPA RML. The highest lead concentration was at TP-9: 5FT which contained lead at 8,840 ppm with a TCLP

concentration of 1.9 mg/L. The overall highest arsenic concentration was also at TP-9: 5FT with 485 ppm, which is above the EPA RML of 68 ppm. Other metals besides lead and arsenic were detected but were not above EPA RMLs.

In 2014, WDNR informed State Street that the berm material is improperly disposed of waste and must be disposed of properly (AR#5). In a subsequent conference call with State Street, WDNR reiterated that the berm is waste material and further investigations are required. By 2015, a dog day care/boarding facility occupied the Site. A parking lot was constructed on the northern portion of the property. An outdoor play area was also constructed over a portion of the contaminated berm.

In 2018, State Street's environmental contractors advanced 24 soil probes in a grid over the bermed area. A total of 66 soil samples were submitted for PCB laboratory analysis with a subset of those samples submitted for metals analysis. Samples were also submitted for volatile organic compounds (VOCs) and PAHs, however these results were not over EPA RMLs. Samples were collected in 2-foot intervals starting at 1-foot below ground surface (bgs) to a maximum depth of 10-feet bgs.

Based on the analytical results from the 2018 sampling event several locations contain near surface (i.e. less than 3 feet) PCB and lead concentrations above EPA RMLs. Cadmium was detected above EPA RMLs at two near surface locations, however it coincided with elevated lead results. A summary of near surface (i.e. less than 3-feet) PCB and lead concentrations exceeding criteria are provided in the table below. Near surface results are focused upon due to the direct contact and migration threat that it poses.

2018 Near Surface PCB and Lead Analytical Results

| Sample Location | Depth (ft bgs) | PCB-1242 (ppm) | PCB-1254 (ppm) | Total PCBs (ppm) | Lead (ppm) |
|-----------------|----------------|----------------|----------------|------------------|------------|
| S-1 | 1-3 | 14.0 | 32.9 | 46.9 | 2,120 |
| S-3 | 1-3 | 10.9 | 16.3 | 27.2 | 2,370 |
| S-5 | 1-3 | ND | ND | ND | 4,780 |
| S-6 | 1-3 | 21.1 | 33.2 | 54.3† | NA |
| S-8 | 1-3 | 20.7 | 20.5 | 41.2 | 3,090 |
| S-10 | 1-3 | 6.95 | 10.5 | 17.5 | 2,630 |
| S-12 | 1-3 | 11.2 | 16.6 | 27.8 | 4,210 |
| S-13 | 1-3 | 1.93 | 3.57 | 5.50 | 1,130 |
| S-15 | 1-3 | 5.00 | 13.0 | 18.0 | 2,420 |
| S-16 | 1-3 | 25.7 | 25.6 | 51.3† | NA |
| S-17 | 1-3 | 8.80 | 22.4 | 31.2 | 2,040 |
| S-20 | 1-3 | 3.66 | 14.0 | 17.7 | 2,530 |
| S-22 | 1-3 | ND | 6.20 | 6.20 | 1,960 |
| S-24 | 1-3 | 10.4 | 21.6 | 32.0 | 2,430 |
| EPA RML & TSCA | | 23 | 24 | 50† | 800 |

Sample results highlighted in Red exceeded EPA RMLs

† 50 ppm of total PCBs is regulated for disposal under the TSCA
bgs below ground surface
ft feet
PCBs Polychlorinated Biphenyls
ppm parts per million

| | |
|------|---|
| RML | Removal Management Levels (for lead and individual PCB aroclor (i.e. PCB-1242) results) |
| TSCA | Toxic Substances Control Act (for PCB results) |

Samples collected at deeper depths (i.e. greater than 3 feet bgs) contained similar concentrations to those listed in the above table. For example, one location, S-17 (3-5 bgs) contained total PCBs at 77.4 ppm, above the 50 ppm TSCA disposal criteria. Metals samples were only collected near the surface.

Figures 3 through 14 depict grids with total PCBs concentrations above 50 ppm from the 2013 and 2018 sampling events. Each figure shows a one-foot profile of the berm where total PCBs above 50 ppm are highlighted. Figures are limited to PCBs because they are the main driver of disposal cost. Lead appears to be uniformly above the EPA RML throughout the berm as shown by the above table.

2. Physical Location

The Site is located at 5401-5425 West State Street in Milwaukee, Milwaukee County, Wisconsin 53208 in a predominantly commercial industrial area. The approximate geographical coordinates for the Site are 43.043849 ° north latitude and 87.981182 ° west longitude. Approximately 17,020 people live within one mile of the Site.

The Site is bordered by West State Street to the north followed by commercial/industrial businesses then a residential subdivision. To the east is a garbage dump service followed by commercial businesses. To the south are railroad tracks, a staging area for a commercial business, the Menomonee River, and a recreation area. To the west is a butcher shop followed by a restaurant.

EPA conducted an Environmental Justice (EJ) analysis for the Site (see Attachment I). Screening of the surrounding area used Region 5's EJ Screen Tool. Region 5 has reviewed environmental and demographic data for the area surrounding the Site and determined there is high potential for EJ concerns at this location.

3. Site Characteristics

The Site is a former scrap/salvage yard that is currently occupied by a dog daycare, kenneling, and grooming business. Environmental investigations were conducted prior to and following State Street's acquiring the former scrap/salvage yard in 2003. These environmental investigations indicate that previous site operations (i.e. scrap/salvage yard) were likely the cause of the contamination. However, while redeveloping the property for its current land use, soil was reworked and placed into a berm on the southern end of the Site (AR#5).

No state or local government body has been the owner of the property during the time when the release occurred based on available information. No actions appear to have been performed by the owner to dispose of the contaminated soil properly. No removal action has been performed at the property.

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

A release or threat of release of hazardous substances, pollutants, or contaminants is present at the Site. Based on available data, the hazardous substances, as defined by Section 101(14) of CERCLA, present are primarily lead and PCBs (AR#5 and #6). Arsenic and cadmium were also detected in several samples above EPA RMLs and coincided with elevated lead concentrations. PCBs and lead are considered substances of critical concern due to their widespread prevalence, elevated concentrations, and distance to the surface. Analytical data supporting this conclusion is provided in Section A.1. of this Action Memorandum.

The original volume of PCB or lead material released during salvage operations cannot be precisely determined because it is unknown what material was salvaged at the Site and whether it contained hazardous substances. However, an attempt to estimate the volume of contaminated or waste material in the berm was performed to estimate a cleanup cost. An estimated 4,151 cubic yards or 7,473 tons of material can be disposed of at a RCRA Subtitle D landfill and 286 cubic yards or 514 tons can be disposed of at a RCRA Subtitle C landfill. Volumes may change substantially upon notifying the EPA TSCA program of the methodology used to determine this volume. Also, waste characterization samples submitted to a disposal landfill could also alter what can be accepted at the RCRA Subtitle D landfill. The method to determine the disposal volume is provided in Attachment II. Figures 3 through 14 depict removal grids and the anticipated final disposal location (i.e. RCRA Subtitle D or C).

The cleanup cost includes removal of the entire berm to grade. Due to the grade of the berm and the vertical interface on the southern extent, it does not appear possible to place a cap over the property to mitigate the release or threat of release of a hazardous substance. In addition, WDNR has determined that the berm is a contaminated waste pile rather than soil and constitutes illegal disposal (AR#8). Therefore, any action taken by EPA to provide temporary mitigation measures (i.e. capping the material) to prevent the immediate threat to human health and the environment would later be undone through WDNR enforcement.

Past release of hazardous substances to the environment most likely occurred through salvaging activities, including the handling of various items that may contain PCBs, along with substances containing leaded material along with other metals (i.e. arsenic and cadmium). It is also possible, based on the large volume of excess soil onsite, that contaminated soil was brought to the Site at some point. After salvage operations ceased the Site was redeveloped. During the redevelopment process, hazardous substances could have been re-released through sifting of soil, erosion, or soil becoming airborne during weather events. Metals and PCBs are not anticipated to break down into byproducts under normal conditions and, therefore, the release of the hazardous substances will remain a threat until a removal action is taken.

5. NPL status

The Site is not on the NPL. It is not known if Wisconsin will propose the Site for inclusion on the NPL in the future.

6. Maps, pictures and other graphic representations

Photographs and maps are included as attachments to the Action Memorandum.

B. Other Actions to Date

1. Previous actions

No prior removal or remedial actions have been conducted at the Site. Assessment work conducted at the Site was documented in Section II.A.

2. Current actions

No actions are currently being conducted at the Site. WDNR has sent several notification or enforcement letters, however no action has been taken by the property owner to mitigate the threat from the Site (AR#5 and #8).

C. State and Local Authorities' Roles

On March 12, 2021, WDNR requested EPA assistance in conducting a removal assessment at the Site (AR #4). WDNR does not have the resources to clean up 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, welfare, and the environment and meet the criteria for a time-critical removal action in 40 C.F.R. § 300.415(b)(1), based on factors in § 300.415(b)(2) of the NCP. These factors include the following:

§ 300.415(b)(2)(i) - Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants;

Hazardous substances are present in the Site's surface and subsurface. Hazardous substances represent an actual or potential exposure threat to nearby human populations. Potential human receptors include workers who manage outside areas. Part of the contaminated outdoor area of the dog daycare facility is built over the contaminated berm and contains an artificial turf. The artificial turf is likely not protective of human health or animals because it does not appear to have the appropriate permeability or strength requirements to prevent current or future exposure from the contaminated berm beneath.

As such, individuals may come into contact with the contaminated soil. Patrons of the current business may also be exposed by being in or near this area. Other human populations include adjacent businesses, notably a Steak House Restaurant approximately 300-feet from the Site. A residential area is approximately 450-feet northwest of the Site. The Menomonee River is approximately 250-feet south and contains various wildlife including small mouth bass.

Analytical results indicate that hazardous substances, as defined by CERCLA § 101(14), are present at the Site and represent an actual or potential exposure threat to nearby human populations. Hazardous substances primarily include lead and PCB. Other hazardous substances include arsenic and cadmium. Information on toxicological effects of these primary hazardous substances, pollutants, and contaminants is listed below and referenced in the Administrative Record (Attachment III).

Lead: The effects of lead are the same whether it enters the body through breathing or swallowing. Lead can affect almost every organ and system in the body. The main target for lead toxicity is the nervous system, both in adults and children. Long-term exposure of adults can result in decreased performance in some tests that measure functions of the nervous system. It may also cause weakness in fingers, wrists, or ankles. Lead exposure also causes small increases in blood pressure, particularly in middle-aged and older people and can cause anemia. Exposure to high lead levels can severely damage the brain and kidneys in adults and children and ultimately cause death. In pregnant women, high-levels of exposure to lead may cause miscarriage. High-level exposure in men can damage the organs responsible for sperm production. Kidney tumors have developed in rats and mice that had been given large doses of some lead compounds. The Department of Health and Human Services (DHHS) has determined that lead and lead compounds are reasonably anticipated to be human carcinogens and EPA has determined that lead is a probable human carcinogen. The International Agency for Research on Cancer (IARC) has determined that inorganic lead is likely carcinogenic to humans and that there is insufficient information to determine whether organic lead compounds will cause cancer in humans (AR #3).

PCBs: The most commonly observed health effects in people exposed to large amounts of PCBs are skin conditions such as acne and rashes. Studies involving 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. Few studies involving workers indicate that PCBs are associated with certain kinds of cancer in humans, such as cancer of the liver and biliary tract. Rats that ate food containing high levels of PCBs for two years developed liver cancer. DHHS has concluded that PCBs may reasonably be anticipated to be carcinogens. PCBs have been classified as probably carcinogenic, and carcinogenic to humans by EPA and IARC, respectively (AR #4).

§ 300.415(b)(2)(iv) – High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface that may migrate;

Site assessment results indicated that high levels of hazardous substances, including PCBs and lead, were detected in near-surface soils and deeper soils. A detailed discussion of near surface contamination is provided in Section II Part A of this Action Memo. Analytical results indicate that PCB and lead contamination are above EPA RMLs. These soils have previously migrated and may continue to migrate.

Prior to and during State Street's purchase of the Site, soil has been reworked as part of an effort to redevelop the Site. In 2002, a scrap metal and debris pile was located across the southern portion of the Site (AR#5). In 2003, the current property owner, State Street, purchased the Site and moved the waste pile to the east side of the property. In 2004, WDNR responded to a dust complaint during machine sifting of the waste pile to reclaim scrap metal. Based on analytical data of the berm it is reasonable to assume that this dust contained metals and PCB contamination at levels above EPA RMLs and migrated off-site.

WDNR has been in contact with State Street since 2004 concerning environmental contamination at the Site. Since 2004, material has been moved throughout the Site despite investigations that confirmed elevated levels of hazardous substances in this material. For example, in 2005, material that contained known hazardous lead (TCLP concentration above 5 mg/L) was consolidated on the southern end of the Site. More recently in 2015, material was again moved during the construction of a parking lot for the current business. WDNR issued a letter in 2013 stating that WDNR approval is needed prior to any construction at the Site. However, State Street did not provide any notification and the material was moved again. Based on these examples, material may migrate again depending on redevelopment needs of the Site.

Based on boring logs generated during Site investigations and current aerial photographs it does not appear the berm is covered. An artificial turf covers a portion of the berm, however it was not approved by WDNR, nor does it appear to be an impermeable barrier. With no surface cover over the bermed area there is nothing to prevent future migration of hazardous substances.

Vertical migration of lead into the subsurface is not anticipated because of lead's tendency to strongly adsorb to soil (AR#2). Lead may become mobilized in a low pH soil, but it does not appear that pH has been sampled at the Site. Since the lead at the Site is elemental, it will not degrade over time and therefore will persist as a threat to the environment.

PCBs may leach significantly and migrate vertically in the presence of organic solvents (AR#1). In general, PCBs do not readily break down in the environment and tend to bind strongly to soil. Therefore, it is unlikely that PCB contamination will degrade over time and will persist as a threat to the environment.

§ 300.415(b)(2)(v) – Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released;

As discussed in the previous section, the berm containing hazardous substances does not contain a cover to prevent migration. The topography of the berm, in general, slopes from south to north leading into a parking lot where drainage is controlled by a sewer system (see cross section in AR#6). The west side of the Site also is sloped to the butcher shop. During heavy rain or snow melt events it is possible some of this material could migrate from the berm into the sewer or towards the butcher shop. Wind may also pick up particulates causing hazardous substances to migrate off-site.

§ 300.415(b)(2)(vii) - The availability of other appropriate federal or State response mechanisms to respond to the release;

On March 12, 2021, WDNR requested assistance from EPA because WDNR does not have the resources to mitigate the threat of release (AR#7).

IV. ENDANGERMENT DETERMINATION

Given the Site conditions, the nature of the known and suspected hazardous substances, and the complete and potential exposure pathways described in Sections II and III above, actual or threatened releases of hazardous substances from this Site, if not addressed by implementing the response actions selected in this 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

EPA proposes to undertake the actions described below to mitigate threats posed by the release or threat of release of hazardous substances at the Site. The actions will be consistent with a risk-based cleanup under TSCA (40 C.F.R. § 761.61(c)). Limited soil removal along with engineering and institutional controls will not present an unreasonable risk appropriate for future use of the Site. Removal activities on-site will include:

1. Development of Site Plans (Work Plan, Sampling Plan/Quality Assurance Project Plan (QAPP), Health and Safety Plan (HASP), Emergency Contingency Plan (ECP), Data Management Plan (DMP) and Air Monitoring Plan (AMP));
2. Notify EPA Toxic Substances Control Act (TSCA) program that a risk-based cleanup under TSCA (40 C.F.R. § 761.61(c)) will be conducted at the Site and comply with any reporting requirements;
3. Collect additional soil samples based on consultation with the EPA TSCA program;
4. Conduct air monitoring and perform dust control measures to ensure worker and public health protection;

5. Remove illegally disposed of lead and PCBs contaminated bermed material on the southern portion of the Site to form an even grade from the parking lot to the start of the rail-road property;
6. Transportation and disposal off-site of any hazardous substances, pollutants and contaminants at a CERCLA approved disposal facility in accordance with EPA's Off-Site Rule (40 C.F.R. § 300.440). Excavated material that fails TCLP for metals may be treated with a fixation agent prior to disposal. PCB-contaminated material with PCB concentrations > 50 mg/kg shall be transported off-site to a TSCA waste landfill that is in compliance with all state and federal regulatory requirements. PCB-contaminated material with PCB concentrations < 50 mg/kg shall be transported off-site and disposed of in an appropriately licensed and permitted commercial landfill in compliance with all state and local laws;
7. Collect samples from the newly graded Site in a grid pattern consistent with the approved sampling plan and submit those samples for RCRA metals and total PCBs laboratory analysis;
8. Remove and dispose of PCB contaminated soil above EPA TSCA low occupancy use levels (i.e., total PCBs soils above 100 ppm) regardless of depth;
9. Remaining PCB contamination in the top two feet of soil not addressed by paragraph 8 will be addressed as follows: Remove and dispose of PCB contaminated soil above Wis. Admin. Code ch NR720 cleanup standards for non-residential properties to a maximum depth of 2-feet bgs. If PCB contamination above cleanup standards remains at 2-feet bgs, a visible barrier will be placed at the bottom of the excavation. Residual contaminated soil above 25 ppm for total PCBs below 2-feet will be capped per 40 C.F.R. § 761.61;
10. Remove and dispose of metals-contaminated soil above NR720 cleanup standards for non-residential properties to a maximum depth of 2-feet bgs. If metals contamination above cleanup standards remains at 2-feet bgs, a visible barrier will be placed at the bottom of the excavation;
11. Backfill with clean material or as required by paragraph 9. Perform additional grading (if necessary) to form an even grade from the parking lot to the start of the rail-road property;
12. Coordinate with the property owner and State to initiate post-removal Site control to ensure users of the property and future owners are aware of the environmental Site conditions; and
13. Take any other response actions to address any release or threatened release of a hazardous substance, pollutant or contaminant listed in this Action Memo that the EPA OSC determines may pose an imminent and substantial endangerment to the public health or the environment.

The OSC will conduct removal actions in a manner not inconsistent with the NCP. The OSC will initiate planning for provision of post-removal site control consistent with the provisions of NCP § 300.415(l).

The threats posed by a release or threat of release of hazardous substances meet the criteria listed in NCP § 300.415(b), and the response actions proposed herein are consistent with any long-term remedial actions that may be required. Elimination of hazardous substances, pollutants and

contaminants that pose a substantial threat of release is expected to 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 for treatment, storage, and disposal shall be treated, stored, or disposed of at a facility in compliance, as determined by EPA, with the EPA Off-Site Rule, 40 C.F.R. § 300.440.

2. Contribution to remedial performance

EPA is working with the WDNR to coordinate remediation efforts at the Site. The proposed action should not impede future remedial performance.

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

Not Applicable

4. Applicable or relevant and appropriate requirements (ARARs)

Wisconsin DNR identified state ARARs in a letter dated February 16, 2022 (AR #9). The EPA OSC has identified applicable federal ARARs in the paragraph below. EPA will comply with ARARs identified in a timely manner to the extent practicable under the exigencies of the situation. However, as set forth at Section 121(e) of CERCLA, actions conducted on-site are exempt from permitting requirements.

State ARARs:

- See Wisconsin DNR letter dated February 16, 2022 (AR#9)

Federal ARARs:

- Hazardous substances, pollutants or contaminants removed off-site pursuant to this response action for treatment, storage and disposal shall be treated, stored, or disposed at a facility in compliance, as determined by EPA, with the EPA Off-Site Rule, 40 C.F.R. § 300.440.
- TSCA, 40 C.F.R. § 761, regulates the cleanup and disposal of PCB contamination.
- Subtitle D of RCRA, Section 1008 and Section 4001, *et seq.*, 42 USC § 691, *et seq.*, regulates the management of nonhazardous solid waste.
- 49 U.S.C. § 5101 *et seq.* regulates the transportation of hazardous waste and hazardous substances by aircraft, railcars, vessels, and motor vehicles to or from a site.

5. Project schedule

The time-critical removal actions will require approximately 40 working days to complete.

B. Estimated Costs:

The estimated costs to complete the activities outlined in this memorandum are summarized below.

| REMOVAL ACTION PROJECT CEILING ESTIMATE | |
|--|---------------------|
| <u>Regional Removal Allowance Costs:</u> Total Cleanup Contractor Costs (This cost category includes estimates for Emergency and Rapid Response Services (ERRS), subcontractors, Notices to Proceed, and Interagency Agreements with Other Federal Agencies. Includes a 20% contingency) | \$ 1,419,590 |
| <u>Other Extramural Costs Not Funded from the Regional Allowance:</u> Total Superfund Technical Assessment and Response Team (START), including multiplier costs | \$ 142,012 |
| Subtotal, Extramural Costs | \$ 1,561,602 |
| Extramural Costs Contingency (20% of Subtotal, Extramural Costs) | \$ 312,320 |
| TOTAL REMOVAL ACTION PROJECT CEILING | \$ 1,873,922 |

Detailed cleanup contractor costs are presented in Attachment IV.

The response actions described in this memorandum directly address the actual or threatened release of hazardous substances, pollutants, or contaminants at the Site which may pose an imminent and substantial endangerment to public health or welfare or to the environment. These response actions do not impose a burden on affected property disproportionate to the extent to which that 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 release and threatened release of hazardous substances and pollutants or contaminants documented on Site, and the potential exposure pathways to nearby populations described in Section II, III, and IV 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, 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 Confidential Enforcement Addendum.

The total EPA costs of this removal action based on full-cost accounting practices that will be eligible for cost recovery are estimated to be \$3,340,319¹.

$$(\$1,873,922 + \$32,000) + (75.26\% \times \$1,905,922) = \$3,340,319$$

¹ Direct 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-judgement 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.

IX. RECOMMENDATION

This decision document represents the selected removal actions for the Site located in Milwaukee, Milwaukee 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, see Attachment III.

Conditions at the Site meet the NCP § 300.415(b) criteria for a removal action. The total project ceiling, if approved, will be \$1,873,922, of which, as much as \$1,731,910 may be used for cleanup contractor costs. You may indicate your decision by signing below.

APPROVE:

X



Douglas Ballotti, Director
Superfund & Emergency Management Division
Signed by: DOUGLAS BALLOTTI

DATE: March 15, 2022

DISAPPROVE:

X

Douglas Ballotti, Director
Superfund & Emergency Management Division

DATE: _____

Enforcement Addendum

Figures:

- 1 – Site Location Map
- 2 – Site Layout Map
- 3-14 – Proposed PCB Excavation Extents

Wisconsin DNR Photographs

Attachments:

- I. Environmental Justice Analysis
- II. Estimated Removal Volume Calculations and Method
- III. Administrative Record Index
- IV. Detailed Cleanup Contractor Estimate
- V. Independent Government Cost Estimate

cc: S. Ridenour, U.S. EPA, 5104A/B517F (Ridenour.Steve@epa.gov)
V. Darby, U.S. DOI, w/o **Enf. Addendum**, (Valincia_Darby@ios.doi.gov)
J. Nelson, U.S. DOI, w/o **Enf. Addendum**, (John_Nelson@ios.doi.gov)
M. Reif, WI DNR, w/o **Enf. Addendum**, (maizie.reif@wisconsin.gov)

BCC PAGE HAS BEEN REDACTED

**NOT RELEVANT TO SELECTION
OF REMOVAL ACTION**

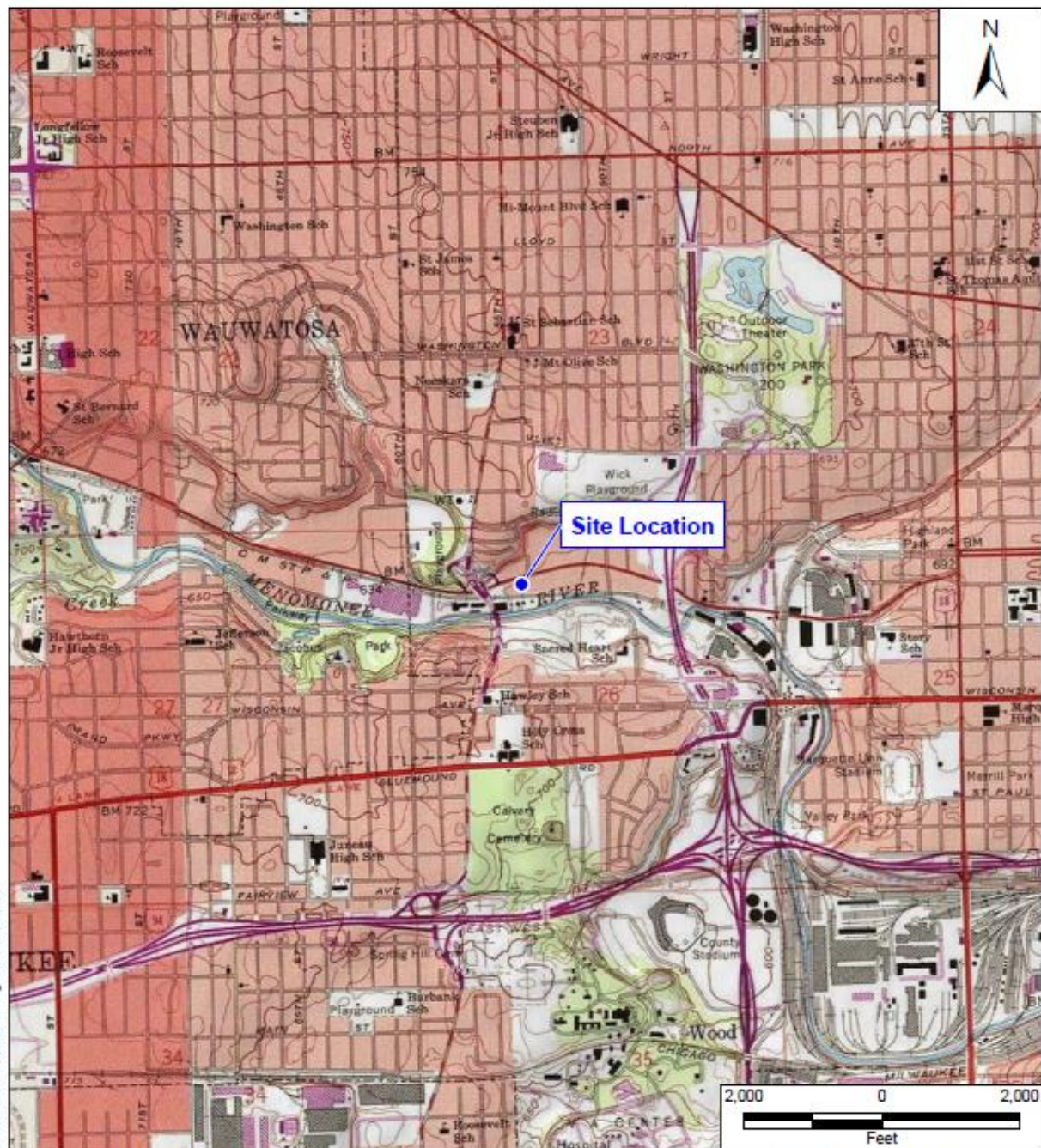
**ENFORCEMENT ADDENDUM
HAS BEEN REDACTED – THREE
PAGES**

**ENFORCEMENT CONFIDENTIAL
NOT SUBJECT TO DISCOVERY
FOIA EXEMPT**

**NOT RELEVANT TO SELECTION
OF REMOVAL ACTION**

FIGURES

File Path: G:\026801-57\ART\Wisconsin\Chudnow Metals\mxd\2021-17\fig-1SiteLocation.mxd



Source: USGS 7.5-Minute Topographic Quadrangle Map: Milwaukee, WI 1994

| | |
|---|-------------------------|
| Chudnow Metals Site 5401 West State Street Milwaukee, Milwaukee County, Wisconsin | |
| Figure 1 Site Location Map | |
|  TETRA TECH | |
| Prepared For: US EPA | Prepared By: Tetra Tech |

Date Saved: 11/09/2021

EPA Contract No.: 68H0019D00026

TOT/TOIIN: P0032-0001/CJ/105

Coordinate System: NAD 1983 StatePlane Wisconsin South FIPS 4803 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US



Legend
 Approximate Site Boundary

100 0 100
 Feet

Chudnow Metals Site
 5401 West State Street
 Milwaukee, Milwaukee County, Wisconsin

Figure 2
Site Layout Map



Prepared For: US EPA

Prepared By: Tetra Tech

File Path: G:\G06031-1-ST-ART-V\Wisconsin\Chudnow Metals\Kmet\2025-1-17\G2-SiteLayout.mxd

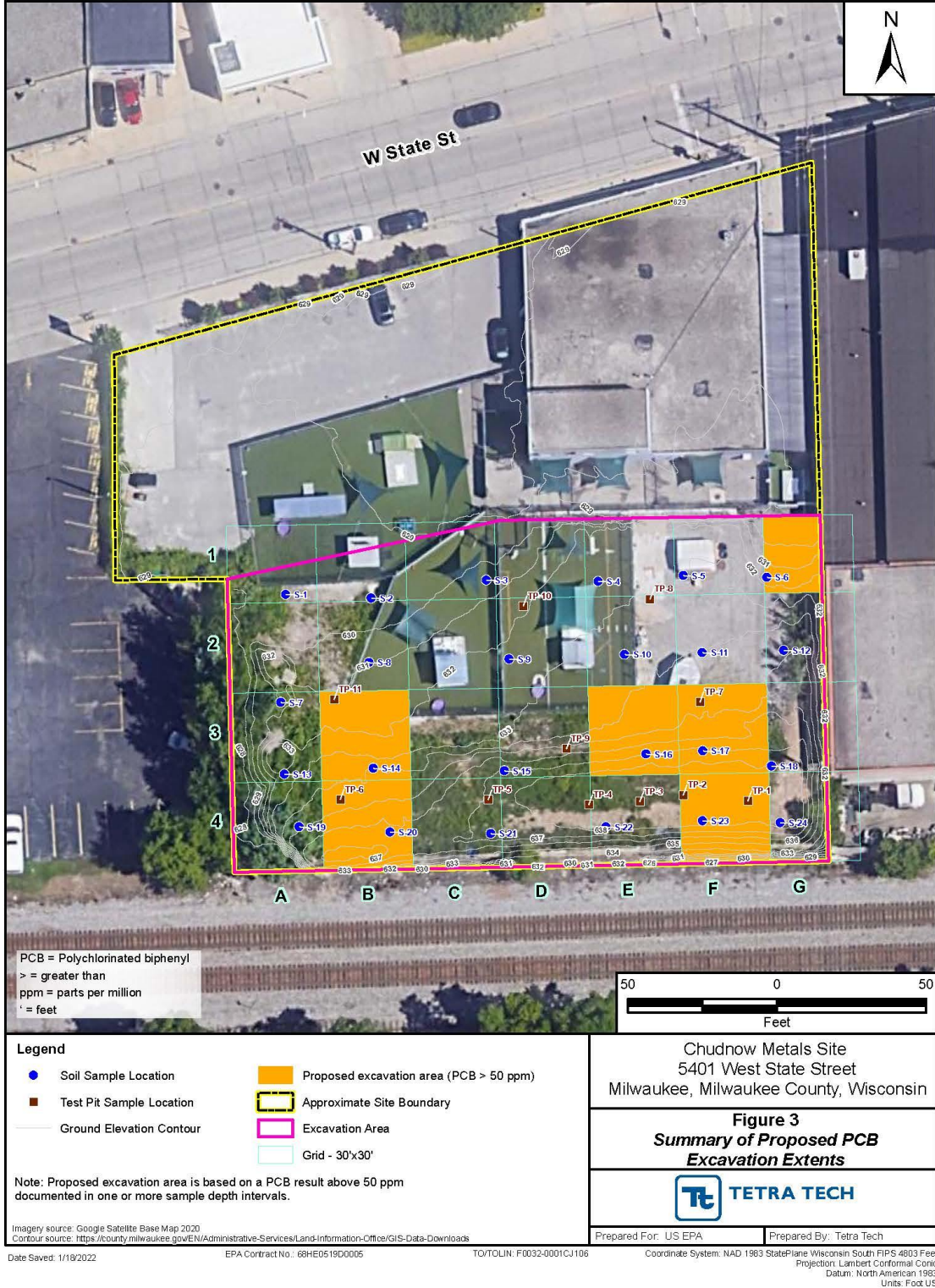
Source: Google Satellite Base Map 2020

Date Saved: 11/04/2021

EPA Contract No.: 68HE051900005

TC/COUN: P0032-0001/CJ/106

Coordinate System: NAD 1983 StatePlane Wisconsin South FIPS 4803 Feet
 Projection: Lambert Conformal Conic
 Datum: North American 1983
 Units: Foot US





Legend

- Soil Sample Location
- Test Pit Sample Location
- Ground Elevation Contour
- Grid - 30'x30'
- Excavation Extent
- Approximate Site Boundary

PCB = Polychlorinated biphenyls
 * = Feet below ground surface

Chudnow Metals Site
 5401 West State Street
 Milwaukee, Milwaukee County, Wisconsin

Figure 4
Proposed PCB Excavation Extent
Elevations 638 - 637



Prepared For: US EPA

Prepared By: Tetra Tech

File Path: G:\GIS\031-START_VW\Wisconsin\Chudnow Metals\mxd\2022-01\Fig4-PCBExcavationArea637-638.mxd

Imagery source: Google Satellite Base Map 2020

Contour source: <https://county.milwaukee.gov/ENR/Administrative-Services/Land-Information-Office/GIS-Data-Downloads>

Date Saved: 1/19/2022

EPA Contract No.: 68HE0519D0005

TO/TOLN: F0032-0001CJ106

Coordinate System: NAD 1983 StatePlane Wisconsin South FIPS 4803 Feet
 Projection: Lambert Conformal Conic
 Datum: North American 1983
 Units: Foot US



Legend

- Soil Sample Location
- Test Pit Sample Location
- Ground Elevation Contour
- Grid - 30'x30'
- Excavation Extent
- Approximate Site Boundary

PCB = Polychlorinated biphenyls
' = Feet below ground surface

Chudnow Metals Site
5401 West State Street
Milwaukee, Milwaukee County, Wisconsin

Figure 5 Proposed PCB Excavation Extent Elevations 637 - 636



Prepared For: US EPA

Prepared By: Tetra Tech

File Path: G:\G9031-START\Wisconsin\Chudnow Metals\mxd\2022-01\Fig5-PCBExcavationArea636-637.mxd

Imagery source: Google Satellite Base Map 2020
Contour source: <https://county.milwaukee.gov/EN/Administrative-Services/Land-Information-Office/GIS-Data-Downloads>

Date Saved: 1/19/2022

EPA Contract No.: 68HE0519D0005

TO/TOLIN: F0032-0001C1106

Coordinate System: NAD 1983 StatePlane Wisconsin South FIPS 4803 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US



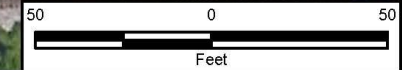


PCB = Polychlorinated biphenyl
 > = greater than
 ppm = parts per million
 ' = feet

Legend

- Sample Location (PCB > 50 ppm)
- Soil Sample Location
- Test Pit Sample Location
- Ground Elevation Contour
- Proposed excavation area (PCB > 50 ppm)
- Grid - 30'x30'
- Excavation Extent
- Approximate Site Boundary

PCB = Polychlorinated biphenyls
 ' = Feet below ground surface



Chudnow Metals Site
 5401 West State Street
 Milwaukee, Milwaukee County, Wisconsin

Figure 7
Proposed PCB Excavation Extent
Elevations 635 - 634



Prepared For: US EPA Prepared By: Tetra Tech

File Path: G:\GIS\9033-START-V\Wisconsin\Chudnow Metals\mxd\2022-01\Fig7-PCBExcavationArea634-635.mxd

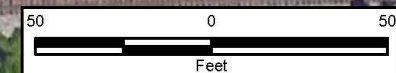


PCB = Polychlorinated biphenyl
 > = greater than
 ppm = parts per million
 ' = feet

Legend

- Sample Location (PCB > 50 ppm)
- Soil Sample Location
- Test Pit Sample Location
- Ground Elevation Contour
- Proposed excavation area (PCB > 50 ppm)
- Grid - 30'x30'
- Excavation Extent
- Approximate Site Boundary

PCB = Polychlorinated biphenyls
 ' = Feet below ground surface



Chudnow Metals Site
 5401 West State Street
 Milwaukee, Milwaukee County, Wisconsin

Figure 8
Proposed PCB Excavation Extent
Elevations 634 - 633



Prepared For: US EPA

Prepared By: Tetra Tech

File Path: G:\G9031-START\Wisconsin\Chudnow Metals\mxd\2022-01\Fig8-PCBExcavationArea633-634.mxd

Imagery source: Google Satellite Base Map 2020

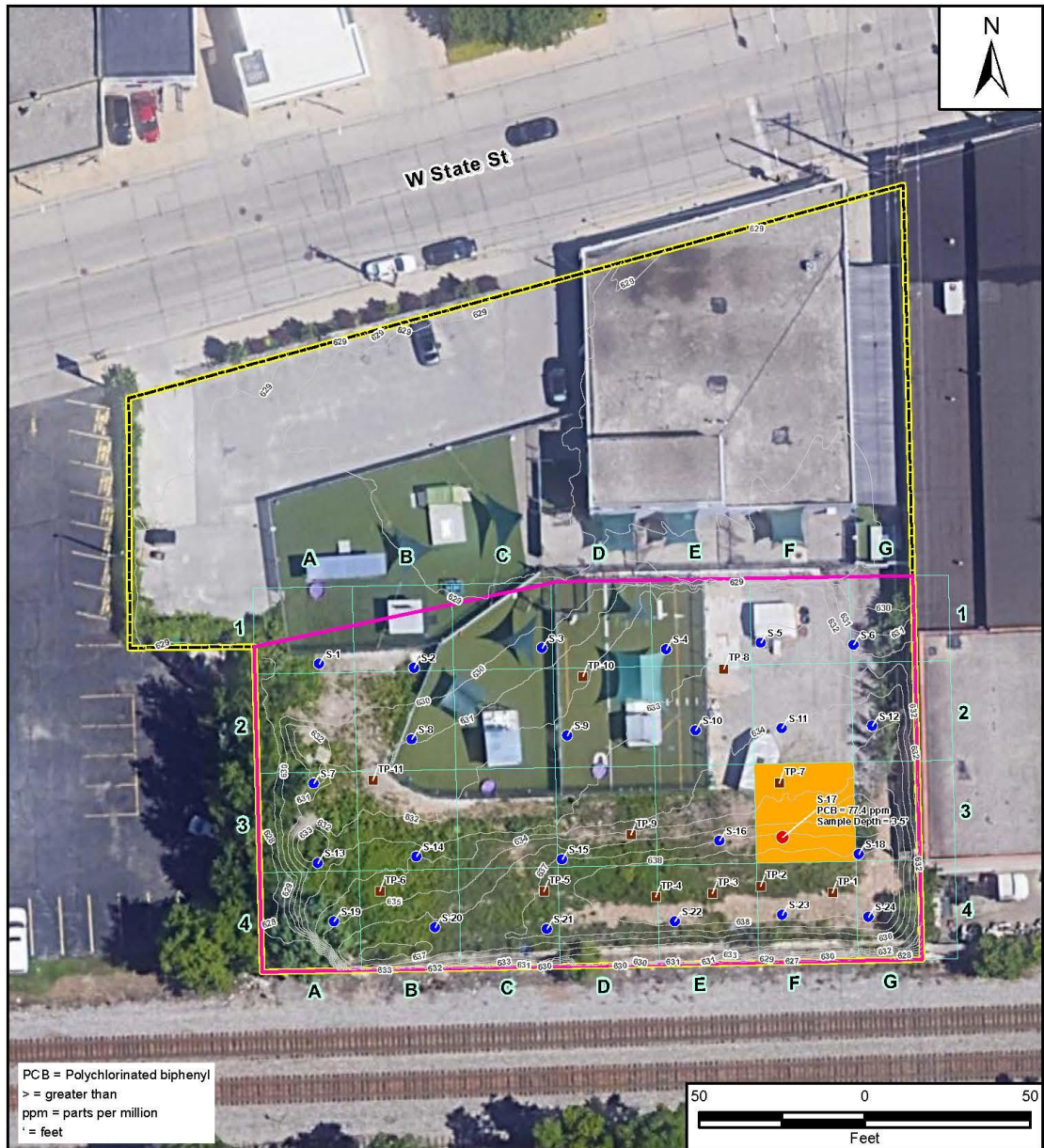
Contour source: <https://county.milwaukee.gov/EN/Administrative-Services/Land-Information-Office/GIS-Data-Downloads>

Date Saved: 1/18/2022

EPA Contract No.: 68HE0519D0005

TO/TOLIN: F0032-0001C1106

Coordinate System: NAD 1983 StatePlane Wisconsin South FIPS 4803 Feet
 Projection: Lambert Conformal Conic
 Datum: North American 1983
 Units: Foot US



PCB = Polychlorinated biphenyl
 > = greater than
 ppm = parts per million
 ' = feet

Legend

- Sample Location (PCB > 50 ppm)
 - Soil Sample Location
 - Test Pit Sample Location
 - Ground Elevation Contour
 - Proposed excavation area (PCB > 50 ppm)
 - Grid - 30'x30'
 - Excavation Extent
 - Approximate Site Boundary
- PCB = Polychlorinated biphenyls
 ' = Feet below ground surface

50 0 50
 Feet

Chudnow Metals Site
 5401 West State Street
 Milwaukee, Milwaukee County, Wisconsin

Figure 9
Proposed PCB Excavation Extent
Elevations 633 - 632



Prepared For: US EPA

Prepared By: Tetra Tech

File Path: G:\G903\START_V\Wisconsin\Chudnow Metals\mxd\2022-01\Fig9-PCBExcavationArea\32-633.mxd

Imagery source: Google Satellite Base Map 2020

Contour source: <https://county.milwaukee.gov/EN/Administrative/Services/Land-Information/Office/GIS-Data-Downloads>

Date Saved: 1/19/2022

EPA Contract No.: 68HE0519D0005

TO/TOLIN: F0032-0001CJ106

Coordinate System: NAD 1983 StatePlane Wisconsin South FIPS 4803 Feet
 Projection: Lambert Conformal Conic
 Datum: North American 1983
 Units: Foot US



PCB = Polychlorinated biphenyl
 > = greater than
 ppm = parts per million
 ' = feet

Legend

- Sample Location (PCB > 50 ppm)
- Soil Sample Location
- Test Pit Sample Location
- Ground Elevation Contour
- Proposed excavation area (PCB > 50 ppm)
- Grid - 30'x30'
- Excavation Extent
- Approximate Site Boundary

PCB = Polychlorinated biphenyls
 ' = Feet below ground surface

Imagery source: Google Satellite Base Map 2020

Contour source: <https://county.milwaukee.gov/EN/Administrative-Services/Land-Information-Office/GIS-Data-Downloads>

Date Saved: 1/19/2022

EPA Contract No.: 68HE0519D0005

TO/TOLIN: F0032-0001C1106

Prepared For: US EPA

Prepared By: Tetra Tech

Coordinate System: NAD 1983 StatePlane Wisconsin South FIPS 4803 Feet
 Projection: Lambert Conformal Conic
 Datum: North American 1983
 Units: Foot US

Chudnow Metals Site
 5401 West State Street
 Milwaukee, Milwaukee County, Wisconsin

Figure 10
Proposed PCB Excavation Extent
Elevations 632 - 631





Legend

- Soil Sample Location
- Test Pit Sample Location
- Ground Elevation Contour
- Grid - 30'x30'
- ▭ Excavation Extent
- ▭ Approximate Site Boundary

PCB = Polychlorinated biphenyls
' = Feet below ground surface

Chudnow Metals Site
5401 West State Street
Milwaukee, Milwaukee County, Wisconsin

Figure 11
Proposed PCB Excavation Extent
Elevations 631 - 630



Prepared For: US EPA

Prepared By: Tetra Tech

File Path: G:\G903\START_V\Wisconsin\Chudnow Metals\mxd\2022-01\Fig11-PCBExcavationArea630-631.mxd

Imagery source: Google Satellite Base Map 2020

Contour source: https://county.milwaukee.gov/EN/Administrative_Services/Land-Information/Office/GIS-Data-Downloads

Date Saved: 1/19/2022

EPA Contract No.: 68HE0519D0005

TO/TOLIN: F0032-0001CJ106

Coordinate System: NAD 1983 StatePlane Wisconsin South FIPS 4803 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

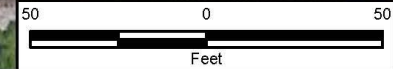


PCB = Polychlorinated biphenyl
 > = greater than
 ppm = parts per million
 ' = feet

Legend

- Sample Location (PCB > 50 ppm)
- Soil Sample Location
- Test Pit Sample Location
- Ground Elevation Contour
- Proposed excavation area (PCB > 50 ppm)
- Grid - 30'x30'
- Excavation Extent
- Approximate Site Boundary

PCB = Polychlorinated biphenyls
 ' = Feet below ground surface



Chudnow Metals Site
 5401 West State Street
 Milwaukee, Milwaukee County, Wisconsin

Figure 12
Proposed PCB Excavation Extent
Elevations 630 - 629



Prepared For: US EPA Prepared By: Tetra Tech

File Path: G:\GIS\031-START\Wisconsin\Chudnow Metals\mxd\2022-01\Fig12-PCBExcavationArea629-630.mxd



- Legend**
- Sample Location (PCB > 50 ppm)
 - Soil Sample Location
 - Test Pit Sample Location
 - Ground Elevation Contour
 - PCB = Polychlorinated biphenyls
 - ' = Feet below ground surface
 - Proposed excavation area (PCB > 50 ppm)
 - Grid - 30'x30'
 - Excavation Extent
 - Approximate Site Boundary

Chudnow Metals Site
 5401 West State Street
 Milwaukee, Milwaukee County, Wisconsin

Figure 13
Proposed PCB Excavation Extent
Elevations 629 - 628



Prepared For: US EPA Prepared By: Tetra Tech

File Path: G:\G9003-START-V\Wisconsin\Chudnow Metals\mxd\2022-01\Fig13-PCBExcavationArea628-629.mxd



Legend

- Soil Sample Location
- Test Pit Sample Location
- Ground Elevation Contour
- Grid - 30'x30'
- Excavation Extent
- Approximate Site Boundary

PCB = Polychlorinated biphenyls
 ' = Feet below ground surface

Chudnow Metals Site
 5401 West State Street
 Milwaukee, Milwaukee County, Wisconsin

Figure 14
Proposed PCB Excavation Extent
Elevations 628 - 627



Prepared For: US EPA

Prepared By: Tetra Tech

File Path: G:\G9031-START\Wisconsin\Chudnow Metals\mxd\2022-01\Fig 14 PCB Excavation Area 627-628.mxd

Imagery source: Google Satellite Base Map 2020

Contour source: <https://county.milwaukee.gov/EN/Administrative-Services/Land-Information-Office/GIS-Data-Downloads>

Date Saved: 1/19/2022

EPA Contract No.: 68HE0519D0005

TO/TOLIN: F0032-0001C1106

Coordinate System: NAD 1983 StatePlane Wisconsin South FIPS 4803 Feet
 Projection: Lambert Conformal Conic
 Datum: North American 1983
 Units: Foot US

WDNR PHOTOGRAPHS



Photo 1 - Looking east at the building and fenced dog enclosures. The dog enclosures are covered with artificial turf to prevent the dogs from getting muddy.



Photo 2 - Looking southeast at the lower plateau of the berm that is partially covered by a dog enclosure and artificial turf.



Photo 3 - Looking east across the top of the berm that is covered in vegetation.



Photo 4 - Looking north down the slope of the berm towards the building. You can still see the flattened area of the lower plateau is covered with recycled asphalt.

ATTACHMENT I

**U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL ACTION**

**ENVIRONMENTAL JUSTICE ANALYSIS
FOR
CHUDNOW METALS
MILWAUKEE, MILWAUKEE COUNTY, WISCONSIN**

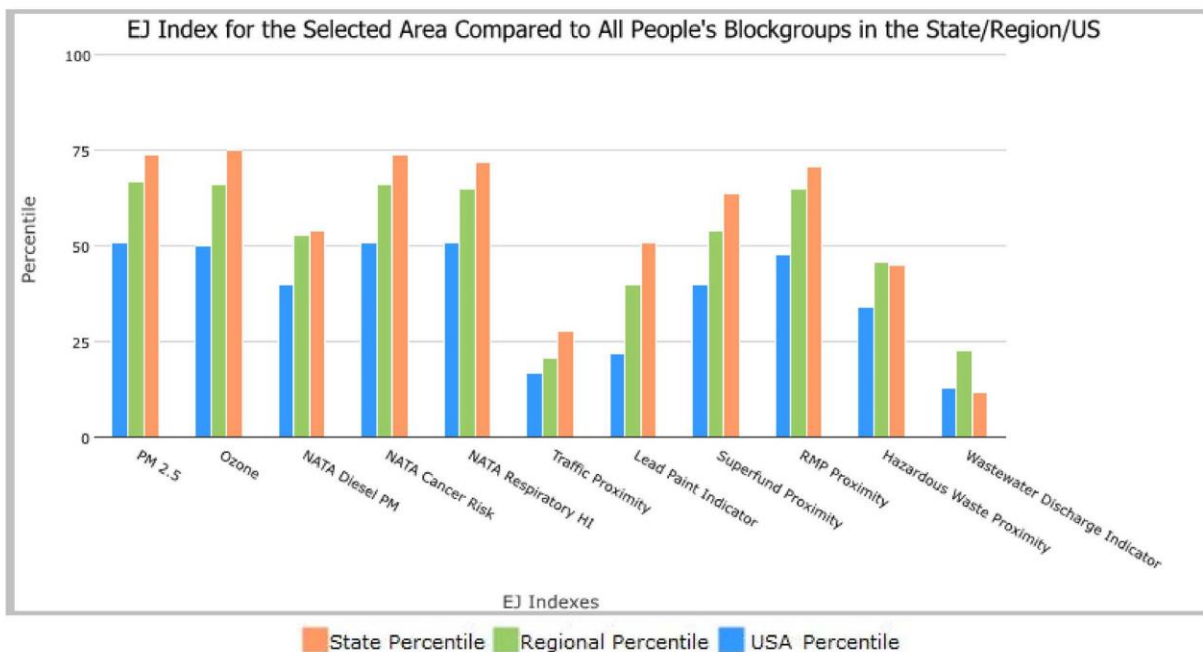
1 mile Ring Centered at 43.043849,-87.981182, WISCONSIN, EPA Region 5

Approximate Population: 17,020

Input Area (sq. miles): 3.14

Chudnow Metals

| Selected Variables | State Percentile | EPA Region Percentile | USA Percentile |
|---|------------------|-----------------------|----------------|
| EJ Indexes | | | |
| EJ Index for PM2.5 | 74 | 67 | 51 |
| EJ Index for Ozone | 75 | 66 | 50 |
| EJ Index for NATA* Diesel PM | 54 | 53 | 40 |
| EJ Index for NATA* Air Toxics Cancer Risk | 74 | 66 | 51 |
| EJ Index for NATA* Respiratory Hazard Index | 72 | 65 | 51 |
| EJ Index for Traffic Proximity and Volume | 28 | 21 | 17 |
| EJ Index for Lead Paint Indicator | 51 | 40 | 22 |
| EJ Index for Superfund Proximity | 64 | 54 | 40 |
| EJ Index for RMP Proximity | 71 | 65 | 48 |
| EJ Index for Hazardous Waste Proximity | 45 | 46 | 34 |
| EJ Index for Wastewater Discharge Indicator | 12 | 23 | 13 |



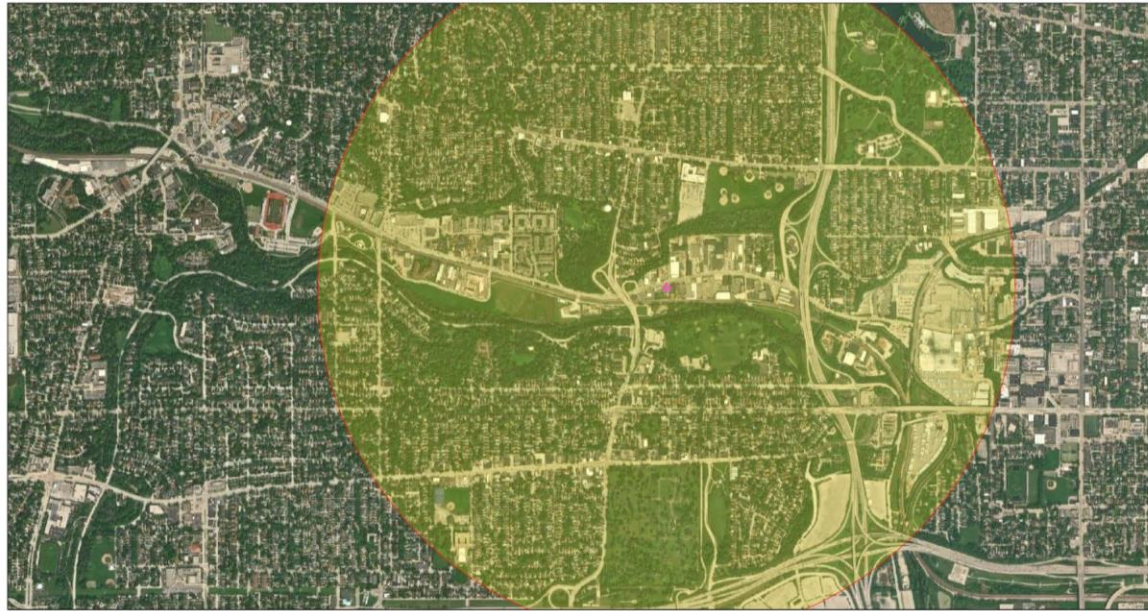
This report shows the values for environmental and demographic indicators and EJSCREEN indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective 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.

1 mile Ring Centered at 43.043849,-87.981182, WISCONSIN, EPA Region 5

Approximate Population: 17,020

Input Area (sq. miles): 3.14

Chudnow Metals



January 4, 2022

Chudnow Metals

1:18,056
0 0.15 0.3 0.6 mi
0 0.25 0.5 1 km
Map

Sites reporting to EPA

Superfund NPL

0

Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)

0

EJSCREEN Report (Version 2020)



1 mile Ring Centered at 43.043849, -87.981182, WISCONSIN, EPA Region 5

Approximate Population: 17,020

Input Area (sq. miles): 3.14

Chudnow Metals

| Selected Variables | Value | 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 $\mu\text{g}/\text{m}^3$) | 7.61 | 6.92 | 77 | 8.4 | 20 | 8.55 | 22 |
| Ozone (ppb) | 43.5 | 41.6 | 73 | 43.8 | 32 | 42.9 | 56 |
| NATA* Diesel PM ($\mu\text{g}/\text{m}^3$) | 0.599 | 0.301 | 94 | 0.446 | 70-80th | 0.478 | 70-80th |
| NATA* Cancer Risk (lifetime risk per million) | 26 | 21 | 97 | 26 | 50-60th | 32 | <50th |
| NATA* Respiratory Hazard Index | 0.35 | 0.27 | 94 | 0.34 | 60-70th | 0.44 | <50th |
| Traffic Proximity and Volume (daily traffic count/distance to road) | 2600 | 600 | 96 | 530 | 96 | 750 | 93 |
| Lead Paint Indicator (% Pre-1960 Housing) | 0.83 | 0.36 | 91 | 0.38 | 91 | 0.28 | 94 |
| Superfund Proximity (site count/km distance) | 0.075 | 0.12 | 52 | 0.13 | 59 | 0.13 | 56 |
| RMP Proximity (facility count/km distance) | 1.9 | 0.89 | 84 | 0.83 | 87 | 0.74 | 89 |
| Hazardous Waste Proximity (facility count/km distance) | 2.4 | 1.5 | 77 | 2.4 | 68 | 5 | 69 |
| Wastewater Discharge Indicator (toxicity-weighted concentration/m distance) | 0.011 | 1.9 | 88 | 2.4 | 71 | 9.4 | 80 |
| Demographic Indicators | | | | | | | |
| Demographic Index | 28% | 23% | 74 | 28% | 64 | 36% | 46 |
| People of Color Population | 28% | 18% | 81 | 25% | 69 | 39% | 47 |
| Low Income Population | 27% | 28% | 57 | 30% | 52 | 33% | 48 |
| Linguistically Isolated Population | 1% | 2% | 66 | 2% | 61 | 4% | 46 |
| Population With Less Than High School Education | 4% | 8% | 31 | 10% | 27 | 13% | 23 |
| Population Under 5 years of age | 7% | 6% | 69 | 6% | 66 | 6% | 64 |
| Population over 64 years of age | 13% | 16% | 37 | 16% | 41 | 15% | 46 |

* 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: <https://www.epa.gov/national-air-toxics-assessment>.

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.

January 04, 2022

3/3

ATTACHMENT II
ESTIMATED REMOVAL VOLUME CALCULATIONS AND METHOD
FOR
CHUDNOW METALS
MILWAUKEE, MILWAUKEE COUNTY, WISCONSIN

The estimated material to be removed at the Chudnow Metals Site was determined by using State Street LLC environmental contractor data (analytical and geospatial) overlaid with publicly available Milwaukee County LiDAR data (topography). Samples collected by State Street's contractor during the 2018 investigation were used to determine the grid pattern. A 30-by 30-foot grid was established throughout most of the Site as it resulted in at least one sample per grid (except for 4 grids). Each grid was evaluated for contamination at a 1-foot elevation based on Milwaukee County LiDAR topography data which appears to match a topography map in AR#6. If any 2018 sample contained total PCBs greater than 50 ppm at any elevation it was highlighted on the corresponding 1-foot elevation map based on the elevation. Test pit samples collected in 2013 were marked as a single depth and thus elevation (i.e. 7-feet or 631 in the case of TP-2). Since an elevation of 631 would correspond to 630-631 or 631-632 it was decided to associate the elevation to the one closest to the surface (i.e. 631-632) since the test pit was dug from a higher elevation downward.

Each grid was evaluated to determine how much of the elevation was present in the grid. For example, grid B3 contains approximately 50% of the elevation between 631 and 632. Since the grade between elevation 631 and 632 is unknown, it is assumed the entire volume is one foot. This results in an overall overestimation in the volume of the proposed excavated material. Using this method the entire berm was assessed to determine a total volume and a volume of PCB material over 50 ppm. Lead was not evaluated since the berm appears to uniformly contain high levels of lead. Lead is unlikely to be a major driver of disposal cost in the same way total PCB above or below 50 ppm will be since total PCBs above 50 will need to go to a RCRA subtitle C landfill which is 3-to 4-times the disposal cost as PCBs below 50.

Calculations for determining volume using these methods are provided on the following page. A 20% contingency was applied to the total volume to account for digging below the proposed grade. It was assumed that a cubic yard of material would equate to 1.5 tons of material.

| | A1 | | A2 | | A3 | | A4 | |
|---------|-----|------|-----|------|-----|-------|-----|------|
| | Haz | SubD | Haz | SubD | Haz | SubD | Haz | SubD |
| 627-628 | | | | | | | | |
| 628-629 | | | | | | | | |
| 629-630 | | 900 | | 900 | | 900 | | 675 |
| 630-631 | | | | 450 | | 900 | | 675 |
| 631-632 | | | | 225 | | 675 | | 675 |
| 632-633 | | | | 225 | | 225 | | 675 |
| 633-634 | | | | | | 225 | | 450 |
| 634-635 | | | | | | | | 450 |
| 635-636 | | | | | | | | 450 |
| 636-637 | | | | | | | | 225 |
| 637-638 | | | | | | | | |
| | | | | | | Total | 0 | 9900 |

| | B1 | | B2 | | B3 | | B4 | |
|---------|-----|------|-----|------|-----|-------|------|-------|
| | Haz | SubD | Haz | SubD | Haz | SubD | Haz | SubD |
| 627-628 | | | | | | | | |
| 628-629 | | | | | | | | |
| 629-630 | | 900 | | 900 | | 900 | | 900 |
| 630-631 | | | | 675 | 900 | | 900 | |
| 631-632 | | | | 225 | | 900 | | 900 |
| 632-633 | | | | | | 675 | | 900 |
| 633-634 | | | | | | 225 | | 900 |
| 634-635 | | | | | | 225 | | 900 |
| 635-636 | | | | | | | | 675 |
| 636-637 | | | | | | | | 450 |
| 637-638 | | | | | | | | 225 |
| | | | | | | Total | 1800 | 11475 |

| | C1 | | C2 | | C3 | | C4 | |
|---------|-----|------|-----|------|-----|-------|-----|-------|
| | Haz | SubD | Haz | SubD | Haz | SubD | Haz | SubD |
| 627-628 | | | | | | | | |
| 628-629 | | | | | | | | |
| 629-630 | | 900 | | 900 | | 900 | | 900 |
| 630-631 | | 225 | | 900 | | 900 | | 900 |
| 631-632 | | | | 675 | | 900 | | 900 |
| 632-633 | | | | 225 | | 900 | | 900 |
| 633-634 | | | | | | 450 | | 900 |
| 634-635 | | | | | | 225 | | 900 |
| 635-636 | | | | | | 225 | | 900 |
| 636-637 | | | | | | 225 | | 675 |
| 637-638 | | | | | | | | 225 |
| | | | | | | Total | 0 | 15750 |

| | D1 | | D2 | | D3 | | D4 | |
|---------|-----|-----|-----|-----|-----|-------|-----|-------|
| | Haz | Non | Haz | Non | Haz | Non | Haz | Non |
| 627-628 | | | | | | | | |
| 628-629 | | | | | | | | |
| 629-630 | | 900 | | 900 | | 900 | | 900 |
| 630-631 | | 675 | | 900 | | 900 | | 900 |
| 631-632 | | 450 | | 900 | | 900 | | 900 |
| 632-633 | | 225 | | 675 | | 900 | | 900 |
| 633-634 | | | | 225 | | 675 | | 900 |
| 634-635 | | | | | | 450 | | 900 |
| 635-636 | | | | | | 450 | | 900 |
| 636-637 | | | | | | 225 | | 675 |
| 637-638 | | | | | | | | 675 |
| 638-639 | | | | | | | | 450 |
| | | | | | | Total | 0 | 19350 |

| | E1 | | E2 | | E3 | | E4 | |
|---------|-----|------|-----|------|-----|-------|------|-------|
| | Haz | SubD | Haz | SubD | Haz | SubD | Haz | SubD |
| 627-628 | | | | | | | | |
| 628-629 | | | | | | | | |
| 629-630 | | 900 | | 900 | | 900 | | 900 |
| 630-631 | | 900 | | 900 | | 900 | | 900 |
| 631-632 | | 900 | | 900 | | 900 | | 900 |
| 632-633 | | 900 | | 900 | | 900 | | 900 |
| 633-634 | | | | 675 | | 900 | | 900 |
| 634-635 | | | | 225 | 675 | | | 900 |
| 635-636 | | | | | 450 | | | 900 |
| 636-637 | | | | | | 225 | | 675 |
| 637-638 | | | | | | 225 | | 675 |
| 638-639 | | | | | | 225 | | 450 |
| | | | | | | Total | 1125 | 21375 |

| | F1 | | F2 | | F3 | | F4 | |
|---------|-----|------|-----|------|------------|------|------------|-------|
| | Haz | SubD | Haz | SubD | Haz | SubD | Haz | SubD |
| 627-628 | | | | | | | | |
| 628-629 | | | | | | | | |
| 629-630 | | 900 | | 900 | | 900 | | 900 |
| 630-631 | | 900 | | 900 | 900 | | | 900 |
| 631-632 | | 900 | | 900 | | 900 | | 900 |
| 632-633 | | 900 | | 900 | 900 | | 900 | |
| 633-634 | | 450 | | 675 | 900 | | | 900 |
| 634-635 | | | | 225 | | 900 | | 900 |
| 635-636 | | | | | | 675 | | 675 |
| 636-637 | | | | | | 450 | | 675 |
| 637-638 | | | | | | 225 | | 675 |
| 638-639 | | | | | | 225 | | 450 |
| Total | | | | | | | 3600 | 19800 |

| | G1 | | G2 | | G3 | | G4 | |
|---------|------------|------|-----|------|-----|------|------|-------|
| | Haz | SubD | Haz | SubD | Haz | SubD | Haz | SubD |
| 627-628 | | | | | | | | |
| 628-629 | 600 | | | | | | | |
| 629-630 | 600 | | | 600 | | 600 | | 600 |
| 630-631 | | 300 | | 600 | | 600 | | 600 |
| 631-632 | | 300 | | 600 | | 600 | | 600 |
| 632-633 | | 150 | | 600 | | 600 | | 600 |
| 633-634 | | | | 600 | | 600 | | 600 |
| 634-635 | | | | 450 | | 600 | | 600 |
| 635-636 | | | | 150 | | 600 | | 600 |
| 636-637 | | | | | | 300 | | 450 |
| 637-638 | | | | | | 150 | | 450 |
| 638-639 | | | | | | 150 | | 300 |
| Total | | | | | | | 1200 | 14550 |

| | ft3 | yd3 | 20% Cont. | Tons (1.5x) | Trucks | Cost |
|------|--------|---------|-----------|-------------|---------|------------|
| SubC | 7725 | 285.825 | 342.99 | 514.485 | 20.5794 | \$ 102,897 |
| SubD | 112200 | 4151.4 | 4981.68 | 7472.52 | 373.626 | \$ 410,989 |

**ATTACHMENT III
U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL
ACTION**

**ADMINISTRATIVE RECORD
FOR THE
CHUDNOW METALS SITE
MILWAUKEE, MILWAUKEE COUNTY, WISCONSIN**

**ORIGINAL
FEBRUARY 2022
SEMS ID:**

| <u>NO.</u> | <u>SEMS ID</u> | <u>DATE</u> | <u>AUTHOR</u> | <u>RECIPIENT</u> | <u>TITLE/DESCRIPTION</u> | <u>PAGES</u> |
|-------------------|-----------------------|--------------------|--|--|---|---------------------|
| 1 | | 11/00 | ATSDR | Public | Toxicological Profile for PCBs; Chapter 6. Potential for Human Exposure | 118 |
| 2 | | 8/07 | ATSDR | Public | Toxicological Profile for Lead; Chapter 6. Potential for Human Exposure | 81 |
| 3 | | 8/1/07 | ATSDR | Public | Tox FAQs Fact Sheet - Lead - CAS #7439-92-1 | 2 |
| 4 | | 7/1/14 | ATSDR | Public | Tox FAQs Fact Sheet - Polychlorinated Biphenyls | 2 |
| 5 | 972804 | 4/25/16 | Villoth, S., State of Wisconsin, Department of Natural Resources | Smith, J., State Street LLC | Notice of Violation (NOV) | 4 |
| 6 | 972806 | 1/8/20 | Ott, T., and Friesseke, R., Friess Environmental Consulting | Michlets, L., State of Wisconsin, Department of Natural Resources | Additional Investigation and Soil Characterization Report | 267 |
| 7 | 972805 | 3/12/21 | Ross., I., State of Wisconsin, Department of Natural Resources | Ribordy. M., U.S. EPA | Email re: Removal Assistance Request | 2 |
| 8 | 972807 | 12/2/21 | Michalets, L., State of Wisconsin, Department of Natural Resources | Smith, J., State Street LLC | Letter re: Action Required for Notification of Contamination to Public | 2 |

| | | | | | | |
|----|--------|---------|--|---------------------------|--|------|
| 9 | 972808 | 2/16/22 | Reif, M., State of Wisconsin, Department of Natural Resources | Kondreck, R., U.S. EPA | Letter re: Applicable, Relevant, and Appropriate Requirements (ARARs) Letter | 5 |
| 10 | ----- | ----- | Kondreck, R. U.S. EPA | Ballotti, D., U.S. EPA | Action Memorandum - Request for for Approval and Funding of Time-Critical Removal Action (Pending) | ---- |

ATTACHMENT IV

DETAILED CLEANUP CONTRACTOR COST ESTIMATE

HAS BEEN REDACTED – ONE PAGE

**NOT RELEVANT TO SELECTION
OF REMOVAL ACTION**

ATTACHMENT V

**INDEPENDENT GOVERNMENT COST ESTIMATE
HAS BEEN REDACTED – EIGHT PAGES**

**NOT RELEVANT TO SELECTION
OF REMOVAL ACTION**