

**Justification for the Partial Deletion from
the National Priorities List
Five Residential Properties of the
South Minneapolis Residential Soil Contamination
Superfund Site
Minneapolis, Minnesota
February 2021**

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List of Acronyms

| | |
|--------|--|
| ATSDR | - Agency for Toxic Substances and Disease Registry |
| bgs | - Below Ground Surface |
| CERCLA | - Comprehensive Environmental Response, Compensation and Liability Act |
| CIP | - Community Involvement Plan |
| EPA | - U.S. Environmental Protection Agency |
| FR | - Federal Register |
| FS | - Feasibility Study |
| FYR | - Five Year Review |
| HHRA | - Human Health Risk Assessment |
| IC | - Institutional Control |
| MDA | - Minnesota Department of Agriculture |
| MDH | - Minnesota Department of Health |
| mg/kg | - milligrams per kilogram (parts per million) |
| µg/l | - micrograms per liter (parts per billion) |
| MnDOT | - Minnesota Department of Transportation |
| MPCA | - Minnesota Pollution Control Agency |
| NCP | - National Oil and Hazardous Substances Pollution Contingency Plan |
| NOIPD | - Notice of Intent for Partial Deletion |
| NPL | - National Priorities List |
| O&M | - Operation and Maintenance |
| OSWER | - Office of Solid Waste and Emergency Response |
| QA/QC | - Quality Assurance/Quality Control |
| RA | - Remedial Action |
| RAOs | - Remedial Action Objectives |
| RCRA | - Resource Conservation Recovery Act |
| RD | - Remedial Design |
| RI | - Remedial Investigation |
| RI/FS | - Remedial Investigation/Feasibility Study |

ROD - Record of Decision

SLERA - Screening Level Ecological Risk Assessment

START - Superfund Technical Assessment and Response Team

SWCA - Special Well Construction Area

UU/UE - Unlimited Use/Unlimited Exposure

**Justification for the Partial Deletion from the National Priorities List
Five Residential Properties of the
South Minneapolis Residential Soil Contamination Superfund Site
Minneapolis, Minnesota**

Purpose

The U.S. Environmental Protection Agency (EPA) Region 5 is proposing to delete five of the remaining nine properties of the South Minneapolis Residential Soil Contamination Superfund Site (South Minn. Site or Site) from the National Priorities List (NPL). EPA is proposing to delete these properties from the NPL because all appropriate response actions have been implemented for these five properties and no further cleanup actions are necessary. The properties included in this proposed partial deletion action are listed in Table 1 and shown on Figure 1.

EPA deleted the majority of the South Minn. Site (approximately 3,623 of 3,632 properties) from the NPL in the *Federal Register* (FR) on September 30, 2019 (84 FR 37112). Nine properties within the Site boundary were excluded from the partial deletion because EPA was not given access to these properties to conduct sampling and/or remediation (Table 2). In 2019 EPA obtained access to five of the nine properties to conduct sampling. EPA sampled these five properties in June 2020 and the results indicate that the soil at these properties is below the cleanup criteria and does not require remediation (Table 3). EPA is proposing to delete these five properties from the NPL. The four remaining South Minn. Site properties that EPA is still not able to sample and/or remediate will remain on the NPL and are not being considered for deletion as part of this action (Table 4).

This document provides EPA's justification for this proposed partial deletion action. EPA and the support agency, the Minnesota Department of Agriculture (MDA), will continue to attempt to obtain access to the four remaining Site properties so that the required remediation can be conducted and the Site can be proposed for a full NPL deletion. Previous soil sampling at those four properties indicate that arsenic is present at levels above EPA's cleanup standard.

EPA plans to publish a Notice of Intent for Partial Deletion (NOIPD) of these five properties of the South Minn. Site from the NPL in the *Federal Register* (the proposed rulemaking) and will open a 30-day public comment period on this proposed action. This document provides information about the Site and explains how these five properties meet EPA's criteria for partial deletion. The documents which provide support for this report and for deleting these properties from the NPL are available for review in the South Minn. Site Partial Deletion Docket. This docket is available online at <https://www.regulations.gov>, Docket ID EPA-HQ-SFUND-2006-0759 and at EPA's webpage for the Site at www.epa.gov/superfund/south-minneapolis-soil. An index of the documents included in the partial deletion docket is provided in Appendix A. The docket also includes information about the 2019 partial Site deletion.

Deletion or partial deletion of a site from the NPL does not create, alter, or revoke any individual's rights or obligations. Deletion or partial deletion of a site from the NPL does not in any way alter the EPA's right to take enforcement actions, as appropriate. The NPL is designed primarily for informational purposes and to assist EPA management. Section 300.425(e)(3) of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) states that a deletion or partial deletion of a site from the NPL does not preclude eligibility for future response actions, should future conditions warrant such actions. As these five properties are a part of the South Minn. Site, Section 300.425(e)(3) is applicable to this proposed action.

Agency Concurrence

EPA requested concurrence from MDA to delete five of the nine remaining properties of the South Minn. Site from the NPL on December 9, 2020. MDA issued a concurrence letter on January 8, 2021. A copy of MDA's concurrence letter is in Appendix B.

EPA Headquarters reviewed this Justification for Partial Deletion on February 1, 2021. Region 5 expects EPA Headquarters to propose the Site for partial deletion in EPA's May 2021 NPL Deletions Update.

Community Involvement

EPA actively engaged with the community throughout the remedial activities at the South Minn. Site and strived to advocate and strengthen early and meaningful community participation, satisfying the provisions of CERCLA Sections 113(k) and 117, 42 U.S.C. 9613(k) and 9617.

EPA developed a Community Involvement Plan (CIP) for the South Minn. Site in July 2005. The CIP outlined the community involvement activities that EPA conducted and would continue to undertake during the remedial activities planned for the Site.

Since 2004, when EPA became involved with the Site, EPA held 22 public meetings and availability sessions about the South Minn. Site investigations and cleanup. EPA held major meetings at the YWCA located at 2121 East Lake Street in Minneapolis, and other meetings at other locations throughout the affected area in an effort to make the meetings more available to all of the communities impacted by the Site. EPA held meetings at Powderhorn Park, the Franklin Avenue Safety Center, and the Minneapolis Public Library Lake Street Branch.

EPA issued its proposed cleanup plan for the South Minn. Site and held a public comment period on its proposal from June 2, 2008 to July 1, 2008. EPA also held a public meeting on June 11, 2008 at the YWCA to discuss the Site contamination, the cleanup alternatives being considered, and to answer questions and accept public comments on the proposed cleanup plan. Approximately 40 people attended the meeting. EPA received approximately 31 public comments during the comment period.

EPA mailed out post cards announcing the public meetings and fact sheets updating the community on the status of the project throughout the entire removal and remedial process. EPA sent mailings out to approximately 10,000 homes. Because of the multi-lingual nature of the area EPA translated the mailings into four languages: English, Spanish, Hmong and Somali. EPA eventually limited the translations to English and Spanish but continued to make Hmong and Somali translations available upon request.

EPA developed and maintained public local information repositories for the South Minn. Site at four locations at the time of the ROD: (1) Green Institute, 2801 21st Ave. S., Suite 100, Minneapolis, MN; (2) City of Minneapolis Police Department, 1201-B E. Franklin Ave., Minneapolis, MN; (3) Minneapolis Central Library; 300 Nicollet Mall, 2nd Floor Minneapolis, MN; and (4) Minneapolis Public Library, East Lake Branch, 2727 E. Lake St., Minneapolis, MN. EPA also developed and maintains a web page for the South Minn. Site located at: www.epa.gov/superfund/south-minneapolis-soil.

EPA involved state and local government officials in the 2014 and 2019 Five-Year Review (FYR) process by notifying them at the start of the FYR. EPA interviewed the former 9th Ward Alderman of the City of Minneapolis, the Minneapolis City Engineer, and a Minnesota Department of Health (MDH) Environmental Research Scientist during the 2014 FYR and included summaries of the interviews in the FYR Report. EPA conducted the 2014 and 2019 FYR site inspections jointly with MDA project staff and provided MDA an opportunity to review and provide input on the FYRs.

EPA notified the community about the 2014 FYR by publishing a newspaper announcement in the Minneapolis Southside Pride at the start of the FYR. The newspaper announcement invited the community to submit any concerns about the South Minn. Site to EPA and directed the community to EPA contacts and the South Minn. Site's web page for additional information. EPA notified the community about the 2019 FYR by publishing a newspaper announcement in the Minneapolis Star Tribune.

EPA made copies of the 2014 and 2019 FYR Reports available on EPA's website and at the information repository for the Site located at the Minneapolis Central Library.

EPA satisfied the public participation activities for the 2019 partial deletion of the South Minn. Site as required by CERCLA Section 113(k), 42 U.S.C. 9613(k), and CERCLA Section 117, 42 U.S.C. 9617. EPA published a newspaper advertisement announcing the proposed direct final partial deletion and the 30-day public comment period in the Minneapolis Star Tribune concurrent with the publication of the partial deletion in the *Federal Register* on July 31, 2019. EPA issued a press release announcing the proposed partial deletion and public comment period on August 1, 2019.

EPA responded to 35 comments the public submitted on EPA's 2019 proposed partial deletion in a Responsiveness Summary issued on September 30, 2019. Because the comments EPA received during the public comment period did not pertain to the technical or administrative merits of EPA's proposed partial deletion of the South Minn. Site, they were not considered adverse and EPA proceeded with the proposed partial deletion, effective September 30, 2019. EPA provided a copy of the 2019 Responsiveness Summary to commenters who provided EPA with their contact information and made a copy of the Responsiveness Summary available in the deletion docket. EPA issued a press release announcing the final partial deletion on October 1, 2019 and mailed copies of a fact sheet announcing the final partial deletion to area residents in English, Spanish, Somali, and Hmong.

EPA sent a letter to the owners of the five properties included in this partial deletion on August 7, 2020. The letters included each property's arsenic sampling results and notified the property owners that the concentrations of arsenic detected at their property was considered safe for all uses, including gardening and children playing, in any area of the yard. The letters informed the property owners that the levels of arsenic detected at their properties were within the normal range of background concentrations of arsenic for the area and that a soil cleanup would not be required. The letters also provided the property owners with the EPA project manager's contact information in case there were any questions.

EPA will publish a notice of availability of this NOIPD and the 30-day public comment period in the Minneapolis Star Tribune concurrent with the publication of the NOIPD in the *Federal Register* to satisfy public participation procedures required by Section 300.425(e)(4) of the NCP. EPA will also issue a press release announcing the proposed partial deletion and comment period. EPA expects to complete these activities in May 2021.

The documents that EPA relied on for this Justification for the Partial Deletion report and the deletion of these five properties from the NPL are available for review in the partial deletion docket. (See Partial Deletion Docket Reports Index in Appendix A). The partial deletion docket and copies of the reports in the docket are available to the public online at <https://www.regulations.gov> and at EPA's webpage for the South Minn. Site at www.epa.gov/superfund/south-minneapolis-soil. The docket also includes information about the 2019 partial Site deletion.

Site Background and History

Location/Project Organization

The South Minn. Site (MND 000 509 136) is located in Minneapolis, Hennepin County, Minnesota, approximately two miles southeast of downtown Minneapolis. The Site included approximately 3,632 properties located on about 1,400 acres within an approximate three-quarter mile radius of the CMC Heartland Lite Yard State Superfund Cleanup Site (CMC Site), the primary source of the contamination at the South Minn. Site. The South Minn. Site boundary was based on air dispersion modeling which showed the potential area of arsenic deposition from past operations at the CMC Site (Figure 2).

The South Minn. Site is in a largely residential area interspersed with commercial and industrial properties, municipal properties including parks and schools, and a cemetery (Figure 3). Most of the homes were built during the early 1900s through the 1930s. A typical residential block contains approximately 30 properties with an average lot size of approximately 5,500 square feet (0.1 acre). The current land uses in the Site area have generally been in place for some time and are expected to continue. Land use is controlled by the City of Minneapolis's enforced zoning program.

EPA deleted the majority of the South Minn. Site that had been cleaned up and/or sampled and cleared for residential use (approximately 3,623 of 3,632 properties) from the NPL in 2019. Nine properties were excluded from the partial deletion because EPA was not given access to conduct sampling and/or remediation at these properties. These nine properties remained on the NPL (Figure 4 and Table 2).

In 2020, EPA obtained access to five of the nine properties to conduct sampling. EPA sampled these five properties in June 2020 and the results indicate that the soil at these properties is below the cleanup criteria and does not require remediation (Table 3). EPA is now proposing to delete these five properties from the NPL. The four remaining South Minn. Site properties that EPA has not yet been able to remediate will remain on the NPL and are not being considered for deletion as part of this action (Table 4).

The CMC Site and the industrial and commercial properties located throughout the South Minn. Site area are not on the NPL and are not part of the South Minn. Site. Because these properties are not part of the South Minn. Site, EPA does not have the authority to conduct any investigation or cleanup activities on these properties as part of the South Minn. Site cleanup.

NPL Listing and 2019 Partial Delisting

EPA proposed the South Minn. Site to the NPL on September 27, 2006 (71 FR 56433) due to the potential health risks posed to residents from exposure to arsenic-contaminated soil. EPA finalized the South Minn. Site on the NPL on September 19, 2007 (72 FR 53463).

EPA proposed to delete approximately 3,623 of the South Minn. Site properties that had been cleaned up and/or cleared for residential use from the NPL on July 31, 2019 (84 FR 37195). Following public comment, the partial deletion of these properties was effective on September 30, 2019 (84 FR 37112). Nine Site properties that still required sampling and/or cleanup remained on the NPL after the 2019 partial deletion (Table 2). Five of these properties were subsequently sampled in June 2020 and cleared for unrestricted residential use (Table 3). EPA is proposing to delete these five properties from the NPL as part of this partial deletion action (Table 1).

History of Contamination and CMC Site Cleanup

The primary source of the contamination at the South Minn. Site is the CMC Site, which is located at the northwest corner of Hiawatha Avenue and 28th Street in Minneapolis. Past operations at the CMC Site contaminated the South Minn. Site with arsenic. The CMC Site was cleaned up under MDA's State Superfund Cleanup Program in 2004-2005 and redeveloped into a 60,000 square foot light industrial building called the Hiawatha Business Center.

The CMC Site property was owned by the Chicago, Milwaukee, St. Paul and Pacific Railroad Company (Milwaukee Railroad) beginning in 1880. From 1938 to 1969, Reade Manufacturing Company (Reade) leased the property from the Milwaukee Railroad. From 1938 to 1963, Reade blended, stored and distributed arsenic herbicides and pesticides at the CMC Site. During the 1940s, Reade also produced an arsenic-based grasshopper insecticide. As part of its operations, Reade regularly unloaded arsenic trioxide from railroad hopper cars onto an open conveyor belt. This caused powdered arsenic trioxide to be released into the air and onto the CMC Site property.

From 1963 to 1968, U.S. Borax subleased the CMC Site property from Reade. U.S. Borax manufactured, shipped and stored borate-based herbicides. U.S. Borax did not receive new shipments of powdered arsenic trioxide, however, its operations at the CMC Site disturbed and dispersed the arsenic contamination that was already present at the property from Reade's operations.

In 1968, a storage tank containing liquid sodium arsenite (NaAsO_2) ruptured at the CMC Site. This released approximately 3,000 gallons of liquid sodium arsenite from a 25,000-gallon storage tank onto an area of approximately 1,000 square meters. U.S. Borax covered the spill with approximately 6 inches of sand.

After 1968, Rollins Oil Company and then Bituminous Roadways, an asphalt road construction company, occupied the CMC Site. By 1996, after the arsenic contamination was discovered at the CMC Site, Bituminous Roadways placed one to two feet of crushed asphalt over the CMC Site property to minimize human exposure to surface soil and to keep additional dust from blowing off the property.

The Minnesota Department of Transportation (MnDOT) discovered the arsenic contamination at the CMC Site in 1994 when investigating the Hiawatha Avenue corridor for reconstruction. The MnDOT collected soil samples from the easternmost part of the CMC Site and detected organochlorine pesticides and elevated levels of arsenic in some of the soil borings.

In 1996, CMC Heartland Partners, the CMC Site property owner at the time, began investigating the CMC Site under the oversight of the MDA's Agricultural Voluntary Investigation and Cleanup Program. Later, the State of Minnesota added the CMC Site to the Minnesota Permanent List of Priorities, a list of sites eligible for cleanup under Minnesota's State Superfund Program. In 2003, the MDA formally requested U.S. Borax and CMC Heartland Partners to investigate and cleanup the CMC Site.

U.S. Borax's and CMC Heartland Partner's investigations detected arsenic in surface soil at the CMC Site at concentrations as high as 5,000 milligrams per kilogram (mg/kg). Groundwater below the CMC Site contained arsenic concentrations as high as 320,000 micrograms per liter (µg/l). The groundwater contamination extended approximately 1,800 feet west-southwest of the CMC Site.

U.S. Borax and CMC Heartland Partners cleaned up the CMC Site from 2004 to 2005 under the oversight of MDA's Superfund Program. The cleanup included the excavation, stabilization and off-site disposal of contaminated soil and debris from the property and institutional controls to restrict access to residual soil and groundwater contamination remaining at and downgradient of the CMC Site.

There are no private drinking water wells at the CMC Site or within the South Minn. Site area. The City of Minneapolis supplies all drinking water to the area from the Mississippi River. The City of Minneapolis, Minnesota Code of Ordinances Chapter 9, Section 1 requires that all properties within the city connect to the municipal water supply.

The MDH established a Special Well Construction Area (SWCA) to address the arsenic plume from the CMC Site in 2005. The SWCA applies to the construction, repair, and sealing of all wells and will remain in effect until further notice. The SWCA includes the area bounded by East 26th Street on the north, 26th Avenue on the east, Lake Street on the south, and Bloomington Avenue South on the west, within the City of Minneapolis. A copy of MDH's 2005 memorandum concerning the SWCA is available in the Docket.

2800 Hiawatha LLC acquired the CMC Site in 2005. 2800 Hiawatha LLC conducted an additional soil cleanup at the CMC Site under MDA's voluntary cleanup program, now called the AgVIC program, and redeveloped the property into the Hiawatha Business Center. 2800 Hiawatha LLC also monitored the arsenic concentrations in groundwater at the CMC Site. In 2018 the CMC Site was sold to Schadegg Development LLC. The MDA is working with Rio Tinto Canada, Inc., a successor to U.S. Borax, on continued investigation of the groundwater at the CMC Site.

Initial Response Actions at South Minn. Site

Due to the elevated concentrations of arsenic at the CMC Site, in 1999, the MDH recommended that soil sampling be performed in residential areas near the CMC Site (part of the area that would come to be known as the South Minn. Site). The prevailing summer winds were determined to be from the southeast toward the northwest; therefore, the residential area located directly downwind of the CMC Site was the focus of this initial sampling effort.

MDA in conjunction with MDH, conducted the initial, limited sampling event at residential properties to the west (crosswind) and northwest (downwind) of the CMC Site in 2001. The results

of the 2001 MDA sampling detected arsenic in soil at six of the 11 downwind properties sampled at concentrations as high as 24 to 210 milligrams per kilogram (mg/kg).

Based on the 2001 sampling event and neighborhood concerns, MDA and MDH determined that additional sampling to the northwest and west of the CMC Site was warranted. MDA conducted a second study in 2003. MDA developed the sampling design for the 2003 study to obtain statistically valid data using a grid overlain on the Phillips neighborhood with the majority of samples falling on residential properties.

MDA's contractor collected soil samples from a total of 242 locations and 167 properties during the 2003 sampling. MDA's contractor additionally collected 12 duplicate samples for quality control and 23 co-located samples to give an indication of spatial variability.

Thirty-five samples collected from 27 of the properties contained arsenic at concentrations greater than or equal to the Minnesota Pollution Control Agency (MPCA) unrestricted land use standard of 10 mg/kg. In 11 of the samples, the concentration of arsenic was greater than 100 mg/kg. Four of those samples contained arsenic at concentrations exceeding 200 mg/kg.

EPA Emergency Removal Actions

In 2004, MDA requested EPA's assistance to determine whether a time critical removal action was warranted to address the arsenic concentrations detected in the residential soil. EPA agreed to perform an additional investigation. EPA collected samples from 192 properties, primarily in the vicinity of the properties previously identified as hotspots, from a depth of zero to three inches below ground surface.

EPA consulted with the Agency for Toxic Substances and Disease Registry (ATSDR) and determined that arsenic concentrations equal to or greater than 95 mg/kg in surface soil posed an acute risk to human health and warranted an emergency removal action. Based on the results of multiple sampling events conducted in the Phillips neighborhood (the vicinity of East 26th Street and Bloomington Avenue), EPA identified 30 properties that exceeded the 95 mg/kg criterion.

EPA conducted a removal action in 2004 to mitigate the threat. EPA excavated the top 12 inches of soil from the yards and the top 18 inches of soil from play areas and gardens at the 30 identified properties. EPA removed an average of 106 cubic yards of arsenic-contaminated soil from each excavated property. EPA also collected post-excavation soil samples from each property to document the residual arsenic concentrations remaining in each yard after excavation. EPA backfilled each property to pre-existing grade with clean topsoil and seeded the excavated areas with grass seed.

In 2005, EPA sampled 540 additional properties in the Phillips neighborhood to ensure that 100 percent of the residential properties most likely to be impacted by wind deposition from the CMC Site were evaluated for potential impacts. EPA also sampled another 60 properties to identify whether areas in other wind directions surrounding the CMC Site were impacted.

EPA's sampling effort identified another 31 properties with arsenic concentrations above 95 mg/kg. EPA began a second removal action in 2005. During the 2005 removal action, EPA excavated and disposed of arsenic-contaminated soil consistent with the 2004 removal activities.

Remedial Investigation/Feasibility Study (RI/FS)

Remedial Investigation (RI)

EPA conducted a Remedial Investigation (RI) at the South Minn. Site from 2005 to 2007. The objective of the RI was to address the remaining arsenic contamination at the Site and have 100 percent of the residential properties, schools and parks within the modeled boundaries of the South Minn. Site sampled for arsenic. EPA also collected soil samples for arsenic analysis from community gardens, playgrounds associated with church schools and a cemetery.

EPA developed the boundary for the South Minn. Site using the Industrial Source Complex 3 air dispersion model, information from past operations at the CMC Site, and wind-rose data for Minneapolis to predict where arsenic may have been deposited in soil at concentrations greater than 10 mg/kg. EPA made slight adjustments to the modeled boundary so that an entire block would be sampled (Figure 2).

EPA did not sample previously sampled properties during the RI unless only one discrete sample had been collected from that property. The RI also did not address groundwater. Groundwater was previously investigated and is being addressed as part of the CMC Site cleanup (see History of Contamination and CMC Site Cleanup section).

EPA conducted the RI surface soil sampling in 2006 (Figure 5). EPA conducted the sampling by collecting five samples from separate areas of each property and combining them into one composite sample for analysis. EPA collected the soil samples from the top three inches of soil below any grass if present.

EPA collected the soil samples from both the front yard and the back yard wherever possible. EPA also collected samples from side yards and gardens depending on their size. For larger properties such as parks and schools, EPA divided the property into sub-areas and collected composite samples from each sub-area.

The RI also included subsurface soil sampling at 20 soil boring locations throughout the South Minn. Site (Figure 6). The subsurface soil borings were located to provide data to characterize the vertical distribution of arsenic at properties with varying arsenic concentrations. EPA collected the subsurface soil samples from each boring at one-foot intervals from zero to five feet, and at a depth of ten feet.

EPA evaluated the 2006 soil sampling results against the previous soil sampling results collected from 2001 to 2005. EPA determined that the data were compatible and could be evaluated as a single data set for the RI. The total number of properties sampled for arsenic from 2001 to 2006 was 3,578. One-hundred and thirty-five properties within the South Minn. Site remained unsampled because the property owners did not allow EPA access. EPA also conducted a statistical evaluation and determined that the background concentration of arsenic in surface soil from natural and man-made sources within the Site area was 16 mg/kg.

The results of the surface and subsurface soil investigations at the South Minn. Site indicated that arsenic was present in the soil at varying concentrations across the area (Figure 7). The arsenic concentrations ranged from background concentrations up to 2,880 mg/kg. The vertical extent of arsenic concentrations above background appeared to be no greater than three feet below ground

surface and, in most cases, was within the upper two feet of soil. This indicated that the mobility of the arsenic in the soil was limited.

Of the 3,578 properties sampled, the majority of residential properties (2,600 properties) had arsenic concentrations below MPCA's unrestricted land use standard of 10 mg/kg. Seven-hundred and eighty-one residential properties contained concentrations of arsenic below EPA's removal action level for arsenic of 95 mg/kg, but above MPCA's unrestricted land use standard of 10 mg/kg. One-hundred and ninety-seven residential properties had arsenic concentrations in soil above EPA's removal action level of 95 mg/kg.

The properties with arsenic concentrations above EPA's removal action level of 95 mg/kg were scattered throughout the South Minn. Site area. EPA addressed these properties through removal actions EPA completed by 2008. All sample results from the schools, parks, playgrounds and the cemetery were within background levels and these properties did not require remediation.

Risk Assessment

EPA's RI included a Human Health Risk Assessment (HHRA) to evaluate the risks to human health from the arsenic contamination detected at the South Minn. Site. As part of the HHRA, EPA calculated potential risks due to varying concentrations of arsenic at residences with and without vegetable gardens and for construction workers.

Using reasonable maximum exposure assumptions, EPA determined that an arsenic concentration of 25 mg/kg or less in soil is protective of adults and children residing within the South Minn. Site area for up to 50 years at homes with vegetable gardens. This concentration of arsenic corresponds to a cancer risk of 1×10^{-4} and a noncancer hazard of 1, which are within EPA's acceptable risk range. Approximately 486 homes exceeded the 25 mg/kg residential threshold. The HHRA determined that arsenic concentrations of 261 mg/kg or less are protective of construction workers, which is higher than the 25 mg/kg concentration of arsenic determined to be protective of residents.

The HHRA estimated that most of the risk posed by the soil is due to the incidental ingestion of soil and dust (approximately 70 percent), and to eating garden vegetables (approximately 25 percent). A small proportion of the estimated risk (approximately 4 percent) is from dermal contact with soil, and a very small relative proportion of potential risk (less than 0.05 percent) is from the inhalation of dust. The calculated risks to residents and construction workers are likely overestimated due to the uncertainties and conservative assumptions required throughout the HHRA process.

The RI included a Screening Level Ecological Risk Assessment (SLERA) to evaluate potential risks to ecological receptors from the arsenic-contaminated soil at the South Minn. Site. The SLERA concluded that no population-level ecological risks were expected from the arsenic contamination. In addition, EPA's Ecological Soil Screening Levels for arsenic of 43 mg/kg for avian wildlife and 46 mg/kg for mammalian wildlife were higher than the 25 mg/kg concentration of arsenic determined to be protective of people. There are no water bodies or wetlands within the South Minn. Site.

Feasibility Study (FS)

EPA conducted a Feasibility Study (FS) to develop and evaluate cleanup alternatives to address the unacceptable levels of arsenic found at the South Minn. Site. The FS evaluated six cleanup

alternatives: (1) no action; (2) remove soil with arsenic levels above 25 mg/kg to a depth of 12 inches (18 inches in garden areas); (3) remove soil with arsenic levels above 16 mg/kg to a depth of 12 inches (18 inches in garden areas); (4) remove soil with arsenic levels above 25 mg/kg to a depth of 12 inches (18 inches in garden areas) and remove soil deeper than 12 inches with arsenic levels above 95 mg/kg; (5) remove all soil with arsenic levels above 25 mg/kg; and (6) remove all soil with arsenic levels above 16 mg/kg. For all cleanup alternatives except the no action alternative, the excavated soil would be disposed of at landfill.

Remedy Selection

2008 Record of Decision (ROD)

EPA selected a cleanup remedy for the South Minn. Site in a 2008 Record of Decision (ROD). EPA's remedial action objectives for the arsenic-contaminated soil at the South Minn. Site are to control the concentrations of arsenic in soil to limit residential contact with arsenic and minimize the potential for dermal contact, ingestion and inhalation exposures.

The major components of EPA's selected cleanup remedy for the South Minn. Site in the ROD, as modified by a slight, non-significant change documented in a September 23, 2009 EPA memorandum include:

- (1) Inventory and document the existing conditions at the areas requiring cleanup;
- (2) Excavate soil to a depth of 12 inches below grade in yards or to a depth of 18 inches below grade in garden areas that have a total arsenic concentration above 25 mg/kg;
- (3) Post-excavation soil sampling to document arsenic concentrations in the remaining soil;
- (4) If the samples at the base of the excavation exceed the deep soil arsenic cleanup standard of 95 mg/kg, then excavate soil until the deep soil cleanup standard is met or to a maximum depth of ten feet;
- (5) If the samples at the base of the excavation exceed the deep soil arsenic cleanup standard, place a permanent, permeable highly-visible marker layer in the bottom of the excavation to provide a visual barrier over soils that were not excavated during the remedial actions and may contain residual contamination above the deep soil cleanup standard;
- (6) Backfill excavations with clean fill and topsoil to the original grade;
- (7) Restore the excavated areas (i.e., restoring vegetation by seeding the final graded surface and planting replacement plants identified prior to excavation during the inventory);
- (8) Collect samples from excavated soil to confirm the soil is not characteristically hazardous and may be transported to and disposed of at a permitted and compliant Resource Conservation Recovery Act (RCRA) Subtitle D landfill;

- (9) If soil is found to be characteristically hazardous, the soil may be stabilized and solidified at a centralized off-site treatment area and disposed of a RCRA Subtitle D landfill, or not stabilized and disposed of as a hazardous waste at a RCRA Subtitle C landfill; and
- (10) Place institutional controls (ICs) on properties where the arsenic cleanup standard was not met at the bottom of the excavation in the form of use-restrictions to define areas of remaining concern or zoning and permit requirements to limit exposure.

The selected remedy applies only to the residential and residential-type properties at the South Minn. Site. The CMC Site and the commercial and industrial properties in the area are not on the NPL and are not part of the South Minn. Site. Also, the commercial and industrial properties in the area typically have little open ground and are mainly covered by asphalt, concrete or buildings which limits the potential for soil exposure.

Cleanup Standards

EPA's selected cleanup standards for arsenic at the South Minn. Site are: (1) 25 mg/kg for soil located zero to 12 inches below grade (or to 18 inches below grade in gardens), and (2) 95 mg/kg for soil down to a depth of 10 feet below grade. These concentrations of arsenic correspond to a cancer risk of 1×10^{-4} and a noncancer hazard of 1 for residential exposure to surface soil and to a cancer risk of 2×10^{-5} and a noncancer hazard of 0.4 for construction worker exposure to subsurface soil and are within EPA's acceptable risk range.

The subsurface soil cleanup standard of 95 mg/kg corresponds to a cancer risk of 4×10^{-4} and a noncancer hazard of 4 to residents. These calculated risks are slightly above EPA's acceptable risk range. However, residential exposure to deep, subsurface concentrations of arsenic is only expected in rare circumstances and for short periods of time, and less frequently than a construction worker. Any risks from exposure to arsenic contamination in deep soil would also be mitigated through the inevitable mixing of the deep soil with the clean, shallow soil above, resulting in lower exposure point concentrations. Therefore, EPA considers the 95 mg/kg acute exposure-based removal action level provided by ATSDR to be appropriate for subsurface soil and protective over the long-term.

As indicated in the HHRA, most of the risk at the South Minn. Site was due to the incidental ingestion of soil and dust by residents and to residents eating garden vegetables. A small proportion of the estimated risk is from dermal contact with soil, and a very small relative proportion of potential risk is due to inhalation of dust. EPA's remedial action objectives for the South Minn. Site take into consideration that control of the soil concentrations of arsenic will address each of the exposure pathways contributing to the overall risk.

Remedy Implementation

Remedial Design (RD)/Remedial Action (RA)

EPA conducted the Remedial Design (RD) phase of the South Minn. Site cleanup from 2008 to 2009. EPA conducted the majority of the Remedial Action (RA) construction work for the South Minn. Site from 2009 to 2011. In 2016 and 2018, EPA conducted additional remedial activities and/or sampling at properties where EPA was not previously able to obtain the owners' consent for access. EPA deleted all properties that had been cleaned up and/or sampled and cleared for residential use from the NPL in 2019 (3,623 out of 3,632 properties). Additional information about the cleanup of these properties can be found in the Response Actions section of the 2019 *Federal Register* Notice of Partial Deletion (84 FR 37112) which is available in the partial deletion docket.

2020 Soil Sampling

Nine properties were excluded from the 2019 partial deletion because the property owners did not allow EPA to conduct the sampling and/or cleanup at these properties (Table 2). In 2020, EPA obtained access to the five of these nine properties where it had not been able to conduct soil sampling for arsenic. EPA sampled these five properties on June 23 and 24, 2020. The sampling was conducted in accordance with the Sampling and Analysis Plan, Revision 1 dated November 11, 2019. The sampling results indicate that the soil at these properties is below the residential cleanup criteria for arsenic and does not require remediation (Table 3).

The June 2020 soil sampling was conducted using the same five-point composite soil sampling strategy used during previous Site investigations. At three of the five properties proposed for deletion, EPA collected one composite soil sample from the front yard and one composite soil sample from the back yard of each property for laboratory analysis (two composite samples per property). Each composite soil sample (front yard or back yard) was composed of equal volumes of soil collected from five locations throughout each "front" or "back" yard. The five soil samples used for the composite sample were collected from the center of each front or back yard and then halfway between the center and each corner of that yard. Each of the five soil samples used for each composite sample were collected from the top three inches of soil, below grass if present. One of the five properties only needed to have samples collected from the back yard during the 2020 sampling event because the front yard was sampled in 2005 and 2006 and was below the cleanup criteria for arsenic.

The fifth property that EPA sampled in 2020 and is proposing for deletion is a residential property that is now used as a community garden. At this property, EPA collected four, five-point composite samples from the east side of the property and four, five-point composite samples from the west side of the property (a total of eight composite samples collected at the property). The four, five-point composite samples were collected from each side of the property (east and west side) using the same five-point compositing strategy described above at the following depth intervals consistent with a gardening exposure scenario: zero to six inches below ground surface (bgs), six to 12 inches bgs, 12 to 18 inches bgs, and 18 to 24 inches bgs.

The June 2020 soil samples were analyzed for arsenic by ALS Environmental and validated by EPA's contractor, Tetra-Tech in an August 4, 2020 Data Validation Report. No rejection or qualification of the sampling results was required. The data show that the concentrations of arsenic in the soil samples collected from these five properties are below the 25 mg/kg residential cleanup criteria for

arsenic in soil and these properties do not require any remediation (Table 3). EPA is proposing to delete these properties from the NPL because all necessary response actions have been implemented for these five properties and no further cleanup actions are necessary. The four remaining South Minn. Site properties that EPA has not yet been able to remediate will remain on the NPL and are not being considered for deletion as part of this action (Table 4).

Final Reporting

EPA sent a letter to the owners of the five properties included in this partial deletion on August 7, 2020. The letters included each property's sampling results and notified the property owners that the concentrations of arsenic detected at their property was within the normal range of background concentrations of arsenic for the area. The letters informed each property owner that the concentrations of arsenic detected at their property was considered safe for all uses, including gardening and children playing, in any area of the yard and that a soil cleanup would not be required.

Operation and Maintenance (O&M)/Institutional Controls (ICs)

No operation, maintenance, monitoring, or institutional controls (ICs) is required for the five properties included in this partial deletion. The June 2020 sampling indicates that these properties meet the cleanup standards for soil in the ROD and are acceptable for unrestricted use/unlimited exposure (UU/UE). No cleanup or follow up activities are required.

Demonstration of Cleanup Activity Quality Assurance/Quality Control (QA/QC)

EPA's contractor, Tetra Tech, conducted the June 23-24, 2020 soil sampling in accordance with the November 11, 2019 Sampling and Analysis Plan (SAP). The samples were analyzed by ALS Environmental and validated by Tetra Tech in accordance with Tetra Tech's August 2019 Quality Assurance Project Plan, Superfund Technical Assessment and Response Team (START) EPA Region 5, Revision 1 and EPA's National Functional Guidelines for Inorganic Superfund Methods Data Review (January 2017). Tetra Tech followed all Standard Operating Procedures outlined in the SAP and collected appropriate quality assurance/quality control (QA/QC) samples including field duplicate samples and matrix spike/matrix spike duplicate samples. Tetra Tech documented the sample collection activities in field logbooks which are available in the partial deletion docket. The data validation report indicates that no rejection or qualification of the sample results is needed and that the soil data from the five properties proposed for deletion is acceptable for use.

Five-Year Reviews (FYRs)

The ROD requires EPA to conduct statutory five-year reviews (FYRs) for the South Minn. Site if cleanup standards are still exceeded at the maximum practicable excavation depth at a property, resulting in hazardous substances, pollutants or contaminants remaining above levels that allow for UU/UE. EPA conducted FYRs of the Site in 2014 and 2019.

FYRs are no longer required for the five properties included in this partial deletion or for the properties deleted from the Site in 2019 because these properties have been remediated and/or

sampled and cleared for UU/UE. EPA will continue to conduct statutory FYRs of the remaining four properties that are part of the South Minn. Site until these properties are remediated and cleared for UU/UE.

The next FYR for the Site is due in May 2024.


Determination that OU1 Meets the Criteria for Deletion

The five properties listed in Table 1 of the South Minn. Site meet all site completion requirements specified in Office of Solid Waste and Emergency Response (OSWER) Directive 9320.2-22, Close Out Procedures for National Priorities List Sites. All cleanup actions and remedial action objectives for these properties set forth in the 2008 ROD have been implemented for all pathways of exposure. The soil sampling data collected from these properties indicates that these properties are acceptable for UU/UE. The selected remedial action, RAOs, and cleanup levels for these properties are consistent with EPA policy and guidance.

The response actions taken these five properties are protective of human health and the environment, therefore, the taking of additional remedial measures at these properties is not appropriate. No further Superfund response is necessary for these five properties. Section 300.425(e) of the NCP states that a Superfund site or a portion of a site may be deleted from the NPL when no further response action is appropriate. EPA, in consultation with the State of Minnesota, through the MDA, has determined that all required response actions have been implemented for these five properties and that no further response action is appropriate. The four properties that still require remediation are not included in this partial deletion action and will remain on the NPL (Table 4). MDA sent EPA a letter concurring with EPA's proposed deletion of these five properties from the NPL on January 8, 2021.

Approval

Approved by:

 Digitally signed by
DOUGLAS BALLOTTI
Date: 2021.02.09
11:43:54 -06'00'

Douglas Ballotti, Director
Superfund & Emergency Management Division
U.S. EPA, Region 5

Figure 1: Five Properties Proposed for Partial Deletion (2021)

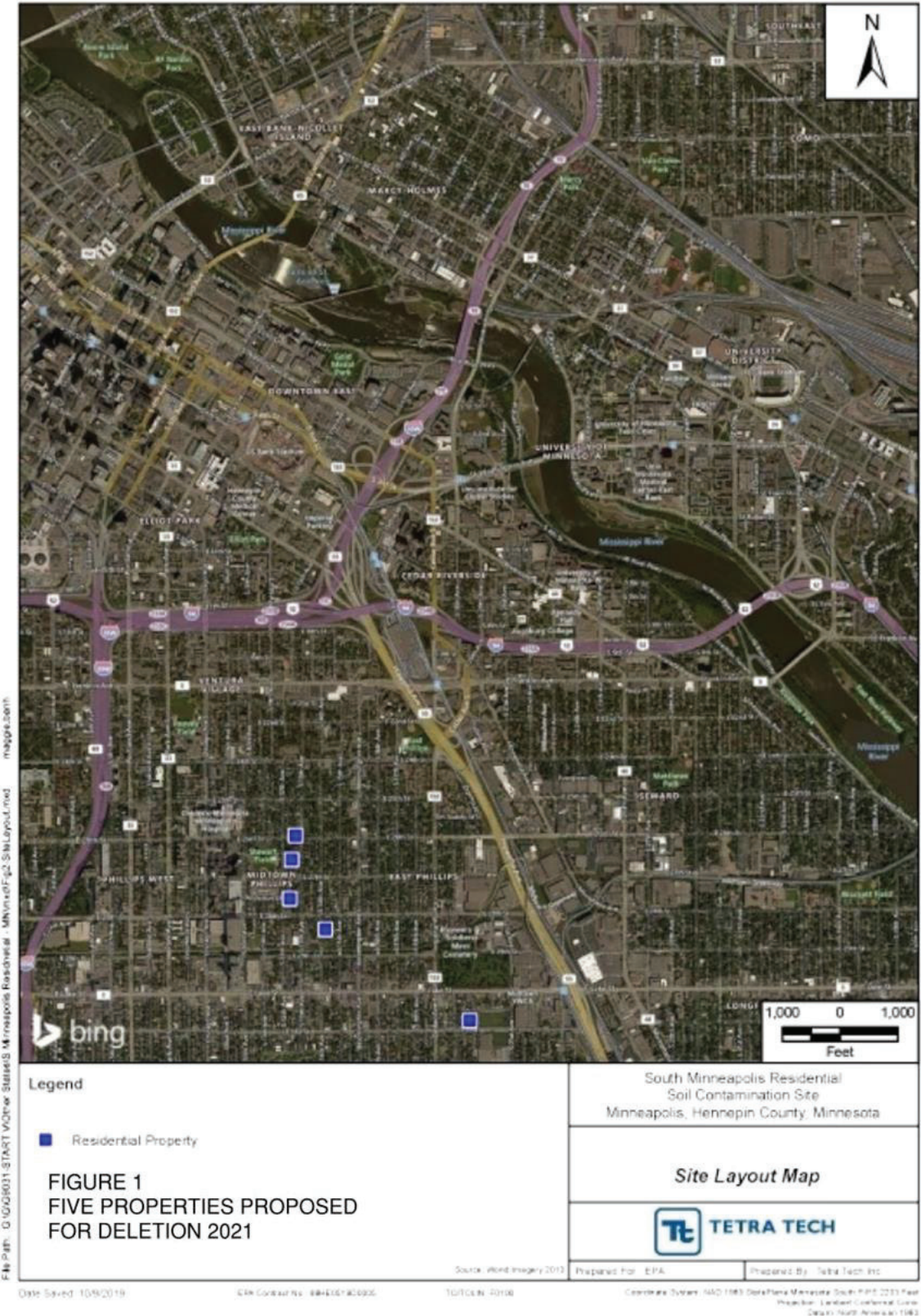
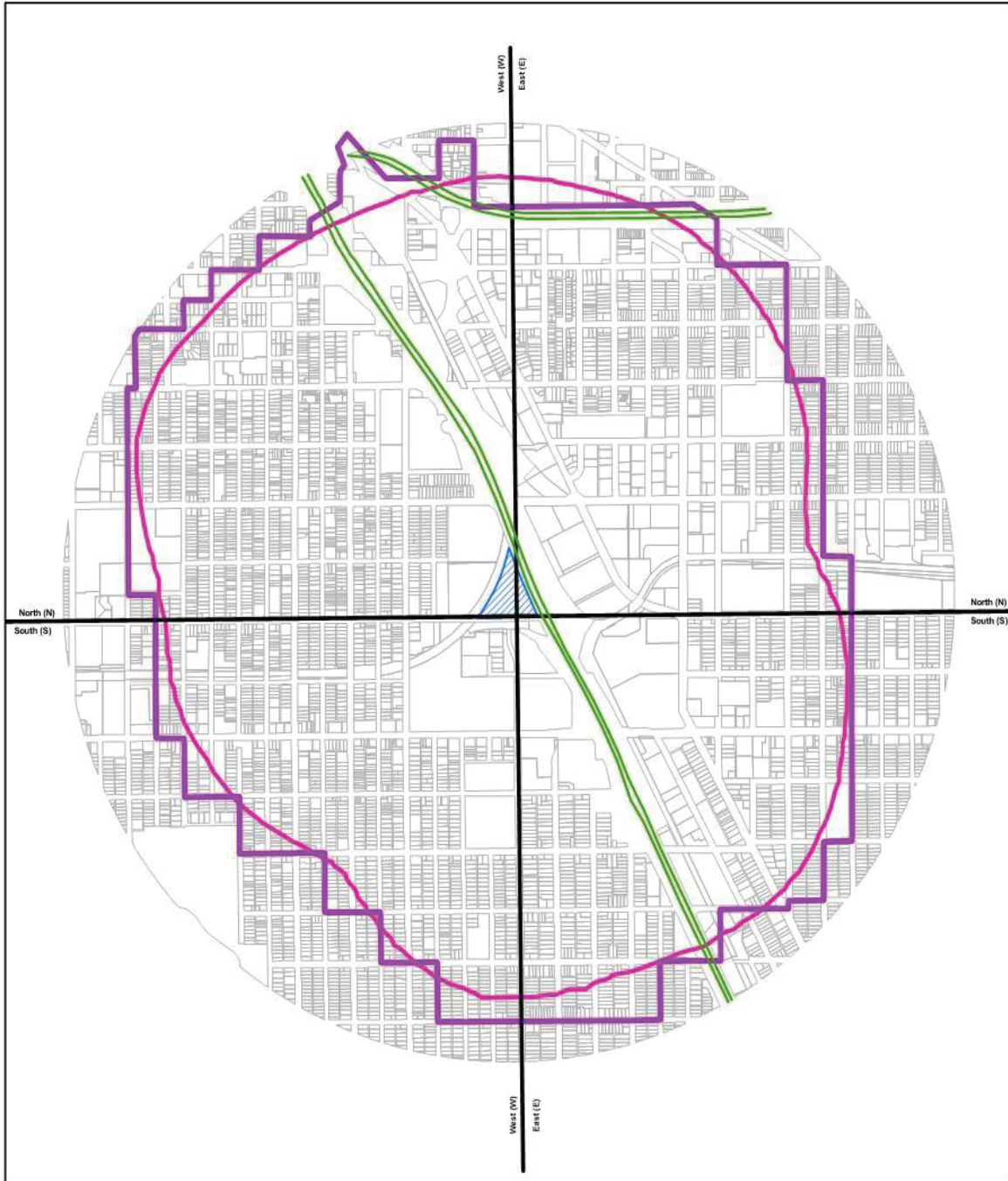


Figure 2: Site Area/Air Dispersion Modelling



Legend

Arsenic Dispersion Boundary

- USEPA Arsenic Dispersion Boundary
- Modified Boundary to Include Full Blocks
- Property Boundaries
- CMC Heartland Lite Yard

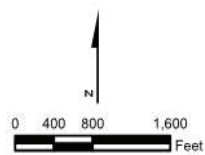
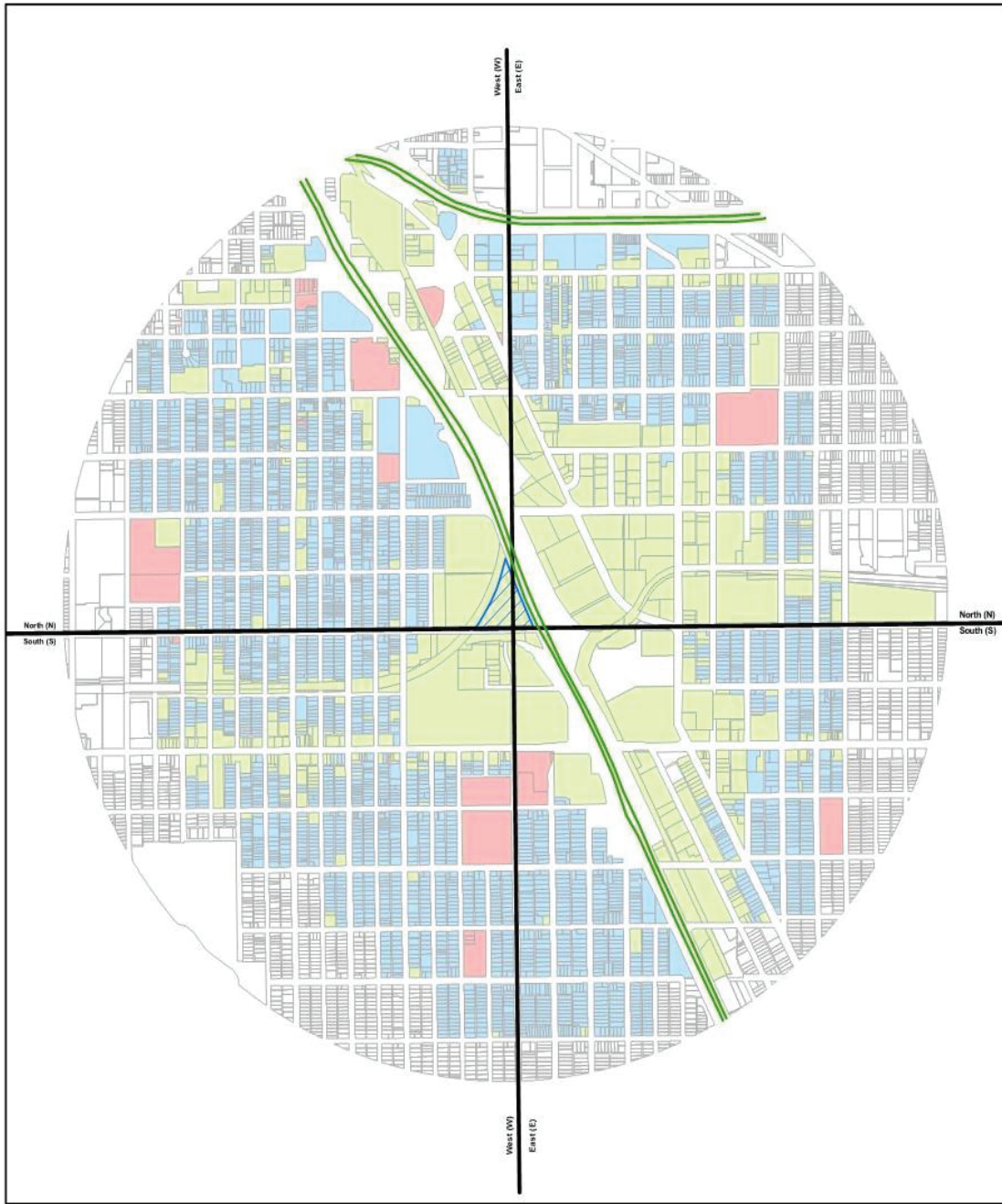


Figure 2
Air Dispersion Model Boundary
South Minneapolis Site
Minneapolis, MN



MKE \\WAVE\PROJ\EPA\336752-SOUTH_MINNEAPOLIS\MXDS\FINAL_REPORT\FIG04-1_AIR_DISPERSION_MODEL_BOUNDARY.MXD 8/31/2007 09:03:18

Figure 3: Property Use



Legend
Property Use

- Residential Properties
- Commercial / Industrial Properties
- Schools and Parks

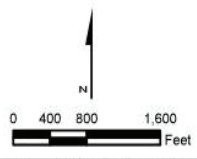


Figure 3
Property Use
South Minneapolis Site
Minneapolis, MN



Figure 4: Nine Properties Not Included in 2019 Partial Deletion

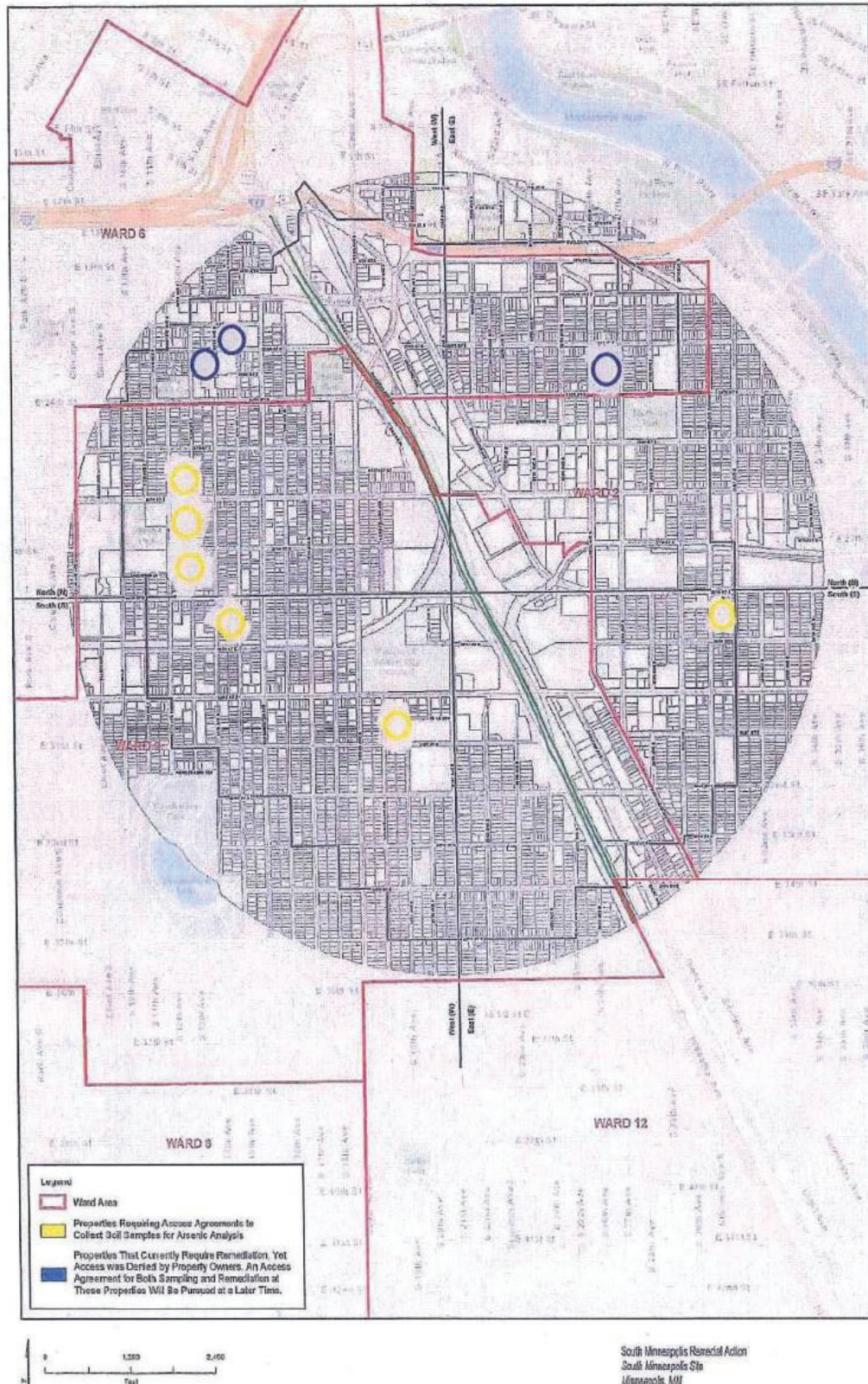


Figure 5: Surface Soil Sampling Locations

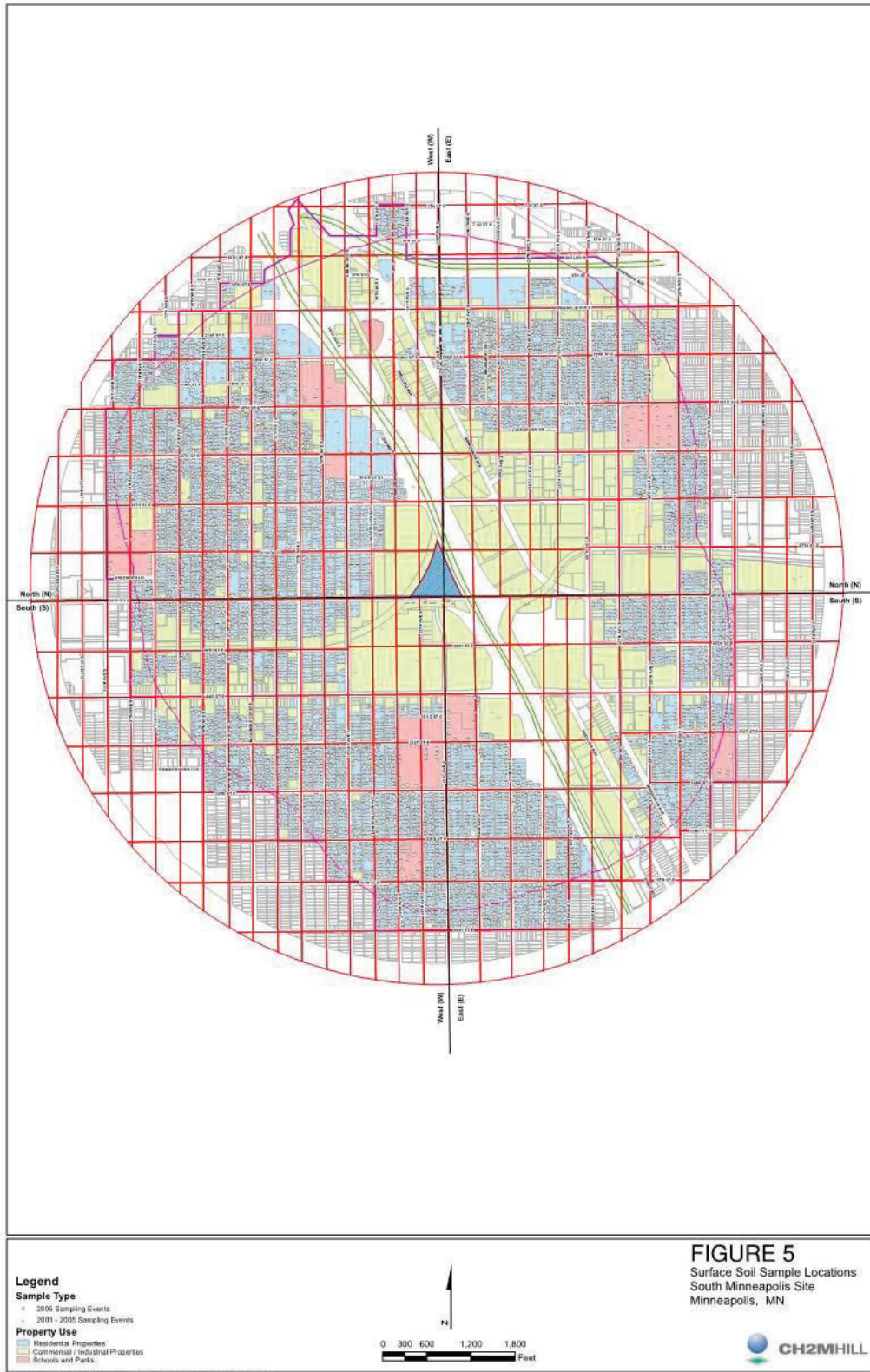


Figure 6: Subsurface Soil Sampling Locations

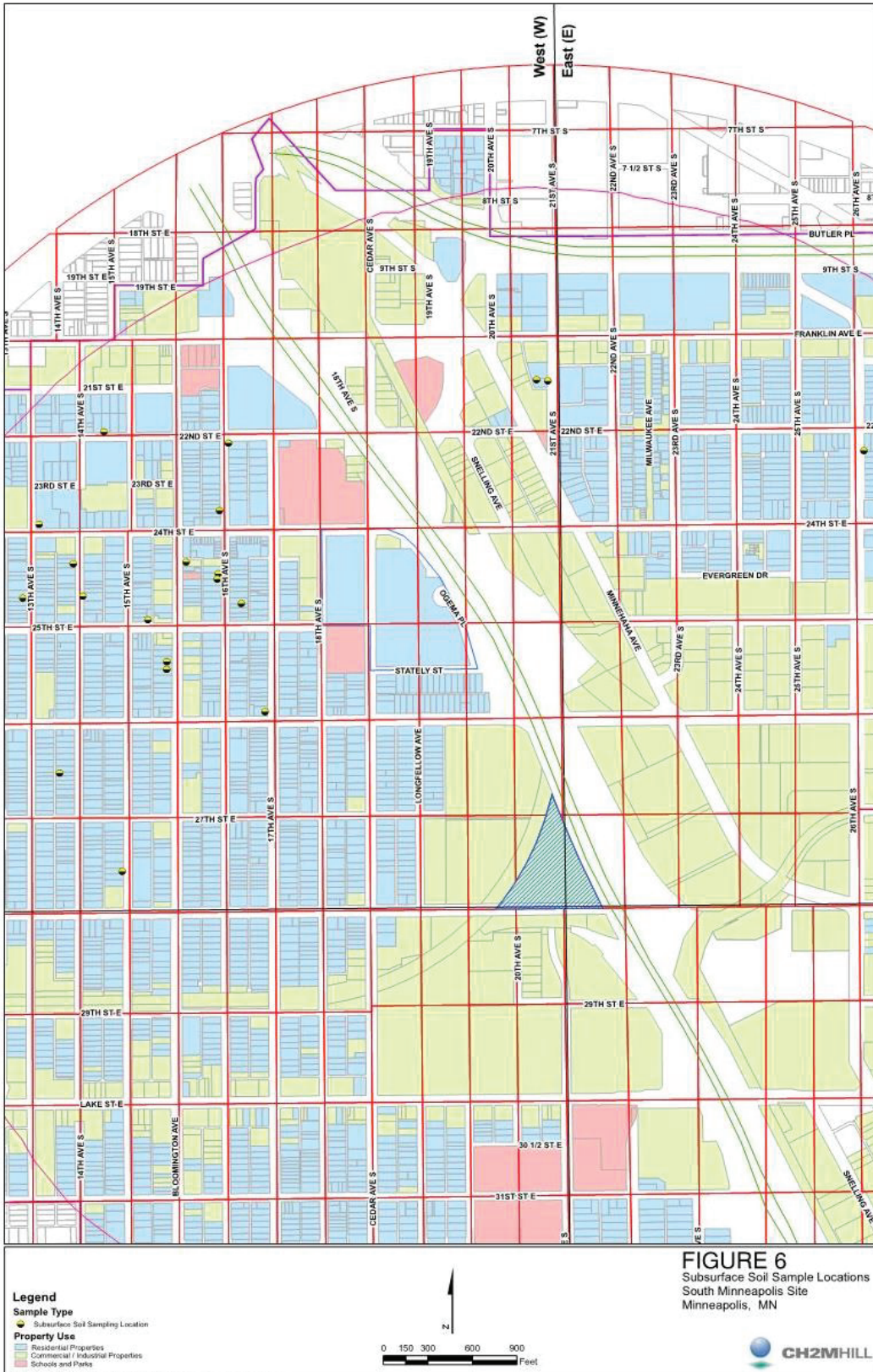


Figure 7: Arsenic Concentrations in Surface Soil

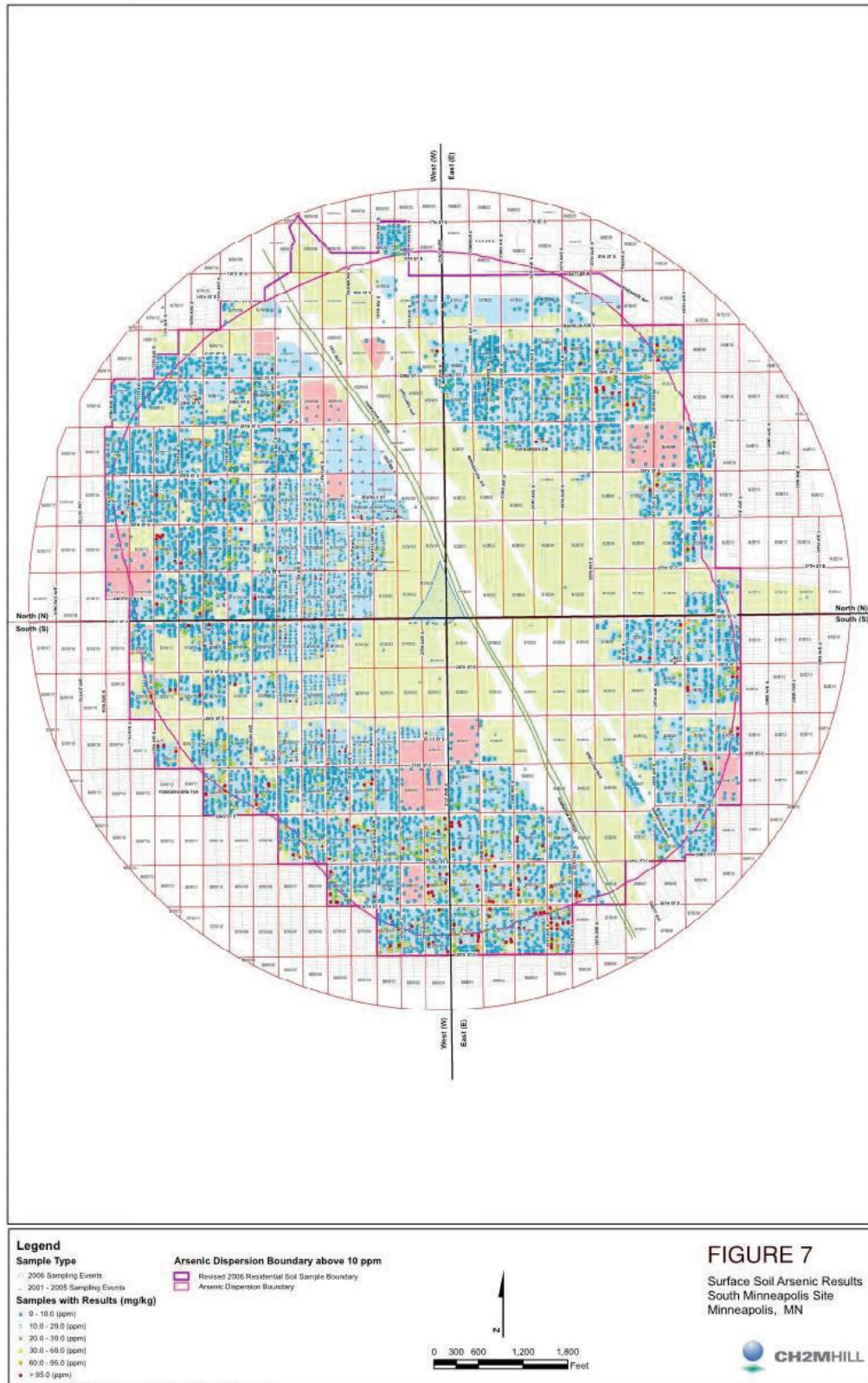


Table 1: Five Properties Proposed for Deletion 2021

| South Minneapolis Residential Area Soil Contamination Site | |
|---|--|
| Tax Property Identification Number (PIN) | Notes |
| 35-029-24-13-0258 East 26 th Street | Sampled June 2020; Below Cleanup Criteria for Arsenic |
| 35-029-24-42-0169 12 th Avenue South | Sampled June 2020; Below Cleanup Criteria for Arsenic |
| 35-029-24-42-0248 12 th Avenue South | Sampled June 2020; Below Cleanup Criteria for Arsenic |
| 35-029-24-43-0069 14 th Avenue South | Sampled June 2020; Below Cleanup Criteria for Arsenic |
| 01-028-24-22-0064 19 th Avenue South | Sampled August 2005, June 2006, and June 2020; Below Cleanup Criteria for Arsenic |

Table 2: Properties NOT Included in 2019 Partial Deletion and Current Status (2021)

| South Minneapolis Residential Area Soil Contamination Site | | |
|---|--|--|
| Property Tax PIN | 2019 Status | Current Status (2021) |
| 35-029-24-12-0127 East 23 rd Street | Access not granted, requires remediation. Remain on NPL. | Same |
| 35-029-24-12-0085 East 21 st Street | Access not granted, requires remediation. Remain on NPL. | Same |
| 36-029-24-12-0149 East 22 nd Street | Access not granted, requires remediation. Remain on NPL. | Same |
| 35-029-24-13-0258 East 26 th Street | Access not granted, requires sampling. Remain on NPL. | Sampled in 2020 and below cleanup levels. Propose for deletion. |
| 35-029-24-42-0169 12 th Avenue South | Access not granted, requires sampling. Remain on NPL. | Sampled in 2020 and below cleanup levels. Propose for deletion. |
| 35-029-24-42-0248 12 th Avenue South | Access not granted, requires sampling. Remain on NPL. | Sampled in 2020 and below cleanup levels. Propose for deletion. |
| 36-029-24-44-0028 30 th Avenue South | Access not granted, requires remediation. Remain on NPL. | Access provided, remediation required but delayed until other properties are also ready for remediation. Remain on NPL. |
| 35-029-24-43-0069 14 th Avenue South | Access not granted, requires sampling. Remain on NPL. | Sampled in 2020 and below cleanup levels. Propose for deletion. |
| 01-028-24-22-0064 19 th Avenue South | Access not granted, requires additional sampling. Remain on NPL. | Sampled in 2020 and below cleanup levels. Propose for deletion. |

Table 3: Arsenic Data for Properties Included in 2021 Partial Deletion

| SOUTH MINNEAPOLIS RESIDENTIAL AREA SOIL CONTAMINATION SITE | | | | | | |
|--|--------------|--------------|-----------------------|-------------------------------|--|---------------------------|
| Property Tax PIN | Date Sampled | Area Sampled | Sample Depth (inches) | Arsenic Concentration (mg/kg) | Results Above 25 mg/kg Criteria (Yes/No) | Cleanup Required (Yes/No) |
| 35-029-24-13-0258 East 26 th Street | 6/23/2020 | Front Yard | 0-3 | 4.0 | NO | NO |
| | 6/23/2020 | Back Yard | 0-3 | 5.1 | NO | NO |
| 35-029-24-42-0169 12 th Avenue South | 6/24/2020 | Front Yard | 0-3 | 5.0 | NO | NO |
| | 6/24/2020 | Back Yard | 0-3 | 4.0 | NO | NO |
| 35-029-24-42-0248 12 th Avenue South | 6/24/2020 | East Side | 0-6 | 6.1 | NO | NO |
| | | | 6-12 | 3.7 | NO | NO |
| | | | 12-18 | 3.0 | NO | NO |
| | | | 18-24 | 2.1 | NO | NO |
| | 6/24/2020 | West Side | 0-6 | 3.4 | NO | NO |
| | | | 6-12 | 2.3 | NO | NO |
| | | | 12-18 | 1.5 | NO | NO |
| | | | 18-24 | 0.97 | NO | NO |
| 35-029-24-43-0069 14 th Avenue South | 6/23/2020 | Front Yard | 0-3 | 7.7 | NO | NO |
| | 6/23/2020 | Back Yard | 0-3 | 20 | NO | NO |
| 01-028-24-22-0064 19 th Avenue South | 8/10/2005 | Front Yard | 0-3 | 6.2 | NO | NO |
| | 6/17/2006 | Front Yard | 0-3 | 6.2 | NO | NO |
| | 6/23/2020 | Back Yard | 0-3 | 6.4 | NO | NO |

Table 4: Properties NOT Included in 2021 Partial Deletion

| SOUTH MINNEAPOLIS RESIDENTIAL AREA SOIL CONTAMINATION SITE | |
|---|--|
| Property Tax Identification Number (PIN) | Current Status |
| 35-029-24-12-0127 East 23 rd Street | Access not granted, requires remediation. Remain on NPL. |
| 35-029-24-12-0085 East 21 st Street | Access not granted, requires remediation. Remain on NPL. |
| 36-029-24-12-0149 East 22 nd Street | Access not granted, requires remediation. Remain on NPL. |
| 36-029-24-44-0028 30 th Avenue South | Access granted, requires remediation. Remain on NPL. |

**APPENDIX A: NPL PARTIAL DELETION DOCKET REPORTS
INDEX - SOUTH MINNEAPOLIS RESIDENTIAL AREA SOIL
CONTAMINATION SITE 2021**

DOCKET REPORTS INDEX
PARTIAL NPL DELETION
FIVE RESIDENTIAL PROPERTIES
SOUTH MINNEAPOLIS RESIDENTIAL AREA
SOIL CONTAMINATION SITE - 2021

| Region | Document ID | Title | Document Date | Page Count |
|--------|-------------|---|---------------|------------|
| | | JUSTIFICATION FOR PARTIAL NPL DELETION | (PENDING) | |
| 5 | 2003208 | MPCA LETTER RE: South Minneapolis Residential Soil Contamination Superfund Site, State Concurrence Letter for Partial Delisting, MDA Project Number RWA253129 | 1/8/2021 | 1 |
| 5 | 963256 | [REDACTED] EPA LETTER RE: RESIDENTIAL SOIL SAMPLING RESULTS | 8/7/2020 | 1 |
| 5 | 963257 | [REDACTED] EPA LETTER RE: RESIDENTIAL SOIL SAMPLING RESULTS | 8/7/2020 | 1 |
| 5 | 963258 | [REDACTED] EPA LETTER RE: RESIDENTIAL SOIL SAMPLING RESULTS | 8/7/2020 | 1 |
| 5 | 963259 | [REDACTED] EPA LETTER RE: RESIDENTIAL SOIL SAMPLING RESULTS | 8/7/2020 | 1 |
| 5 | 963260 | REDACTED EPA LETTER RE: RESIDENTIAL SOIL SAMPLING RESULTS, TWELFTH AND THIRTEEN AVENUE BLOCK CLUB COMMUNITY GARDEN | 8/7/2020 | 1 |
| 5 | 2003170 | TETRA TECH - DATA VALIDATION REPORT | 8/4/2020 | 15 |
| 5 | 2003169 | TETRA TECH - SAMPLING AND ANALYSIS PLAN, REVISION 1 | 11/11/2019 | 156 |
| 5 | 951025 | EPA FACT SHEET (SPANISH VERSION) - EPA FINALIZES PARTIAL DELETION OF SUPERFUND SITE FROM NATIONAL LIST | 10/1/2019 | 2 |
| 5 | 951026 | EPA FACT SHEET (ENGLISH VERSION) - EPA FINALIZES PARTIAL DELETION OF SUPERFUND SITE FROM NATIONAL LIST | 10/1/2019 | 2 |
| 5 | 951027 | EPA FACT SHEET (SOMALI VERSION) - EPA FINALIZES PARTIAL DELETION OF SUPERFUND SITE FROM NATIONAL LIST | 10/1/2019 | 2 |
| 5 | 951028 | EPA FACT SHEET (HMONG VERSION) - EPA FINALIZES PARTIAL DELETION OF SUPERFUND SITE FROM NATIONAL LIST | 10/1/2019 | 2 |

| | | | | |
|---|---------|---|-----------|----|
| 5 | 2002338 | RESPONSIVENESS SUMMARY ADDRESSING PUBLIC COMMENTS ON THE NOTICE OF INTENT TO PARTIALLY DELETE THE SOUTH MINNEAPOLIS RESIDENTIAL SOIL CONTAMINATION SUPERFUND SITE MINNEAPOLIS, MINNESOTA FROM THE NATIONAL PRIORITIES LIST | 9/30/2019 | 11 |
| 5 | 2002339 | US EPA MEMO RE: RECOMMENDATION FOR APPROVAL OF THE RESPONSIVENESS SUMMARY ADDRESSING PUBLIC COMMENTS ON THE NOTICE OF INTENT FOR PARTIAL DELETION | 9/30/2019 | 2 |
| 5 | 948897 | [REDACTED] PUBLIC COMMENTS SUBMITTED DURING COMMENT PERIOD FOR PROPOSED NPL PARTIAL DELETION | 9/4/2019 | 59 |
| 5 | 948896 | [REDACTED] EAST PHILLIPS INDOOR FARM PROJECT PETITIONS SUBMITTED TO EPA | 8/30/2019 | 93 |
| 5 | 2002330 | STAR TRIBUNE PRESS RELEASE - EPA PROPOSES REMOVING SOUTH MINNEAPOLIS RESIDENTIAL SOIL CONTAMINATION SITE FROM SUPERFUND LIST | 7/31/2019 | 1 |
| 5 | 2003176 | FEDERAL REGISTER NOTICE PROPOSED RULE - NATIONAL OIL AND HAZARDOUS SUBSTANCES POLLUTION CONTINGENCY PLAN; NATIONAL PRIORITIES LIST: PARTIAL DELETION OF THE SOUTH MINNEAPOLIS RESIDENTIAL SOIL CONTAMINATION SUPERFUND SITE | 7/31/2019 | 1 |
| 5 | 2003177 | FEDERAL REGISTER NOTICE - DIRECT FINAL RULE - NATIONAL OIL AND HAZARDOUS SUBSTANCES POLLUTION CONTINGENCY PLAN; NATIONAL PRIORITIES LIST: PARTIAL DELETION OF THE SOUTH MINNEAPOLIS RESIDENTIAL SOIL CONTAMINATION SUPERFUND SITE | 7/31/2019 | 11 |
| 5 | 2002164 | TABLE 1 & FIGURES FOR NPL PARTIAL DELETION - SOUTH MINNEAPOLIS RESIDENTIAL SOIL CONTAMINATION SUPERFUND SITE | 7/31/2020 | 6 |
| 5 | 2002343 | EPA MEMO RE: HEADQUARTERS CONCURRENCE ON THE SOUTH MINNEAPOLIS RESIDENTIAL SOIL CONTAMINATION SUPERFUND SITE NOTICE OF INTENT FOR PARTIAL DELETION | 7/17/2019 | 6 |
| 5 | 2002186 | US EPA INFORMATION REPOSITORY TRANSMITTAL LETTER RE: NPL DELISTING DOCKET FOR THE SOUTH MINNEAPOLIS NEIGHBORHOOD SOIL CONTAMINATION SUPERFUND SITE | 7/16/2019 | 1 |

| | | | | |
|---|---------|---|------------|-----|
| 5 | 2002342 | MDA LETTER RE: STATE CONCURRENCE LETTER FOR PARTIAL DELISTING | 7/11/2019 | 2 |
| 5 | 946071 | [REDACTED] EPA EMAIL - OSC EMAIL DOCUMENTING 2018 SOIL REMOVAL AT RESIDENCE | 6/18/2019 | 2 |
| 5 | 947877 | [REDACTED] SECOND FIVE YEAR REVIEW REPORT (SIGNED) - SOUTH MINNEAPOLIS RESIDENTIAL SOIL CONTAMINATION SITE | 5/15/2019 | 56 |
| 5 | 946075 | [REDACTED] CH2M HILL - DATA EVALUATION REPORT (WA NO. 242-RARA-B58Y / CONTRACT NO. EP-S5-06-01 | 8/1/2018 | 52 |
| 5 | 946077 | [REDACTED] CH2M HILL - FINAL REMEDIAL ACTION REPORT | 12/16/2016 | 570 |
| 5 | 546905 | CH2M HILL - UNIFORM FEDERAL POLICY QUALITY ASSURANCE PLAN | 4/1/2016 | 758 |
| 5 | 946074 | [REDACTED] FIVE YEAR REVIEW REPORT (SIGNED) - SOUTH MINNEAPOLIS RESIDENTIAL SOIL CONTAMINATION SITE | 5/16/2014 | 99 |
| 5 | 461419 | USEPA MEMORANDUM RE: MINOR CHANGE IN SOUTH MINNEAPOLIS RESIDENTIAL SOIL CONTAMINATION SITE REMEDY: EPA TO PAY CLEANUP COST SHARE FOR NINE AFFECTED RESIDENCES CONSTRUCTED AFTER 1963 WITHIN THE RESIDENTIAL SITE BOUNDARY | 10/21/2013 | 2 |
| 5 | 444400 | EPA SUPERFUND PROPERTY REUSE EVALUATION CHECKLIST FOR REPORTING THE SITEWIDE READY-FOR-ANTICIPATED USE GPRA MEASURE | 11/28/2012 | 2 |
| 5 | 442022 | EPA LETTER RE: APPROVAL OF REMEDIAL ACTION COMPLETION REPORT | 9/12/2012 | 2 |
| 5 | 946076 | [REDACTED] CH2M HILL - FINAL REMEDIAL ACTION REPORT | 8/30/2012 | 176 |
| 5 | 946072 | [REDACTED] EPA - SITEWIDE READY FOR ANTICIPATED USE (SWRAU) - SOUTH MINNEAPOLIS RESIDENTIAL SOIL CONTAMINATION | 6/28/2012 | 11 |
| 5 | 946073 | [REDACTED] EPA - RECOMMENDATION TO SIGN THE SITEWIDE READY FOR ANTICIPATED USE (SWRAU) DETERMINATION | 6/28/2012 | 20 |
| 5 | 438642 | CITY OF MINNEAPOLIS CODE OF ORDINANCES TITLE 12 SECTION 248.30 - SELLER DISCLOSURE REQUIRED | 4/13/2012 | 1 |
| 5 | 345957 | EPA MEMO RE: NON-SIGNIFICANT CHANGE TO 09/05/08 RECORD OF DECISION | 9/23/2009 | 2 |
| 5 | 299953 | ADMINISTRATIVE RECORD SITE INDEX - SOUTH MINNEAPOLIS RESIDENTIAL SOIL CONTAMINATION - UPDATE #1 - REMEDIAL ACTION | 9/5/2008 | 2 |
| 5 | 309326 | RECORD OF DECISION (ROD) (SIGNED) | 9/5/2008 | 179 |

| | | | | |
|---|---------|---|-----------|-----|
| 5 | 299710 | ADMINISTRATIVE RECORD SITE INDEX - SOUTH MINNEAPOLIS NEIGHBORHOOD ARSENIC SITE - UPDATE - REMOVAL ACTION | 7/17/2008 | 1 |
| 5 | 299550 | ADMINISTRATIVE RECORD SITE INDEX - ORIGINAL - REMEDIAL ACTION | 5/21/2008 | 19 |
| 5 | 919909 | CH2M HILL - REMEDIAL INVESTIGATION REPORT | 11/1/2007 | 534 |
| 5 | 296266 | FEDERAL REGISTER - 40 CFR PART 300, NATIONAL PRIORITIES LIST, FINAL RULE | 9/19/2007 | 8 |
| 5 | 259703 | ADMINISTRATIVE RECORD SITE INDEX - 2ND REMOVAL ACTION - CMC HEARTLAND - UPDATE #2 | 9/6/2006 | 1 |
| 5 | 248226 | ADMINISTRATIVE RECORD SITE INDEX - CMC HEARTLAND - UPDATE #2 - REMOVAL ACTION | 9/26/2005 | 1 |
| 5 | 2002161 | MDH MEMO RE: NOTICE OF DESIGNATION OF A SPECIAL WELL CONSTRUCTION AREA IN THE VICINITY OF THE CMC HEARTLAND LITE YARD SITE IN MINNEAPOLIS, MN | 3/21/2005 | 6 |
| 5 | 222850 | ADMINISTRATIVE RECORD SITE INDEX - 2ND REMOVAL ACTION - CMC HEARTLAND – ORIGINAL | 9/27/2004 | 1 |
| 5 | 222883 | ADMINISTRATIVE RECORD SITE INDEX - CMC HEARTLAND – ORIGINAL | 9/3/2004 | 2 |

APPENDIX B: STATE LETTER OF CONCURRENCE

January 8, 2021

Doug Ballotti
Director, Superfund & Emergency Management Division
U.S. Environmental Protection Agency, Region V
Ralph Metcalfe Federal Building
77 West Jackson Blvd.
Chicago, IL 60604

RE: South Minneapolis Residential Soil Contamination Superfund Site
MDA Project Number RWA253129
State Concurrence Letter for Partial Delisting

Dear Mr. Ballotti:

The Minnesota Department of Agriculture (MDA) has worked cooperatively with the United States Environmental Protection Agency (EPA) for many years in overseeing the investigation and cleanup of contaminated soil within the boundary of the South Minneapolis Residential Soil Contamination Site (South Minn. Site), located in Minneapolis, Hennepin County, Minnesota. In consultation with the MDA, the EPA has developed the *Notice of Partial Deletion*. This document, which will be published in the Federal Register, describes EPA's intent to delete an additional five properties located within the South Minn. Site from the National Priorities List (NPL). This action is considered a partial deletion because there are four properties that still require sampling and/or remediation, but these actions have yet to be completed due to access issues. These four properties will remain on the NPL and are not being considered for deletion as part of this action. EPA will continue conducting five-year reviews of these four properties with the intention of resolving access issues. The EPA and the MDA have worked with the City of Minneapolis to provide protections on the properties requiring remediation to ensure that these properties do not become rental properties and to protect utility and construction workers when a building or construction permit is sought for these properties. The EPA may pursue other protective measures if access for sampling and/or remediation cannot be obtained after continued efforts.

Commercial and industrial properties located within the boundary of the South Minn. Site do not require deletion because these properties are not part of the South Minn. Site and are not on the NPL.

The MDA concurs that partial delisting of five properties within the boundary of the South Minn. Site is appropriate because all appropriate response actions under the Comprehensive Environmental Response, Compensation and Liability Act have been completed for all residential properties, parks, schools, community gardens, playgrounds associated with church schools and the cemetery located within the boundary of the South Minn. Site.

If you have questions about this letter, please contact Cathy Villas-Horns at 651-201-6697 or cathy.villas-horns@state.mn.us.

Sincerely,



Thom Petersen
Commissioner

Doug Ballotti
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January 8, 2021

cc: The Honorable Amy Klobuchar, United States Senate
The Honorable Tina Smith, United States Senate
The Honorable Ilhan Omar, United States Congress
The Honorable Omar Fateh, Minnesota Senate
The Honorable Hassan Hodan, Minnesota House of Representatives
Howard Caine, Remedial Project Manager, EPA
The Honorable Jacob Frey, Mayor, City of Minneapolis
Tom Frame, City of Minneapolis