



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

March 17, 2022

REPLY TO THE ATTENTION OF:
 S-6J

MEMORANDUM

SUBJECT: ACTION MEMORANDUM – 2nd AMENDMENT: Request for a Ceiling Increase for a Time-Critical Removal Action and Exemption from the \$2 Million and 12-month Statutory Limits at the Taracorp Industries Soils Site, Lyons, Cook County, Illinois (Site ID # C5HS)

FROM: Douglas Ballotti, Director
 Superfund and Emergency Response Division

 Digitally signed by
 DOUGLAS BALLOTTI
 Date: 2022.03.17
 16:45:32 -05'00'

THRU: Kathleen Salyer, Director
 Office Of Emergency Management

**DONNA
 SALYER**  Digitally signed by
 DONNA SALYER
 Date: 2022.04.18
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TO: Barry N. Breen, Acting Assistant
 Administrator Office Of Land and
 Emergency Management

I. PURPOSE

The purpose of this Action Memorandum Amendment is to request and document your approval to increase the ceiling for the time-critical removal action at the Taracorp Industries Soils Site (“Site” or “Taracorp Industries Soils Site”) located in Lyons, Cook County, Illinois. The previous Action Memorandum Amendment increased the project ceiling from \$4,899,707 to \$5,999,133. Approval of this second amendment would increase the project ceiling by \$2,353,509, from \$5,999,133 to \$8,352,642. The ceiling increase is necessary to mitigate the threats to public health, welfare, and the environment posed by the presence of lead-contaminated surface soil in residential properties located at the Site by the proper excavation and off-site disposal of lead contaminated soil in the residential yards. No precedent-setting issues are associated with this non-NPL Site.

The ceiling increase is also necessary because, when the original Action Memorandum was approved (July 16, 2020), EPA had confirmed the presence of lead contaminated soil¹ at 28

¹ That is, the top twelve inches of soil had lead concentrations above the Removal Management Level (RML) for residential soil of 400 milligrams per kilogram (mg/kg).

properties and estimated that up to 51 properties would need to be remediated. By the time the first Action Memorandum Amendment was approved (September 7, 2021), EPA had received sample results from an additional 38 properties and confirmed the presence of lead at 28 additional properties, increasing the total known number of properties requiring cleanup to 56. Since the first Action Memorandum Amendment, EPA has received sampling results from an additional 37 properties, 23 of which require cleanup. A grand total of 131 properties have been sampled, with 79 requiring cleanup (53 properties have already been addressed). All but three of the 79 owners have consented to EPA accessing their properties to conduct the removal. EPA also estimates that 19 of the 33 unsampled properties in the site boundary may require cleanup, raising the total estimate of properties to 95 (nearly twice EPA's original estimate). Additionally, prices for fuel and materials have increased significantly since the original Action Memorandum was approved, the estimated time to complete the project has increased, and local DBA labor rates have averaged about 18% more than anticipated when the first Action Memorandum Amendment was written. This increase in scope and costs will cause the action to exceed the previous Action Memorandum Amendment ceiling, therefore requiring a second amendment to the original Action Memorandum.

This Action Memorandum Amendment serves as approval for expenditures by EPA, as the lead technical agency, to take actions to abate the imminent and substantial endangerment posed by hazardous substances at the Site. The continued removal of hazardous substances is pursuant to Section 104(a)(1) of the CERCLA, 42 U.S.C. § 9604(a)(1), and Section 300.415 of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 C.F.R. § 300.415. Based on the level of hazardous substances and the threat to the community, this removal action is considered time-critical. The project will require an estimated 440 days to complete.

II. SITE CONDITIONS AND BACKGROUND

CERCLIS ID: ILD09883208

RCRA ID: none

State ID: none

Category: Time-Critical Removal Action

The Site consists of the former Taracorp Industries property, which is located at 7753 West 47th Street in McCook, Cook County, Illinois, and an estimated 164 residential properties generally located between the south side of 45th Street to the north, Fisherman's Terrace to the east, 47th Street to the south, and the 7900 blocks of 45th, 46th and 47th streets to the west in Lyons, Cook County, Illinois (Figure 1). Of these 164 properties, EPA has sampled 131 residential properties to date, and confirmed that 79 have lead concentrations above the RML for residential soil of 400 milligrams per kilogram mg/kg, though EPA does not have access to conduct removal activities at 3 properties. Of the remaining 33 unsampled properties, EPA estimates that 19 may have lead concentrations above the RML and request cleanup, for an estimated total of 95 residential properties.

The Taracorp Industries facility was a secondary lead smelter that operated from 1979 through 1983. Prior to Taracorp's operations, the same facility was operated by National Lead Industries, Inc. beginning in 1965. The site was included in the Comprehensive Environmental Response, Compensation, and Liability Information System (now the Superfund Enterprise Management System) in 1980, based on elevated lead levels on the property.

Waste material from the property was supposedly removed after Taracorp ceased operations in 1983. A portion of the property was leased for use as a truck terminal and maintenance garage in the 1980s. In 1990, the property was purchased by a construction demolition company. On information and belief, it is currently owned and operated by MBT Transport, a trucking company.

In the 1980s, the Illinois Environmental Protection Agency (Illinois EPA) conducted a Preliminary Assessment and Site Inspection focused on the evaluation of lead concentrations in soil on the Taracorp property. A 2017 Illinois EPA Site Reassessment investigation included the former Taracorp property, as well as surrounding residential properties (AR #1). X-ray fluorescence (XRF) screening and fixed laboratory results for the 15 residential properties assessed determined that lead was present in soil at concentrations ranging from 157 mg/kg to 970 mg/kg, with lead concentrations at seven residential properties above the RML of 400 mg/kg. Lead was the only contaminant of concern identified. Based on the results of the Site Reassessment, Illinois EPA requested the assistance of the EPA Removal Program (AR #2).

In June of 2018, EPA began sampling at 24 residential properties whose owners had signed consent for access forms. Samples were submitted to CT Laboratories, LLC to be analyzed for total lead. Additional sample aliquots of soil were retained pending the total lead results. Sampling continued periodically through November of 2019 at a total of 58 occupied residential properties, and a local school.

The removal action was initiated by EPA on September 21, 2020. During the initial mobilization for the removal action in 2020, 7 additional residential properties were sampled for total lead, 6 of which had results above the RML. During 2021, EPA sampled an additional 66 properties, 49 of which had total lead above the RML (AR 2nd Amend. #1). To date, 53 properties have been remediated.

A. Site Description

1. Removal site evaluation

Occupied residential sampling

Occupied residential properties were sampled in June 2018, October 2018, May 2019 and November 2019 (AR #3). Laboratory data packages for all rounds of sampling are found in Laboratory Data Packages for Taracorp Industries Removal Assessment (AR #4). Of the 58 total occupied residential properties sampled, 28 of the properties had surficial concentrations that exceeded the EPA RML of 400 mg/kg for lead. None of these properties had surficial concentrations above 1,200 mg/kg for lead. The highest lead concentration found at the surface of one of the residential properties was 1,160 mg/kg. No properties met the tier I criteria as defined in the “Superfund Lead-Contaminated Residential Sites Handbook” (AR #5). A summary of the results can be found below and in Table 1.

In June 2018, EPA collected soil samples from 24 residential properties and analyzed those samples for lead. Of the 24 properties sampled, 16 properties had lead above the RML of 400 mg/kg, with the highest concentration at 1,160 mg/kg. Residents were informed of their results via letters mailed between July 31 and August 2, 2018.

Additional sample aliquots from those yards which had total lead above the RML were sent to CT Laboratories for in vitro bioaccessibility assay (IVBA) for lead. Sample results for TI-11, TI-12, and TI-13 had the highest bioavailability. Eight additional sample aliquots collected from samples with low, medium and high levels of total lead were analyzed for target analyte list (TAL) metals.

In addition to chemical analysis, MicroVision conducted Scanning Electron Microscopy (SEM), Energy Dispersive X-Ray Spectroscopy (EDS) as well as Back Scatter Electron (BSE) analysis of particles in soil samples from the highest residential sample in each of the 16 yards that exceed the RML in the June 2018 sampling event. Lead-bearing particles were detected in the fines of all 16 residential samples that START submitted to the laboratory. In eleven samples, antimony was detected in some of the lead-bearing fine particles. Lead and antimony are found together in some types of lead acid batteries, which are commonly used in secondary lead smelting operations. Furthermore, these particles contained metals consistent with foundry and smelting processes, suggesting they originated from secondary smelting operations (AR #6).

In October 2018, EPA collected soil samples from 6 additional residential properties and analyzed those samples for full TAL Metals. Of the 6 additional residential properties sampled, 4 properties had lead above the RML of 400 mg/kg. Residents were informed of their results via letters mailed out on November 29, 2018.

On May 21-22, 2019 EPA collected soils samples from 19 additional residential properties and analyzed those samples for full TAL Metals. Of the 19 additional residential properties sampled, 6 properties had lead above the RML of 400 mg/kg. Residents were informed of their results via letters that were mailed out on July 23, 2019.

Based on analytical results, samples collected during the May 2019 sampling event were selected for elemental particle characterization of lead-bearing minerals by SEM/BSE/EDS. Soil samples selected for the SEM/BSE/EDS analysis contained the highest concentrations of lead. As discussed in the MicroVision Report (#13228), lead-bearing particles and lead-bearing slag were detected in the fines in six of the seven residential samples submitted. In addition, three samples contained tin-rich lead-bearing fine particles and five samples contained antimony-rich lead-bearing fine particles, again suggesting that the particles originated from secondary lead smelting operations (AR #7).

The trends noted in both MicroVision reports suggest that foundry and smelting processes, like those conducted at the Taracorp Industries facility, likely impacted the residential properties where EPA and START collected soil samples. However, it must be noted that no suspect source soil samples or bulk raw materials were provided with the samples (e.g. from the Taracorp Industries facility or property), and conclusions drawn from this data are based on the

descriptions and the categorization of the types of detected lead-bearing particles, as noted in Interim Removal Assessment Report (AR #3).

On November 14-15, 2019 EPA collected samples from 9 additional residential properties for full TAL Metals. Of the 9 additional residential properties sampled, 2 properties had lead above the RML of 400 mg/kg. Residents were informed of their results via letters that were mailed out on February 21-24, 2020.

Since mobilizing to conduct the removal action, EPA has collected samples from 73 additional residential properties for total lead. Of the 73 additional residential properties sampled, 51 had lead above the RML of 400 mg/kg, with the highest result being 1,300 mg/kg in a sample from 6” – 12” below ground surface.

A summary table of the occupied residential property sample results is provided below.

Total number of properties sampled:	131
Total number of properties over 400 mg/kg lead:	79 (76 with access to remove)
Total number of properties over 1200 mg/kg lead:	3

School sampling

Robinson Elementary School was sampled August 2, 2019. Of the 6 samples collected from five sampling locations and one duplicate, none of the samples showed lead above the RML of 400 mg/kg. Sample results from the school were mailed out on September 6, 2019.

Taracorp Industries property sampling

According to the November 2017 referral letter for the Site (AR #2), Illinois EPA conducted a site assessment of the former Taracorp Industries property, collecting soil samples at depths from the surface to four feet, and concluded that the property “does not qualify for additional CERCLA Site Assessment activities at this time.” EPA did not sample the Taracorp Industries property in 2018-19. Therefore, the proposed removal actions described in Section VI are limited to the 164 residential properties demarcated in Figure 1.

2. Physical location

The Site consists of the former Taracorp Industries property, which is located at 7753 West 47th Street in McCook, Cook County, Illinois, and residential properties generally located between the south side of 45th Street to the north, Fisherman's Terrace to the east, 47th Street to the south, and the 7900 blocks of 45th, 46th and 47th streets to the west in Lyons, Cook County, Illinois. The center area of the residential area's geographical coordinates is approximately 41.808070° north latitude and -87.815420° west longitude.

An Environmental Justice (EJ) analysis for the Site is contained in Attachment 1. Screening of the surrounding area used Region 5's EJ Screening Tool (which applies the interim version of the national EJ Strategic Enforcement Assessment Tool (EJSCREEN)). Region 5 has reviewed environmental and demographic data for the area surrounding the Site in Chicago, Illinois and determined there is a high potential for EJ concerns at this Site.

3. Site characteristics

The Site is comprised of an estimated 164 residential properties, including the 76 known properties which EPA has access to that have lead above the RML of 400 mg/kg, with the highest concentration at 1,300 mg/kg. Of the 33 properties that have not yet been sampled, EPA estimates an additional 19 properties may have lead above the RML.

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

EPA documented a release of hazardous substances, pollutants, or contaminants in the soil. Lead is present in surface soil in residential yards at the Site at concentrations greater than the EPA RML of 400 mg/kg. Environmental exposure to lead may occur from direct ingestion of soil in yards, soil tracked indoors, or house dust; inhalation of fugitive dust; and ingestion of vegetables grown in contaminated soil. Potential human receptors include residents, including children under seven years of age and pregnant or nursing women; and construction and utility workers. Table 2, below, lists the components of the completed environmental exposure pathways for lead (i.e., human exposure has occurred or is occurring) at the Site:

Table 2 Exposure Pathways for Lead at Taracorp Industries Site				
Pathway Name	Contaminant	Point of Exposure	Route of Exposure	Exposed Population
Soil/Dust	Lead	Yards	Ingestion Inhalation	Residents, including children, pregnant or nursing women; construction and utility workers
Vegetables	Lead	Gardens	Ingestion	Gardeners who eat home grown vegetables from contaminated areas

In summary, the Site contains residential properties with elevated levels of lead in surface soils, and therefore there exists a potential for exposure of humans to lead, a hazardous substance. Lead exposure via inhalation and/or ingestion can have detrimental effects on almost every organ and system in the human body. Off-site migration of the documented hazardous substance would greatly increase the potential exposure to nearby human populations, animals, or the food chain.

5. NPL status

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

6. Maps, pictures and other graphic representations

- Figure 1 Site Location Map
- Figure 2 Site Layout Map
- Attachment 1 Environmental Justice Analysis
- Attachment 2 Detailed Cleanup Contractor Cost Estimate
- Attachment 3 Independent Government Cost Estimate
- Attachment 4 List of currently identified affected Residential Sample numbers
- Attachment 5 Administrative Record

B. Other Actions to Date

1. Previous actions

On July 16, 2020, EPA issued the Action Memorandum, “*Request for Approval and Funding for a Time-Critical Removal Action Exemption from the \$2 Million and 12-month Statutory Limits at the Taracorp Industries Soils Site, Lyons, Cook County, Illinois*” (AR Attachment A) authorizing the expenditure of funds to remove, transport and properly dispose of lead contaminated soil from residential properties. On September 7, 2021, EPA issued the Action Memorandum – 1st Amendment “*Request for a Ceiling Increase for the Time-Critical Removal Action at the Taracorp Industries Soils Site, Lyons, Cook County, Illinois*” (AR Amend #1, Attachment A).

The removal has thus far resulted in the removal and disposal of 8,267 tons of non-hazardous lead contaminated soil from 53 residential properties.

2. Current actions

No current response actions by the residential property owners, the State, or local authorities are underway at the Site.

C. State and Local Authorities' Roles

1. State and local actions to date

No State or local response actions have been taken to address the hazardous substance releases or threatened releases at the Site.

2. Potential for continued State/local response

As documented in a June 2, 2020 letter from Illinois EPA (AR #8), the State does not have the resources (personnel and/or monetary) at this time to address the release of lead to the environment at the Site.

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

The conditions present at the Site may present an imminent and substantial endangerment to the public health, welfare, and the environment, and meet the criteria for a time-critical removal action as provided for in the NCP, 40 C.F.R. § 300.415(b)(1), based on the factors in 40 C.F.R. § 300.415(b)(2). These factors include, but are not limited to, the following:

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

During the Site assessment, EPA found that 79 of the 131 residential property samples received to date had elevated lead in surface soils above the residential EPA RML of 400 mg/kg, though EPA does not have access to conduct a cleanup at three properties. Lead was detected at a maximum concentration of 1,300 mg/kg in a residential yard. Exposure may occur from direct ingestion of soil in yards, soil tracked indoors, or house dust; inhalation of fugitive dust; and ingestion of vegetables grown in contaminated soil. Potential human receptors include residents (including children under seven years of age and pregnant or nursing women), and construction and utility workers. These soils are unsecured and part of the environment.

Lead is a hazardous substance, as defined by Section 101(14) of CERCLA; *see also* 40 C.F.R. § 302.4. 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 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 or 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 (AR #9).

§ 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.

EPA identified average lead concentrations in the top two feet of soil above the residential EPA RML of 400 mg/kg. Lead-contaminated soil may migrate as airborne particulate matter, surface runoff, percolation into groundwater, through construction activities, by children transporting soil/dust into their homes after playing in contaminated soil, and by tracking in homes via foot traffic into residences.

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

Cook County, Illinois receives a substantial amount of precipitation, and temperatures are normally below freezing during the winter, with regular snowfall. In the winter, the average temperature is 25.1° F and the average daily minimum temperature is 17.3° F. In the summer, the average temperature is 71.7° F, and the average daily maximum temperature is 81.7° F. The average total annual precipitation is 38.65 inches and the average seasonal snowfall is 32.6 inches. The average wind speed is about 10.7 miles per hour (according to the National Weather Service). These weather conditions may cause water, wind, and freeze-thaw erosion of the Site's surface soil (AR #10). Lead contaminated surface soil may migrate off-site via wind and runoff to other areas in the residential neighborhood.

In addition, although the Chicago-area (including Lyons) historical tornado activity is slightly below the Illinois state average, it is 46% greater than the overall U.S. average (Source: <http://www.city-data.com/city/Chicago-Illinois.html>). Severe weather may impact the Site. Normal weather conditions, such as snow, rain and wind, will continue to be the main factors of hazardous substance release and migration at the Site. Migration will pose a real threat to nearby populations. The Site is located in a mixed residential neighborhood, and many of the homes in that neighborhood are in close proximity to each other, making them very susceptible to impacts from off-site migration.

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

Based on information in the June 2, 2020 letter from Illinois EPA, the State does not have the funds or resources at this time to respond to a time-critical removal action of this magnitude required by conditions at the Site. See AR #8.

IV. EXEMPTION FROM STATUTORY LIMITS

Section 104(c) of CERCLA, 42 U.S.C. § 9604(c), as amended by the Superfund Amendments and Reauthorization Act (SARA), limits a Federal response action to 12 months and \$2 million unless response actions meet emergency and/or consistency exemptions. The removal still meets the same emergency exemption criteria specified in the original July 16, 2020 Action Memorandum, *“Request for Approval and Funding for a Time-Critical Removal Action Exemption from the \$2 Million and 12-month Statutory Limits at the Taracorp Industries Soils Site, Lyons, Cook County, Illinois.”*

V. ENDANGERMENT DETERMINATION

Given the Site conditions, the nature of the known and suspected lead contamination on Site, and the 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.

VI. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

1. Proposed action description

The response actions described in this memorandum directly address actual or potential releases of hazardous substances on Site, which may pose an imminent and substantial endangerment to public health, welfare, or the environment. The response actions generally include the excavation and removal of lead-contaminated soil, backfilling excavated areas to original grade with clean topsoil, and restoring landscaping. Removal and proper disposal of contaminated soil that exceeds the action level is necessary due to elevated levels of lead in surface soil that present an imminent and substantial endangerment to public health. This approach is consistent with the Office of Solid Waste and Emergency Response (OSWER) Publication 9285.7-50 Superfund Lead-Contaminated Residential Sites Handbook (Lead Handbook) (2003) (AR #5).

Removal activities on Site will include:

- 1) Develop and implement a Site Health and Safety Plan to include a Perimeter Air Monitoring and Sampling Plan and develop measures to control dust during the removal of contaminated soil. In addition, develop a Site-specific Work Plan, Quality Assurance Project Plan (QAPP), and Emergency Contingency Plan;
- 2) Develop and implement a Site-specific sampling plan to conduct additional assessment, confirmation, and disposal characterization sampling of soil at the Site, as needed;
- 3) Conduct individual property evaluations prior to removal activities. These evaluations will document the conditions of the property prior to undertaking the

removal action to ensure that the properties are properly restored once the removal action is completed;

- 4) Excavation of soil at residential parcels where lead in the top twelve inches is equal to or exceeds 400 mg/kg., as determined by EPA's site assessment and removal evaluation sampling. Soil will be excavated to a depth of approximately two feet below ground surface (bgs), to eliminate any direct contact and inhalation threats. Excavated material that fails toxicity characteristic leaching procedure (TCLP) for lead may be treated with a fixation agent prior to disposal. Excavation will cease if lead concentrations are less than 400 mg/kg;
- 5) Collection and analysis of confirmation samples from the bottom of each excavation, if bedrock is not encountered in the top two feet bgs. If lead levels below 400 mg/kg cannot be achieved at an excavation depth of approximately two feet bgs, and bedrock has not been encountered, excavation will cease and a visible barrier will be placed at the bottom of the excavation to alert the property owner of the existence of high levels of lead;
- 6) Replacement of excavated soil with clean soil, including approximately 6 inches of topsoil, to maintain the original grade. Each yard will be restored as close as practicable to its pre-removal condition. Once the parcels are sodded or seeded, removal site control of the sod or seed, including, watering, fertilizing, and cutting, may be conducted for 30 days. After the initial 30-day period, property owners will be responsible for the maintenance of their own yards. The aforementioned work shall be documented in a Work Plan;
- 7) 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 CFR § 300.440); and
- 8) Performance of any other response actions to address any release or threatened release of a hazardous substance, pollutant or contaminant that the EPA On-Scene Coordinator (OSC) determines may pose an imminent and substantial endangerment to the public health or the environment.

The exact number of properties requiring time-critical removal action is currently unknown. Currently, EPA has access to 76 residential properties that have met the criteria this Action Memorandum authorizes for removal. The actual number of properties subject to removal action may change due to additional properties within the Site boundaries being sampled during the removal action at the request of the homeowner. Of the 33 properties not sampled to date, EPA estimates removal activities may be required at an additional 19 properties. EPA estimates that it may ultimately remediate up to 95 properties and has built that cost and activity into the scope of this Action Memorandum Amendment. This estimate is based on the percentage of properties discovered in previous sampling, extrapolated to the number of properties in the current area of concern.

The removal action will be conducted in a manner not inconsistent with the NCP and consistent with the Lead Handbook. The OSC has initiated planning for provision of post-removal Site control consistent with the provisions of Section 300.415(l) of the NCP (40 C.F.R. § 300.415(l)). The threats posed by the lead contaminated surface soils meet the criteria listed in Section 300.415(b) of the NCP (40 C.F.R. § 300.415(b)), and the response actions proposed herein are consistent with any long-term remedial actions which may be required. However, removal of hazardous substances, pollutants and contaminants that pose a substantial threat of release are expected to eliminate 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, or disposal shall be treated, stored, or disposed of at a facility in compliance, as determined by EPA, with the EPA Off-Site Rule at 40 C.F.R. § 300.440.

2. Contribution to remedial performance:

The proposed action will not impede future actions based on available information. No long-term remedial actions have been identified for the Site at this time.

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

Not Applicable.

4. Applicable or relevant and appropriate requirements (ARARs)

On April 29, 2020 EPA Region 5 sent a letter to Jerry Willman with Illinois EPA requesting the State to identify ARARs for this time-critical removal action (AR #11). Mr. Willman responded in a letter dated June 1, 2020 that identified potential State ARARs (AR #12).

Additionally, the OSC identified the following ARARs:

1. Hazardous Waste Management Requirements:
Regulations governing the identification and listing of hazardous waste under the Resource Conservation and Recovery Act of 1976 (RCRA), as amended, 42 U.S.C. §§ 6901 *et seq.* Potential ARARs may include requirements set forth in 40 C.F.R. Part 261, Subpart C (Characteristics of Hazardous Waste).

Standards applicable to generators of hazardous waste under RCRA. Potential ARARs may include requirements set forth in 40 C.F.R. Part 262, Subpart B (Manifest Requirements Applicable to Small and Large Quantity Generators) and Subpart C (Pre-Transport Requirements Applicable to Small and Large Quantity Generators).

Requirements under RCRA applicable to owners and operators of facilities that treat, store, or dispose of hazardous waste set forth in 40 C.F.R. Part 264. Potential ARARs may include requirements set forth in 40 C.F.R. Part 264, Subpart I (Use and Management of Containers).

2. 40 CFR § 50.6 and § 50.12 establish national ambient air quality standards for air quality pertaining to particulate matter and lead. Engineering controls will be used at the Site to achieve those standards.
3. 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.
4. 29 CFR § 1910 promulgates occupational safety and health standards for hazardous waste operations and emergency response. It regulates cleanup operations at uncontrolled hazardous waste sites.

All Federal and State ARARs will be complied with to the extent practicable considering the exigencies of the circumstances.

5. Project Schedule

Given the estimated 95 residential properties requiring removal, the removal activities are expected to take approximately 333 on-site working days to complete, an increase of 163 days from the original Action Memorandum.

B. Estimated Costs

The Independent Government Cost Estimate is presented in Attachment 3 and the detailed cleanup contractor cost is presented in Attachment 2. The estimated project costs are summarized in the table below.

<u>Extramural Costs</u>	<u>Current Ceiling</u>	<u>Proposed Increase</u>	<u>Proposed Ceiling</u>
<u>Regional Removal Allowance</u>			
<u>Costs:</u>	\$4,979,733	\$2,166,809	\$7,146,542
Total Cleanup Contractor Costs (This cost category includes estimates for ERRS, subcontractors, Notices to Proceed, and Interagency Agreements with Other Federal Agencies and 10% Contingency)			
<u>Other Extramural Costs Not Funded from the Regional Allowance:</u>	\$236,905	\$210,195	\$447,100
Total START, including multiplier costs			
<u>Subtotal</u>			
Subtotal Extramural Costs	\$5,216,638	\$2,377,004	\$7,593,642
Extramural Costs Contingency (10% of Subtotal, Extramural Costs rounded to nearest thousand for Proposed Increase)	\$782,495 (15% in previous amendment)	- \$ 23,495	\$ 759,000
TOTAL REMOVAL ACTION PROJECT CEILING	\$5,999,133	\$2,353,509	\$8,352,642

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

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

Given the Site conditions, the nature of the hazardous substances and pollutants or contaminants documented on Site, and the potential exposure pathways to nearby populations described in Sections II, III and IV, above, and actual or threatened release of hazardous substances and pollutants or contaminants from the Site, failing to take or delaying action may present an imminent and substantial endangerment to public health, welfare, or the environment, increasing

the potential that hazardous substances will be released, thereby threatening the adjacent population and the environment.

VIII. OUTSTANDING POLICY ISSUES

None.

IX. ENFORCEMENT

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

The total EPA costs for this removal action based on full-cost accounting practices that will be eligible for cost recovery are estimated to be \$15,515,140.¹

$$(\$8,352,642 + \$500,000) + (75.26\% \times \$ 8,852,642) = \$ 15,515,140$$

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-judgment interest, do not take into account other enforcement costs, including Department of Justice costs, and may be adjusted during the course of a removal action. The estimates are for illustrative purposes only, and their use is not intended to create any rights for responsible parties. Neither the lack of a total cost estimate nor deviation of actual total costs from this estimate will affect the United States' right to cost recovery.

cc: S. Ridenour, U.S. EPA 5104A/B517F (email: ridenour.steve@epa.gov)
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**NOT RELEVANT TO SELECTION
OF REMOVAL ACTION**

ENFORCEMENT ADDENDUM

HAS BEEN REDACTED – 8 PAGES

ENFORCEMENT CONFIDENTIAL

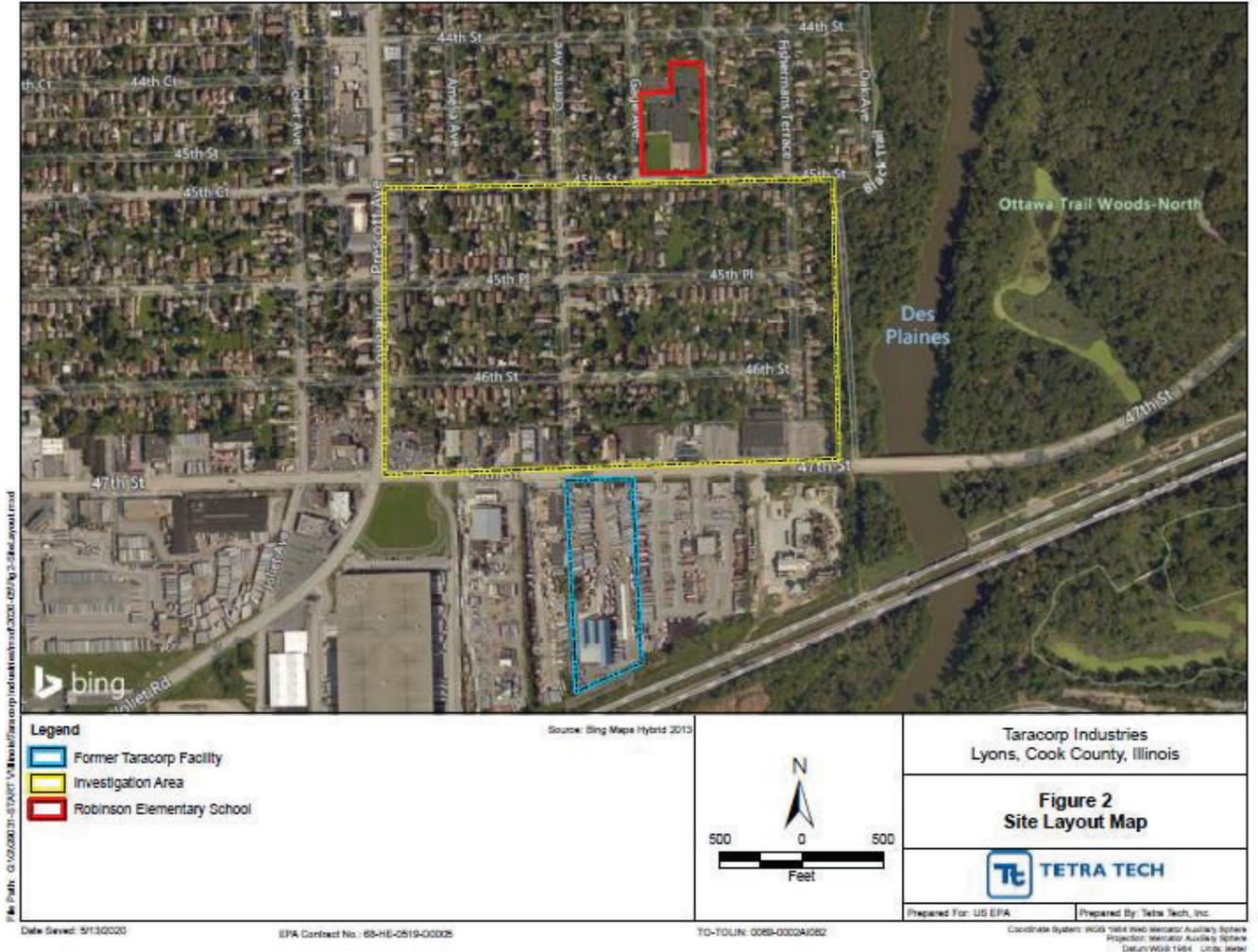
NOT SUBJECT TO DISCOVERY

FOIA EXEMPT

NOT RELEVANT TO SELECTION

OF REMOVAL ACTION

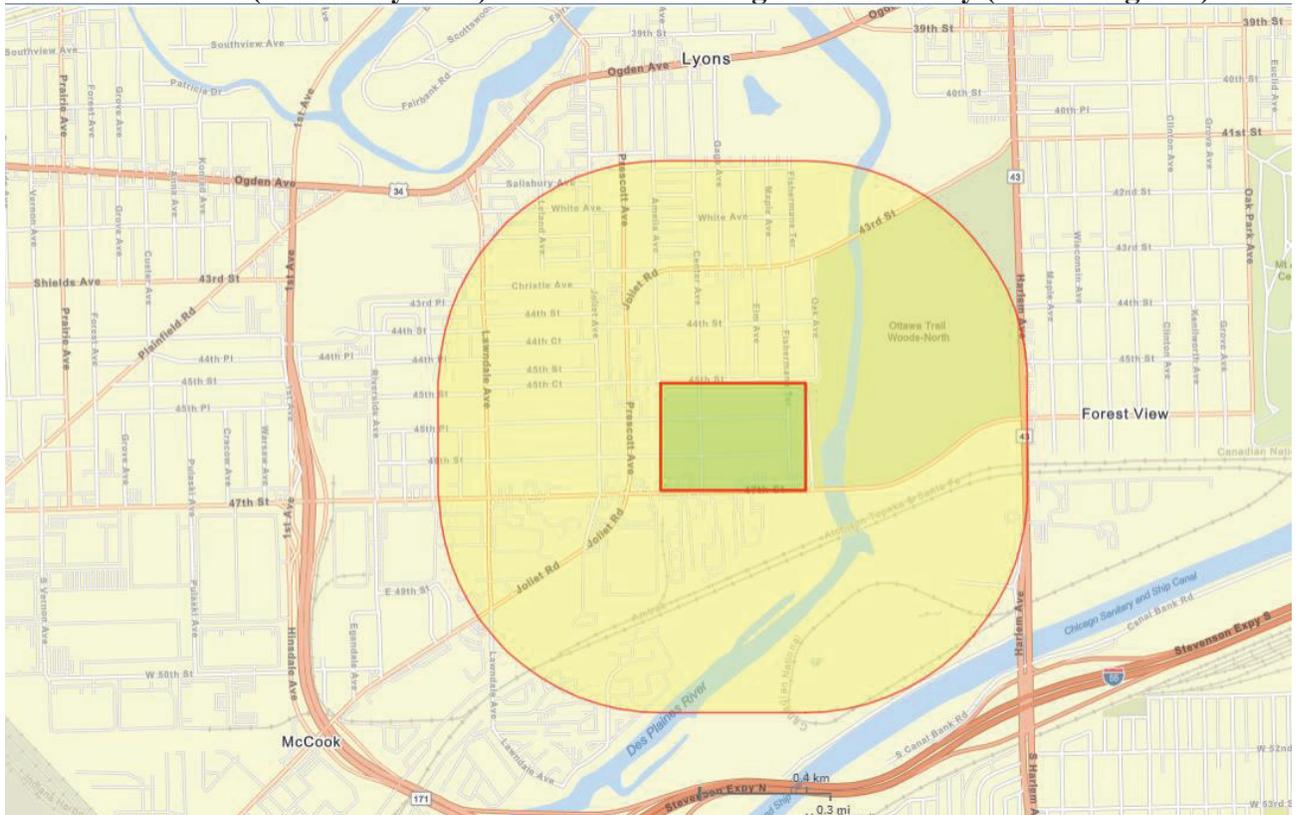
**Figure 2
Site Layout Map**



ATTACHMENT 1

Environmental Justice Analysis Taracorp Industries Soil Site Lyons, Illinois April, 2020

0.5 Mile buffer (shown in yellow) around Site investigation boundary (shown in green)



Save as PDF



EJSCREEN Report (Version 2019)

0.5 miles Ring around the Area

ILLINOIS, EPA Region 5

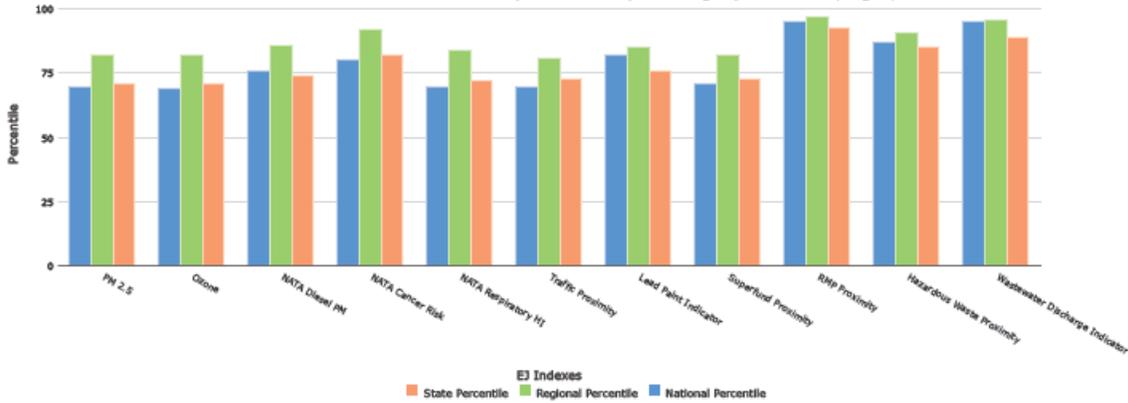
Approximate Population: 5,198

Input Area (sq. miles): 1.43

Taracorp Residential Area

Selected Variables	Percentile in State	Percentile in EPA Region	Percentile in USA
EJ Indexes			
EJ Index for Particulate Matter (PM 2.5)	71	82	70
EJ Index for Ozone	71	82	69
EJ Index for NATA* Diesel PM	74	86	76
EJ Index for NATA* Air Toxics Cancer Risk	82	92	80
EJ Index for NATA* Respiratory Hazard Index	72	84	70
EJ Index for Traffic Proximity and Volume	73	81	70
EJ Index for Lead Paint Indicator	76	85	82
EJ Index for Superfund Proximity	73	82	71
EJ Index for RMP Proximity	93	97	95
EJ Index for Hazardous Waste Proximity	85	91	87
EJ Index for Wastewater Discharge Indicator	89	96	95

EJ Index for the Selected Area Compared to All People's Blockgroups in the State/Region/US



Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	1

Selected Variables	Value	State		EPA Region		USA	
		Avg.	%tile	Avg.	%tile	Avg.	%tile
Environmental Indicators							
Particulate Matter (PM 2.5 in $\mu\text{g}/\text{m}^3$)	10.1	9.25	99	8.83	99	8.3	90
Ozone (ppb)	45.3	44.8	66	43.4	73	43	66
NATA* Diesel PM ($\mu\text{g}/\text{m}^3$)	0.925	0.869	81	0.446	90-95th	0.479	90-95th
NATA* Air Toxics Cancer Risk (risk per MM)	88	33	99	26	95-100th	32	95-100th
NATA* Respiratory Hazard Index	0.52	0.42	84	0.34	95-100th	0.44	70-80th
Traffic Proximity and Volume (daily traffic count/distance to road)	410	630	69	530	70	750	64
Lead Paint Indicator (% pre-1960s housing)	0.58	0.41	66	0.38	73	0.28	81
Superfund Proximity (site count/km distance)	0.064	0.095	59	0.13	53	0.13	51
RMP Proximity (facility count/km distance)	8.5	1.2	99	0.82	99	0.74	99
Hazardous Waste Proximity (facility count/km distance)	6.3	2	92	1.5	95	4	92
Wastewater Discharge Indicator (toxicity-weighted concentration/m distance)	0.56	1.7	81	0.82	92	14	94
Demographic Indicators							
Demographic Index	46%	34%	71	28%	81	36%	70
Minority Population	57%	38%	72	25%	85	39%	71
Low Income Population	35%	30%	64	31%	63	33%	59
Linguistically Isolated Population	10%	5%	82	2%	92	4%	83
Population with Less Than High School Education	12%	11%	65	10%	70	13%	60
Population under Age 5	7%	6%	65	6%	66	6%	64
Population over Age 64	13%	14%	48	15%	42	15%	47

*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 (<http://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.

ATTACHMENT 2

**DETAILED CLEANUP CONTRACTOR AND
START ESTIMATE HAS BEEN REDACTED**

ONE PAGE

**NOT RELEVANT TO SELECTION
OF REMOVAL ACTION**

ATTACHMENT 3

**INDEPENDENT GOVERNMENT COST
ESTIMATE HAS BEEN REDACTED – TWO
PAGES
NOT RELEVANT TO SELECTION
OF REMOVAL ACTION**

ATTACHMENT 4

LIST OF AFFECTED RESIDENTIAL SAMPLE NUMBERS

Taracorp Industries Soil Site

Lyons, Illinois

Updated February 2022

TI-02-FY-0006-061218:	TI-03-FY-0006-061218	TI-03-GD-0006-061218
TI-03-BY-0006-061218	TI-06-FY-0006-061218	TI-09-BY-0006-061418
TI-10-FY-0006-061418	TI-11-FY-0006-061318	TI-11-BY-0006-061318
TI-12-FY-0006-061318	TI-12-FY-0006-061318-D	TI-12-BY-0006-061318
TI-12-GD-0006-061318	TI-13-FY-0006-061318	TI-13-BY-0006-061318
TI-15-FY-0006-061218	TI-15-BY-0006-061218	TI-16-FY-0006-061318
TI-16-BY-0006-061318	TI-18-FY-0006-061318*	TI-19-FY-0006-061318
TI-19-FY-0006-061318D	TI-19-SY-0006-061318	TI-19-BY-0006-061318
TI-22-FY-0006-061418	TI-22-BY-0006-061418	TI-23-FY-0006-061318
TI-23-SY-0006-061318	TI-23-BY-0006-061318	TI-23-BY-0006-061318D
TI-24-FY-0006-061318	TI-24-BY-0006-061318	TI-25-FY-0006-061318
TI-25-BY-0006-061318	TI-26-FY-0006-100918	TI-27-FY-0006-100918
TI-28-FY-0006-100918	TI-28-BY-0006-100918	TI-30-FY-0006-20210709
TI-30-DUP-20210709	TI-31-FY-0006-100918	TI-32-FY-0006-052119
TI-35-PA-0006-052119	TI-36-FY-0006-052119	TI-37-BY-0006-052119
TI-37-GA-0006-052119	TI-41-FY-0006-052119*	TI-49-FY-0006-052219
TI-51-FY-0612-111419	TI-53-FY-0006-111419	TI-60-FY-0006-10282020
TI-60-FY-0612-10282020	TI-(60) DUP2-10282020	TI-60-BY-0006-10282020
TI-60-FY-0621-10282020	TI-61 FY-0006-10282020	TI-63-FY-0006-10282020
TI-63-BY-0006-10282020	TI-(63) DUP-10282020	TI-63-BY-0006-10282020
TI-64-FY-0006-10282020	TI-64-FY-0612-10282020	TI-64-SY-0006-10282020
TI-64-SY-0612-10282020	TI-65-FY-0006-10282020	TI-65-FY-0612-10282020
TI-65-BY-0006-10282020	TI-(65) DUP3-10282020	TI-65-BY-0612-10282020
TI-66-FY-0006-10282020	TI-66-BY-0006-10282020	TI-66-BY-0612-10282020
TI-67-GD-0006-20210408	TI-69-FGD-0006-20210429*	TI-69-FGD-0612-20210429*
TI-70-FY-0006-20210409	TI-70-BY-0612-20210409	TI-70-BGD-0006-20210409
TI-70-BGD-0612-20210409	TI-71-GA-0612-20200513	TI-73-FY-0006-20210519
TI-73-BY-0006-20210519	TI-73-DUP-20210519	TI-74-FY-0006-20210519
TI-74-SY-0006-20210519	TI-75-BY-0612-20210526	TI-75-GD2-0006-20210526
TI-75-GD2-0612-20210526	TI-76-BY-0006-20210526	TI-76-BY-0612-20210526
TI-76-GD-0612-20210526	TI-80-BY-0006-20210527	TI-80-SY1-0006-20210527
TI-82-FY-0006-20210603	TI-82-BY-0006-20210603	TI-82-BY-0612-20210603
TI-82-GD-0612-20210603	TI-84-FY-0006-20210604	TI-84-FY-0006-20210604
TI-85-SY-0006-20210608	TI-85-SY-0612-20210608	TI-85-BY-0006-20210608
TI-87-SY1-0006-20210608	TI-87-DUP-20210608	TI-87-SY2-0006-20210608
TI-87-SY2-0612-20210608	TI-91-FY-0006-20210618	TI-91-DUP-20210618
TI-91-BY-0006-20210618	TI-92-GD-0612-20210617	TI-93-FY-0006-20210621
TI-93-GD2-0612-20210621	TI-94-FY-0006-20210623	TI-95-GD2-0006-20210623

LIST OF AFFECTED RESIDENTIAL SAMPLE NUMBERS
(continued from previous page)
Taracorp Industries Soil Site
Lyons, Illinois
Updated February 2022

TI-95-GD1-0612-20210623	TI-95-DUP-20210623	TI-95-GD1-0006-20210623
TI-95-GD2-0612-20210623	TI-95-BY-0006-20210623	TI-95-DUP-20210623
TI-95-PA-0006-20210623	TI-96-GD3-0612-20210708	TI-97-FY-0006-20210708
TI-98-SY-0006-20210708	TI-98-SY-0612-20210708	TI-99-BY-0006-20210812
TI-99-DUP-20210812	TI-99-BY-0612-20210812	TI-99-PA-0006-20210812
TI-99-PA-0612-20210812	TI-99-GD-0006-20210812	TI-100-BY-0006-20210812
TI-100-GD1-0006-20210812	TI-100-GD1-0612-20210812	TI-104-FY-0006-20210813
TI-106-GD-0006-20210813	TI-107-FY-0006-20210819	TI-107-BY-0006-20210819
TI-107-BY-0612-20210819	TI-107-GD2-0006-20210819	TI-108-GD-0612-20210819
TI-109-BY-0612-20210819	TI-109-FY-0612-20210819	TI-110-FY-0006-20210819
TI-110-GD-0006-20210819	TI-110-BY-0006-20210819	TI-111-BY-0006-20210819
TI-115-PA-0006-20210826	TI-115-GD-0006-20210826	TI-115-BY-0006-20210826
TI-115-BY-0612-20210826	TI-116-FY-0006-20210826	TI-117-GD3-0612-20210825
TI-117-BY-0006-20210825	TI-117-DUP-20210825	TI-118-GD2-0006-20210825
TI-121-FY-0006-20211012	TI-121-FY-0612-20211012	TI-121-BY-0006-20211012
TI-122-PA-0006-20211013	TI-122-PA-0612-20211013	TI-123-BY-0006-20211013
TI-125-FY-0006-20211011	TI-127-FY-0006-20211011	TI-128-FY-0006-20211012
TI-128-DUP-20211012	TI-130-FY-0612-20211116	TI-131-BY-0006-20211116
TI-131-BY-0612-20211116	TI-131-GD3-0006-20211116	TI-131-GD5-0612-20211116
TI-134-FY-0006-20211116	TI-134-GD-0006-20211116	

* EPA has not been able to obtain access to these properties to conduct a cleanup.

**ATTACHMENT 5
U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL ACTION**

**ADMINISTRATIVE RECORD
FOR THE
TARACORP. IND. MC COOK PLANT
MC COOK, COOK COUNTY, ILLINOIS**

**AMENDMENT 2
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	972803	12/06/21	Eurofins TestAmerica Laboratory	TetraTech, Inc.	Taracorp Industries Soils Site Laboratory Data Reports for 2020 and 2021	1207
2	-----	-----	Thomas, C., U.S. EPA	Ballotti, D. and Breen, B., U.S. EPA	EPA Action Memorandum: 2 nd Amendment Request for Change in Ceiling Increase (Pending)	--