

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

IN THE MATTER OF:

Sangamon Street Right of Way Site
Chicago, Cook County, Illinois
(C54R)

ADMINISTRATIVE SETTLEMENT
AGREEMENT AND ORDER ON
CONSENT FOR REMOVAL ACTION

Docket No. V-W-16-C-007

Respondent:

BNSF Railway Company

Proceeding Under Sections 104, 106(a), 107
and 122 of the Comprehensive
Environmental Response, Compensation,
and Liability Act, as amended,
42 U.S.C. §§ 9604, 9606(a), 9607 and 9622

I. JURISDICTION AND GENERAL PROVISIONS

1. This Administrative Settlement Agreement and Order on Consent ("Settlement Agreement") is entered into voluntarily by the United States Environmental Protection Agency ("U.S. EPA") and BNSF Railway Company ("Respondent" or "BNSF"). This Settlement Agreement provides for the Respondent's performance of removal actions and the payment of certain response costs the United States incurs at or in connection with the Sangamon Street Right of Way Site ("Site") which consists of the BNSF right-of-way that runs east of and adjacent to the city of Chicago's ("City") Sangamon Street and sidewalk, between 16th Street to the north and 21st Street to the south, in Chicago, Cook County, Illinois.

2. This Settlement Agreement is issued under the authority vested in the President of the United States by Sections 104, 106(a), 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended ("CERCLA"), 42 U.S.C. §§ 9604, 9606(a), 9607 and 9622. This authority has been delegated to the Administrator of the U.S. EPA by Executive Order No. 12580, January 23, 1987, 52 Federal Register 2923, and further delegated to the Regional Administrators by U.S. EPA Delegation Nos. 14-14-A, 14-14-C and 14-14-D, and to the Director, Superfund Division, Region 5, by Regional Delegation Nos. 14-14-A, 14-14-C and 14-14-D.

3. U.S. EPA has notified the State of Illinois (the "State") of this action pursuant to Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).

4. U.S. EPA and Respondent recognize that this Settlement Agreement has been negotiated in good faith and that the actions Respondent undertakes in accordance with this Settlement Agreement do not constitute an admission of any liability. Respondent does not admit, and retains the right to controvert in any subsequent proceedings other than proceedings to implement or enforce this Settlement Agreement, the validity of the findings of facts, conclusions of law, and determinations in Sections IV (Findings Of Fact) and V (Conclusions Of Law And Determinations) of this Settlement Agreement. Respondent agrees to comply with and be bound by the terms of this Settlement Agreement and further agrees that it will not contest the basis or validity of this Settlement Agreement or its terms.

II. PARTIES BOUND

5. This Settlement Agreement applies to and is binding upon U.S. EPA and upon Respondent and its successors and assigns. Any change in ownership or corporate status of Respondent including, but not limited to, any transfer of assets or real or personal property shall not alter Respondent's responsibilities under this Settlement Agreement.

6. Respondent shall ensure that its contractors, subcontractors, and representatives comply with this Settlement Agreement. Respondent shall be responsible for any noncompliance with this Settlement Agreement.

III. DEFINITIONS

7. Unless otherwise expressly provided in this Settlement Agreement, terms used in this Settlement Agreement that are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or in such regulations. Whenever terms listed below are used in this Settlement Agreement or in the appendices attached hereto and incorporated hereunder, the following definitions shall apply:

"CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. §§ 9601-9675.

"Day" shall mean a calendar day unless otherwise specified. In computing any period of time under this Settlement Agreement, where the last day would fall on a Saturday, Sunday, or Federal holiday, the period shall run until the close of business of the next working day.

"Effective Date" shall be the effective date of this Settlement Agreement as provided in Section XXVIII (Effective Date).

"Future Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs, that the United States incurs in reviewing or developing plans, reports and other items pursuant to this Settlement Agreement, in overseeing implementation of the Work, or otherwise implementing, overseeing, or enforcing this Settlement Agreement on or after the Effective Date. Future Response Costs shall also include, but not be limited to, payroll costs, contractor costs, travel costs, laboratory costs, the costs incurred pursuant to Paragraph 24 including, but not limited to, costs and attorney's fees and any monies paid to secure access, including, but not limited to, the amount of just compensation and Paragraph 34 (emergency response). Future Response Costs shall also include all costs, including, but not limited to, direct and indirect costs, incurred prior to the Effective Date, but paid after that date. Future Response Costs shall also include all "Interim Response Costs," and all Interest on those Past Response Costs Respondents have agreed to pay under this Settlement Agreement that has accrued pursuant to 42 U.S.C. § 9607(a) during the period from May 15, 2015, to the Effective Date.

"Interest" shall mean interest at the rate specified for interest on investments of the U.S. EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, compounded annually on October 1 of each year, in accordance with 42 U.S.C. § 9607(a). The applicable rate of interest shall be the rate in effect at the time the interest accrues. The rate of interest is subject to change on October 1 of each year.

"Interim Response Costs" shall mean all costs, including direct and indirect costs, (a) the United States pays in connection with the Site between May 15, 2015, and the Effective Date, or (b) incurred prior to the Effective Date, but paid after that date.

"National Contingency Plan" or "NCP" shall mean the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, and any amendments thereto.

"Paragraph" shall mean a portion of this Settlement Agreement" identified by an Arabic numeral or an upper or lower case letter.

"Parties" shall mean the U.S. Environmental Protection Agency or U.S. EPA, and Respondent.

"Past Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs, that the United States paid at or in connection with the Site through May 15, 2015, plus Interest on all such costs through such date.

"RCRA" shall mean the Solid Waste Disposal Act, as amended, 42 U.S.C. §§ 6901, *et seq.* (also known as the Resource Conservation and Recovery Act).

"Respondent" shall mean the BNSF Railway Company or "BNSF".

"Section" shall mean a portion of this Settlement Agreement identified by a Roman numeral.

"Settlement Agreement" shall mean this Administrative Settlement Agreement and Order on Consent and all Attachments hereto (listed in Section XXVII - Severability/Integration/Attachments). In the event of conflict between this Settlement Agreement and any appendix, this Settlement Agreement shall control.

"Site" shall mean the Sangamon Street Right of Way Superfund Site, which consists of the BNSF right-of-way ("ROW") that runs east of and adjacent to the City's Sangamon Street and sidewalk, between 21st Street to the south and 16th Street to the north, in Chicago, Cook County, Illinois.

"State" shall mean the State of Illinois.

"United States" shall mean the United States of America and each department, agency, and instrumentality of the United States, including U.S. EPA.

"U.S. EPA shall mean the United States Environmental Protection Agency and any successor departments or agencies of the United States.

"Waste Material" shall mean 1) any "hazardous substance" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); 2) any pollutant or contaminant under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); 3) any "solid waste" under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27); and 4) any "hazardous substance" under Section 3.215 of the Illinois Environmental Protection Act, 415 ILCS 5/3.215.

"Work" shall mean all activities Respondent is required to perform under this Settlement Agreement, except those required by Section XI (Record Retention).

IV. FINDINGS OF FACT

8. Based on available information, including the Administrative Record in this matter, U.S. EPA hereby finds that:
- a. The Sangamon Street Right of Way Site is located in Section 20, Township 39N, Range 14E in Chicago, Cook County, Illinois. The Site consists of BNSF's ROW which runs east of and adjacent to Sangamon Street and a sidewalk, between 21st Street to the south and 16th Street to the north.
 - b. Several private properties are adjacent to the ROW which may overlap the Site property. The City also owns and maintains a sidewalk and portions of the ROW. A title search and property survey will be conducted by BNSF prior to the removal action. The ROW between 18th and 16th Streets along Sangamon Street is adjacent to the National Lead Site, which was in the Illinois Environmental Protection Agency ("IEPA") voluntary remediation program, and is being assessed separately.
 - c. In June 2013, U.S. EPA engaged in sampling activities at and adjacent to the former Loewenthal Metals Company's smelting facility property at 947 West Cullerton Avenue in Chicago, in assessing the extent of contamination to be addressed in a time critical removal action at the Loewenthal Metals facility. As part of its investigation, U.S. EPA requested access to the ROW, which borders the Loewenthal Metals Site on the east boundary, in order to delineate the extent of lead contamination. U.S. EPA also designated twelve sampling locations along the BNSF ROW.
 - d. On June 21, 2013, BNSF's contractor collected soil samples at the twelve U.S. EPA-designated sampling locations, and provided U.S. EPA with splits. The contractor also collected three additional soil samples at locations one block north of the U.S. EPA-designated locations (north of Cullerton Street) along the ROW, and east of Sangamon Street.
 - e. The results of the BNSF June 21, 2013, sampling showed one location had a toxicity characteristic leaching procedure ("TCLP") concentration of lead at 56 milligrams per liter ("mg/L"), which is above the characteristic hazardous waste limit of 5 mg/L. The results of the other soil samples indicated high levels of lead at the surface to one-foot deep, at 6,300 milligrams per kilogram ("mg/kg") and from 3100 mg/kg to 1500 mg/kg in the surface to one-foot deep range. These levels of lead exceed IEPA's Tiered Approach to Corrective Action Objectives ("TACO") values for residential and industrial Soil Remediation Objectives of 400 mg/kg and 800 mg/kg respectively. They also exceed U.S. EPA's removal management levels ("RMLs"), which are the same, that is, 400 mg/kg for residential scenarios and 800 mg/kg for industrial.
 - f. In the summer of 2013, BNSF's contractor removed the track and crossings in the ROW between 18th Street and 21st Street. The contractor constructed temporary fencing around the known contaminated areas, and sampled and managed the soil pile

that was staged along the Sangamon corridor. The soil was disposed of as special waste and the removal of track was suspended pending further sampling and characterization.

- g. U.S. EPA consulted with the City Department of Transportation regarding the high levels of lead found along the east border of the Loewenthal Metals Site. The City determined that it owned and maintained this sidewalk and ROW and, between September 30 and October 11, 2013, conducted a cleanup of two lead-contaminated areas. The areas are both located along the sidewalk constructed on the east side of the ROW from Cullerton Street south to 21st Street. The City removed lead-contaminated soil at the south parcel from Cullerton Street to 21st Street. That area is now designated as an urban garden. The second area was adjacent to the Loewenthal Metals removal action. The City removed 64 cubic yards of lead-contaminated soil and backfilled the areas with clean fill.
- h. Based on the results of BNSF's and U.S. EPA's initial sampling, BNSF conducted additional soil sampling on November 21, 2013, and again on October 7-8, 2014, to further evaluate lead impacts along the ROW running from 18th Street south to 21st Street.
- i. Based on the results of the soil samples collected and analyzed for total lead, 33 soil boring locations on the ROW have total lead concentrations above 800 mg/kg, which is above the RML industrial value and the IEPA TACO Industrial value. In addition, six sample locations are above the TCLP threshold for lead of 5 mg/l, and must be managed as a hazardous waste.
- j. In addition to total and TCLP lead analyses, U.S. EPA analyzed one soil sample for polycyclic aromatic hydrocarbon analysis and one sample for volatile organic chemical analysis. None of the volatile or semi-volatile analyses exceeded RML's or IEPA TACO levels for residential or industrial values.
- k. The BNSF ROW is easily accessible and is not fenced except for the portion from 16th Street to 18th Street.
- l. An Environmental Justice ("EJ") analysis for the Site was conducted of the surrounding area using Region 5's EJ Screening Tool. Region 5 has reviewed environmental and demographic data for the area surrounding the Sangamon Street ROW and determined there is a high potential for EJ concerns at this Site.

V. CONCLUSIONS OF LAW AND DETERMINATIONS

9. Based on the Findings of Fact set forth above, and the Administrative Record supporting this removal action, U.S. EPA has determined that:

- a. The Sangamon Street Right of Way Site is a "facility" as defined by Section 101(9) of

CERCLA, 42 U.S.C. § 9601(9).

- b. The contamination found at the Site, as identified in the Findings of Fact above, includes a "hazardous substance" as defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).
- c. Respondent is a "person" as defined by Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).
- d. Respondent is a responsible party under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), and is jointly and severally liable for performance of response actions and for response costs incurred and to be incurred at the Site, because:
 - i. Respondent is an "owner" and/or "operator" of the facility, as defined by Section 101(20) of CERCLA, 42 U.S.C. § 9601(20), and within the meaning of Section 107(a)(1) of CERCLA, 42 U.S.C. § 9607(a)(1);
 - ii. Respondent was an "owner" and/or "operator" of the facility at the time of disposal of hazardous substances at the facility, as defined by Section 101(20) of CERCLA, 42 U.S.C. § 9601(20), and within the meaning of Section 107(a)(2) of CERCLA, 42 U.S.C. § 9607(a)(2).
- e. The conditions described in the Findings of Fact above constitute an actual or threatened "release" of a hazardous substance from the facility into the "environment" as defined by Sections 101(22) and 101(8) of CERCLA, 42 U.S.C. §§ 9601(22) and 9601(8).
- f. The conditions present at the Site constitute a threat to public health, welfare, or the environment based upon the factors set forth in Section 300.415(b)(2) of the National Oil and Hazardous Substances Pollution Contingency Plan, as amended ("NCP"), 40 C.F.R. § 300.415(b)(2). These factors include, but are not limited to, the following:
 - i. Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances, pollutants or contaminants; this factor is present at the Site due to the high levels of lead that exist in the soil that are documented above RALs, and in 6 sampling locations were found to be above the RCRA hazardous level of 5 mg/l TCLP. The Site is unfenced and accessible to the public.
 - ii. High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface that may migrate; this factor is present at the Site due to the existence of analytical results from previous reports and activities that document the presence of high levels of lead and TCLP lead levels above the RCRA level of 5 mg/l, causing the soil to be a characteristic hazardous waste. These high levels of lead at or near the surface could migrate through windblown dust, rain, flooding or by mechanical movement.

- iii. Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released; this factor is present at the Site due to the potential for wind action during dry periods which could cause lead-contaminated soil to become airborne, posing a breathing hazard. Such wind action could also lead to deposition of lead-contaminated materials in uncontaminated areas. Migration of contaminants in surface soil could also occur through surface water flow or groundwater flow during wet periods, due to the high levels of heavy metals.
- iv. The unavailability of other appropriate federal or state response mechanisms to respond to the release; this factor supports the actions required by this Settlement Agreement at the Site because IEPA plans no further response actions. IEPA referred the Site to U.S. EPA, requesting that a time critical removal assessment and possible removal action be conducted along the ROW.
- g. The removal action this Settlement Agreement requires is necessary to protect the public health, welfare, or the environment and, if carried out in compliance with the terms of this Settlement Agreement, will be consistent with the NCP, as provided in Section 300.700(c)(3)(ii) of the NCP.

VI. SETTLEMENT AGREEMENT AND ORDER

10. Based upon the foregoing Findings of Fact, Conclusions of Law, Determinations, and the Administrative Record for this Site, it is hereby Ordered and Agreed that Respondent shall comply with all provisions of this Settlement Agreement, including, but not limited to, all attachments to this Settlement Agreement and all documents incorporated by reference into this Settlement Agreement.

VII. DESIGNATION OF CONTRACTOR, PROJECT COORDINATOR, AND ON-SCENE COORDINATOR

11. Respondent shall retain one or more contractors to perform the Work and shall notify U.S. EPA of the name(s) and qualifications of such contractor(s) within 5 business days of the Effective Date. Respondent shall also notify U.S. EPA of the name(s) and qualification(s) of any other contractor(s) or subcontractor(s) retained to perform the Work at least 5 business days prior to commencement of such Work. U.S. EPA retains the right to disapprove of any or all of the contractors and/or subcontractors Respondent retains. If U.S. EPA disapproves of a selected contractor, Respondent shall retain a different contractor and shall notify U.S. EPA of that contractor's name and qualifications within 3 business days of U.S. EPA's disapproval. The contractor must demonstrate compliance with ANSI/ASQC E-4-1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs" (American National Standard, January 5, 1995), by submitting a copy of the proposed contractor's Quality Management Plan ("QMP"). The QMP should be prepared consistent with "EPA Requirements for Quality Management Plans (QA/R-2)" (EPA/240/B-01/002), or equivalent documentation as U.S. EPA requires. Any decision not to require submission of the contractor's QMP should be documented in a memorandum from the On-Scene

Coordinator (“OSC”) and Regional quality assurance personnel to the Site file.

12. Within 5 business days after the Effective Date, Respondent shall designate a Project Coordinator who shall be responsible for administration of all actions Respondent takes under this Settlement Agreement, and shall submit to U.S. EPA the designated Project Coordinator's name, address, telephone number, and qualifications. To the greatest extent possible, the Project Coordinator shall be present on Site or readily available during Site work. U.S. EPA retains the right to disapprove of the designated Project Coordinator. If U.S. EPA disapproves of the designated Project Coordinator, Respondent shall retain a different Project Coordinator and shall notify U.S. EPA of that person's name, address, telephone number, and qualifications within 3 business days following U.S. EPA's disapproval. Receipt by Respondent's Project Coordinator of any notice or communication from U.S. EPA relating to this Settlement Agreement shall constitute receipt by Respondent.

13. U.S. EPA has designated Steve Faryan of the Emergency Response Branch 2, Region 5, as its OSC. Except as otherwise provided in this Settlement Agreement, Respondent shall direct all submissions required by this Settlement Agreement to the OSC at:

Steve Faryan, On-Scene Coordinator
U.S. Environmental Protection Agency, Region 5
77 West Jackson Boulevard, SE-5J
Chicago, Illinois 60604
faryan.steven@epa.gov
312-353-9351

Respondent is encouraged to make its submissions to U.S. EPA electronically.

14. U.S. EPA and Respondent shall have the right, subject to Paragraph 12, to change their respective designated OSC or Project Coordinator. U.S. EPA shall notify the Respondent, and Respondent shall notify U.S. EPA, as early as possible before such a change is made, but in no case less than 24 hours before such a change. The initial notification may be made orally but shall be promptly followed by a written notice.

VIII. WORK TO BE PERFORMED

15. Respondent shall perform, at a minimum, the following removal activities consistent with the Work Plan attached as Attachment A:

- a. Develop and implement a site-specific Health and Safety Plan, Sampling and Analysis Plan, Fugitive Emission Management Plan, Work Plan and Schedule for Completion;
- b. Conduct a Title Search, prepare a map of the Right of Way and mark all property lines;

- c. Implement the Work Plan attached as Attachment A.
- d. Provide dust control and dust monitoring to protect the neighboring residences.
- e. Transport and dispose of all characterized or identified hazardous substances, pollutants, wastes, or contaminants to a RCRA/CERCLA-approved disposal facility in accordance with U.S. EPA's Off-Site Rule (40 C.F.R. § 300.440);
- f. Backfill all excavated areas with clean soil and grade as appropriate; and
- g. Vegetate or take other actions to prevent soil erosion, which could include the transfer of properties to another party for other use and erosion control.

16. Work Plan and Implementation.

a. Respondent has submitted and U.S. EPA has approved a Work Plan (attached as Attachment A) for performing the removal action generally described in Paragraph 15 above. The Work Plan shall provide a description of, and an expeditious schedule for, the actions required by this Settlement Agreement. The Work Plan shall include a Quality Assurance Project Plan ("QAPP"). The following documents shall be used for the development of QAPPs for Region 5 Superfund sites:

- The Uniform Federal Policy for Quality Assurance Projects Plans ("UFP-QAPP"), OSWER Directive 9272.0-17.
- EPA Requirements for Quality Assurance Project Plans QA/R-5 (EPA/240/B-01/003), March 2001, Reissued May 2006.

The following guidance may be used in conjunction with the requirements above:

- EPA Guidance for the Quality Assurance Project Plans QA/G-5 (EPA/240/R-02/009), December 2002.
- Guidance on Choosing a Sampling Design for Environmental Data Collection EPA QA/G-5S, December 2002.

b. The Work Plan, the schedule, and any subsequent modifications shall be incorporated into and become fully enforceable under this Settlement Agreement.

c. Respondent shall not commence any Work except in conformance with the terms of this Settlement Agreement.

17. Health and Safety Plan. Within 10 business days after the Effective Date, Respondent shall submit for U.S. EPA review and comment a plan that ensures the protection of the public health and safety during performance of on-site work under this Settlement Agreement. This plan shall be prepared consistent with U.S. EPA's Standard Operating Safety Guide (PUB 9285.1-03, PB 92-963414, June 1992). In addition, the plan shall comply with all currently applicable Occupational Safety and Health Administration ("OSHA") regulations found at 29 C.F.R. Part 1910. If U.S. EPA determines that it is appropriate, the plan shall also

include contingency planning. Respondent shall incorporate all changes to the plan U.S. EPA requires and shall implement the plan during the pendency of the removal action.

18. Quality Assurance and Sampling.

a. All sampling and analyses performed pursuant to this Settlement Agreement shall conform to U.S. EPA direction, approval, and guidance regarding sampling, quality assurance/quality control ("QA/QC"), data validation, and chain of custody procedures. Respondent shall ensure that the laboratory used to perform the analyses participates in a QA/QC program that complies with the appropriate U.S. EPA guidance. Respondent shall follow, as appropriate, "Quality Assurance/Quality Control Guidance for Removal Activities: Sampling QA/QC Plan and Data Validation Procedures" (OSWER Directive No. 9360.4-01, April 1, 1990), as guidance for QA/QC and sampling. Respondent shall only use laboratories that have a documented Quality System that complies with ANSI/ASQC E-4 1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs" (American National Standard, January 5, 1995), and EPA Requirements for Quality Management Plans (QA/R-2) (EPA/240/B-01/002, March 2001, reissued May 2006)," or equivalent documentation as determined by EPA. U.S. EPA may consider laboratories accredited under the National Environmental Laboratory Accreditation Program ("NELAP") as meeting the Quality System requirements.

b. Upon U.S. EPA's request, Respondent shall have such a laboratory analyze samples U.S. EPA submits for QA monitoring. Respondent shall provide to U.S. EPA the QA/QC procedures followed by all sampling teams and laboratories performing data collection and/or analysis.

c. Upon U.S. EPA's request, Respondent shall allow U.S. EPA or its authorized representatives to take split and/or duplicate samples. Respondent shall notify U.S. EPA not less than 3 business days in advance of any sample collection activity, unless U.S. EPA agrees to shorter notice. U.S. EPA shall have the right to take any additional samples that U.S. EPA deems necessary. Upon request, U.S. EPA shall allow Respondent to take split or duplicate samples of any samples it takes as part of its oversight of Respondent's implementation of the Work.

19. Post-Removal Site Control. In accordance with the Work Plan schedule, or as U.S. EPA's otherwise directs, Respondent shall submit a proposal for post-removal site control consistent with Section 300.415(*l*) of the NCP and OSWER Directive No. 9360.2-02. Upon U.S. EPA approval, Respondent shall implement such controls and shall provide U.S. EPA with documentation of all post-removal site control arrangements.

20. Reporting.

a. Respondent shall submit a written progress report to U.S. EPA concerning actions undertaken pursuant to this Settlement Agreement every 30th day after the date of receipt of U.S. EPA's approval of the Work Plan until termination of this Settlement Agreement, unless otherwise directed in writing by the OSC. These reports shall describe all significant

developments during the preceding period, including the actions performed and any problems encountered, analytical data received during the reporting period, and the developments anticipated during the next reporting period, including a schedule of actions to be performed, anticipated problems, and planned resolutions of past or anticipated problems.

b. Respondent shall submit 3 hard copies of all plans, reports or other submissions required by this Settlement Agreement, or any approved work plan. Upon U.S. EPA's request, Respondent shall submit such documents in electronic form in lieu of 3 hard copies.

c. Respondent shall, at least 30 days prior to the conveyance of any interest in real property at the Site, give written notice to the transferee that the property is subject to this Settlement Agreement and written notice to U.S. EPA and the State of Illinois of the proposed conveyance, including the name and address of the transferee. Respondent shall also agree to require that its successors comply with the immediately preceding sentence and Sections IX (Site Access) and X (Access to Information).

21. Final Report. Within 60 days after completion of all Work required by Section VIII (Work To Be Performed) of this Settlement Agreement, Respondent shall submit for U.S. EPA review and approval a final report summarizing the actions taken to comply with this Settlement Agreement. The final report shall conform, at a minimum, with the requirements set forth in Section 300.165 of the NCP entitled "OSC Reports" and with the guidance set forth in "Superfund Removal Procedures: Removal Response Reporting POLREPS and OSC Reports" (OSWER Directive No. 9360.3-03, June 1, 1994). The final report shall include a good faith estimate of total costs or a statement of actual costs incurred in complying with the Settlement Agreement, a listing of quantities and types of materials removed off-site or handled on-site, a discussion of removal and disposal options considered for those materials, a listing of the ultimate destination(s) of those materials, a presentation of the analytical results of all sampling and analyses performed, and accompanying appendices containing all relevant documentation generated during the removal action (e.g., manifests, invoices, bills, contracts, and permits). The final report shall also include the following certification signed by a person who supervised or directed the preparation of that report:

"Under penalty of law, I certify that to the best of my knowledge, after appropriate inquiries of all relevant persons involved in the preparation of the report, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

22. Off-Site Shipments.

a. Respondent shall, prior to any off-site shipment of Waste Material from the Site to an out-of-state waste management facility, provide written notification of such shipment of Waste Material to the appropriate state environmental official in the receiving facility's state and to the On-Scene Coordinator. However, this notification requirement shall not apply to any off-site shipments when the total volume of all such shipments will not exceed 10 cubic yards.

i. Respondent shall include in the written notification the following information:
(1) the name and location of the facility to which the Waste Material is to be shipped;
(2) the type and quantity of the Waste Material to be shipped; (3) the expected schedule for the shipment of the Waste Material; and (4) the method of transportation. Respondent shall notify the state in which the planned receiving facility is located of major changes in the shipment plan, such as a decision to ship the Waste Material to another facility within the same state, or to a facility in another state.

ii. Respondent will determine the receiving facility's and state's identity following the award of the contract for the removal action. Respondent shall provide the information required in Paragraph 22(a) as soon as practicable after the award of the contract and before the Waste Material is actually shipped.

b. Before shipping any hazardous substances, pollutants, or contaminants from the Site to an off-site location, Respondent shall obtain U.S. EPA's certification that the proposed receiving facility is operating in compliance with the requirements of CERCLA Section 121(d)(3), 42 U.S.C. § 9621(d)(3), and 40 C.F.R. § 300.440. Respondent shall only send hazardous substances, pollutants, or contaminants from the Site to an off-site facility that complies with the requirements of the statutory provision and regulation cited in the preceding sentence.

IX. SITE ACCESS

23. Respondent shall, commencing on the Effective Date, provide U.S. EPA, the State, and their representatives, including contractors, with access at all reasonable times to the Site, and to any other property Respondent owns or controls and to which access is need to implement this Settlement Agreement, for the purpose of conducting any activity related to this Settlement Agreement.

24. Where any action under this Settlement Agreement is to be performed in areas owned by or in possession of someone other than Respondent, Respondent shall use its best efforts to obtain all necessary access agreements within 10 business days after the Effective Date, or as otherwise specified in writing by the OSC. Respondent shall immediately notify U.S. EPA if after using its best efforts it is unable to obtain such agreements. For purposes of this Paragraph, "best efforts" includes the payment of reasonable sums of money in consideration of access. Respondent shall describe in writing its efforts to obtain access. U.S. EPA may then assist Respondent in gaining access, to the extent necessary to effectuate the response actions described in this Settlement Agreement, using such means as U.S. EPA deems appropriate. Respondent shall reimburse U.S. EPA for all costs and attorney's fees the United States incurs obtaining such access, in accordance with the procedures in Section XV (Payment of Response Costs).

25. Notwithstanding any provision of this Settlement Agreement, U.S. EPA and the State retain all of their access authorities and rights, including enforcement authorities related thereto, under CERCLA, RCRA, and any other applicable statutes or regulations.

X. ACCESS TO INFORMATION

26. Respondent shall provide to U.S. EPA, upon request, copies of all documents and information within its possession or control or that of its contractors or agents relating to activities at the Site or to the implementation of this Settlement Agreement, including, but not limited to, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information related to the Work. Respondent shall also make available to U.S. EPA, for purposes of investigation, information gathering, or testimony, its employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.

27. Respondent may assert business confidentiality claims covering part or all of the documents or information submitted to U.S. EPA under this Settlement Agreement to the extent permitted by and in accordance with Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7), and 40 C.F.R. § 2.203(b). Documents or information U.S. EPA determines to be confidential will be afforded the protection specified in 40 C.F.R. Part 2, Subpart B. If no claim of confidentiality accompanies documents or information when they are submitted to U.S. EPA, or if U.S. EPA has notified Respondent that the documents or information are not confidential under the standards of Section 104(e)(7) of CERCLA or 40 C.F.R. Part 2, Subpart B, the public may be given access to such documents or information without further notice to Respondent.

28. Respondent may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If the Respondent asserts such a privilege in lieu of providing documents, it shall provide U.S. EPA with the following: 1) the title of the document, record, or information; 2) the date of the document, record, or information; 3) the name and title of the author of the document, record, or information; 4) the name and title of each addressee and recipient; 5) a description of the contents of the document, record, or information; and 6) the privilege Respondent asserts. However, no documents, reports or other information created or generated pursuant to the requirements of this Settlement Agreement shall be withheld on the grounds that they are privileged or confidential.

29. No claim of privilege or confidentiality shall be made with respect to any data, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, or engineering data, or any other documents or information evidencing conditions at or around the Site.

XI. RECORD RETENTION

30. Until 6 years after Respondent's receipt of U.S. EPA's notification pursuant to Section XXVI (Notice of Completion of Work), Respondent shall preserve and retain all non-identical copies of records and documents (including records or documents in electronic form) now in its possession or control or which come into its possession or control that relate in any manner to the performance of the Work or the liability of any person under CERCLA with respect to the Site, regardless of any corporate retention policy to the contrary. Until 6 years after Respondent's receipt of U.S. EPA's notification pursuant to Section XXVI, Respondent

shall also instruct its contractors and agents to preserve all documents, records, and information of whatever kind, nature or description relating to performance of the Work.

31. At the conclusion of this document retention period, Respondent shall notify U.S. EPA at least 60 days prior to the destruction of any such records or documents, and, upon request by U.S. EPA, Respondent shall deliver any such records or documents to U.S. EPA. Respondent may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If Respondent asserts such a privilege, it shall provide U.S. EPA with the following: 1) the title of the document, record, or information; 2) the date of the document, record, or information; 3) the name and title of the author of the document, record, or information; 4) the name and title of each addressee and recipient; 5) a description of the subject of the document, record, or information; and 6) the privilege Respondent asserts by Respondent. However, no documents, reports or other information created or generated pursuant to the requirements of this Settlement Agreement shall be withheld on the grounds that they are privileged or confidential.

32. Respondent hereby certifies that to the best of its knowledge and belief, after thorough inquiry, that (1) it has not altered, mutilated, discarded, destroyed or otherwise disposed of any records, documents or other information (other than identical copies) relating to its potential liability regarding the Site since the earlier of (a) U.S. EPA's or the State's notification of potential liability or (b) the filing of suit against it regarding the Site and (2) that it has fully complied with any and all U.S. EPA requests for information pursuant to Sections 104(e) and 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) and 9622(e), and Section 3007 of RCRA, 42 U.S.C. § 6927.

XII. COMPLIANCE WITH OTHER LAWS

33. Respondent shall perform all actions required pursuant to this Settlement Agreement in accordance with all applicable local, state, and federal laws and regulations except as provided in Section 121(e) of CERCLA, 42 U.S.C. § 6921(e), and 40 C.F.R. §§ 300.400(e) and 300.415(j). In accordance with 40 C.F.R. § 300.415(j), all on-Site actions required pursuant to this Settlement Agreement shall, to the extent practicable, as U.S. EPA determines, considering the exigencies of the situation, attain applicable or relevant and appropriate requirements ("ARARs") under federal environmental or state environmental or facility siting laws. Respondent shall identify ARARs in the Work Plan subject to U.S. EPA approval.

XIII. EMERGENCY RESPONSE AND NOTIFICATION OF RELEASES

34. In the event of any action or occurrence during performance of the Work that causes or threatens a release of Waste Material from the Site that constitutes an emergency situation or may present an immediate threat to public health or welfare or the environment, Respondent shall immediately take all appropriate action. Respondent shall take these actions in accordance with all applicable provisions of this Settlement Agreement, including, but not limited to, the Health and Safety Plan, in order to prevent, abate or minimize such release or endangerment the releases causes or threatens. Respondent shall also immediately notify the OSC or, in the event of his unavailability, the Regional Duty Officer, Emergency Response Branch, Region 5 at (312)

353-2318, of the incident or Site conditions. In the event that Respondent fails to take appropriate response action as this Paragraphs requires, and U.S. EPA takes such action instead, Respondent shall reimburse U.S. EPA all costs of the response action not inconsistent with the NCP pursuant to Section XV (Payment of Response Costs).

35. In addition, in the event of any release of a hazardous substance on or from the Site, Respondent shall immediately notify the OSC at (312) 353-9351 and the National Response Center at (800) 424-8802. Respondent shall submit a written report to U.S. EPA within 7 business days after each release, setting forth the events that occurred and the measures taken or to be taken to mitigate any release or endangerment caused or threatened by the release and to prevent the reoccurrence of such a release. This reporting requirement is in addition to, and not in lieu of, reporting under Section 103(c) of CERCLA, 42 U.S.C. § 9603(c), and Section 304 of the Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. § 11004, *et seq.*

XIV. AUTHORITY OF ON-SCENE COORDINATOR

36. The OSC shall be responsible for overseeing Respondent's implementation of this Settlement Agreement. The OSC shall have the authority the NCP vests in OSCs, including the authority to halt, conduct, or direct any Work this Settlement Agreement requires, or to direct any other removal action undertaken at the Site. Absence of the OSC from the Site shall not be cause for stoppage of work unless the OSC specifically directs.

XV. PAYMENT OF RESPONSE COSTS

37. Payment for Past Response Costs.

a. Within 30 days after the Effective Date, Respondents shall pay to U.S. EPA \$8,056.69 for Past Response Costs. Payment shall be made to U.S. EPA by Fedwire Electronic Funds Transfer (EFT) to:

Federal Reserve Bank of New York,
ABA # 021030004
Account = 68010727
SWIFT address = FRNYUS33,
33 Liberty Street,
New York, NY, 10045

Field Tag 4200 of the Fedwire message should read:
"D 68010727 Environmental Protection Agency"

and shall reference Site/Spill ID Number C54R and the EPA docket number for this action.

b. When the Past Response Costs identified in the above Paragraph are less than \$10,000, payment may, in lieu of the described EFT method, be made by official bank check made payable to "U.S. EPA Hazardous Substance Superfund". Each check, or a letter

accompanying each check, shall identify the name and address of the party(ies) making payment, the Site name, U.S. EPA Region 5, the Site/Spill ID Number C54R, and, if any, the U.S. EPA docket number for this action, and shall be sent to:

U.S. Environmental Protection Agency
Superfund Payments
Cincinnati Finance Center
P.O. Box 979076
St. Louis, MO 63197-9000

At the time of payment, Respondents shall send notice that such payment has been made to the Director, Superfund Division, U.S. EPA Region 5, 77 West Jackson Blvd., Chicago, Illinois, 60604-3590 and to Tom Williams, Associate Regional Counsel, 77 West Jackson Boulevard, C-14J, Chicago, Illinois, 60604-3590, and to the EPA Cincinnati Finance Center by email at acctsreceivable.cinwd@epa.gov, or by mail to: Cincinnati Finance Center, 26 Martin Luther King Drive, Cincinnati, Ohio 45268. Such notice shall reference Site/Spill ID Number C54R and the EPA docket number for this action.

c. U.S. EPA shall deposit the total amount Respondent pays pursuant to Paragraph 39(a) in the Sangamon Street Right of Way Special Account to be retained and used to conduct or finance response actions at or in connection with the Site, or for U.S. EPA to be transferred to the U.S. EPA Hazardous Substance Superfund.

38. Payments for Future Response Costs.

a. Respondent shall pay U.S. EPA all Future Response Costs not inconsistent with the NCP. On a periodic basis, U.S. EPA will send Respondent a bill requiring payment that consists of an Itemized Cost Summary. Respondent shall make all payments within 30 days of receipt of each bill requiring payment, except as otherwise provided in Paragraph 40 of this Settlement Agreement according to the following procedures

- i. Respondent shall make all payments this Paragraph requires to U.S. EPA by Fedwire EFT to:

Federal Reserve Bank of New York,
ABA # 021030004
Account = 68010727
SWIFT address = FRNYUS33,
33 Liberty Street,
New York, NY, 10045

Field Tag 4200 of the Fedwire message should read:
"D 68010727 Environmental Protection Agency"

and shall reference Site/Spill ID Number C54R and the EPA docket number for this action.

- ii. If the amount demanded in the bill is \$10,000 or less, Respondent may, in lieu of the procedures in subparagraph 38(a)(i), make all payments this Paragraph requires by official bank check made payable to "U.S. EPA Hazardous Substance Superfund". Each check, or a letter accompanying each check, shall identify the name and address of the party making payment, the Site name, U.S. EPA Region 5, the Site/Spill ID Number C54R, and, if any, the U.S. EPA docket number for this action, and shall be sent to:

U.S. Environmental Protection Agency
Superfund Payments
Cincinnati Finance Center
P.O. Box 979076
St. Louis, MO 63197-9000

b. At the time of payment, Respondent shall send notice that payment has been made to the Director, Superfund Division, U.S. EPA Region 5, 77 West Jackson Blvd., Chicago, Illinois, 60604-3590 and to Tom Williams, Associate Regional Counsel, 77 West Jackson Boulevard, Mail Code C-14J, Chicago, Illinois, 60604-3590, and to the U.S. EPA Cincinnati Finance Office by email at acctsreceivable.cinwd@epa.gov cinwd_acctsreceivable@epa.gov, or by mail to: Cincinnati Finance Office, 26 West Martin Luther King Drive, Cincinnati, Ohio 45268. Such notice shall reference Site/Spill ID Number C54R and the EPA docket number for this action.

c. The total amount Respondent is to pay pursuant to Paragraph 38(a) shall be deposited in the Sangamon Street Right of Way Site Special Account within the U.S. EPA Hazardous Substance Superfund to be retained and used to conduct or finance response actions at or in connection with the Site, or for U.S. EPA to transfer to the U.S. EPA Hazardous Substance Superfund.

39. In the event that the payments for Future Response Costs are not made within 30 days of Respondent's receipt of a bill, Respondent shall pay Interest on the unpaid balance. The Interest on Future Response Costs shall begin to accrue on the date of the bill and shall continue to accrue until the date of payment. Payments of Interest made under this Paragraph shall be in addition to such other remedies or sanctions available to the United States by virtue of Respondent's failure to make timely payments under this Section, including but not limited to, payment of stipulated penalties pursuant to Section XVIII (Stipulated Penalties).

40. Respondent may contest payment of any Future Response Costs billed under Paragraph 38 if it determines that U.S. EPA has made a mathematical error, or included a cost item that is not within the definition of Future Response Costs, or if it believes U.S. EPA incurred excess costs as a direct result of a U.S. EPA action that was inconsistent with a specific provision or provisions of the NCP. Such objection shall be made in writing within 30 days of receipt of the bill and must be sent to the OSC. Any such objection shall specifically identify the contested Future Response Costs and the basis for objection. In the event of an objection, Respondent shall within the 30-day period pay all uncontested Future Response Costs to U.S. EPA in the manner described in Paragraph 36. Simultaneously, Respondent shall establish,

in a duly chartered bank or trust company, an interest-bearing escrow account that is insured by the Federal Deposit Insurance Corporation (FDIC), and remit to that escrow account funds equivalent to the amount of the contested Future Response Costs. Respondent shall send to the U.S. EPA OSC a copy of the transmittal letter and check paying the uncontested Future Response Costs, and a copy of the correspondence that establishes and funds the escrow account, including, but not limited to, information containing the identity of the bank and bank account under which the escrow account is established as well as a bank statement showing the initial balance of the escrow account. Simultaneously with establishment of the escrow account, Respondent shall initiate the Dispute Resolution procedures in Section XVI (Dispute Resolution). If U.S. EPA prevails in the dispute, within 5 days of the resolution of the dispute, Respondent shall pay the sums due (with accrued interest) to U.S. EPA in the manner described in Paragraph 38. If Respondent prevails concerning any aspect of the contested costs, Respondent shall pay that portion of the costs (plus associated accrued interest) for which it did not prevail to U.S. EPA in the manner described in Paragraph 38. Respondent shall be disbursed any balance of the escrow account. The dispute resolution procedures set forth in this Paragraph in conjunction with the procedures set forth in Section XVI (Dispute Resolution) shall be the exclusive mechanisms for resolving disputes regarding Respondent's obligation to reimburse U.S. EPA for its Future Response Costs.

XVI. DISPUTE RESOLUTION

41. Unless otherwise expressly provided for in this Settlement Agreement, the dispute resolution procedures of this Section shall be the exclusive mechanism for resolving disputes arising under this Settlement Agreement. The Parties shall attempt to resolve any disagreements concerning this Settlement Agreement expeditiously and informally.

42. If Respondent objects to any U.S. EPA action taken pursuant to this Settlement Agreement, including billings for Future Response Costs, it shall notify U.S. EPA in writing of its objection(s) within 10 days of such action, unless the objection(s) has/have been resolved informally. This written notice shall include a statement of the issues in dispute, the relevant facts upon which the dispute is based, all factual data, analysis or opinion supporting Respondent's position, and all supporting documentation on which such party relies. U.S. EPA and Respondent shall have 10 days from U.S. EPA's receipt of Respondent's written objection(s) to resolve the dispute through formal negotiations. The period for formal negotiations may be extended at U.S. EPA's sole discretion. If the parties are unable to reach a written agreement by the conclusion of the formal negotiation period, U.S. EPA shall provide its Statement of Position, including supporting documentation, no later than 10 days after the formal negotiation period concludes. In the event that these 10-day time periods for exchange of written documents may cause a delay in the work, they shall be shortened upon, and in accordance with, notice by U.S. EPA. An administrative record of any dispute under this Section shall be maintained by U.S. EPA. The record shall include the written notification of such dispute, and the Statement of Position served pursuant to the preceding Paragraph. Upon review of the administrative record, the Director of the Superfund Division, U.S. EPA Region 5, shall resolve the dispute consistent with the NCP and the terms of this Settlement Agreement. U.S. EPA's decision shall be incorporated into and become an enforceable part of this Settlement Agreement.

43. Respondent's obligations under this Settlement Agreement shall not be tolled by submission of any objection for dispute resolution under this Section. Following resolution of the dispute, as provided by this Section, Respondent shall fulfill the requirement that was the subject of the dispute in accordance with the agreement reached or with U.S. EPA's decision, whichever occurs.

XVII. FORCE MAJEURE

44. Respondent agrees to perform all requirements of this Settlement Agreement within the time limits established under this Settlement Agreement, unless a *force majeure* delays performance. For purposes of this Settlement Agreement, a *force majeure* is any event arising from causes beyond Respondent's control, or the control of any entity Respondent controls, including but not limited to its contractors and subcontractors, that delays or prevents performance of any obligation under this Settlement Agreement despite Respondent's best efforts to fulfill the obligation. *Force majeure* does not include financial inability to complete the Work or increased cost of performance.

45. If any event, whether or not *force majeure*, occurs or has occurred that may delay the performance of any obligation under this Settlement Agreement, Respondent shall notify U.S. EPA within 24 hours of when Respondent first knew that the event might cause a delay. Within 7 days thereafter, Respondent shall provide to U.S. EPA in writing an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; Respondent's rationale for attributing such delay to a *force majeure* event if it intends to assert such a claim; and a statement as to whether, in Respondent's opinion, such event may cause or contribute to an endangerment to public health, welfare or the environment. Failure to comply with the above requirements shall be grounds for U.S. EPA to deny Respondent an extension of time for performance. Respondent shall have the burden of demonstrating by a preponderance of the evidence that the event is a *force majeure*, that the delay is warranted under the circumstances, and that best efforts were exercised to avoid and mitigate the effects of the delay.

46. If U.S. EPA agrees that the delay or anticipated delay is attributable to a *force majeure* event, U.S. EPA shall extend the time for performance of the obligations under this Settlement Agreement that are affected by the *force majeure* event for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the *force majeure* event shall not, of itself, extend the time for performance of any other obligation. If U.S. EPA does not agree that the delay or anticipated delay has been or will be caused by a *force majeure* event, U.S. EPA will notify Respondent in writing of its decision. If U.S. EPA agrees that the delay is attributable to a *force majeure* event, U.S. EPA will notify Respondent in writing of the length of the extension, if any, for performance of the obligations affected by the *force majeure* event.

XVIII. STIPULATED PENALTIES

47. Respondent shall be liable to U.S. EPA for stipulated penalties in the amounts set

forth in Paragraphs 48 and 49 for failure to comply with the requirements of this Settlement Agreement specified below, unless excused under Section XVII (Force Majeure). "Compliance" by Respondent shall include completion of the activities under this Settlement Agreement or any Work Plan or other plan approved under this Settlement Agreement identified below in accordance with all applicable requirements of law, this Settlement Agreement, and any plans or other documents approved by U.S. EPA pursuant to this Settlement Agreement within the specified time schedules established by and approved under this Settlement Agreement.

48. Stipulated Penalty Amounts – Work (Including Payments).

a. The following stipulated penalties shall accrue per violation per day for any noncompliance identified in Paragraph 48(b):

<u>Penalty per Violation per Day</u>	<u>Period of Noncompliance</u>
\$500	1st through 14th day
\$1,250	15th through 30th day
\$2,500	31st day and beyond

b. Compliance Milestones: Date and time deadlines for compliance milestones are as follows:

- i. Payment of Past Response Costs within 30 days after the Effective Date in accordance with Paragraph 37;
- ii. Payment of Future Response Costs within 30 days of receipt of a bill from U S. EPA, in accordance with Paragraph 38;
- iii. Implementation of the Work Plan in accordance with the approved schedule, as Paragraphs 15 and 16 require;
- iv. Implementation of the Health and Safety Plan during pendency of the removal action, as Paragraph 17 requires; and
- v. Performance of sampling and analysis in accordance with the quality assurance requirements set forth in Paragraphs 18 (a) – (c).

49. Stipulated Penalty Amounts - Reports. The following stipulated penalties shall accrue per violation per: day for failure to submit timely or adequate reports, notices, or other written documents pursuant to the following Paragraphs:

- i. Within 5 business days of the Effective Date, notification to U.S. EPA of the identification and qualifications of the contractor or contractors retained by Respondent to perform the Work, in accordance with Paragraph 11;
- ii. Within 5 business days of the Effective Date, notification to U.S. EPA of the Respondent's Project Coordinator, in accordance with Paragraph 12;
- iii. Within 24 hours before the change, notification to U.S. EPA of any change in Respondent's Project Coordinator, in accordance with Paragraph 14;
- iv. Within 10 business days of the Effective Date, submission of the Health and Safety Plan, in accordance with Paragraph 17;
- v. Within 3 business days in advance of any sample collection activity by

- Respondent (or any shorter time period agreed to by U.S. EPA), notification of such activity to U.S. EPA, in accordance with Paragraph 18(c);
- vi. Timely submission of written progress reports and notices of conveyance in accordance with Paragraph 20;
 - vii. Within 60 days after completion of the Work, submission of the Final Report, in accordance with Paragraph 21;
 - viii. Notice to U.S. EPA of any performance delay within 24 hours of Respondent's knowledge of the event that might cause a delay, and written explanation and description of the delay to U.S. EPA within 7 days thereafter, in accordance with Paragraph 45.

<u>Penalty per Violation per Day</u>	<u>Period of Noncompliance</u>
\$250	1st through 14th day
\$500	15th through 30th day
\$1,000	31st day and beyond

50. All penalties shall begin to accrue on the day after the complete performance is due or the day a violation occurs, and shall continue to accrue through the final day of the correction of the noncompliance or completion of the activity. However, stipulated penalties shall not accrue: 1) with respect to a deficient submission under Section VIII (Work to be Performed), during the period, if any, beginning on the 31st day after U.S. EPA's receipt of such submission until the date that U.S. EPA notifies Respondent of any deficiency; and 2) with respect to a decision by the Director of the Superfund Division, Region 5, under Paragraph 42 of Section XVI (Dispute Resolution), during the period, if any, beginning on the 21st day after U.S. EPA submits its written statement of position until the date that the Director of the Superfund Division issues a final decision regarding such dispute. Nothing herein shall prevent the simultaneous accrual of separate penalties for separate violations of this Settlement Agreement.

51. Following U.S. EPA's determination that Respondent has failed to comply with a requirement of this Settlement Agreement, U.S. EPA may give Respondent written notification of the failure and describe the noncompliance. U.S. EPA may send Respondent a written demand for payment of the penalties. However, penalties shall accrue as provided in the preceding Paragraph regardless of whether U.S. EPA has notified Respondent of a violation.

52. All penalties accruing under this Section shall be due and payable to U.S. EPA within 30 days of Respondent's receipt from U.S. EPA of a demand for payment of the penalties, unless Respondent invokes the dispute resolution procedures under Section XVI (Dispute Resolution). Respondent shall make all payments required by this Section by official bank check made payable to "U.S. EPA Hazardous Substance Superfund". Each check, or a letter accompanying each check, shall identify the name and address of the party making payment, the Site name, U.S. EPA Region 5, the Site/Spill ID Number C54R, and, if any, the U.S. EPA docket number for this action, and shall be sent to:

U.S. Environmental Protection Agency
Superfund Payments

Cincinnati Finance Center
P.O. Box 979076
St. Louis, MO 63197-9000

and shall indicate that the payment is for stipulated penalties, and shall reference the name and address of the party making payment. At the time of payment, copies of check(s) paid pursuant to this Section, and any accompanying transmittal letter(s), shall be sent to U.S. EPA as provided in Paragraph 38(b).

53. The payment of penalties shall not alter in any way Respondent's obligation to complete performance of the Work required under this Settlement Agreement.

54. Penalties shall continue to accrue during any dispute resolution period, but need not be paid until 20 days after the dispute is resolved by agreement or by receipt of U.S. EPA's decision.

55. If Respondent fails to pay stipulated penalties when due, U.S. EPA may institute proceedings to collect the penalties, as well as Interest. Respondent shall pay Interest on the unpaid balance, which shall begin to accrue on the date of demand made pursuant to Paragraph 52. Nothing in this Settlement Agreement shall be construed as prohibiting, altering, or in any way limiting U.S. EPA's ability to seek any other remedies or sanctions available by virtue of Respondent's violation of this Settlement Agreement or of the statutes and regulations upon which it is based, including, but not limited to, penalties pursuant to Sections 106(b) and 122(I) of CERCLA, 42 U.S.C. §§ 9606(b) and 9622(I), and punitive damages pursuant to Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3). Provided, however, that U.S. EPA shall not seek civil penalties pursuant to Section 106(b) or 122(I) of CERCLA or punitive damages pursuant to Section 107(c)(3) of CERCLA for any violation for which a stipulated penalty is provided in this Section, except in the case of a willful violation of this Settlement Agreement. Should Respondent violate this Settlement Agreement or any portion hereof, U.S. EPA may carry out the required actions unilaterally, pursuant to Section 104 of CERCLA, 42 U.S.C. § 9604, and/or may seek judicial enforcement of this Settlement Agreement pursuant to Section 106 of CERCLA, 42 U.S.C. § 9606. Notwithstanding any other provision of this Section, U.S. EPA may, in its unreviewable discretion, waive in writing any portion of stipulated penalties that have accrued pursuant to this Settlement Agreement.

XIX. U.S. EPA'S COVENANT NOT TO SUE

56. In consideration of the actions Respondent will perform and the payments it will make under this Settlement Agreement, and except as otherwise specifically provided in this Settlement Agreement, U.S. EPA covenants not to sue or to take administrative action against Respondents pursuant to Sections 106 and 107(a) of CERCLA, 42 U.S.C. §§ 9606 and 9607(a), for the Work, Past Response Costs, and Future Response Costs. This covenant not to sue shall take effect upon receipt by U.S. EPA of the Past Response Costs due under Section XV (Payment of Response Costs) of this Settlement Agreement and any Interest or Stipulated Penalties due for failure to pay Past Response Costs as required by Sections XV (Payment of Response Costs) and XVIII (Stipulated Penalties) of this Settlement Agreement. This covenant

not to sue is conditioned upon the complete and satisfactory performance by Respondents of their obligations under this Settlement Agreement, including, but not limited to, payment of Future Response Costs pursuant to Section XV (Payment of Response Costs). This covenant not to sue extends only to Respondent and not to any other person.

XX. U.S. EPA'S RESERVATIONS OF RIGHTS

57. Except as specifically provided in this Settlement Agreement, nothing in this Settlement Agreement shall limit U.S. EPA's or the United States' power and authority to take, direct, or order all actions necessary to protect public health, welfare, or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants or contaminants, or hazardous or solid waste on, at, or from the Site. Further, nothing in this Settlement Agreement shall prevent U.S. EPA from seeking legal or equitable relief to enforce this Settlement Agreement, from taking other legal or equitable action as it deems appropriate and necessary, or from requiring the Respondent in the future to perform additional activities pursuant to CERCLA or any other applicable law.

58. The covenant not to sue set forth in Section XIX (U.S. EPA's Covenant Not to Sue) above does not pertain to any matters other than those expressly identified therein. U.S. EPA reserves, and this Settlement Agreement is without prejudice to, all rights against Respondent with respect to all other matters, including, but not limited to:

- a. claims based on Respondent's failure to meet a requirement of this Settlement Agreement;
- b. liability for costs not included within the definition of Past Response Costs or Future Response Costs;
- c. liability for performance of response action other than the Work;
- d. criminal liability;
- e. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments;
- f. liability arising from the past, present, or future disposal, release or threat of release of Waste Materials outside of the Site; and
- g. liability for costs incurred or to be incurred by the Agency for Toxic Substances and Disease Registry related to the Site.

XXI. RESPONDENT'S COVENANT NOT TO SUE

59. Respondent covenants not to sue and agrees not to assert any claims or causes of action against the United States, or its contractors or employees, with respect to the Work, Past

Response Costs, Future Response Costs, or this Settlement Agreement, including, but not limited to:

a. any direct or indirect claim for reimbursement from the Hazardous Substance Superfund established by 26 U.S.C. § 9507, based on Sections 106(b)(2), 107, 111, 112, or 113 of CERCLA, 42 U.S.C. §§ 9606(b)(2), 9607, 9611, 9612, or 9613, or any other provision of law;

b. any claim arising out of response actions at or in connection with the Site, including any claim under the United States Constitution, the Illinois Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, as amended, or at common law; or

c. any claim against the United States pursuant to Sections 107 and 113 of CERCLA, 42 U.S.C. §§ 9607 and 9613, relating to the Work or Future Response Costs.

d. These covenants not to sue shall not apply in the event the United States brings a cause of action or issues an order pursuant to any of the reservations set forth in Paragraphs 58 (b), (c), and (e) - (g), but only to the extent that Respondent's claims arise from the same response action, response costs, or damages that the United States is seeking pursuant to the applicable reservation.

60. Nothing in this Agreement shall be deemed to constitute approval or preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. § 300.700(d).

In consideration of the actions that Respondent will perform and the payments it will make under this Settlement Agreement, and except as otherwise specifically provided in this Settlement Agreement, U.S. EPA covenants not to sue or to take administrative action against Respondents pursuant to Sections 106 and 107(a) of CERCLA, 42 U.S.C. §§ 9606 and 9607(a), for the Work, Past Response Costs, and Future Response Costs. This covenant not to sue shall take effect upon U.S. EPA's receipt of the Past Response Costs due under Section XV (Payment of Response Costs) of this Settlement Agreement and any Interest or Stipulated Penalties due for failure to pay Past Response Costs as required by Sections XV (Payment of Response Costs) and XVIII (Stipulated Penalties) of this Settlement Agreement. This covenant not to sue is conditioned upon Respondent's complete and satisfactory performance of its obligations under this Settlement Agreement, including, but not limited to, payment of Future Response Costs pursuant to Section XV (Payment of Response Costs). This covenant not to sue extends only to Respondent, and no other person).

XXII. OTHER CLAIMS

61. By issuing this Settlement Agreement, the United States and U.S. EPA assume no liability for injuries or damages to persons or property resulting from any of Respondent's acts or omissions. The United States or U.S. EPA shall not be deemed a party to any contract Respondent or its directors, officers, employees, agents, successors, representatives, assigns, contractors, or consultants may enter in carrying out actions pursuant to this Settlement

Agreement.

62. Except as expressly provided in Section XXI (Respondent's Covenant Not to Sue), and Section XIX (U.S. EPA's Covenant Not to Sue), nothing in this Settlement Agreement constitutes a satisfaction of or release from any claim or cause of action against Respondent or any person not a party to this Settlement Agreement, for any liability such person may have under CERCLA, other statutes, or common law, including but not limited to any claims of the United States for costs, damages and interest under Sections 106 and 107 of CERCLA, 42 U.S.C. §§ 9606 and 9607.

63. No U.S. EPA action or decision pursuant to this Settlement Agreement shall give rise to any right to judicial review, except as set forth in Section 113(h) of CERCLA, 42 U.S.C. § 9613(h).

XXIII. EFFECT OF SETTLEMENT/CONTRIBUTION

64. Except as provided in Section XXI (Respondent's Covenant Not to Sue), nothing in this Settlement Agreement shall be construed to create any rights in, or grant any cause of action to, any person not a Party to this Settlement Agreement. Except as provided in Section XXI (Respondent's Covenant Not to Sue), each of the Parties expressly reserves any and all rights (including, but not limited to, pursuant to Section 113 of CERCLA, 42 U.S.C. § 9613), defenses, claims, demands, and causes of action which each Party may have with respect to any matter, transaction, or occurrence relating in any way to the Site against any person not a Party hereto. Nothing in this Settlement Agreement diminishes the right of the United States, pursuant to Section 113(f)(2) and (3) of CERCLA, 42 U.S.C. § 9613(f)(2)-(3), to pursue any such persons to obtain additional response costs or response action and to enter into settlements that give rise to contribution protection pursuant to Section 113(f)(2).

65. a. The Parties agree that this Settlement Agreement constitutes an administrative settlement for purposes of Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4), and that Respondent is entitled, as of the Effective Date, to protection from contribution actions or claims as provided by Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4), or as may otherwise be provided by law, for "matters addressed" in this Settlement Agreement. The "matters addressed" in this Settlement Agreement are the Work and Past and Future Response Costs.

b. The Parties further agree that this Settlement Agreement constitutes an administrative settlement for purposes of Section 113(f)(3)(B) of CERCLA, 42 U.S.C. § 9613(f)(3)(B), pursuant to which the Respondent has, as of the Effective Date, resolved its liability to the United States for the Work, Past Response Costs, and Future Response Costs.

66. Each Respondent shall, with respect to any suit or claim brought by it for matters related to this Settlement Agreement, notify U.S. EPA in writing no later than 60 days prior to initiating such suit or claim. Each Respondent also shall, with respect to any suit or claim brought against it for matters related to this Settlement Agreement, notify U.S. EPA in writing within 10 days of service of the complaint or claim upon it. In addition, each Respondent shall

notify U.S. EPA within 10 days of service or receipt of any Motion for Summary Judgment and within 10 days of receipt of any order from a court setting a case for trial, for matters related to this Settlement Agreement.

67. In any subsequent administrative or judicial proceeding U.S. EPA, or the United States on U.S. EPA's behalf, may initiate for injunctive relief, recovery of response costs, or other relief relating to the Site, Respondent shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, *res judicata*, collateral estoppel, issue preclusion, claim-splitting, or other defenses based upon any contention that the claims raised in the subsequent proceeding were or should have been brought in the instant case; provided, however, that nothing in this Paragraph affects the enforceability of U.S. EPA's covenant set forth in Section XIX.

68. Effective upon Respondent's signature of this Settlement Agreement, Respondent agrees that the time period after the date of its signature shall not be included in computing the running of any statute of limitations potentially applicable to any action the United States may bring related to the "matters addressed" as defined in Paragraph 65 and that, in any action the United States may bring related to the "matters addressed," Respondent will not assert, and may not maintain, any defense or claim based upon principles of statute of limitations, waiver, laches, estoppel, or other defense based on the passage of time after its signature of this Settlement Agreement. If U.S. EPA gives notice to Respondent that it will not make this Settlement Agreement effective, the limitations period shall begin to run again commencing ninety days after the date U.S. EPA sends such notice.

XXIV. INDEMNIFICATION

69. Respondent shall indemnify, save and hold harmless the United States, its officials, agents, contractors, subcontractors, employees and representatives from any and all claims or causes of action arising from, or on account of, negligent or other wrongful acts or omissions of Respondent, its officers, directors, employees, agents, contractors, or subcontractors, in carrying out actions pursuant to this Settlement Agreement. In addition, Respondent agrees to pay the United States all costs incurred by the United States, including but not limited to attorney's fees and other expenses of litigation and settlement, arising from or on account of claims made against the United States based on negligent or other wrongful acts or omissions of Respondent, its officers, directors, employees, agents, contractors, subcontractors and any persons acting on its behalf or under its control, in carrying out activities pursuant to this Settlement Agreement. The United States shall not be held out as a party to any contract entered into by or on behalf of Respondent in carrying out activities pursuant to this Settlement Agreement. Neither Respondent nor any such contractor shall be considered an agent of the United States. The Federal Tort Claims Act (28 U.S.C. §§ 2671, 2680) provides coverage for injury or loss of property, or injury or death caused by the negligent or wrongful act or omission of an employee of U.S. EPA while acting within the scope of his or her employment, under circumstances where U.S. EPA, if a private person, would be liable to the claimant in accordance with the law of the place where the act or omission occurred.

70. The United States shall give Respondent notice of any claim for which the United

States plans to seek indemnification pursuant to this Section and shall consult with Respondent prior to settling such claim.

71. Respondent waives all claims against the United States for damages or reimbursement or for set-off of any payments made or to be made to the United States, arising from or on account of any contract, agreement, or arrangement between Respondent and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays. In addition, Respondent shall indemnify and hold harmless the United States with respect to any and all claims for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between Respondent and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays.

XXV. MODIFICATIONS

72. The OSC may make modifications to any plan or schedule in writing or by oral direction. U.S. EPA will promptly confirm in writing any oral modification, but the modification's effective date shall be the date of the OSC's oral direction. Any other requirements of this Settlement Agreement may be modified in writing by the parties' mutual agreement.

73. If Respondent seeks permission to deviate from any approved work plan or schedule, Respondent's Project Coordinator shall submit a written request to U.S. EPA for approval outlining the proposed modification and its basis. Respondent may not proceed with the requested deviation until receiving oral or written approval from the OSC pursuant to Paragraph 72.

74. No informal advice, guidance, suggestion, or comment the OSC or other U.S. EPA representatives may make regarding reports, plans, specifications, schedules, or any other writing Respondent submits shall relieve Respondent of its obligation to obtain any formal approval this Settlement Agreement requires, or to comply with all of this Settlement Agreement's requirements, unless it is formally modified.

XXVI. NOTICE OF COMPLETION OF WORK

75. When, after U.S. EPA's review of the Final Report, it determines that all Work has been fully performed in accordance with this Settlement Agreement, with the exception of any continuing obligations this Settlement Agreement requires, including, *e.g.*, post-removal site controls, payment of Future Response Costs, and record retention, U.S. EPA will provide written notice to Respondent. If U.S. EPA determines that such Work has not been completed in accordance with this Settlement Agreement, U.S. EPA will notify Respondent, provide a list of the deficiencies, and require that Respondent modify the Work Plan if appropriate in order to correct such deficiencies. Respondent shall implement the modified and approved Work Plan and shall submit a modified Final Report in accordance with the U.S. EPA notice. Respondent's failure to implement the approved modified Work Plan shall be a violation of this Settlement Agreement.

XXVII. SEVERABILITY/INTEGRATION/ATTACHMENTS

76. If a court issues an order that invalidates any provision of this Settlement Agreement or finds that Respondent has sufficient cause not to comply with one or more provisions of this Settlement Agreement, Respondent shall remain bound to comply with all provisions of this Settlement Agreement not invalidated or determined to be subject to a sufficient cause defense by the court's order.

77. This Settlement Agreement and any attachments constitute the final, complete and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this Settlement Agreement. The parties acknowledge that there are no representations, agreements or understandings relating to the settlement other than those expressly contained in this Settlement Agreement.

XXVIII. EFFECTIVE DATE

78. This Settlement Agreement shall be effective upon electronic receipt by Respondent of a copy of this Settlement Agreement signed by the Director, Superfund Division, U.S. EPA Region 5.

The undersigned representative of Respondent certifies that he or she is fully authorized to enter into the terms and conditions of this Settlement Agreement and to bind the party he or she represents to this document.

Agreed this 8th day of December, 2015.

For Respondent

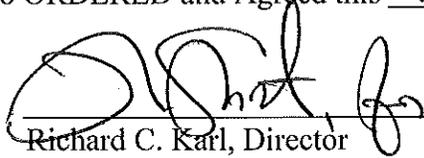
By: John Jovanov
Title: Vice President, Environmental

IN THE MATTER OF:

Sangamon Street Right of Way Site
Chicago, Illinois

It is so ORDERED and Agreed this 16 day of MARCH, 2017⁶

BY:



Richard C. Karl, Director
Superfund Division
United States Environmental Protection Agency
Region 5



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

US EPA RECORDS CENTER REGION 5



494709

REPLY TO THE ATTENTION OF:

MEMORANDUM

SUBJECT: ENFORCEMENT ACTION MEMORANDUM —Determination of an Imminent and Substantial Threat to Public Health and/or the Environment at the Sangamon Street Right of Way Site located in Chicago, Cook County, Illinois (Site ID C54R)

FROM: Steve Faryan, On-Scene Coordinator *MSF*
Removal Response Section 3

THRU: Samuel Borries, Chief
Emergency Response Branch 2

TO: Richard C. Karl, Director
Superfund Division

I. PURPOSE

The purpose of this Action Memorandum is to document the determination of an imminent and substantial threat to public health and the environment at the Sangamon Street Right of Way Site (the Site) in Chicago, Cook County, Illinois. The response actions proposed herein are necessary in order to mitigate threats and potential threats to public health, welfare, and the environment posed by the presence of uncontrolled hazardous substances including high levels of lead in surface soils located on the Site. The Site is currently owned at least in part, and was operated by, Burlington Northern Santa Fe Railway (BNSF). This document details the time-critical removal action proposed for the Site.

Site assessment sampling has documented high levels of heavy metals in the surface and sub-surface soil at concentrations that exceed the threshold concentration for lead using the Environmental Protection Agency's Resource Conservation and Recovery Act (RCRA) Toxic Characteristic Leaching Procedure (TCLP), Removal Management Levels (RMLs), and the Illinois Environmental Protection Agency's (Illinois EPA's) Tiered Approach to Clean-up (TACO) levels. Given the Site's location in a mixed residential area and its current status as an open area, no longer used for rail traffic, there is clear potential for exposure to neighboring residents, and this action is properly classified as a time-critical removal.

The time-critical removal action proposed herein includes the removal of contaminated soil from the areas shown in Figures A-2, A-3 and A-4, with off-site disposal, thereby mitigating site conditions. Clean soil will be graded over the excavated areas and seeded to prevent erosion.

BNSF, the potentially responsible party, has indicated that it is prepared to conduct the time-critical removal action described in this Action Memorandum and may complete the work pursuant to an Administrative Order on Consent (AOC). Separately, BNSF has petitioned the Surface Transportation Board for permission to abandon railroad operations along the corridor, so the premises can be conveyed to the City of Chicago (City). In turn, the City plans to construct a walkway and green space along the Sangamon Street corridor, to be named "El Paseo."

There are no nationally significant or precedent setting issues associated with the proposed response at this non-NPL site.

II. SITE CONDITIONS AND BACKGROUND

CERCLIS ID: ILN000505581

State ID: C54R

Category: Time-Critical Removal Action

A. Site Description

The Site is an out-of-service railroad corridor located in the City of Chicago, Cook County, Illinois, and running from 16th Street south along Sangamon Street to 21st Street. It is immediately adjacent to a City-owned corridor, which in turn includes Sangamon Street and the sidewalk that runs along its west side, and an undeveloped area south of Cullerton Avenue. The southern portion of the Site and the undeveloped portion of the City corridor are adjacent to the Loewenthal Metals Site, which was the subject of a time-critical removal action in 2013, discussed further below. The northern end is adjacent to the National Lead Site, which has been addressed under Illinois Environmental Protection Agency's (Illinois EPA) voluntary remediation program.

There are several privately-owned properties adjacent to the BNSF corridor that may partly encroach on it, and thus there is an issue of whether there may be additional current owners of the Site. BNSF will conduct a title search and property survey as part of this action prior to the removal action.

The former Loewenthal Metals Company owned and operated a smelter at 947 West Cullerton Street in Chicago, Illinois (Figure A-1). EPA conducted a time-critical removal action at the Loewenthal Metals Site from July 2013 to October 11, 2013 to remove high concentrations of lead in the soil so as to allow future residential use. A total of 4,800 tons of impacted soil and debris were excavated, treated with a fixation agent, and transported for disposal at Republic Services' Newton County landfill in Indiana. Clean top soil was graded over the site and seeded to prevent erosion.

As part of the investigation phase of the Loewenthal Metals Site removal action, EPA requested access to the portion of BNSF's corridor lying to the east of the Loewenthal Metals Site, in order to delineate the extent of lead contamination. EPA and BNSF agreed that BNSF's contractor, TRC, would collect soil samples at EPA-designated locations and split the samples with EPA. These sampling locations are shown on Figure 1 and are designated as LM-SB-24 to LM-SB-35. The LM-series samples were collected on June 21, 2013. In addition to the sampling activities at the EPA-designated locations, on June 21, 2013, TRC collected three additional soil samples from an area one block north of the EPA sampling locations and north of Cullerton Avenue along the BNSF corridor. These samples are designated as GP-1 to GP-3.

The results of this sampling event documented levels of lead exceeding the RCRA toxicity characteristic level for lead, which is 5 mg/L, and the RMLs for lead, which are 400 mg/kg for residential use scenarios and 800 mg/kg for industrial. In particular, TCLP analysis on a sample from location LM-SB-24 showed a lead concentration of 56 milligrams per liter (mg/L), and 6,300 mg/kg lead at the surface-to-one-foot-deep range. Lead concentrations in other samples from this event ranged from 3,100 mg/kg to 1,500 mg/kg in the surface-to-one-foot-deep range. Notably, the RMLs for lead are the same as the Illinois EPA TACO levels for lead; thus, there exceedances of the state's levels as well.

Following the June 21, 2013 sampling, BNSF's contractor constructed temporary fencing around the known contaminated areas, and sampled and managed the soil pile that was staged along Sangamon Street during the removal of the crossings and track from Cullerton Avenue to 18th Street. The soil was disposed of as special waste and the removal of railroad track was suspended pending further sampling and characterization.

Based on BNSF's and EPA's initial sampling results, BNSF completed additional soil sampling on November 21, 2013 and again on October 7-8, 2014, to further evaluate lead impacts along the BNSF corridor running from 21st Street north to 16th Street, at which point the right of way intersects the main BNSF east-west rail lines.

The analytical results were compared to the Tier 1 Soil Remediation Objectives (SROs) for both residential and industrial/commercial properties, which are listed in the Illinois TACO regulations, 35 Illinois Administrative Code (IAC) 742. In addition, the TCLP analytical results were compared to the values in EPA's Identification and Listing of Hazardous Waste rules at 40 Code of Federal Regulations (CFR) Part 261. TCLP lead samples with concentrations greater than 5 mg/L are classified as hazardous waste.

Based on the results of the soil samples collected and analyzed for total lead, 33 soil boring locations on the BNSF corridor have total lead concentrations above 800 mg/kg, exceeding the RML for industrial and residential values. In addition, lead concentrations at six sample locations are above the 5 mg/l TCLP threshold. As such, this material will have to be managed as a hazardous waste.

In addition to the total lead and TCLP lead analyses, EPA analyzed one soil sample (LM-SB-24) from two to three feet below ground surface (bgs) for polycyclic aromatic hydrocarbons (PAHs) analysis, and one sample (LM-SB-26) from two to three feet bgs for volatile organic

compounds (VOCs) analysis. None of the VOC analyses exceeded RMLs or Illinois EPA TACO levels for residential or industrial values.

Summary Table for Exposure Threats to Surface Soil (0 to 2 ft.) - BNSF Right of Way Boundaries

Locations	Total # samples	Max soil level (ppm)	#>400 ppm	#>800 ppm	TCLP exceedance
Block 1 - [Pb]	16	1,700	12	8	0
Block 2* - [Pb]	21	5,010	17	15	2
Block 3 - [Pb]	20	3,180	14	7	1
Block 2*: GP - 1, 2, 3	# samples	Max soil level (ppm)	RML (ppm)	# > RML	
Arsenic [As]	3	125	67	2	
Benzo(a)pyrene	3	68	1.5	3	

Pb – Lead; RML – Removal Management Level; ppm – parts per million; TCLP – Toxicity Characteristic Leaching Procedure

Block 1: Sangamon St, between W 21st and Cullerton St; example sample sites listed in table 1 - P1

Block 2: Sangamon St, between Cullerton St and W 19th St; example sample sites listed in table 1 - P3, P4, P5, P6, P7, GP1, GP2, GP3

Block 3: Sangamon St, between W 19th St and W 18th St

Contaminant	Concentration (mg/kg)	Location	Removal Management Level (mg/kg)
Lead	1,040 mg/kg 0-1 feet	GP-1	400mg/kg Residential/800mg/kg Industrial
Lead	1200 mg/kg 0-1 feet	GP-2	400mg/kg Residential/800mg/kg Industrial
Lead	3,190 mg/kg 0-2 feet	GP-3	400mg/kg Residential/800mg/kg Industrial
Lead	1,540 mg/kg 0-2 feet	P-1	400mg/kg Residential/800mg/kg Industrial
Lead	1200 mg/kg 2-4 feet	P-3	400mg/kg Residential/800mg/kg Industrial
Lead	1,350 mg/kg 0-1 feet	P-4	400mg/kg Residential/800mg/kg Industrial
Lead	5010mg/kg 0-2feet	P-5	400mg/kg Residential/800mg/kg Industrial

Lead	120 mg/kg 0-1 feet	P-6	400mg/kg Residential/800mg/kg Industrial
Lead	4,960 mg/kg 2-4 feet	P-6	400mg/kg Residential/800mg/kg Industrial
Lead	2,620mg/kg 0-2 feet	P-7	400mg/kg Residential/800mg/kg Industrial

1. Physical Location

The Sangamon ROW Site is located in a mixed commercial, light industrial and residential neighborhood in the City of Chicago, Cook County, Illinois, and runs from 16th Street south along Sangamon Street to 21st Street. The Site is located adjacent to the City's Sangamon Street and a sidewalk, which run along the west side of the railroad corridor. Additionally, the portion of the Site between 16th and 18th Streets is adjacent to the National Lead Site, which has been addressed through the Illinois EPA voluntary remediation program. Figure A-1 shows the location of the corridor and the points at where samples have been collected.

Several areas of third-party private property are adjacent to the railroad corridor and may overlap with or encroach on the railroad's property. BNSF will conduct a title search and property survey as part of this action prior to the planned soil removal.

An Environmental Justice (EJ) analysis for the Site was conducted. 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 Sangamon Street Right of Way Site in Chicago, Illinois and determined there is a high potential for EJ concerns at this Site. The screening table and map are included in Figure A-5.

2. Site Characteristics

The BNSF property is easily accessible and is not fenced except for a portion from 18th Street to 16th Street. The corridor had track and grade crossings between 18th Street and 21st Street until BNSF contracted with Orange Crush to remove the rails, ties and crossings in the summer of 2013. BNSF had also arranged for temporary fencing to be placed at Cullerton Avenue, but it has since fallen down and the area is again accessible to the public.

The sampling EPA and BNSF's contractor TRC conducted at the Site documents high levels of lead that exceed the TCLP in 5 sample locations along the BNSF corridor. The sampling taken elsewhere along the corridor has documented lead levels at the surface that exceed the RMLs for lead of 400mg/kg for residential and 800 mg/kg for industrial.

There are two areas of the Site that the City has already addressed. Both areas are located along the sidewalk constructed on the east side of the right of way from Cullerton Avenue south to 21st

Street. The City removed soil at the south parcel from 21st Street to Cullerton Avenue and constructed a sidewalk, and the area is now designated as an urban garden. The second area was adjacent to the Loewenthal Metals removal action. In August and September of 2013, the City removed two to three feet of soil from this area and backfilled it with clean fill.

3. Release or Threatened Release into the Environment of a Hazardous Substance, or Pollutant, or Contaminant

Analytical results from previous sampling events have documented lead's presence in soils in concentrations above the RCRA TCLP threshold and Superfund RMLs, and the Illinois EPA TACO residential and industrial standards. The high levels of lead contamination have been documented near the surface, primarily in the zero-to-two-foot range. The contaminated soil will be removed to allow for re-use of the corridor and adjacent property. The City is planning to construct the El Paseo project, which is being designed as a "green way" and walking path. Contaminated soil removal is required so that this project can be conducted safely. Otherwise, the material would be disturbed during El Paseo construction, causing a release or threat of release of lead contamination through dust via movement by equipment and by rain or flood waters.

4. NPL Status

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

5. Maps, Pictures, and Other Graphic Representations

Figure A-1 is the Site Location Map for the Sangamon Street Right of Way Site. Figure A-2, A-3 and A-4 show the areas where the removal action plan will be implemented. Figure A-5 is the EJ Screen report and map.

B. Other Actions to Date

1. Previous Actions

Previous actions at the Site include the City's 2009 removal of the top twelve to sixteen inches of contaminated soil along the west side of the BNSF tracks running from Cullerton Avenue south to 21st Street, so that the City could construct a walking path and an urban garden in this area. EPA was not contacted or present when this work was completed.

During the summer of 2013, BNSF contracted Orange Crush to remove the rail crossings along the portion of its corridor running north from Cullerton Avenue to 18th Street. Orange Crush removed all the rail lines, ties, and scrapped some soil during this action. After receiving complaints from residents that the track removal was creating excessive dust, EPA told BNSF and its contractor, verbally and through e-mail correspondence, to properly characterize the soil that was being removed and to institute dust control measures. BNSF then staged soil piles, sampled them for disposal, and arranged for the soil, track and ties to be removed from the area. The soil was transported and disposed of as a special waste at a permitted landfill.

EPA consulted with the City's Department of Transportation regarding the high levels of lead found in the area between the east border of the Loewenthal property and the western edge of the BNSF corridor. After the City determined that it owned and maintained this area, it conducted a cleanup of lead-contaminated soil. The City's documentation, dated January 17, 2014, reports that the cleanup was conducted between September 30 and October 11, 2013, and that its contractor, SET Environmental, Inc., excavated 64 cubic yards of contaminated soil that was hauled off-site for treatment and disposal. Geotextile fabric was placed on the bottom of the excavation and the excavated areas were filled with clean soil.

2. Current Actions

No removal actions are currently occurring on the Site.

C. State and Local Authorities' Roles

1. State and Local Actions to Date

By letter of December 9, 2014, Illinois EPA referred the Sangamon Street Right of Way Site to EPA, requesting that a removal assessment and, as appropriate a removal action, be conducted.

The City has conducted limited removal of lead hot spots and lead contaminated soil on the east side of the undeveloped Sangamon Street corridor from Cullerton Avenue south to 21st Street. It is also planning to construct the El Paseo along Sangamon Street and the undeveloped City property between the former Loewenthal property and the BNSF corridor, and conceptual plans have been prepared to conduct the work.

2. Potential for Continued State/Local Response

EPA anticipates that there will be no need for state or local response on the BNSF railroad corridor in view of BNSF's agreement in principle to undertake the response action. EPA has no information suggesting any lead hot spots remain on the City's Sangamon Street corridor.

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

Conditions at the Site may pose an imminent and substantial endangerment to public health or welfare, and the environment based upon factors set forth in the National Contingency Plan (NCP), 40 Code of Federal Regulations (CFR) Section 300.415 (b)(2). These conditions include:

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

A potential exposure risk is present due to lead in soils at concentrations above Removal Management Levels and at six sampling locations above the RCRA TCLP level of 5 mg/l. The railroad corridor is unfenced and accessible to the public, so presently individuals may have direct contact with the contamination. Walsh Elementary School is one block east of the Sangamon Corridor and many children walk through the area on a daily basis. Exposure could occur through direct contact with the contaminated soil or inhalation of airborne particles dispersed from the uncovered contaminated soil. There are no signs warning people of the presence of contamination to be avoided. Additionally, the planned redevelopment and use of the Sangamon corridor as a public walkway and green space will involve heavy construction. Thus, the contaminated soil should be removed and replaced with clean soil prior to any construction of the El Paseo.

Data for the levels of arsenic in surface soil samples that BNSF's contractor provided to EPA are limited to only three borings. Of the three surface samples from those borings, two exceed the RML value of 67 ppm, with a maximum of 125 ppm.

Data for the levels of Polycyclic Aromatic Hydrocarbons (PAHs) in surface soil samples BNSF's contractor provided to EPA are also limited to only 3 borings. For all three samples, the level of benzo(a)pyrene significantly exceeded the RML of 1.5 ppm. While there may be multiple sources of PAHs in urban soil, PAHs are also present in creosote used to treat railroad ties. Therefore, the presence of PAHs may be expected in surface soil throughout the corridor.

Lead can affect almost every organ and system in the body. The main target for lead toxicity is the nervous system, both in adults and children. Long-term exposure of adults can result in decreased performance in some tests that measure functions of the nervous system. It may also cause weakness in fingers, wrists, or ankles. Lead exposure also causes small increases in blood pressure, particularly in middle-aged and older people and can cause anemia. Exposure to high lead levels can severely damage the brain and kidneys in adults 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. DHHS has determined that lead and lead compounds are reasonably anticipated to be human carcinogens and the EPA has determined that lead is a probable human carcinogen (ATSDR, CAS # 7439-92-1, August 2007).

Ingesting very high levels of arsenic can result in death. Exposure to lower levels can cause nausea and vomiting, decreased production of red and white blood cells, abnormal heart rhythm, damage to blood vessels, and a sensation of "pins and needles" in hands and feet. Ingesting or breathing low levels of inorganic arsenic for a long time can cause a darkening of the skin and the appearance of small "corns" or "warts" on the palms, soles, and torso. Skin contact with inorganic arsenic may cause redness and swelling. Several studies have shown that ingestion of inorganic arsenic can increase the risk of skin cancer and cancer in the liver, bladder, and lungs. Inhalation of inorganic arsenic can cause increased risk of lung cancer. The Department of Health and Human Services (DHHS) and the EPA have determined that inorganic arsenic is a

known human carcinogen (ATSDR, Chemical Abstract Services [CAS] # 7440-38-2], August 2007).

Benzo(a)pyrene is included in 15 specific PAHs that are reasonably anticipated to cause cancer in humans according to the 12th Report on Carcinogens published by the National Toxicology Program. According to the report, uptake of PAHs through the skin is substantial. Some people who have breathed or touched mixtures of PAHs and other chemicals for long periods of time have developed cancer.

High levels of hazardous substances or pollutants or contaminants in soils at or near the surface that may migrate.

Analytical results from previous reports and activities documented the presence of lead in concentrations above the RCRA TCLP threshold of 5 mg/l. Thus, the soil meets this criterion for classification as a characteristic hazardous waste. These high levels of lead are at or near the soil surface and could migrate as windblown dust, or through rain, flooding, or vehicular tracking.

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. Lead contaminated surface soil may as a result of wind action during dry periods pose an inhalation hazard. Such wind action could also lead to deposition of materials in uncontaminated areas. Migration of contaminants in surface soil could also occur through surface water flow during wet periods.

IV. ENDANGERMENT DETERMINATION

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

V. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

1. Proposed action description

BNSF has orally agreed to prepare and implement a Removal Action Work Plan for the Site. The main components of the work plan include the following mandatory provisions:

- a) Completion of preliminary activities such as control of public access with fences;
- b) Site preparation including clearing and grubbing;
- c) Excavation of lead contaminated soil within defined removal areas (Figures A-2, A-3 and A-4) to depths specified in the EPA approved removal work plan;
- d) Transportation and off-site disposal of excavated material from defined areas;
- e) Removal of soil in areas where the soil exceeds RCRA hazardous waste levels;
- f) Placement of demarcation barrier at excavation limits to warn anyone undertaking future excavation projects;
- g) Backfilling with clean fill and grading and seeding to prevent erosion;
- h) Compliance, where practicable, with state and local requirements that are applicable or relevant and appropriate to on-site activities and are more stringent than their federal counterparts;
- i) Construction Quality Assurance Measures, such as
 - Air Monitoring
 - Dust suppression
 - Fugitive Emission Management Plan
 - Health and Safety Plan
 - Sampling and Analysis Plan;
- j) Written schedule for Completion of Tasks;
- k) Submission of Weekly and Final Reports;
- l) Taking any other response actions to address any release or threatened release of hazardous substances, pollutant or contaminants that the EPA OSC determines may pose an imminent and substantial endangerment to public health or the environment.

The removal action will be conducted in a manner not inconsistent with the NCP. The PRP will also initiate planning for provisions of post-removal Site control consistent with the provisions of Section 300.415(1) of the NCP.

The threats posed by uncontrolled substances considered hazardous meet the criteria listed in the NCP Section 300.415(b)(2), and the response actions proposed herein are consistent with any long-term remedial actions which may be required. The proposed removal of hazardous substances, pollutants and contaminants that pose a substantial threat of release is expected to minimize substantial requirements for post-removal Site controls.

All hazardous substances, pollutants, or contaminants removed off-site pursuant to this removal action for treatment, storage and disposal shall be treated, stored, or disposed of at a facility in compliance, as determined by EPA, with the EPA Off-Site Rule, 40 C.F.R Section 300.440.

2. Contribution to remedial performance

The proposed action would not impede future actions, if any, under the Remedial Program.

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

This section is not applicable because this is a time critical removal action.

4. Applicable or relevant and appropriate requirements (ARARs)

All applicable, relevant and appropriate requirements (ARARs) of Federal and State law will be complied with to the extent practicable considering the exigencies of the circumstances.

5. Project Schedule

This project is expected to be completed in 10 weeks.

B. Estimated Costs

This information is not presented because this is an Enforcement Action Memorandum to support a proposed administrative consent order, the respondent, BNSF, having agreed in principle to perform the work. If ultimately an agreement is not reached, the OSC will assemble the anticipated costs and seek authorization that they be committed for an EPA-led action.

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

Given the Site conditions, the nature of the hazardous substances and pollutants or contaminants documented on Site, and the potential exposure pathways to nearby populations described in Sections II, III, and IV above, 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.

VII. OUTSTANDING POLICY ISSUES

There are no outstanding policy issues.

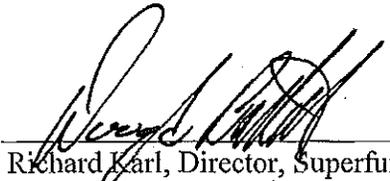
VIII. ENFORCEMENT

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

IX. RECOMMENDATION

This decision document represents the selected removal action for the Sangamon Street Right of Way in Chicago, Cook County, Illinois, developed in accordance with CERCLA as amended, and is not inconsistent with the NCP. This decision is based on the administrative record for the Site (Attachment 1). Conditions at the Site meet the NCP Section 300.415(b)(2) criteria for a removal action and I recommend your approval of the removal action proposed in this Action Memorandum. You may indicate your decision by signing below.

APPROVE:

for 
Richard Karl, Director, Superfund Division

DATE:

9/8/2015

DISAPPROVE: _____

Richard Karl, Director, Superfund Division

DATE: _____

Enforcement Addendum

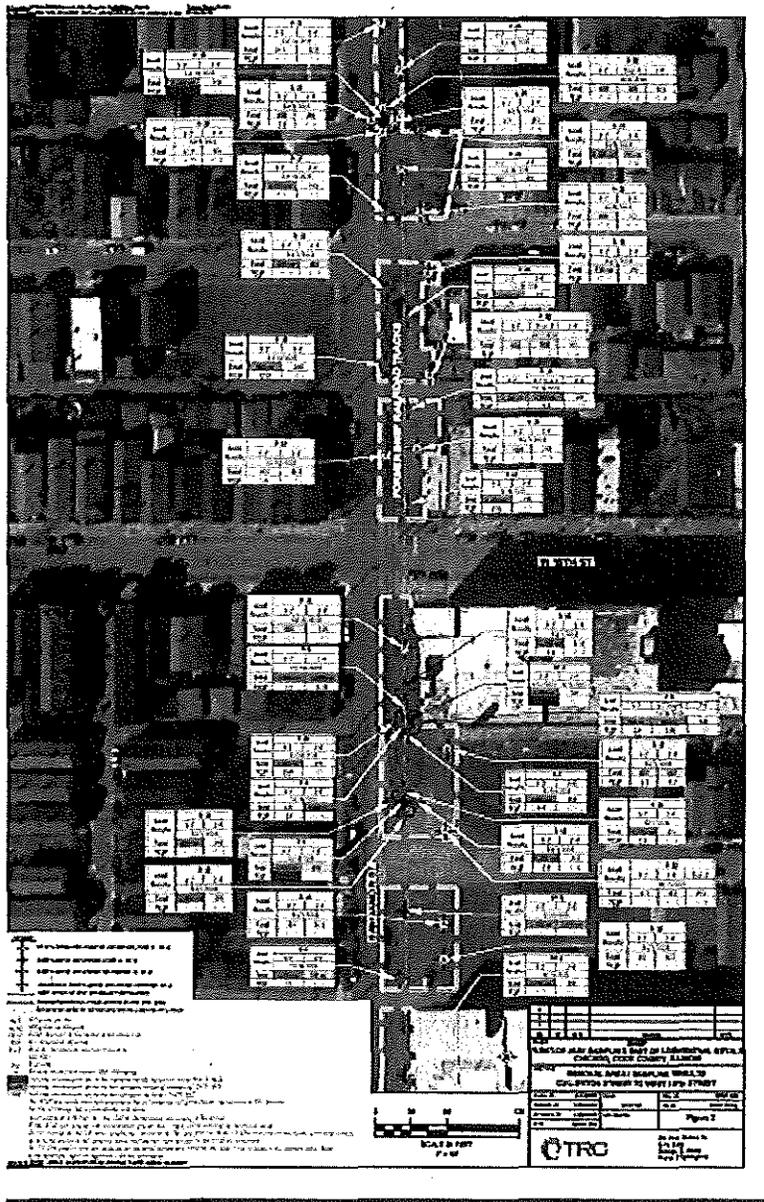
Figures:

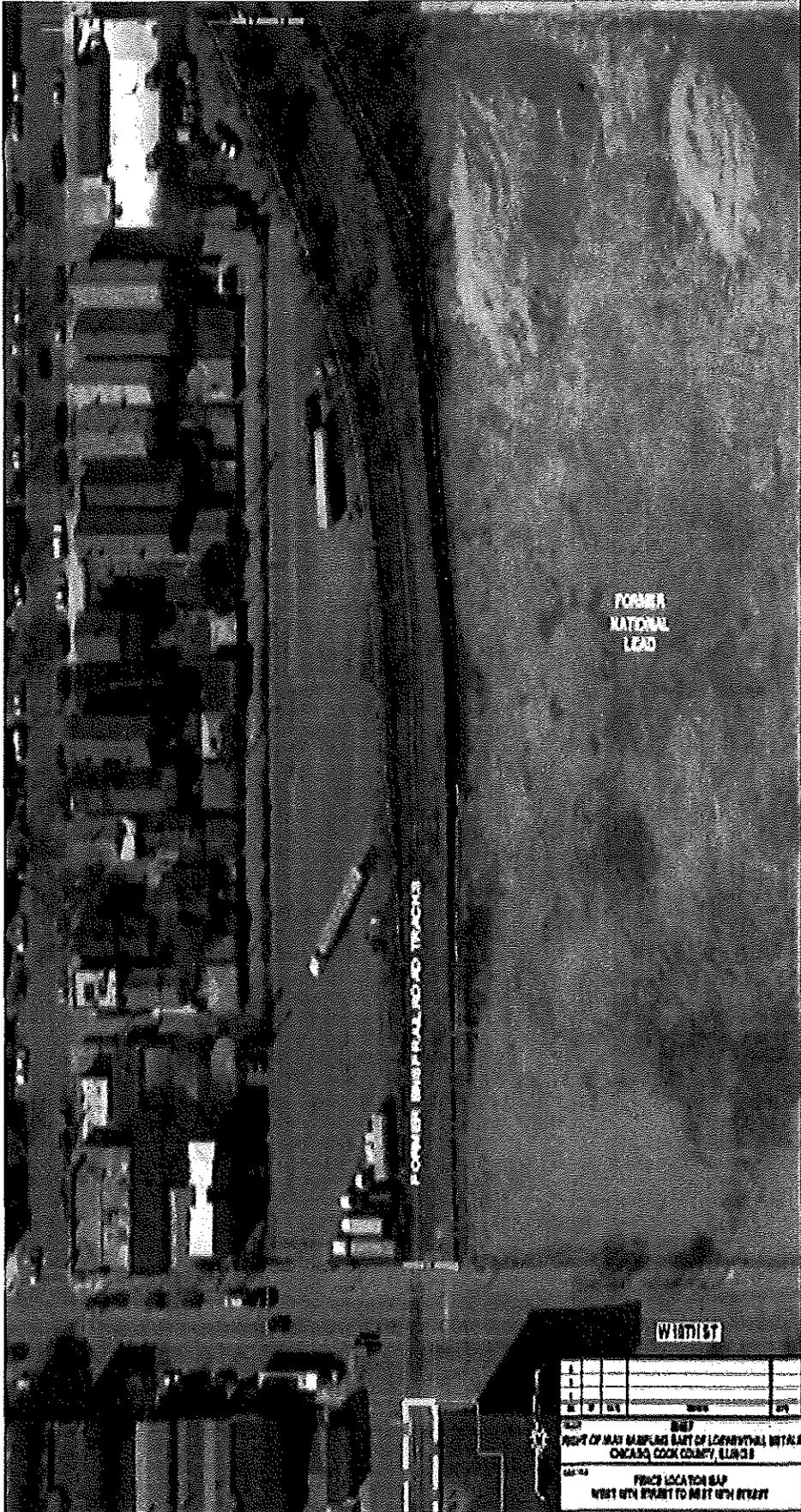
- A-1 Site Location Map
- A,-2, 3, 4 Removal Action Area Extent
- A-5 EJ Screening Map

Attachments:

- 1. Administrative Record Index

cc: B. Schlieger, USEPA 5202 G (email: schlieger.brian@epa.gov)
L. Nelson, U.S. DOI, w/o Enf. Addendum
(email: lindy_nelson@ios.doi.gov)
B. Everetts, Illinois EPA, w/o Enf. Addendum
(email: bruce.everetts@illinois.gov)





FORMER
NATIONAL
LEAD

FORMER INDUSTRIAL TRUCKS

WORTH ST

NO.	DATE	BY	REVISION
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

PROJECT: [unclear]
SHEET: [unclear]
PROJECT OF MAJ. MARSHALL BART OF LOGANVILLE, IOWA
CHICAGO, COOK COUNTY, ILLINOIS

100-100 PROJECT LOCATION MAP
WEST 1/4th 1/4th TO WEST 1/4th 1/4th

DATE	BY	APP.	REV.
10/10/90	[unclear]	[unclear]	1
11/10/90	[unclear]	[unclear]	2

ATTACHMENT I

U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL ACTION

ADMINISTRATIVE RECORD
FOR THE
SANGAMON STREET RIGHT OF WAY SITE
CHICAGO, COOK COUNTY, ILLINOIS

ORIGINAL
MAY, 2015

<u>NO.</u>	<u>SEMS ID</u>	<u>DATE</u>	<u>AUTHOR</u>	<u>RECIPIENT</u>	<u>TITLE/DESCRIPTION</u>	<u>PAGES</u>
1	918539	No Date	TRC	BNSF	Table 1: Soil Analytical Results - IEPA TACO Tier 1 SROs	2
2	918540	No Date	TRC	BNSF	Table 2: Soil Analytical Results - USEPA RML and CFR	2
3	918537	6/27/13	Brown, A., Pace Labs	Meagher, L., TRC	Laboratory Analytical Report for the June 21, 2013 Sampling Event	22
4	918538	12/12/13	Brown, A., Pace Labs	Meagher, L., TRC	Laboratory Analytical Report for the November 12, 2013 Sampling Event	116
5	918536	12/1/14	Meagher, L., TRC	Jeffries, G., BNSF	Letter re: Soil Sampling Results (with Attachments)	43
6	918535	12/24/14	TRC	BNSF	BNSF Right-of-Way Sampling Maps	6
7	918534	4/1/15	TRC	BNSF	Draft Removal Action Work Plan	17
8	-	-	Faryan, S., U.S. EPA	Karl, R., U.S. EPA	Enforcement Action Memorandum re: Determination of Threat to Public Health and/or the Environment at the Sangamon Street Right of Way Removal Action (<i>PENDING</i>)	-

A-5 EJ Screen Report and Map



EJSCREEN Report

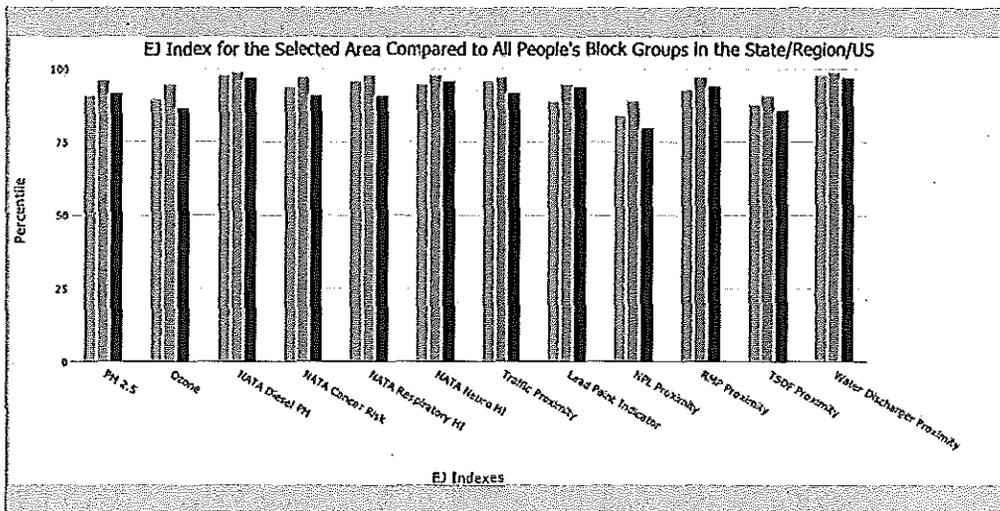


for 1 mile Ring Centered at 41.867973,-87.649938, ILLINOIS, EPA Region 5

Approximate Population: 35480

Sangamon Right of Way

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
EJ Indexes			
EJ Index for PM2.5	91	96	92
EJ Index for Ozone	90	95	87
EJ Index for NATA Diesel PM	98	99	97
EJ Index for NATA Air Toxics Cancer Risk	94	97	91
EJ Index for NATA Respiratory Hazard Index	96	98	91
EJ Index for NATA Neurological Hazard Index	95	98	96
EJ Index for Traffic Proximity and Volume	96	97	92
EJ Index for Lead Paint Indicator	89	95	94
EJ Index for Proximity to NPL sites	84	89	80
EJ Index for Proximity to RMP sites	93	97	94
EJ Index for Proximity to TSDFs	88	91	86
EJ Index for Proximity to Major Direct Dischargers	98	99	97



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



EJSCREEN Report

for 1 mile Ring Centered at 41.857973, -87.649938, ILLINOIS, EPA Region 5



Approximate Population: 35480

Sangamon Right of Way

Selected Variables	Raw Data	State Avg.	%ile in State	EPA Region Avg.	%ile in EPA Region	USA Avg.	%ile in USA
Environmental Indicators							
Particulate Matter (PM 2.5 in $\mu\text{g}/\text{m}^3$)	129	11.4	99	10.8	99	9.78	98
Ozone (ppb)	42.3	44.1	18	44.4	26	46.1	25
NATA Diesel PM ($\mu\text{g}/\text{m}^3$) [*]	3.39	0.968	98	0.712	95-100th	0.824	95-100th
NATA Cancer Risk (lifetime risk per million) [*]	74	48	96	42	95-100th	49	80-90th
NATA Respiratory Hazard Index [*]	3.6	1.8	97	1.5	95-100th	2.3	80-90th
NATA Neurological Hazard Index [*]	0.16	0.073	94	0.067	95-100th	0.063	95-100th
Traffic Proximity and Volume (daily traffic count/distance to road)	220	69	82	69	93	110	88
Lead Paint Indicator (% Pre-1960 Housing)	0.58	0.43	63	0.4	71	0.3	79
NPL Proximity (site count/km distance)	0.034	0.069	43	0.036	41	0.096	38
RMP Proximity (facility count/km distance)	0.75	0.43	83	0.33	88	0.31	89
TSDF Proximity (facility count/km distance)	0.036	0.037	72	0.051	65	0.054	64
Water Discharger Proximity (facility count/km distance)	0.68	0.27	90	0.23	93	0.25	92
Demographic Indicators							
Demographic Index	68%	34%	86	28%	92	35%	87
Minority Population	80%	36%	83	24%	91	36%	85
Low Income Population	56%	31%	85	32%	85	34%	83
Linguistically Isolated Population	20%	5%	90	2%	96	5%	92
Population With Less Than High School Education	28%	13%	87	12%	92	14%	85
Population Under 5 years of age	5%	6%	42	6%	43	7%	42
Population over 64 years of age	11%	13%	46	13%	40	13%	44

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

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

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

May 27, 2015

3/3

ATTACHMENT A