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

GENERAL NOTICE LETTER
URGENT LEGAL MATTER
PROMPT REPLY NECESSARY
CERTIFIED MAIL: RETURN RECEIPT REQUESTED

REPLY TO THE ATTENTION OF

September 22, 2017

John E. Fischer
President and CEO
Olin Corporation
190 Carondelet Plaza, Suite 150
Clayton, MO 63105

Re: General Notice Letter for the U.S. Smelter and Lead Refinery, Inc. Superfund Site in East Chicago, Indiana

Site Spill Identification Number: 053J

Dear Mr. Fischer:

Under the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), commonly known as the federal "Superfund" law, the U.S. Environmental Protection Agency ("EPA") is responsible for responding to the release or threat of release of hazardous substances, pollutants or contaminants into the environment—that is, for stopping further contamination from occurring and for cleaning up or otherwise addressing any contamination that has already occurred. EPA has documented that such a release has occurred at the U.S. Smelter and Lead Refinery, Inc. Superfund Site ("the Site"). The Site includes the former U.S. Smelter and Lead Refinery, Inc. facility (part of "Operable Unit 2" or "OU2"), a residential neighborhood ("Operable Unit 1" or "OU1") which has been further sub-divided into three zones, and groundwater beneath both the former facility and the residential neighborhood (also part of OU2).

EPA has spent, or is considering spending, public funds to investigate and control releases of hazardous substances or potential releases of hazardous substances at the Site. Based on information presently available to EPA, EPA believes that Olin Corporation may be liable under Section 107(a) of CERCLA with respect to the Site, as an arranger, which by contract or agreement, arranged for the disposal, treatment or transportation of hazardous substances at the Site.

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Explanation of Potential Liability

Under CERCLA, specifically Sections 106(a) and 107(a), potentially responsible parties ("PRPs") may be required to perform cleanup actions to protect the public health, welfare, or the environment. PRPs may also be responsible for costs incurred by EPA in cleaning up the Site, unless the PRP can demonstrate divisibility or assert one of the statutory defenses. PRPs include current and former owners and operators of a Site, as well as persons who arranged for treatment and/or disposal of any hazardous substances found at the site, and persons who accepted hazardous substances for transport and selected the site to which the hazardous substances were delivered.

To date, EPA, the State of Indiana, and several other potentially responsible parties have taken several response actions at the Site under the authority of the Superfund Program, including:

- Removal Actions including the excavation and off-site disposal of contaminated soils to reduce any immediate threats to the environment or human health posed by the Site.

- A Remedial Investigation ("RI") to identify the Site characteristics and to define the nature and extent of soil contamination at the Site and the risks posed by the Site.

- A Feasibility Study ("FS") to evaluate different cleanup options for the Site.

- Issuance of a Record of Decision ("ROD"), dated November 30, 2012, addressing soil contamination in Operable Unit 1 of the Site.

- Negotiation and execution of a Consent Decree, date October 28, 2014, which provides for the performance of the work described in the ROD at Zones 1 and 3 of Operable Unit 1 of the Site.

- Issuance of a Third, Fourth, and Fifth Amended Action Memorandum for the Site, dated October 13, 2016, October 28, 2016, and March 14, 2017, respectively (collectively, the "Action Memoranda"), addressing soil contamination in Zone 2 of the Operable Unit 1 of the Site and interior lead and arsenic sampling and cleanup throughout Operable Unit 1 of the Site.

- Negotiation and execution of an Administrative Settlement Agreement and Order on Consent ("ASAOC"), date March 16, 2017, which provides for performance of the work described in the Fifth Amended Action Memorandum for the Site at certain properties in Zones 2 and 3 of the Operable Unit 1 of the Site.

- Negotiation and execution of another ASAOC, dated September 20, 2017, which provides for an RI/FS of Operable Unit 2 of the Site.

- Performance of the work described in the ROD and Action Memoranda throughout Operable Unit 1 of the Site.

***De Minimis* Settlements**

Under Section 122(g) of CERCLA, whenever practicable and in the public interest, EPA may offer special settlements "to parties whose waste contribution to a site is minimal in volume and toxicity, that is, *de minimis* parties."

Individuals or businesses resolving their Superfund liability as *de minimis* parties are not typically required to perform site cleanup. Instead, EPA requires *de minimis* settlors to pay their fair share of cleanup costs incurred, plus a "premium" that accounts for, among other things, uncertainties associated with the costs of work to be performed in the future. In return, *de minimis* settlors receive: (1) a covenant not to sue, which is a promise that EPA will not bring any future legal action against the settling party for the specific matters addressed in the settlement; and (2) protection from contribution claims, which provides a settling party with protection from being sued in a contribution action by other responsible parties for the specific matters addressed in the settlement. (The matters addressed in a *de minimis* settlement are typically all cleanup actions and all cleanup costs at the particular site.) Participation in a *de minimis* settlement means that you are settling directly with EPA as soon as it is possible.

The protection from contribution actions for *de minimis* settlors is based on Sections 113(f)(2) and 122(g)(5) of the CERCLA law, which provide that a person "who has resolved its liability to the United States" in an administrative or judicially approved settlement "shall not be liable for claims for contribution regarding matters addressed in the settlement." This protection against contribution claims, however, may not extend to claims by third parties that have incurred their own response costs and seek to recover them under Section 107(a)(4)(B). *See United States v. Atlantic Research Corporation*, 127 S.Ct. 2331, 168 L.Ed. 2d 28 (June 11, 2007) (in certain situations, a liable party who has incurred cleanup costs at a site can sue other liable parties under CERCLA § 107(a)(4)(B)).

If Olin Corporation believes that it may be eligible for a *de minimis* settlement at this Site, please contact Leo Chingcuanco, Association Regional Counsel, at (312) 886-7236 or chingcuanco.leonardo@epa.gov for additional information on *de minimis* settlements. You may be asked to respond in writing to questions about your involvement with the Site to assist EPA in making a determination as to whether you may be eligible for such a settlement.

Financial Concerns/Ability to Pay Settlements

EPA is aware that the financial ability of some PRPs to contribute toward the payment of response costs at a site may be substantially limited. If you believe, and can document, that you fall within that category, please contact Leo Chingcuanco, Association Regional Counsel, at (312) 886-7236 or chingcuanco.leonardo@epa.gov for information on ability to pay settlements. In response, you will receive a package of information about the potential for such settlements and a form to fill out with information about your finances, and you will be asked to submit financial records including business federal income tax returns. If EPA concludes that Olin

Corporation has a legitimate inability to pay the full amount of EPA's costs, EPA may offer a schedule for payment over time or a reduction in the total amount demanded from you.

Also, please note that because EPA has a potential claim against you, you must include EPA as a creditor if you file for bankruptcy. EPA reserves the right to file a proof of claim or an application for reimbursement of administrative expenses.

Information to Assist You

EPA would like to encourage communication between you, other PRPs, and EPA at the Site. EPA recommends that all PRPs meet to select a "steering committee" that will be responsible for representing the group's interests. Establishing a manageable group is critical to successful negotiations with EPA. If this is not possible, EPA encourages each PRP to select one person from its company or organization to represent its interests to EPA.

To assist you in your efforts to communicate, please find the following attached information:

1. A short description of the Site, the operational history of USS Lead, and recent activities taken by EPA;

2. A list of names and addresses of PRPs to whom this letter is being sent, and to whom other general notice letters have been sent.

3. A fact sheet that describes the Site.

Additional information can also be found at the Site website located at https://www.epa.gov/uss-lead-superfund-site.

EPA has established an Administrative Record that contains documents that serve as the basis for EPA's selection of a cleanup action for the Site. The Administrative Record is located at https://semspub.epa.gov/src/collection/05/AR62604 and is available to you and the public for inspection. The Administrative Record is also available for inspection at the Superfund Records Center, EPA Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604.

Resources and Information for Small Businesses

As you may be aware, on January 11, 2002, President Bush signed into law the Superfund Small Business Liability Relief and Brownfields Revitalization Act. This Act contains several exemptions and defenses to CERCLA liability, which we suggest that all parties evaluate.

EPA has created a number of helpful resources for small businesses. EPA has established the National Compliance Assistance Clearinghouse as well as Compliance Assistance Centers which offer various forms of resources to small businesses. You may inquire about these resources at http://www.epa.gov/compliance/compliance-assistance-centers. In addition, the EPA

Small Business Ombudsman may be contacted at http://www.epa.gov/resources-small-businesses/forms/contact-us-about-resources-small-businesses. Finally, EPA has developed a fact sheet about the Small Business Regulatory Enforcement Fairness Act (SBREFA) and information on resources for small businesses, which is enclosed with this letter and available on the Agency's website at http://www.epa.gov/compliance/small-business-resources-information-sheet.

Further Site Discussions

On October 25, 2017, EPA plans to hold a meeting at its Chicago offices to provide further details about the Site to you and other potentially responsible parties, and to answer any questions you may have. If you or your representatives cannot make it to Chicago, a call in number will be provided. Either way, your participation is greatly encouraged. Additional details will follow shortly.

Please give these matters your immediate attention and consider consulting with an attorney. If you have any questions regarding this letter, please contact Leo Chingcuanco, Association Regional Counsel, at (312) 886-7236 or chingcuanco.leonardo@epa.gov. Thank you for your prompt attention to this matter.

Sincerely,

Denise Boone

Denise Boone, Acting Branch Chief
Superfund Division

Enclosures:

Site Description
General Notice List
Site Maps

cc: Leonardo Chingcuanco, Associate Regional Counsel
Steven Kaiser, Associate Regional Counsel
Lisa McCoy, Indiana Department of Environmental Management
Annette Lang, Department of Justice
Sparsh Khandeshi, Department of Justice

Enclosure 1

Site Description, USS Lead Operational History, and Site Activities

The U.S. Smelter and Lead Refinery, Inc. Superfund Site ("the Site") is located within the city of East Chicago in Lake County, Indiana. The EPA has divided the Site into two Operable Units, Operable Unit 1 ("OU1") and Operable Unit 2 ("OU2"). OU2 consists of the former U.S. Smelter and Lead Refinery, Inc. ("USS Lead") facility and groundwater beneath the entire Site, while OU1 is comprised of a residential neighborhood located north and east of the USS Lead facility. Maps of the Site are included as Enclosure 3.

OU1 consists of the surface and subsurface soil (but not the groundwater) within the following geographic boundaries: on the north East Chicago Avenue; on the east Parrish Avenue; the south East 151st Street/149th Place; and on the west the Indiana Harbor Canal. This is a residential area generally known as the Calumet neighborhood. OU1 has been further sub-divided into three zones. Zone 1 includes a former low-income public housing complex (the West Calumet Housing Complex or "WCHC") and the former Carrie Gosch Elementary School. Zones 2 and 3 generally include single-family residences, multi-family residences, numerous public parks, and various small commercial structures.

OU2 includes the 79-acre parcel consisting of the former USS Lead facility located at 5300 Kennedy Avenue. OU2 is bounded to the east by Kennedy Avenue, to the north by the Indiana Harbor Belt Railroad, to the northwest by the Indiana Harbor Canal, and to the south and west by the Grand Calumet River. OU2 also includes groundwater beneath both the former USS Lead facility and OU1. The United States Metals Refining Company (USMRC) owned and operated the USS Lead facility from 1906 to 1920. USS Lead then owned and operated the facility from 1920 until 1985, when all operations at the facility ceased.

From 1906 to 1973, the USS Lead facility operated principally as a lead refinery, although that operation also included a secondary lead smelter with a 50-ton blast furnace. During this period, the USS Lead facility annually processed between approximately 30,000 and 40,000 tons of lead product, among other metals and chemicals, and released to the environment associated lead and arsenic production wastes. In 1973, the facility installed a 100-ton blast furnace and started operating exclusively as a secondary lead smelter which annually processed approximately 20,000 tons of lead recovered from various materials including: lead batteries, plates, and elements; miscellaneous lead scrap; reverberatory slag; dross; gel cell trimmings; sump waste/sludge; scrap battery lead; remelted material; oxide; baghouse dust and floor sweepings; hazardous waste; and unknown or unidentified material.

USS Lead generated two primary waste materials as a result of the smelting operations: (1) blast-furnace slag and (2) lead-containing dust emitted from the stack of the blast-furnace. These waste materials contained hazardous substances including lead and arsenic. Blast furnace slag was stockpiled south of the plant building and spread annually over an adjoining 21-acre wetland. The blast-furnace baghouse collected approximately 300 tons of baghouse flue dust per month during maximum operating conditions. Some of the baghouse dust was reintroduced into the furnace for additional lead recovery. By the late 1970s approximately 8,000 tons of

baghouse dust were stored outside at the facility. Air emissions that contained lead and arsenic were released into the atmosphere through one or more stacks and contaminated OU1 and OU2.

The Site has also been contaminated by materials from historic operations at the former E. I. du Pont de Nemours and Co. ("DuPont") chemicals processing facility located just south of the Site, and from another set of lead refining facilities formerly within the boundaries of Zone 1 of the Site.

On April 8, 2009, U.S. EPA placed the entire Site (both OU1 and OU2) on the National Priorities List ("NPL") by publication in the Federal Register, 74 Fed. Reg. 16,126-34. On November 30, 2012, EPA issued a Record of Decision ("ROD"), which sets forth the remedial action to be implemented at OU1. The remedial action includes excavation and off-site disposal of soil with lead concentrations exceeding 400 milligrams per kilogram (mg/kg) and arsenic concentrations exceeding 26 mg/kg, to a maximum depth of two feet. At industrial or commercial properties, EPA will clean up lead that exceeds 800 mg/kg.

On October 28, 2014, the United States and the State of Indiana reached an agreement with the Atlantic Richfield Company ("ARC") and DuPont for the cleanup of Zones 1 and 3 of OU1, although the Chemours Company ("Chemours")—a DuPont spinoff—has since assumed a number of DuPont's obligations. The agreement is embodied in a federal consent decree entered by the United States District Court, Northern District of Indiana (2:14-cv-312). Under the consent decree, EPA is conducting the cleanup work in the neighborhood using funding provided by the companies. EPA is working with property owners to develop property-specific drawings showing which soils on the property must be excavated, conduct the excavation work, and restore the properties after excavation is completed. Atlantic Richfield, DuPont, and Chemours are paying for EPA's work, and are also transporting the contaminated soil out of the neighborhood for proper disposal.

In April 2016, EPA validated its remedial design data for the West Calumet Housing Complex (Zone 1), and shared that data with the City of East Chicago in May 2016. In July 2016, the Mayor of East Chicago advised the approximately 1,200 residents of the WCHC to relocate. As part of the relocation effort, EPA also sampled and cleaned 286 housing units for interior lead and arsenic dust contamination. The East Chicago Housing Authority ("ECHA"), which is the local housing authority responsible for overseeing the WCHC, has since relocated all of the residents and submitted an application to HUD requesting permission to demolish the facility. EPA has postponed further remediation efforts in Zone 1 pending the demolition of the WCHC.

In October 2016, EPA also began its remediation efforts in Zones 2 and 3 of Site, including excavation of contaminated soils and sampling for interior lead and arsenic dust contamination. EPA conducted interior cleanings at all remediated properties where sampling results came back positive.

On March 16, 2017, EPA entered into an Administrative Settlement Agreement and Order on Consent (ASAOC) with ARC, DuPont, Chemours, and USMRC, whereby the respondents to the ASAOC would fund, for the 2017 construction season only, implementation of the ROD at high

priority (i.e., CERCLA removal-authority eligible) properties in Zone 2, and interior sampling and cleaning at all remediated properties in Zones 2 and 3.

Approximately 404 out of 596 properties in Zone 2 and 212 out 480 properties in Zone 3 require remediation. By the end of the 2017 construction season, EPA expects to have remediated approximately 128 properties in Zone 2 and 158 properties in Zones 3.

On September 20, 2017, EPA entered into an ASAOC with USS Lead pursuant to which USS Lead agreed to perform the RI/FS for OU2. That said, significant portions of the remediation work required at the former USS Lead facility have already been performed under federal and state RCRA programs.

As such, although there are already a number of agreements in place regarding work at the Site, unresolved issues include the (1) remaining Zone 2 exterior soil work, (2) the remaining interior dust work in Zones 2 and 3, (3) the appropriate OU2 groundwater remedy, if any, and (4) past costs at the Site. These will be the subject of future negotiations.

Enclosure 2

Potentially Responsible Parties General Notice List

Previously Issued:

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Mueller Industries, Inc.
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Thomas Brugao
Covington & Burling LLP
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United States Metals Refining Company
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Vice President, General Counsel and Corporate Secretary
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Honeywell International Inc.
Tom Byrne

Associate General Counsel/Chief Environmental Counsel
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Morristown, New Jersey 07962

NL Industries, Inc.
Joel L. Herz
Law Offices of Joel L. Herz
La Paloma Corporate Center
3573 East Sunrise Drive, Suite 215
Tucson, Arizona 85718

Recently Issued:

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Cleveland, OH 44115

Olin Corporation
John E. Fischer
President and CEO
190 Carondelet Plaza
Suite 1530
Clayton, MO 63105-3443

Alcatel-Lucent USA Inc.
Lance B. Boxer
Executive Officer
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Akzo Nobel Inc.
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President and General Manager
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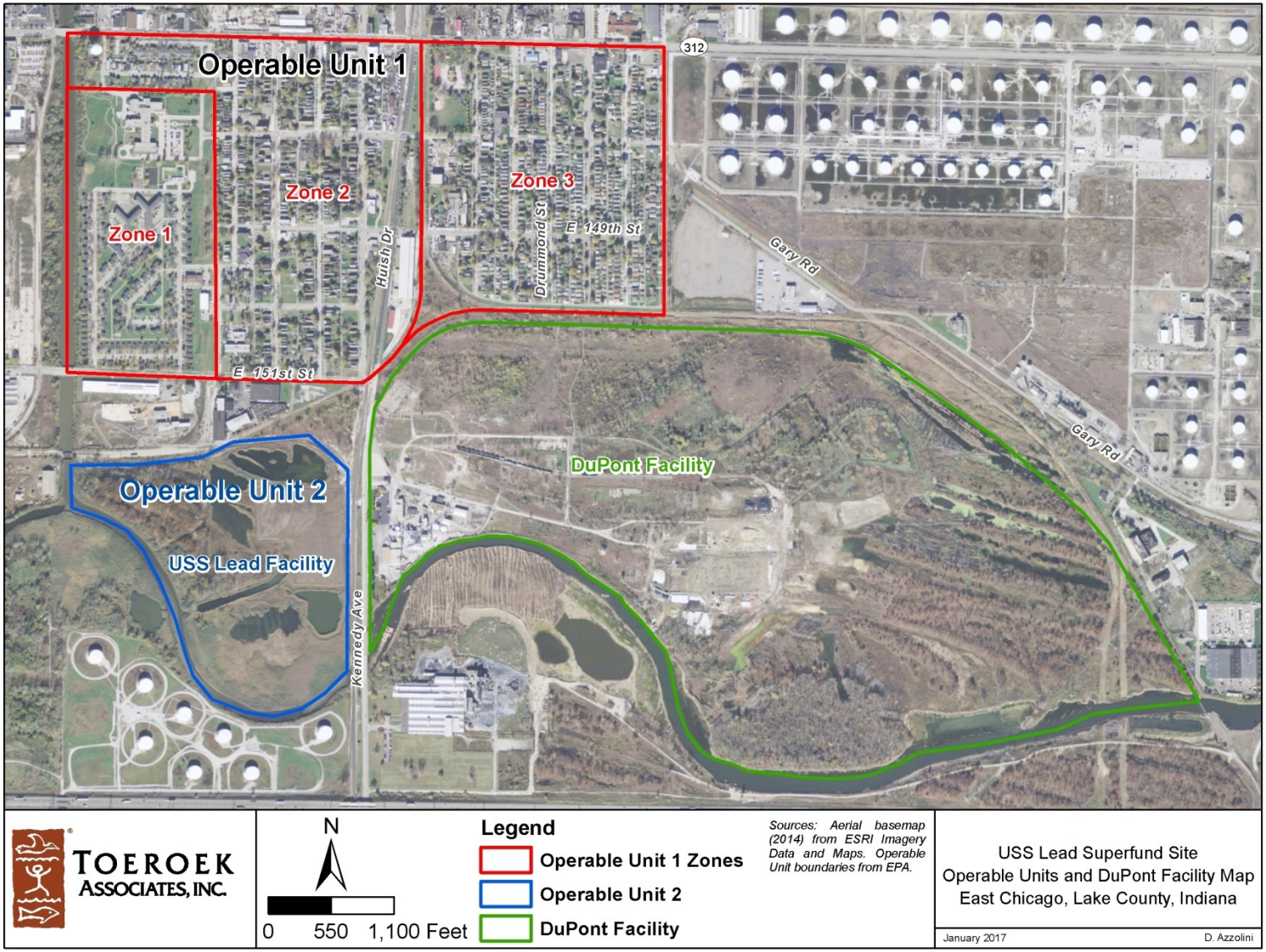
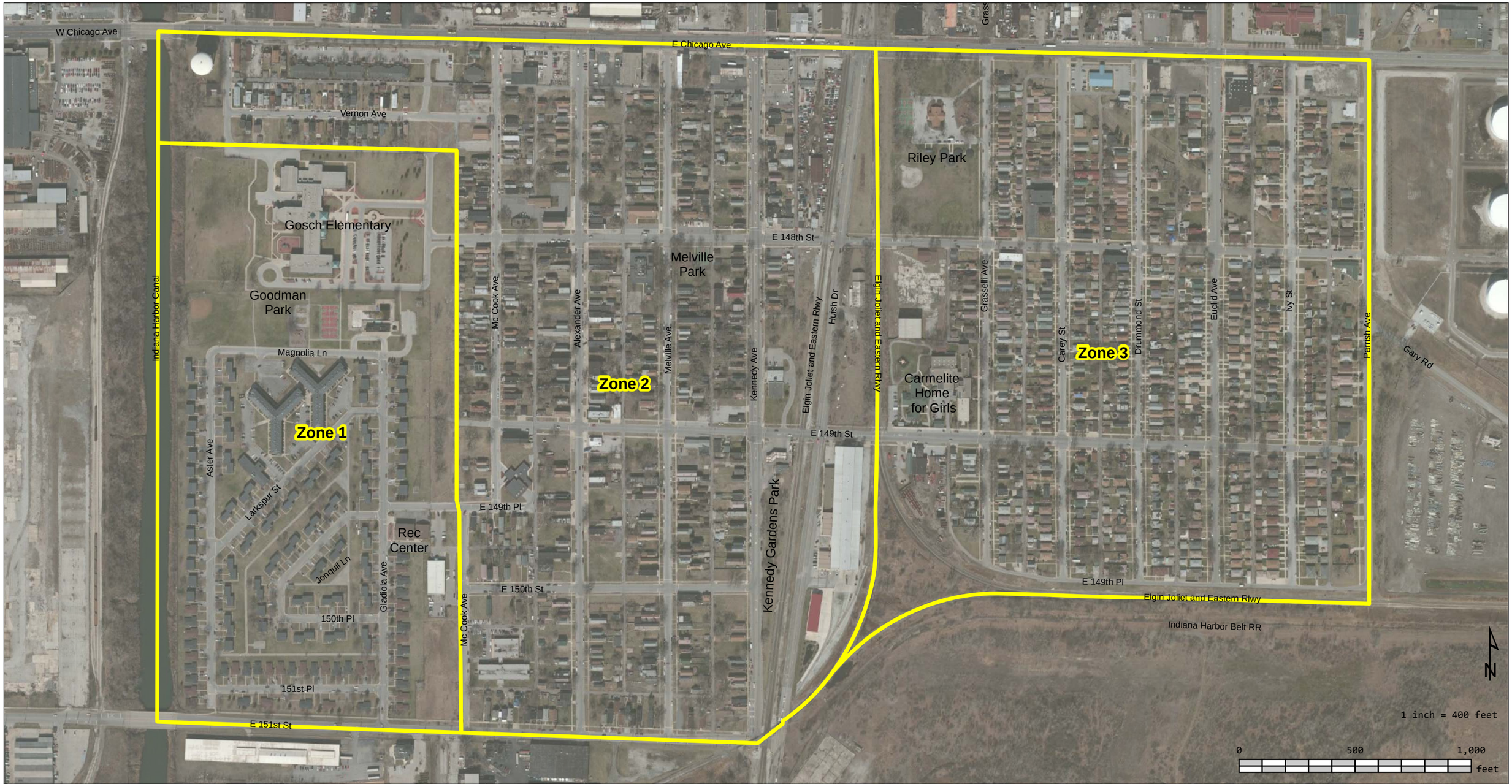
Chicago, IL 60607

Hammond Group, Inc.
Terrence H. Murphy
President and CEO
1414 Field Street, Building B
Hammond, IN 46320



Enclosure 3
Map of USS Lead Superfund Site



Zone

Basemap source: Esri

US SMELTER & LEAD REFINERY
LAKE COUNTY, EAST CHICAGO, INDIANA

Enclosure 3
OU1 ZONES

EPA REGION 5 RAC 2 | REVISION 0 | JULY 2014

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