



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 4  
SAM NUNN ATLANTA FEDERAL CENTER  
61 FORSYTH STREET  
ATLANTA, GEORGIA 30303-8960

## **ACTION MEMORANDUM**

**SUBJECT:** Approval and Funding for a Removal Action at the Livermore Industrial Plating Site, Livermore, McLean County, Kentucky

**FROM:** Terry L. Tanner, On-Scene Coordinator  
Emergency Response, Removal, Prevention, & Preparedness Branch

**THRU:** James W. Webster, Ph.D., Chief  
Emergency Response, Removal, Prevention, & Preparedness Branch

**TO:** Randall Chaffins, Acting Director  
Superfund & Emergency Management Division

### **I. PURPOSE**

The purpose of this Action Memorandum is to request, and document approval of the proposed Time-Critical Removal Action described herein for the Livermore Industrial Plating Site (the Site) located at 407 East 7th Street in Livermore, McLean County, Kentucky. The release or threat of release of hazardous substances at the Site poses a threat to public health and the environment pursuant to Section 104(a) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. Section 9604(a), that meets the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) Section 300.415(b) criteria for removal actions. The Site is a former metal plating facility. The total project ceiling for this time-critical removal action, if approved, will be \$690,038.

### **II. SITE CONDITIONS AND BACKGROUND**

Site ID: C4J2  
CERCLIS ID: KYN000420304  
Removal Category: Time-Critical Removal Action

#### **A. Site Description**

The Site is a commercial/industrial property comprised of approximately 0.5 acres located in McLean County. The Site was formerly owned and operated by Livermore Industrial Plating, also known as Livermore Brass & Silver Shop, Inc. Livermore Industrial Plating conducted metal plating operations at the Site from about 1992 until 2018 when its owner became ill. The Site includes, but is not limited to, a warehouse, a plating conveyer system, a wastewater processing unit, two plating vats, chemicals, and spent plating solutions associated with the former operations. From about

2018 until 2021, the Kentucky Department of Environmental Protection (KYDEP) worked with Livermore Industrial Plating and/or its owner to remove the remaining waste and chemicals from the

Site. After Livermore Industrial Plating's owner died in 2021, KYDEP referred the Site to the U.S. Environmental Protection Agency on February 25, 2021, for evaluation of a time-critical removal action. Information provided in the KYDEP referral request documented the presence of spent plating solution in vats, a floor sump filled with unknown liquid, a wastewater treatment unit containing untreated wastewater, and many 55-gallon drums and plastic bags containing chemicals associated with metal plating operations.

## **1. Removal Site Evaluation**

As part of the Removal Site Evaluation (RSE), a Site Inspection was performed on March 23, 2021, by the EPA's On-Scene Coordinator (OSC). The son of the former owner of Livermore Industrial Plating and personnel from KYDEP's emergency response group were present during this Site Inspection. Multiple containers were present throughout the facility including 46 count 55-gallon drums, 38 count 5-gallon poly buckets, three 3000-pound supersacks, and multiple odd-size containers of liquid and soil material. According to the son of the former owner of Livermore Industrial Plating, many of the containers were labeled, and their contents accurately reflected in the corresponding labels. According to the labels, contents in the containers included nickel chloride, acid copper plating solution, nickel carbonate, ammonium bifluoride, nickel sulfate, zinc chloride, commercial grade hydrogen peroxide, sulfuric acid, nitric acid, Pavchrome (hexavalent chromium solution), and spent plating solution from a plating vat.

Sections of the roof covering the western section of the building were missing, and the containers were exposed to weather. The son of the former owner of Livermore Industrial Plating stated that there have been multiple incidences of trespassers breaking into the locked building, vandalizing, and stealing items from the Site.

On April 26, 2021, the EPA performed a RSE sampling investigation to assess the contents of the containers. The data from the sampling event were used to establish the accuracy of the labels relative to the container contents and assess for the presence of hazardous substances. The laboratory analysis results of the samples documented the presence of hexavalent chromium, nickel sulfate, nickel chloride and ammonium fluoride, consistent with the labels present on the containers. These chemicals, which were initially used as raw plating ingredients, are present in undiluted, high concentrations and are all hazardous substances as defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14), and the Resource Conservation and Recovery act (RCRA) characteristic definitions, and/or are listed as hazardous substances in Title 40 of the Code of Federal Regulations (C.F.R.) Section 302.4.

## **2. Physical Location**

The Site is located at 407 7<sup>th</sup> Street in Livermore, McLean County, Kentucky, within an area of mixed residential and commercial properties. Residential properties border the Site on the north, east and south. To the west is a commercial property housing a restaurant. The geographic coordinates taken from the center of the Site are 37.49282 North latitude and 87.13103 West longitude. The Site is comprised of approximately 0.5 acres. The majority of the property is enclosed within the footprint of the building that housed the former metal plating operation.

### **3. Site Characteristics**

Livermore Industrial Plating conducted metal plating operations at the Site from approximately 1992 to 2018. The facility used an electroplating process to plate metal parts for the automotive and commercial/industrial equipment industries. The Site includes, but is not limited to, a warehouse, a plating conveyer system, a wastewater processing unit, two plating vats, and chemicals and spent plating solutions associated with the former operations. The metal plating operations were performed within two adjoining metal warehouse structures. Operations ceased around 2018 when Livermore Industrial Plating's former owner became ill. The warehouse presently contains chemicals and plating solutions in drums, a wastewater processing unit and collection sump, and two plating vats. Sections of the roof covering the western portion of the building are missing from one of the warehouse structures. The exterior walls of the metal warehouses are intact. The structural framework and the metal roof of the warehouses show extensive rust and corrosion, typical for the corrosive atmosphere associated with a metal plating process.

### **4. Release or Threatened Release into the Environment of a Hazardous Substance, or Pollutant or Contaminant**

Nickel chloride, ammonium bifluoride, nickel sulfate, zinc chloride, sulfuric acid, and nitric acid are hazardous substances as defined by Section 101(14) of CERCLA, 42 U.S.C. Section 9601(14), and are listed as hazardous substances in 40 C.F.R. Section 302.4. These substances are present in undiluted concentrations in drums, a wastewater processing unit and collection sump, and two plating vats within the warehouse structures. Observations made by the OSC during the March 23, 2021 Site Inspection document the threat of a release of hazardous substances to the environment at the Site.

### **5. National Priorities List (NPL) Status**

The Site is not listed on the NPL and has not been proposed for the NPL or evaluated under the Hazardous Ranking System.

### **6. Maps, Pictures, and Other Graphic Representations**

A google aerial image is attached to this Action Memorandum.

## **B. Other Actions to Date**

### **1. Previous Actions**

All previous actions performed by regulatory agencies have consisted of inspections and/or assessments. From 2018 until 2021, KYDEP performed multiple inspections to evaluate the regulatory status of the Site and to encourage the Site's owner/operator to remove the chemicals and plating solutions from the Site.

The EPA performed a Site Inspection on March 23, 2021, to confirm the presence of materials previously observed by the KYDEP. Based on the OSC's observations during the Site Inspection, the EPA returned to the Site on April 26, 2021, to sample materials on-Site. As discussed above, the data from the sampling event were used to establish the accuracy of the labels relative to the container contents and assess for the presence of hazardous waste.

## 2. Current Actions

There are no current actions being taken by any party to address the threats posed by the Site.

### C. State and Local Authorities' Roles

#### 1. State and Local Actions to Date

The actions taken to date by the KYDEP have consisted of Site inspections followed by a referral to the EPA on February 25, 2021, for the evaluation of a time-critical removal action at the Site. Sewer and electrical services have been discontinued for this facility. There is no information available that would suggest the discontinuation of these services were associated with any environmental regulatory issues at this Site.

#### 2. Potential for Continued State/Local Response

The State of Kentucky does not presently have resources or funds available to address a removal action at the Site. KYDEP however, plans to perform an environmental assessment of the soil and groundwater at the Site once the hazardous substances have been removed from the Site.

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

As discussed above, hazardous substances including nickel chloride, , ammonium bifluoride, nickel sulfate, zinc chloride, sulfuric acid, and nitric acid are present at the Site, and pose the following threats or potential threats to public health or welfare as listed in 40 CFR Section 300.415(b)(2):

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

Many full or partially full drums, vats, and containers remain on the Site. While the contents of every container are not known, based on information provided by a former employee of the former metal plating operation, CERCLA hazardous substances such as nickel chloride, ammonium bifluoride, nickel sulfate, zinc chloride, sulfuric acid, and nitric acid are present at the Site. Additionally, based on sampling results from the RSE, CERCLA hazardous substances including hexavalent chromium, nickel sulfate, nickel chloride and ammonium fluoride are present at the Site.

Further, while the son of the former owner of Livermore Industrial Plating has attempted to secure the warehouse against theft and vandalism, Site controls are minimal. After the former owner of Livermore Industrial Plating died, materials were left in the warehouse on-Site. Sections of the roof covering the western portion of the building are missing from one of the warehouse structures and as such, containers are exposed to weather. The containers containing the hazardous substances are degrading and will eventually release their contents into the environment. The Site is surrounded by residential properties, and any release from the Site would expose the nearby human population to hazardous substances.

**300.415(b)(2)(iii): Hazardous substances or pollutants or contaminants in drum, barrels, tanks, or other bulk storage containers, that may pose a threat of release;** As discussed in greater detail in Section II.A.1 and II.A.3 of this Action Memorandum, there are many drums, vats,

and containers full or partially full of hazardous substances at the Site. These hazardous substance containers are degrading and will eventually release their contents into the environment.

**300.415(b)(2)(v): Weather conditions that may cause hazardous substances or pollutant or contaminants to migrate or be released;** Sections of the roof covering the western portion of the building are missing from one of the warehouse structures and as such, containers are exposed to weather. Rainwater has compromised some of the metal and paper containers and will continue to do so resulting in a release of hazardous substances.

**300.415(b)(2)(vii): The availability of other appropriate federal or state response mechanisms to respond to the release.** There are no other federal or state agencies available to respond. The State of Kentucky has indicated that it lacks the resources necessary to address the threat and has requested the EPA's assistance with the removal action at the Site.

#### **IV. ENDANGERMENT DETERMINATION**

Actual or threatened releases of hazardous substances, pollutants, or contaminants from this Site, if not addressed by implementing the response action selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, or welfare, or the environment.

#### **V. PROPOSED ACTIONS AND ESTIMATED COSTS**

##### **A. Proposed Actions**

##### **1. Proposed Action Description**

The following actions will be implemented by the EPA under the scope of this Action Memorandum:

- Mobilize personnel and equipment to the Site.
- Remove materials from drums, vats, and containers.
- Conduct hazard categorization of all materials and formulate a bulking scheme.
- Treat to the extent practical, liquid waste prior to transportation and disposal.
- Transportation and disposal of solid and liquid hazardous waste to an off-site location.

##### **2. Contribution to Remedial Performance**

The scope of this proposed action is to address the threats discussed in Section III, which meet the 40 C.F.R Section 300.415(b)(2) removal criteria. The removal action will, to the extent practicable, be consistent with any future remedial action.

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

This proposed action is time-critical and does not require an EE/CA.

##### **4. Applicable or Relevant and Appropriate Requirements (ARAR)**

In accordance with the NCP at 40 CFR Section 300.415(j), on-site removal actions conducted under CERCLA are required to attain ARARs to the extent practicable considering the exigencies of the

situation or provide grounds for invoking a waiver under Section 121(d)(4) of CERCLA. In determining whether compliance with ARARs is practicable, the lead agency may consider appropriate factors, including (1) the urgency of the situation; and (2) scope of the removal action to be conducted. Additionally, under 40 CFR Section 300.400(g)(3), other advisories, criteria or guidance may also be considered (so-called To-Be-Considered or TBC) when conducting the removal action. The site-specific ARARs and TBC for this time-critical removal action, which the EPA deems compliance practicable, are described below.

ARARs include only federal and state environmental or facility siting laws/regulations and do not include occupational safety or worker protection requirements. Compliance with OSHA standards is required by 40 CFR Section 300.150. ARARs are typically divided into three categories: (1) chemical-specific; (2) location-specific; and (3) action-specific.

Under CERCLA Section 121(e)(1), federal, state, or local permits are not required for the portion of any removal or remedial action conducted entirely on-site as defined in 40 CFR Section 300.5. See also 40 CFR Section 300.400(e)(1) and (2). On-site means the areal extent of contamination and all suitable areas in very close proximity to the contamination necessary for implementation of the response action. On-site response actions must comply, to the extent practicable, with substantive but not administrative requirements of ARARs. Off-site activities such as transportation and disposal of wastes are required to comply with all applicable requirements, including the administrative portions.

The EPA sent an ARARs request letter to the State on June 23, 2021, for the purpose of identifying any ARARs which may have been created since the previous removal action. At this time, no response has been received from the State of Kentucky. The OSC will continue to coordinate with State Officials and will evaluate all identified ARARs in accordance with the NCP.

Though not an ARAR, as provided in CERCLA Section 121(d)(3) and the Off-site Rule at 40 CFR Section 300.400 et seq., the off-site transfer of any hazardous substance, pollutant or contaminant generated during the response action will be sent to a treatment, storage or disposal facility that is in compliance with applicable federal and state laws and has been approved by the EPA for acceptance of CERCLA waste.

## **5. Projected Schedule**

Response actions at the Site will be initiated within six months of approval of this Action Memorandum. While the proposed removal activities are expected to be completed within five weeks of initiation of on-Site activities, a period of up to six months will be necessary to provide sufficient pre-mobilization planning, arrange for disposal, compensate for weather-related or other delays, and complete demobilization activities. All actions are expected to be completed within six months of mobilization.

## B. Estimated Costs

<b>Extramural Costs:</b>	<b>Proposed Ceiling</b>
Regional Allowance Cost	
ERRS	\$517,672
Non-Regional Allowance Costs	
START	\$57,360
Contingency (20%)	\$115,006
<b>TOTAL REMOVAL ACTION PROJECT CEILING:</b>	<b>\$690,038</b>

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

If this response action is significantly delayed or not taken, a release of hazardous substances and/or pollutants and contaminants may occur.

## VII. OUTSTANDING POLICY ISSUES

There are no outstanding policy issues related to the proposed removal actions at this Site.

## VIII. ENFORCEMENT

The EPA will initiate a fund-lead removal action at this Site. For more enforcement information, see the attached Enforcement Addendum.

The total EPA costs for this removal action based on full-cost accounting practices that will be eligible for cost recovery are estimated to be \$1,103,615 using the following formula:

$$(\text{Total Extramural Cost} + \text{Total Intramural Costs}) + (55.33\%(\text{Total Extramural Costs} + \text{Total Intramural Cost})) = \text{Estimated EPA Costs, or } (690,038 + \$20,459) + ((55.33\% (\$690,038 + \$20,459))) = \$1,103,615.^1$$

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<sup>1</sup> Direct costs include direct extramural costs and direct intramural costs. Indirect costs are calculated based on an estimated indirect cost rate expressed as a percentage of site-specific direct costs, consistent with the full cost accounting methodology effective October 2, 2000. These estimates do not include pre-judgment interest, do not take into account other enforcement costs, including Department of Justice costs, and may be adjusted during the course of a removal action. The estimates are for illustrative purposes only and their use is not intended to create any rights for responsible parties. Neither the lack of a total cost estimate nor deviation of actual total costs from this estimate will affect the United States' right to cost recovery.

## IX. RECOMMENDATION

This decision document represents the selected removal action for the Livermore Industrial Plating Site in Livermore, McLean County, Kentucky. This decision document has been 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.

Conditions at the Site meet the NCP Section 300.415(b) criteria for a time-critical removal action. The removal action is anticipated to be fund lead, with a total project ceiling, if approved, of \$690,038. I recommend your approval of the proposed removal action.

APPROVED: *Randall Chaffins* DATE: \_\_\_\_\_  
Randall Chaffins, Acting Director  
Superfund & Emergency Management Division

DISAPPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_  
Randall Chaffins, Acting Director  
Superfund & Emergency Management Division

Attachment:

A. Google aerial image of Livermore Industrial Plating Site



Attachment A  
IMAGE  
LIVERMORE INDUSTRIAL PLATING SITE

