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

EPA Region 5 Records Ctr.
235171

REPLY TO THE ATTENTION OF: SE2-5J

MEMORANDUM

DATE: SEP 17 1997

SUBJECT: ACTION MEMORANDUM - Request for a Time Critical Removal Action at the Moschiano Plating Company Site, Cook County, Chicago, Illinois

FROM: Reiniero A. Rivera, On-Scene Coordinator
Emergency Response Section II

TO: William E. Muno, Director
Superfund Division

THRU: Richard Karl, Chief
Emergency Response Branch

Site ID#: **B515**

I. PURPOSE

The purpose of this memorandum is to request approval to expend up to $1,085,158 to abate an imminent and substantial threat to public health and the environment present at the abandoned Moschiano Plating Company (MPC) site, 2808 W. Lake Street, Cook County, Chicago, Illinois.

This memorandum also seeks to confirm and document the verbal authorization of August 12, 1997, by the acting Emergency Response Branch Chief, William Messenger, to expend up to $50,000 on an emergency response action to secure the building until the time-critical removal action proposed in this document started.

The site was referred to the U.S. EPA for an emergency response by the City of Chicago Department of Environment after a portion of the roof collapsed breaking pipes connected to the fire suppression system and forced the entrance of representatives of the Metropolitan Water Reclamation District of Greater Chicago (MWRDGC) who discovered that the abandoned plating lines were still in place in the facility. A removal assessment was conducted at the site, and after a limited emergency action to secure the site, the site was further evaluated and recommended for the proposed removal action.

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The abandoned plating facility is located in a low-income/high-minority area. The site operations included nickel, chromium, copper, and brass plating. The removal action seeks to abate the imminent and substantial threat to human health and the environment posed by the presence on site of plating wastes as well as improperly stored drums, containers, and sumps containing hazardous materials with pH levels as low as 0.0. Elevated concentrations of cyanide have been documented by the MWRDGC sampling as well as the U.S. EPA removal assessment. In addition, several open drums of flammable liquids, acids, and unknown contents are present in the building. It is estimated that the removal action will require 90 on-site working days to complete. This proposed removal action is considered time critical due to the current conditions of the building which may worsen the threat during precipitation events and cold weather periods, the vandalistic events occurring at the site, and the proximity of residents to the site.

II. SITE CONDITIONS AND BACKGROUND

A. Site Description

1. Site history

The Moschiano Plating Company (MPC) was incorporated in 1972 and moved to the Lake Street location in 1979. Two separated plating lines existed on site. Plating operations included nickel, copper, brass, and chromium. Hazardous wastes generated on site included plating sludges, buffing dust, and spent solvents. The owner of the facility died in April 1997, and site operations have been inactive since then.

According to MWRDGC documents, the company has a long history of discharge violations. Since 1989, MPC has been cited for over 50 violations by the MWRDGC. These violations include illegal discharges, Spill Prevention Control and Countermeasure Plan violations and effluent limits violations. Between November 1995 and December 1996, samples collected by the MWRDGC indicated elevated concentrations of zinc, copper, nickel, and/or total metals on sixteen separate occasions. MPC was also fined by the Illinois Environmental Protection Agency (IEPA) for violations of air regulations.

2. Physical location

The MPC site is located at 2808 West Lake Street (latitude:41°53'04" N, longitude:87°41'20" W) in a low income/high minority area of mixed industrial and residential development. The property is bordered on the north by residential areas, on the south by Lake Street, on the west by Mozart Street, and on the east by a primarily residential building owned by the Holy Temple Church. Directly across Lake Street is an industrial building that contains the National Interchemical Company. There is a Chicago Transit Authority train platform located directly above Lake Street that runs parallel to the building.

3. Site characteristics

The site consists of a 60,000-square-foot, one-story brick building. The building includes two plating areas, a lacquer room, a lacquer spray room, a buffing/polishing room, an office and various storage areas. The building has entrances on the Lake Street side and west side, and a loading dock on the north side. The plating areas consist of approximately 60 vats, many of which still contain chemicals used during plating operations. The majority of the plating lines are still intact. The floor of the building is constructed mainly of concrete in fair condition. A large amount of miscellaneous debris, including materials associated with plating activities, is scattered about the building. Approximately fifty 55-gallon drums are staged in the eastern portion of the building.

On August 1, 1997, a section of the roof along the eastern portion of the building collapsed breaking pipes connected to the fire suppression system. The pipes leaked water inside the building and onto the streets. The collapsed section of the roof landed on several 55-gallon drums. The City of Chicago shut off the water main and provided a contractor to board up the door to prevent access to the facility. Evidence showed that vandals had been on site.

4. Removal site evaluation

On August 8, 1997, U.S. EPA On-Scene Coordinator (OSC) Reiniero (Rey) Rivera, Thomas Cook, U.S. EPA summer intern, and two Superfund Technical Assessment Response Team (START) Members, Steve Skare and Stephanie Wenning, performed a removal assessment at the site. Access to the property was provided by Christopher Nowotarski, attorney for Moschiano Plating, who was also present the day of the assessment along with Dominic Mezino (MPC former supervisor), Manuel Castillo (MWRDGC), Bill Ryczek (U.S. EPA Enforcement Specialist), and Pete Badillo (City of Chicago Department of Environment).

The hole in the roof had worsened since the original site visit by the U.S. EPA, the City of Chicago, and the MWRDGC for an emergency assessment on August 1, 1997, and water continued to accumulate in the main room. The majority of the vats present in the two separated plating areas still contain chemicals used in the plating operations. Access to all the vats in these areas is by wooden catwalk. According to the MPC former supervisor, chemicals in the vats include copper cyanide, brass, nickel, sulfuric acid, nitric acid, and chrome. The lacquer room still contains some lacquer and thinner in vats. Drums labeled "TCE" are present east of the southern plating area.

Analytical results of the samples collected at the site indicate the presence of plating wastes. The wastes exhibit the Resource Conservation and Recovery Act (RCRA) characteristics for hazardous waste or exhibit elevated levels of hazardous substances. Several samples from vat contents exhibit pHs of less than 2.0 and are therefore considered corrosive hazardous wastes. In addition, analytical results from other vats indicate that samples contained amenable cyanide in levels greater than the Federal land ban disposal regulation of 0.86 mg/L for waste waters.

Cyanide was also detected in samples from the floor drain and the southern wall.

Several 55-gallon drums of ignitable waste, acids, and unknown contents were observed in the building. Samples were taken from several of these drums, and the analytical results indicate the presence of xylene, toluene, and ethyl benzene. Water samples from the floor drain contained dichloroethene and trichloroethene.

The building is relatively full of miscellaneous debris, in addition, several areas exist where people could be exposed to residual chemicals. In several places chemicals were spilled. Also presenting possible chemical hazards are a number of barrels with unknown contents. The building may also present inhalation exposure issues. Odor of solvents and acids can be noticed, spilled plating wastes may present air quality problems. Several areas of the MPC site show signs of vandalism. Most windows of the building have been broken.

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

The property history indicates that there is a high potential for contamination on the site. Waste in drums, vats, floor drains and on the floor of the building are or may be hazardous. Some of the wastes sampled during the removal assessment had extremely low pH and therefore are corrosivity characteristic hazardous wastes. Open containers of liquids in the lacquer room have flashpoints well below the RCRA regulatory limit of 140°F, and so are ignatibility characteristics hazardous wastes. Other liquids at the site exhibit other characteristics of hazardous waste or appear to be listed hazardous wastes (for example, the plating wastes likely are F007 waste). Roofing materials and other building materials probably contain asbestos-containing materials.

Wastewater from metal finishing processes conducted at the site were, in many cases, very low pH wastestreams which may have corroded the metal pipes and connections under the floors creating pathways for contamination to spread into the underlying soils and groundwater. Corrosion of concrete sumps and floor pits may also have resulted in contamination of underlying soil and groundwater.

6. NPL status

The site is not included on the National Priorities List (NPL). CERCLIS ID # ILD062471081. The site was referred to the U. S. EPA by the City of Chicago Department of Environment for an emergency response. The site has not been referred to the traditional site assessment program and therefore will not receive a site assessment inspection nor will a PREscore be developed. As a result of the removal site assessment, the site was evaluated and recommended for the proposed removal action.

B. State and Local Authorities' Role

1. State and local actions to date

The site was initially discovered by the MWRDGC when responding to the situation at the facility created by the collapsed portion of the roof. During the emergency response on August 1, 1997, U.S. EPA determined that the abandoned facility poses potential health threats to the adjacent residential neighborhood. Both physical and chemical hazards are evident. The City of Chicago had tried to secure the building from vandals to no avail. Due to the need for an immediate action and the nature and extent of contamination at the site, the City referred the site to the U.S. EPA.

2. Potential for continued State/local response

The City of Chicago or a potential purchaser may be interested in addressing the building as a Brownfield site after the removal action is completed.

III. THREAT TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT AND STATUTORY AND REGULATORY AUTHORITIES

Current conditions present at the Moschiano Plating Company site constitute an imminent and substantial threat to public health and welfare and the environment, based upon considerations as set forth in the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 C.F.R. § 300.415 (b)(2). Accordingly, a time critical removal action is the appropriate response action at the MPC site. These conditions include, but are not limited to, the following:

i) **Actual or potential exposure to nearby human populations, animals, or food chain from hazardous substances or contaminants.**

Potential exposure of nearby populations to hazardous materials exists at the MPC site due to its location in an industrial and residential area. The building has been secured, but the potential exists for trespassers to come in contact with the hazardous wastes on site. Although security measures have been put into place, such measures have only been somewhat successful in deterring vandals. Vat samples contain materials that are classified as corrosive as defined at 40 C.F.R. § 261.21 (a)(1). Several vats also contain acids used in the plating process. Acids are known to be generally irritating to skin when touched and if moisture were to come in contact with the acid, then fumes could be liberated which would be irritating to the skin and/or lungs. Furthermore, ethyl benzene, toluene, and xylene were detected in drum samples. Long-term exposure to ethyl benzene, toluene, and xylene may cause damage to the brain, liver, kidneys, lungs and blood tissue.

ii) **Actual or potential contamination of drinking water supplies or sensitive ecosystems.**

The MWRDGC has documented effluent discharge violations by Moschiano Plating. Now that the site is unattended, the potential exists for hazardous materials to leak or spill into the storm sewer.

iii) **Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers that may pose a threat of release.**

Sample results from some of the drum and vat contents indicate the presence of plating wastes. Flammable liquids, acids, and drums with unknown contents were observed in the building. Approximately 50 drums are located underneath the collasped section of the building roof. Since the site is currently inactive, the potential for the drums to deteriorate or spill due to weather conditions or vandals exists. As the drums or vats corrode over time, the potential exists for them to either leak or spill.

iv) **Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released.**

Because the building is not maintained, weather conditions may promote the release of hazardous chemicals from containers stored in the building. Most windows of the main building have been broken. The hole in the building roof has previously caused the accumulation of water in the main room of the building. This water will eventually discharge to the storm sewer and may contain unknown contaminants. The rest of the roof of the facility leaks during precipitation events, therefore, the possibility exists that floor drains and drums that are open could overflow due to events of heavy precipitation. Freezing temperatures during winter months may cause rupture of containers at the site, resulting in a release.

v) **The threat of fire or explosion.**

If a fire occurs, the potential for a rupture of an on-site drum or container exists. The resulting release would pose a health risk to near-by residents. The materials sampled in the Lacquer room have flashpoints well below the RCRA regulatory limit for ignitability of 140°F. These liquids are currently stored in open containers and pose a serious threat of fire and explosion.

vi) **The unavailability of other appropriate Federal or State response mechanisms to respond to the release.**

This factor supports the proposed action at the MPC site because IEPA and local officials do not have the necessary resources to respond to an emergency situation.

IV. ENDANGERMENT DETERMINATION

Given the present site conditions, the nature of hazardous substances on site, and the potential exposure pathways described in Sections II.A.5 and III above, actual or threatened releases of hazardous substances 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.

Hazardous materials exist in open drums, vats, floor drains as well as on the floor of the building. Containers of flammable liquids, acids and unknown contents also present a threat to public health and the environment.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

1. Proposed action description

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

The purpose of this removal action is to mitigate the imminent and substantial threats posed to public health or welfare or the environment from wastes at the site. The proposed immediate response action includes the following actions:

a) Prepare a workplan which includes a site safety and health plan addressing continuous monitoring of air borne contaminants and dust control measures.

b) Secure the site by establishing after working hours security during removal activities and repairing or replacing damaged fencing.

c) Abate, package, and dispose of potential friable asbestos-containing materials found inside and outside the building.

d) Decontaminate metal and other debris, and dispose or recycle as appropriate.

e) Decontaminate the buildings and contents that are clearly impacted by the release of the contaminants of concern and sample to verify that the structure has been cleaned to acceptable levels.

f) Conduct compatibility testing on liquids, sludges, solids, and other hazardous wastes and substances.

g) Stage, sample, remove, and dispose of drums, containers, above ground and below ground storage tanks, and their contents, hazardous and non-hazardous debris, friable asbestos, and contaminated waste piles in accordance with the U.S. EPA off-site rule.

h) Identify extent of contamination in the concrete and soil, and consolidate, remove and/or decontaminate all hazardous wastes within the property and adjacent to the property that are identified as contaminated.

i) Excavate and dispose of contaminated concrete and soil.

j) Properly address any additional hazardous wastes and/or materials identified during the removal action.

Any wastes transported off site will be properly treated and disposed by the disposal facility in accordance with U.S. EPA's off-site rule 40 C.F.R. § 300.440.

2. Contribution to remedial performance

The proposed action will not impede future responses based upon available information. The MPC site is a non-NPL site for which remedial actions have not been planned to date. The proposed removal action will address all threats meeting the removal criteria in the NCP, 40 C.F.R. § 300.415 (b)(2), as identified in Section III of this Action Memorandum. The proposed action will also contribute to the City of Chicago or any interested parties in redeveloping the site and returning it to productive use.

3. Applicable or relevant and appropriate requirements (ARARs)

A letter will be sent to the IEPA requesting the State to identify State ARARs. Compliance, to the extent practicable, with all ARARs of Federal and State environmental statutes and law identified in a timely manner will be assured during this removal action.

4. Project schedule

The removal action is expected to take approximately 90 work days to complete. The project will be conducted in two phases. The first phase, expected to take 60 days, will include preparation of the site safety plan, mobilization of personnel and equipment, container sampling, compatibility and bulk testing, waste consolidation, disposal bidding, and a concrete and soil extent of contamination (EOC) study. The second phase, 30 working days, will include excavation of any contaminated soil and concrete, and transportation and disposal of all wastestreams.

B. Estimated Costs

The detailed Emergency Response Cleanup Services (ERCS) contractor costs are presented in Attachment A, with the summary of estimated project costs following:

REMOVAL PROJECT CEILING ESTIMATE

EXTRAMURAL COSTS	
Cleanup Contractor Costs	$ 628,915
Contingency (20%)	125,783
Subtotal	$ 754,698
START Costs	79,100
Total Extramural Costs	$ 833,798
Extramural Contingency (20%)	166,760
TOTAL, EXTRAMURAL COTS	**$ 1,000,558**
INTRAMURAL COSTS	
U.S. EPA Direct Costs	
$30/hr (900 Regional + 90 HQ)	$ 29,700
U.S. EPA Indirect Costs	
$61/hr x (900 Regional)	54,900
TOTAL, INTRAMURAL COSTS	**$ 84,600**
TOTAL, REMOVAL PROJECT CEILING	**$ 1,085,158**

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

Delayed action will increase public health risk to the adjacent population given that weather conditions, heavy precipitation and/or freezing temperatures during winter months, may worsen the potential of hazardous wastes in drums, vats, tanks, and drains to be released. In addition, trespassers may be endangered by the physical and chemical hazards posed by the contaminated wastes and debris on site.

Without undertaking the aforementioned actions, additional releases of hazardous wastes may occur in the building, the surrounding soils, and eventually off site.

VII. OUTSTANDING POLICY ISSUES

There are no outstanding policy issues for the Moschiano Plating Company site.

VIII. ENFORCEMENT

For administrative purposes, information concerning the enforcement strategy for this site is contained in an Enforcement Confidential Addendum (see Attachment B).

IX. RECOMMENDATION

This decision document represents the selected removal action for the Moschiano Plating Company, 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 (see Attachment C). Conditions at the site meet the criteria of the NCP, 40 C.F.R. § 300.415 (b)(2), for a removal action and I recommend your approval of the proposed removal action. The total estimated project ceiling, if approved, will be $1,085,158. Of this, an estimated $921,458 may be used for cleanup contractor costs. You may indicate your decision by signing below:

APPROVE : Wm. E. Muno DATE: 9/17/97
Superfund Division Director

DISAPPROVE: _____ DATE: _____
Superfund Division Director

ATTACHMENTS:
- A: ERCS Contractor Costs
- B: Enforcement Confidential Addendum
- C: Administrative Record Index

cc: K. Mould, U.S. EPA HQ, 5202G
D. Henne, U.S. Department of Interior
B. Everetts, IEPA
L Kelly, Chicago Department of Environment
M. Castillo, MWRDGC

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REDACTED

NOT RELEVANT TO THE SELECTION OF THE REMOVAL ACTION

Attachment A

EKCS Contractor Costs

Moschiano Plating Company Site
Chicago, Illinois

PERSONNEL	$ 201, 674
EQUIPMENT	28, 674
OTHER DIRECT COST	398, 567
TOTAL FOR CONTRACTOR	**$ 628, 915**

ATTACHMENT B
ENFORCEMENT CONFIDENTIAL ADDENDUM
MOSCHIANO PLATING COMPANY SITE
CHICAGO, COOK COUNTY, ILLINOIS
SEPTEMBER 1997
1 PAGE

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NOT RELEVANT TO THE SELECTION OF THE REMOVAL ACTICN

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ATTACHMENT C

U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL ACTION

ADMINISTRATIVE RECORD
FOR
MOSCHIANO PLATING COMPANY SITE
CHICAGO, COOK COUNTY, ILLINOIS

ORIGINAL
SEPTEMBER 9, 1997

NO.	DATE	AUTHOR	RECIPIENT	TITLE/DESCRIPTION	PAGES
1	00/00/00			Site Assessment (PENDING)	
2	00/00/00	Rivera, R., U.S. EPA	Muno, W., U.S. EPA	Action Memorandum: Request for a Time-Critical Removal Action at the Moschiano Plating Company Site (PENDING)	