



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

JUL 25 2008

REPLY TO THE ATTENTION OF:

MEMORANDUM

SUBJECT: **ACTION MEMORANDUM #3-** Request for a Ceiling Increase, and a modification to the Scope of Work for the Removal Action at the Ingersoll Site, Chicago, Illinois (Site ID #B5CW)

FROM: Thomas Cook, On-Scene Coordinator
Emergency Response Branch 1 – Section #2

TO: Richard C. Karl, Director
Superfund Division

THRU: Jason El-Zein, Chief
Emergency Response Branch 1, Superfund Division

ATTN: Michael Harris, Section Chief
Emergency Response Branch 1, Section #2



I. PURPOSE

The purpose of this memorandum is to document your approval for a ceiling increase to expend up to an additional \$1,544,339 to mitigate threats to public health, welfare, and the environment at the Ingersoll (Site) in Chicago, Illinois. If approved, this increase will bring the total approved ceiling for the Ingersoll Site to \$4,334,954. The expanded actions proposed herein will mitigate hazardous site conditions by implementing a removal action that will include the following activities: 1) Sealing contaminated concrete foundation slabs which are contaminated with Polychlorinated Biphenyls (PCB's), 2) Perform surgical soil excavation in impacted areas with high levels of metals and PCB's; and 3) Temporary storage, treatment and/or disposal of petroleum based liquids and solids in open pits throughout the site. These liquids and solids are the result of many different processes that occurred on the Site over the course of its history. Some of these liquids and solids contain Toxic Substances Control Act (TSCA) regulated levels of Polychlorinated Biphenyls (PCB's) and some contain PCB's at low concentrations that are not regulated under TSCA, but are still above industrial and residential limits. Due to documented threats at the Ingersoll Site, this removal action is considered time-critical. The project will require an estimated additional 120 working days to complete. The original Action Memorandum was approved on November 23, 2005. The first ceiling increase was approved on April 11, 2007.

There are no nationally significant or precedent-setting issues associated with the Ingersoll Site and the Site is not on the National Priorities List (NPL)

II. SITE CONDITIONS AND BACKGROUND

A. Physical Location and Description

CERCLIS ID # ILN000510053

The Ingersoll Site is located in an industrial area at 1000 West 120th Street in Chicago, Cook County, Illinois. The Site is bordered by 119th Street to the north, South Morgan Street to the east, 120th Street to the south, and vacant industrial properties to the west. The geographic coordinates for the Site are latitude 41°40'35" north and longitude 87°38'49" west. The Site property measures approximately 12 acres and includes several interconnected, vacant buildings. A fire in the summer of 2004 destroyed a portion of the former administration areas located in the southeast portion of the Site. The fence surrounding the Site contains several large gaps.

An environmental justice analysis has been prepared for the area surrounding the Site (Attachment #3). According to the Region 5 Superfund Environmental Justice Analysis, the group of residents closest to the Site fall within census block group 1, with a population of 28,572 persons. Demographics for the residents in this census group indicate 38% with low-income, with 98% having a minority status. In Illinois, the low-income percentage is 27% and the minority percentage is 32%. To meet the Environmental Justice (EJ) concern criteria, the area within 1 mile of the Site must have a population that is twice the state low-income percentage and/or twice the state minority percentage. That is, the area must be at least 54% low-income and/or 50% minority. Therefore, the Site does meet the Region's EJ criteria based on demographics, as defined in "Region 5 Interim Guidelines for Identifying and Addressing a Potential EJ Case", June 1998.

B. Site Background

The Ingersoll Site has a history of industrial machining and oil use for 90 years. Borg-Warner purchased the property in 1929, and in that same period, acquired Ingersoll Steel Disc Division, manufacturer of agricultural accessories including disc blades. According to former Borg-Warner employees, electronic enclosures, hospital beds, bathtubs and sinks were also manufactured on site. During the Korean conflict, wing tanks were built, and during the Vietnam War, bomb shell casings were made on the site. According to a series of Sanborn Fire Insurance maps, an electromelt foundry was operating in the building where steel was manufactured in 1975. The former foundry building is now used as storage space.

The 1911 Sanborn Map indicates that the eastern portion of Study Area No. 7 was operated by Whitman & Barnes Manufacturing Company for the production of lawn mowers and haymaking tools. Included on the 1911 map was a machine shop, an oil house, a gas machine room, an underground gas oil tank, fuel oil tanks, four heater rooms, two engines, and two dynamos. The 1939 Sanborn Map indicates that the site was operated by the Ingersoll Steel Disk Division of Borg-Warner Corporation. The 1939 Sanborn Map shows many additions to the site, which include four transformer rooms, a Commonwealth Edison electrical substation, an enameling room, an above ground oil tank, three oil houses, and a pickling area. The 1950 Sanborn Map shows additions to the site which include a sulfuric acid tank, additional enameling rooms, and a cleaning room. The 1975 Sanborn Map indicates additions to the site which include a dipping room, an oven, and an annealing room. The 1987 Sanborn Map indicates no changes from 1975.

In July 1992, Weston completed a Phase I Environmental Site Assessment (ESA) report for the City of Chicago. The purpose of this report was to identify possible areas of environmental concern in comparison with past and present site uses. The Phase I ESA identifies these possible areas of concern:

- Contaminated soils from oils stored and used during the manufacturing process
- Petroleum contamination in areas where underground storage tanks (UST) were located
- Potential polychlorinated biphenyls (PCB) contamination in areas where older transformers were located
- Potential soil contamination from foundry sands where steel was manufactured

Weston recommended the collection of soil samples for benzene, toluene, ethylbenzene, and xylene (BTEX), and PCB analysis, a geophysical survey in order to identify any additional UST's, a Phase I asbestos survey to identify any asbestos present at the Site, and the collection of foundry soils for phenol and metals analysis.

In early August, 2005, the Chicago Department of Environment (CDOE) consulted U.S.EPA's Emergency Response Branch (ERB) to determine if conditions at the Site warranted a removal assessment, emergency response action, or time-critical removal. After completing a data review and a site assessment report, U.S. EPA's ERB determined that the Site meets the criteria for a time-critical removal action.

The Site is uncontrolled and previous investigations and past removal actions indicate the presence of volatile organic compounds (VOCs), Semi volatile organic compounds (SVOCs), metals and PCBs on surfaces or in soil at concentrations that exceeded human health, welfare, and environmental risk criteria.

U.S. EPA; Weston Solutions, Inc., Superfund Technical Assessment and Response Team (START) and Environmental Quality (EQM) mobilized to the Site on January 16, 2006 to begin removing friable ACM from buildings; removing oils, sludges, and PCB oils from tanks, pits, and vaults; Cleaning building surfaces with known PCB contamination; and excavating PCB-contaminated soil and oil.

The initial Site removal activities underwent a 19-month effort, to remove as much contamination within the allowable budget. The OSC has identified four additional tasks yet to be completed to ensure that the risks to human health, welfare, and the environment posed by Site contaminants are mitigated:

- 1) Decontaminate foundation slabs and site surfaces.
- 2) Apply epoxy to floors in Buildings where high concentrations of PCBs were found.
- 3) Recover, transport, and dispose of an unknown quantity of oil and sludge contaminated by low concentrations of PCBs present in subsurface piping, and any wastewater produced during Site activity.
- 4) Perform surgical soil excavation in highly impacted areas with elevated levels of metals and PCB's.

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

The original Action Memorandum approved on November 23, 2005 documented past conditions at the Ingersoll Site. The past ceiling increase was approved on April 11, 2007 which addressed outstanding tasks not completed during the initial removal. Current conditions at the Ingersoll Site present an imminent and substantial threat to public health, welfare, and the environment and meet the criteria for a removal action provided for in the National Contingency Plan (NCP), 40 CFR Section 300.415, paragraph (b)(2), specifically:

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

The Ingersoll Site is fenced. However, access to the Site buildings is virtually unrestricted through gaps in the fencing and openings in the buildings' outer walls, allowing access to the interiors of all the buildings which allows vagrants, scrappers, and wildlife contact with numerous pits filled with oil, ACM piping insulation, mastic, and former transformer rooms with surfaces containing very high PCB concentrations. Evidence of trespassing was observed throughout the site buildings. A chain-link fence exists, however, areas of the fence have been cut away or are down and gate locks have been removed, allowing access to the site. Past Geoprobe and soil sampling results show free product and hydrocarbon staining is present in soils two to eight feet below ground surface. Brick and steel scavengers have removed bricks and steel beams throughout the Site.

b. Hazardous substances or pollutants or contaminants on the surface of the building foundation slabs pose a threat of release;

Numerous foundation slabs containing high levels of PCB's are located at the Ingersoll Site. If these foundation slabs are not addressed, continued exposure will occur.

c. Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released

The existing buildings at the Site have numerous large holes in the roof. This allows the Site to be exposed to rain events and causes the open pits, manholes, and vaults to refill with PCB oil contaminated water and discharge off-Site.

d. The availability of other appropriate federal or state response mechanisms to respond to the release.

In July 2008, CDOE requested U.S. EPA's assistance with the Ingersoll Site. The City of Chicago has mentioned that Site will be demolished and possibly redeveloped with mix use industrial/commercial units. The City of Chicago has indicated that they do not have the physical or financial resources to take action at this Site.

e. Threat of fire or explosion

The Ingersoll Site has already been subjected to fire damage. Because the Site access is still unrestricted, and the local scrappers are very active, the possibility of another fire at the Site still exists.

IV. ENDANGERMENT DETERMINATION

Given the Site conditions, the nature of the confirmed hazardous substances, and the potential exposure pathways described in Sections II and III above, actual or threatened

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

V. The Ingersoll Site received an exemption from statutory limit during the second phase of the removal action in April, 2007

Refer to Action Memorandum #2

VI. PROPOSED ACTIONS AND ESTIMATED COSTS

The OSC proposes that the following actions as well as the four outstanding tasks identified in Section II to mitigate threats posed by the presence of hazardous substances at the Ingersoll Site:

- 1) Continued implementation of a Site Health and Safety Plan, including an air monitoring plan and Site contingency plan.
- 2) Maintain Site security.
- 3) Remove and properly dispose of (in accordance with U.S. EPA's Off-Site Rule (40 CFR § 300.440)) any contaminated materials that are collected or generated as part of this removal action.
- 4) Contaminated soil excavation will take place at the discretion of the OSC. It has been identified during the extent of contamination survey that PCB and Lead contaminated soil is present. Excavation will be surgical and only conducted where contaminates poses an immediate threat to the public.

The removal action will be conducted in a manner not inconsistent with the NCP. The OSC has established provisions for post-removal Site control consistent with the provisions of Section 300.415(l) of the NCP.

The activities described in this memorandum will require an additional 120 working days to complete.

The detailed cleanup contractor cost is presented in Attachment # 1 and estimated project costs are summarized in Attachment # 4. These outline the Total Level of Effort which includes budget allotment from Action Memos #1 and #2 and projected costs through completion.

REMOVAL PROJECT CEILING ESTIMATE

<i>Regional Removal Allowance Costs:</i>	<i>Current:</i>	<i>Increase:</i>	<i>Total:</i>
Total Cleanup Contractor Costs: (This cost category includes estimates for ERRS. Includes a 10% contingency)	\$2,490,720	\$ 1,494,339	\$3,985,059
<i>Other Extramural Costs Not Funded from the Regional Allowance:</i>			
Total START, including multiplier costs:	\$299,895	\$50,000	\$349,895
Extramural Subtotal:	\$2,790,615	\$ 1,544,339	\$4,334,954
TOTAL REMOVAL PROJECT CEILING:	\$2,790,615	\$1,544,339	\$4,334,954

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

Applicable or Relevant and Appropriate Requirements

All applicable, relevant, and appropriate requirements (ARARs) will be complied with to the extent practicable. An e-mail was sent to Bruce Everrets at IEPA on July 21, 2008 requesting state ARARs.

All hazardous substances, pollutants or contaminants removed off Site pursuant to this removal action for treatment, storage, and disposal will be treated, stored, or disposed of at a facility in compliance, as determined by U.S. EPA, with the U.S. EPA Off-Site Rule, 40 CFR § 300.440.

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

Continued risk to public health and the environment will result if no action or delayed action ensues.

VIII. OUTSTANDING POLICY ISSUES

None

IX. ENFORCEMENT

For administrative purposes, information concerning the enforcement strategy for this Site is contained in the Enforcement Confidential 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 \$6,559,452.¹

$$(\$4,334,954 + \$50,000) + (49.59\% \times \$4,384,954) = \$6,559,452$$

X. RECOMMENDATION

This decision document represents the selected removal action for the Ingersoll Site developed in accordance with CERCLA as amended, and is not inconsistent with the NCP. This decision was based upon information now presented in the Administrative Record for the site (Attachment #2). Conditions at the Ingersoll Site meet the NCP Section 300.415(b)(2) criteria for a removal and I recommend your approval of a ceiling increase of \$1,544,339. The ceiling total including prior removals would be \$4,334,954. Of this, an estimated \$1,494,339 may be used for cleanup contractor costs. You may indicate your decision by signing below:

APPROVE: _____

Richard C. Kel
Director, Superfund Division

DATE: _____

7-25-08

DISAPPROVE: _____

Director, Superfund Division

DATE: _____

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

Attachments

1. Detailed Cleanup Contractor Cost Estimate
2. Administrative Record Index
3. Region 5 EJ Analysis
4. Independent Government Cost Estimate
5. Enforcement Addendum

cc: D. Chung, U.S. EPA, 5202-G
M. Chezick, U.S. Department of the Interior, **w/o Enf. Addendum**
B. Everetts, Illinois EPA, **w/o Enf. Addendum**
S. Davis, Illinois DNR, **w/o Enf. Addendum**

ATTACHMENT 1

**DETAILED CLEANUP CONTRACTOR ESTIMATE
INGERSOLL SITE
CHICAGO, ILLINOIS
JULY 2008**

The estimated cleanup contractor costs necessary to complete the removal action at the Ingersoll Site are as follows:

Labor	\$ 342,553
Equipment	\$ 69,137
Analytical&T&D,Other Field Cost	\$ 886,800
Mobe/Demobe	<u>\$ 60,000</u>
<u>Project Contingency</u>	\$135,849.
TOTAL Cleanup Contractor Costs	\$ 1,494,339



ATTACHMENT 2

U.S. ENVIRONMENTAL PROTECTION AGENCY REMOVAL ACTION

ADMINISTRATIVE RECORD FOR INGERSOLL SITE CHICAGO, COOK COUNTY, ILLINOIS

ORIGINAL
NOVEMBER 23, 2005

<u>NO.</u>	<u>DATE</u>	<u>AUTHOR</u>	<u>RECIPIENT</u>	<u>TITLE/DESCRIPTION</u>	<u>PAGES</u>
1	10/02/05	Tetra Tech EM, Inc.	U.S. EPA	Final Site Assessment Report for the Ingersoll Products Site w/Cover Letter	60
2	11/23/05	Cook, T., U.S. EPA	Karl, R., U.S. EPA	Action Memorandum: Request for a CERCLA Removal Action at the Ingersoll Site (PORTIONS OF THIS DOCUMENT HAVE BEEN REDACTED)	19

UPDATE #1 APRIL 11, 2007

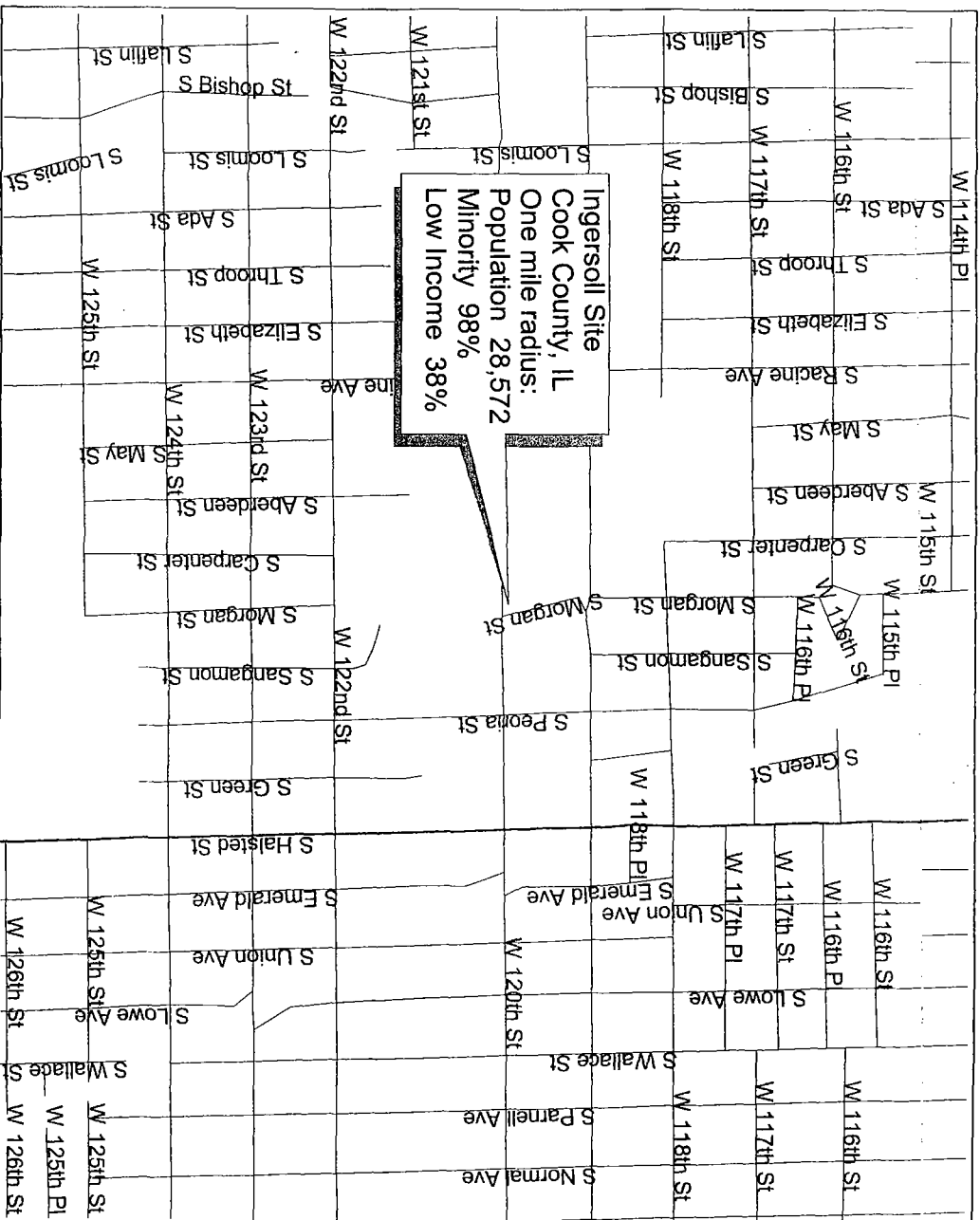
1	04/11/07	Cook, T., U.S. EPA	Karl, R., U.S. EPA	Action Memorandum #2: Request for a Ceiling In- crease, a Modification to the Scope of Work, and an Exemption from the 1-Year and \$2 Million Statutory Limit for the Removal Action at the Ingersoll Site (PORTIONS OF THIS DOCUMENT HAVE BEEN REDACTED)	18
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UPDATE #2 JULY 14, 2008

1	00/00/00	Cook, T., U.S. EPA	Karl, R., U.S. EPA	Action Memorandum #3: Request for a Ceiling In- crease, and a Modification to the Scope of Work for the Removal Action at the Ingersoll Site (PENDING)	
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Region 5 Superfund EJ Analysis

Ingersoll Site Chicago, IL



State of Illinois averages:
Minority: 32%
Low Income: 27%

U.S. EPA Region 5
Environmental Justice Case Criteria
for State of Illinois

Minority: 64% or greater
Low Income: 54% or greater

ATTACHMENT 4

INDEPENDENT GOVERNMENT COST ESTIMATE INGERSOLL SITE CHICAGO, ILLINOIS JULY 2008

The following cost estimate documents actions that are required which incur costs about the current action memorandum ceiling (\$4,334,954 for the cleanup contractor):

Excavation of soil.

Management Labor	\$63,430
Field Labor	\$147,468
Equipment	\$50,505
Major ODCs	\$377,411

Total (not factoring move/demove) **\$638,814**

Seal Contaminated Concrete

Management Labor	\$42,287
Field Labor	\$85,155
Equipment	\$18,632
Major ODCs	\$503,940
Total (not factoring move/demove)	\$650,014

Geoprobe Operations

Management Labor	\$ 0
Field Labor	\$4,213
Equipment	\$0
Major ODCs	\$5,449
Total (not factoring move/demove)	\$9,662

Estimated cost for demobilization: **\$ 60,000**

*Typical move and demove for large site.

GRAND TOTAL: **\$ 1,358,490**

**ENFORCEMENT CONFIDENTIAL
NOT SUBJECT TO DISCOVERY**

**ENFORCEMENT ADDENDUM UPDATE NO. 2
FOR ACTION MEMORANDUM REQUESTING A SECOND CEILING INCREASE AND A
MODIFICATION TO THE SCOPE OF WORK**

**REMOVAL ACTION
INGERSOLL HOLDING COMPANY SITE
CHICAGO, COOK COUNTY, ILLINOIS**

JULY 2008

(REDACTED 2 PAGES)