



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
EMERGENCY RESPONSE BRANCH
9311 GROH ROAD, ROOM 216
GROSSE ILE, MI 48138-1697

EPA Region 5 Records Ctr.



286312

SUBJECT: **ACTION MEMORANDUM** - Request for a Time Critical Removal Action at the Quincy Smelter Area of the Torch Lake Superfund Site, Franklin Township, Houghton County, Michigan (Site ID B57M)

FROM: Brian Kelly, On-Scene Coordinator
Emergency Response Branch - Section 1

Brian Kelly
3/26/08

TO: Richard C. Karl, Director
Superfund Division

THRU: Jason H. El-Zein, Chief *JHE* - 4-8-08
Emergency Response Branch 1

I. PURPOSE

This memorandum is to request your approval to expend up to \$ 505,200 to conduct a time-critical removal action to eliminate an imminent and substantial threat to public health, welfare, or the environment posed by the release and potential release of friable asbestos from the Quincy Smelter area of the Torch Lake Superfund Site (the "Site" or the "Quincy Smelter Site"). Friable asbestos is a listed hazardous substance under Section 102 of CERCLA, 42 U.S.C. § 9602. See 40 C.F.R. § 302.4 (Designation of Hazardous Substances). Additionally, EPA has identified asbestos as a hazardous air pollutant under Section 112 of the Clean Air Act, 42 U.S.C. § 7412(b). See also 40 C.F.R. § 61.01.

As explained at greater length below, the buildings comprising the Quincy Smelter Site were constructed during the late 19th and early 20th centuries, and originally housed copper smelting operations. The National Park Service ("NPS") has designated the Site as a historical landmark. The Quincy Smelter Site is located within the Keweenaw Historical National Park.

Asbestos-containing material ("ACM") with as high as 80% Chrysotile asbestos, is located in several of the Site's degraded, open buildings. These buildings are subject to severe weather conditions. The Site is located near the Hancock-Ripley Trail, which is used by the public for walking, biking, jogging and snowmobiling. These Site conditions were documented by EPA during a 2004 removal action, during which EPA removed waste drums and ACM from two buildings at the Site. All of the buildings have continued to deteriorate since 2004, and some are in grave danger of collapse, which could result in the release of ACM into the environment.

EPA did not remove all asbestos from the Site in 2004 because the Agency expected the NPS to complete interior asbestos removal as part of its plans to develop the Site into a visitor center. EPA recently learned that the NPS has no funds currently available to construct the proposed visitor center or perform the necessary asbestos abatement. The NPS hopes, however, to be able to preserve the buildings in such a way as to allow for future development of this important historical and cultural resource.

The proposed response action will mitigate the threat posed to human health and the environment from Site conditions by properly removing ACM for off-site disposal. This response action will be conducted in accordance with Section 104(a)(1) of the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), 42 U.S.C. 9604(a)(1).

Additional Site activities will include security, air monitoring, building stabilization (as needed to remove asbestos), and appropriate consideration of historical preservation.¹ The proximity of the smelter buildings to the Hancock-Ripley Trail, the rapid deterioration of the smelter buildings, and the up-coming summer season all contribute to the classification of this removal action as time-critical. The project will require an estimated 21 on-site working days to complete. The site is on the National Priorities List (NPL).

II. SITE CONDITIONS AND BACKGROUND

CERCLIS ID #MID 980 901 946

A. Physical Location and Description

The Site is located at 48991 Maple Street, Franklin Township, Houghton County, Michigan, 49930. The geographical coordinates of the Site are 47.12°N and 88.54°W. The Site consists of 28 buildings, four aboveground storage tanks, two slag piles and a small wooded area. Portage Waterway, adjoining Lake Superior, is located immediately south. Commercial and industrial businesses are located to the east and west, and residential areas are located to the north.

Environmental Justice Analysis

In Michigan, the low-income percentage is 29% and the minority percentage is 21%. To meet the Region 5 Environmental Justice ("EJ") concern criteria, the area within 1 mile of a site must have a population that is twice the state low-income percentage and/or twice the state minority percentage, *i.e.* in Michigan, the area must be at least 58% low-income and/or 42% minority. See "Region 5 Interim Guidelines for Identifying and Addressing a Potential EJ Case, June 1998." At this Site, the low-income

¹ See *the* National Historic Preservation Act of 1966, 16 U.S.C. § 470, and the nationwide Programmatic Agreement on Protection of Historic Properties during Emergency Response under the National Contingency Plan ("NCP").

population percentage is 35% and the minority population is 3%, as determined by Arcview or Landview III EJ analysis. Therefore, this Site does not meet the Region's EJ criteria based on demographics.

National Significance

Removals involving asbestos as the principal contaminant of concern have been designated as nationally significant. This removal will follow precedents and protocols established by other asbestos cleanups. As noted above, the Quincy Smelter Site is within the National Priorities List Torch Lake Site.

B. Site Background

The Quincy Mining Company ("QMC") owned and operated the Quincy Smelter until 1968 or 1969, when mining operations ended. After closing mining operations, QMC continued to operate a water company that provided water for the Quincy Hill area of Franklin Township and the City of Mason.

In November of 1986, the Quincy Development Corporation ("QDC") acquired QMC. QDC reportedly used Site buildings to store historical artifacts dating to the Quincy Mining era. In addition, QDC stored waste from a related company, Pelletech, at the Quincy Smelter Site.

Franklin Township took ownership of the Site from the QDC in 1999. Franklin Township has not conducted operations at the Site.

2004 EPA Removal and Asbestos Assessment

In June 2004, EPA conducted a removal action to remove drums, tanks, vats, and small containers. In addition, suspect Asbestos Containing Materials (ACM) were visually identified inside most buildings and in several locations outside. Based on EPA's assessment, and reports from the previous owner and the NPS, EPA commissioned an asbestos survey. The survey documented the presence of friable asbestos inside and outside most of the Site buildings and along the Hancock-Ripley Trail (HRT).

On June 28, 2004, EPA issued General Notice of Potential Liability to Franklin Township (as Site owner) and NPS (as Site operator). EPA had ISSUED GENERAL NOTICE in 2003 to Quincy Development Corporation, a site owner between 1986 and 1999). Franklin Township, while acknowledging ownership of the facility, lacked (and continues to lack) any funds to address the release of hazardous substances at the Site. The NPS denied (and continues to deny) any liability, although it remains manager of the Keweenaw National Historic Park in which the Quincy Smelter Site is located. Quincy Development also denied liability.

To prevent direct contact by the public with friable asbestos, Franklin Township, the Michigan Department of Environmental Quality ("MDEQ"), and the NPS, requested that

EPA construct a perimeter fence, which was completed between July 5, 2004, and July 15, 2004.

To examine the potential health risk for the use of the HRT, EPA conducted activity based sampling of the HRT between August 12-20, 2004. After reviewing the data, ATSDR and the Michigan Department of Community Health issued a letter saying asbestos levels did not pose a current health concern for either winter or summer uses.

On October 14, 2004, Region 5's Remedial Project Manager for the Torch Lake Site, the On-Scene Coordinator for the removal action, the NPS, and personnel from the Department of Interior met to discuss issues at the Site and to set a path forward for continued cooperation at the Site. Most importantly, Franklin Township and NPS continued to raise issues about the presence of friable asbestos in the deteriorating Site buildings and the effect of erosion of smelting wastes into nearby Torch Lake.

To assess these concerns, Region 5's removal program and the NPS agreed to conduct a joint asbestos assessment. Region 5 agreed to add metals to the activity based sampling.

Between December 6 and December 9, 2004, EPA and NPS completed a building-by-building asbestos removal assessment to determine the structural integrity of the buildings and the potential means and cost of removing bulk asbestos.

During July 2005, EPA moved the perimeter fence off the HRT, and removed asbestos from two buildings outside the fence.

Since July 2005, no further work has been conducted to remove the asbestos or stabilize the buildings. During monthly conference calls with all stakeholders at the Site, Franklin Township and the NPS have stated that they continue to have no funds available to conduct the asbestos removal.

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

The conditions at the Quincy Smelter Site present an imminent and substantial threat to the public health, or welfare, or the environment, and satisfy the criteria for a time-critical removal action as provided in Section 300.415(b)(2) of the NCP, as amended. 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 or pollutants or contaminants;**

Friable asbestos is a listed hazardous substance under Section 102 of CERCLA, 42 U.S.C. § 9602. See 40 C.F.R. § 302.4 (Designation of Hazardous Substances). Additionally, EPA has identified asbestos as a hazardous air pollutant under Section

Additionally, EPA has identified asbestos as a hazardous air pollutant under Section 112 of the Clean Air Act, 42 U.S.C. § 7412(b). See also 40 C.F.R. § 61.01.

The joint asbestos assessment report (Asbestos Survey Report, Quincy Mining Company Smelter Works June 2004) documents the existence of friable asbestos in the majority of Site buildings. As noted above, the buildings were constructed between 1898 and 1919, and many are in an advanced state of collapse and disrepair.

The HRT transects the Site, and is used for jogging, biking, walking, ATVs, and snowmobiles. During the 2004 removal action, EPA documented public use of the trail. Users included mothers with baby strollers. In addition, local public officials report vandalism and trespassing at the Site.

Asbestos is the name given to a number of naturally occurring fibrous minerals with high tensile strength, the ability to be woven, and resistance to heat and most chemicals. Because of these properties, asbestos fibers have been used in a wide range of manufactured goods, including roofing shingles, ceiling and floor tiles, paper and cement products, textiles, coatings, and friction products such as automobile clutch, brake and transmission parts. The current federal definition of asbestos is the asbestiform varieties of: chrysotile (serpentine); crocidolite (riebeckite); amosite (cummingtonite/grunerite); anthophyllite; tremolite; and actinolite.

Health Effects

Exposure to airborne friable asbestos may result in a potential health risk because persons breathing the air may breathe in asbestos fibers. Continued exposure can increase the amount of fibers that remain in the lung. Fibers embedded in lung tissue over time may cause serious lung diseases including: asbestosis, lung cancer, or mesothelioma.

According to the Agency for Toxic Substance and Disease Registry:

Asbestos mainly affects the lungs and the membrane that surrounds the lungs. Breathing high levels of asbestos fibers for a long time may result in scar-like tissue in the lungs and in the pleural membrane (lining) that surrounds the lung. This disease is called asbestosis and is usually found in workers exposed to asbestos, but not in the general public. People with asbestosis have difficulty breathing, often a cough, and in severe cases heart enlargement. Asbestosis is a serious disease and can eventually lead to disability and death.

Breathing lower levels of asbestos may result in changes called plaques in the pleural membranes. Pleural plaques can occur in workers and sometimes in people living in areas with high

environmental levels of asbestos. Effects on breathing from pleural plaques alone are not usually serious, but higher exposure can lead to a thickening of the pleural membrane that may restrict breathing.

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

According to the National Oceanic and Atmospheric Administration, Houghton County experiences 17.74 inches of rainfall and 200 inches of snowfall per year. Most buildings and containers noted during the EPA's 2004 removal action and subsequent assessments were in an advanced state of deterioration. Roof failures currently allow snow and rainwater to infiltrate through the buildings. Weather will continue to contribute to deterioration of the buildings and the potential release of ACM. ACM released from the buildings or already outside of the buildings could affect people using the HRT and/or release asbestos into the environment.

vi) The availability of other appropriate federal or state response mechanisms to respond to the release

The Quincy Smelter Site is part of the larger Torch Lake NPL Superfund Site. As noted above, neither of the identified potentially responsible parties (NPS and Franklin Township) admit to liability or have funds available to perform the necessary abatement work. MDEQ also has asserted that the State of Michigan has no funds available to address the hazardous wastes.

IV. ENDANGERMENT DETERMINATION

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

V. PROPOSED ACTIONS AND ESTIMATED COSTS

The OSC proposes to undertake the following actions to mitigate threats posed by the presence of hazardous substances at the Site:

- 1) Develop and implement a Site health and safety plan, including engineering controls to stabilize buildings and allow asbestos removal;
- 2) Remove and properly dispose of friable ACM, which may be a threat to human health and the environment as determined by EPA;

- 4) To the extent practicable, after consultation with the NPS, preserve historical structures and objects.

The removal action will be conducted in a manner not inconsistent with the NCP. The OSC has initiated planning for provision of post-removal Site control consistent with the provisions of Section 300.415(l) of the NCP. Elimination of asbestos is expected to eliminate the need for post-removal site control due to asbestos. Franklin Township as the Site owner will need to restrict access due to the threat of building collapse.

The removal activities described in this memorandum will require an estimated 21 on-Site working days to complete.

A detailed cleanup contractor cost estimate is presented in Attachment 1, and estimated project costs are summarized below:

REMOVAL PROJECT CEILING ESTIMATE

EXTRAMURAL COSTS:

Regional Removal Allowance Costs

Total Cleanup Contractor Costs	\$386,000
(This cost category includes estimates for ERRS, and subcontractors including 15% contingency)	

Other Extramural Cost Not Funded from the Regional Allowance:

Total START, including multiplier costs	\$ 35,000
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Subtotal, Extramural Subtotal	\$ 421,000
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Extramural Costs Contingency (20% of Subtotal, Extramural Costs)	\$ 84,200
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TOTAL, Removal Action Project Ceiling	\$ 505,200
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The response actions described in this memorandum directly address the actual or threatened release 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) of Federal and State law will be complied with to the extent practicable. On February 28, 2007, Region 5 sent a letter to Mary Schafer of MDEQ requesting that the State identify applicable 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 at a facility in compliance, as determined by EPA, with the EPA Off-Site Rule, 40 C.F.R. 300.440.

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

Continued risk to public health, welfare, or environment will result if no action or delayed action ensues at this Site.

VII. OUTSTANDING POLICY ISSUES

Asbestos is the principal contaminant of concern. As this Site is within the Torch Lake NPL Site, OSWER Directive 9360.0-19 Guidance on Non-NPL Removal Actions Involving Nationally Significant or Precedent-Setting Issues is not applicable. Though concurrence is not required, headquarters has requested a copy of this Action Memo.

VIII. 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 \$793,126².

$$(\$505,200 + \$25,000) \times (530,200 \times 49.59\%) = \$793,126$$

IX. RECOMMENDATION

²Direct 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 Quincy Smelter Site, Franklin Township, Houghton County, Michigan, which has been developed in accordance with CERCLA as amended, and is not inconsistent with the NCP. This decision was based upon the administrative record for the Site. Conditions at the Site meet criteria of Section 300.415(b) of the NCP for a removal action, and I recommend your approval of the proposed response work. The total removal action project ceiling, if approved, will be \$505,200. Of this amount, an estimated \$470,200 comes from the Regional removal allowance. You may indicate your decision by signing below:

APPROVE: Richard C. Kol DATE: 4-9-08
Director, Superfund Division

DISAPPROVE: _____ DATE: _____
Director, Superfund Division

Enforcement Addendum

Attachments

1. IGCE
2. Detailed Cleanup Contractor Cost Estimate
3. Administrative Record Index
4. Region 5 EJ Analysis

cc: D. Chung, EPA, 5104-G
M. Chezik, U.S. DOI, **w/o Enf. Addendum**
Steven E. Chester, Director, Michigan DEQ, **w/o Enf. Addendum**
Mary B. Schafer, Michigan DEQ, **w/o Enf. Addendum**
Constitution Hall 3rd Floor South
Superfund Section
P.O. Box 30426
Lansing, MI 48909-7926
N. Seif, MDEQ, **w/o Enf. Addendum**
P.O. Box 30473
Lansing, MI 48909
Mike Cox, Michigan Department of Attorney General, **w/o Enf. Addendum**
P.O. Box 30212
Lansing, MI 48909

**ENFORCEMENT ADDENDUM
QUINCY SMELTER SITE
HANCOCK, HOUGHTON COUNTY, MICHIGAN
MARCH 2008**

(REDACTED 2 PAGES)

**ENFORCEMENT CONFIDENTIAL
NOT SUBJECT TO DISCOVERY**

ATTACHMENT 1

Independent Government Cost Estimate Quincy Smelter Site Franklin Township, Houghton County, Michigan March 2008

Cost estimates are taken from 2005; Quincy Smelter Asbestos Abatement Assessment

Stack stabilization =	\$ 24,360
Building Stabilization =	\$199,250
Asbestos Removal =	\$ 86,885
Subtotal	<u>\$310,000 (rounded)</u>
8.4% Inflation change 2004 to 2008	\$ 26,040
15% contingency	\$ 50,400
Total	\$ 386,000 (rounded)

ATTACHMENT 2

**Detailed Cleanup Contractor Estimate
Quincy Smelter Site
Franklin Township, Houghton County, Michigan
March 2008**

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

Personnel & Equipment	\$ 146,000
Materials & Misc	\$ 185,000
Transportation and Disposal	\$ 55,000
	=====
TOTAL	\$ 386,000



ATTACHMENT 3

U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL ACTION

ADMINISTRATIVE RECORD
FOR
QUINCY SMELTER SITE
FRANKLIN TOWNSHIP, HOUGHTON COUNTY, MICHIGAN

ORIGINAL
MAY 3, 2004

<u>NO.</u>	<u>DATE</u>	<u>AUTHOR</u>	<u>RECIPIENT</u>	<u>TITLE/DESCRIPTION</u>	<u>PAGES</u>
1	07/01/03	Karenen, A., MDEQ	Dollhopf, R., U.S. EPA	E-Mail Transmission re: Franklin Township's Re- quest for Assistance with a Removal Action at the Quincy Smelter Site	2
2	08/04/03	Weston	U.S. EPA	Container Inventory for the Quincy Smelter Site w/Attached Photographic Log	48
3	09/19/03	Fiala F., U.S. DOI	Dollhopf, R., U.S. EPA	Letter re: the Financial Participation of the Keweenaw National Historic Park with the Staging and Sampling Project at the Quincy Smelting Site	1
4	12/19/03	Clark, C., MDEQ	Ekdahl, G., Franklin Township Supervisor	Letter re: Due Care Ob- ligations at the Quincy Smelter Site	4
5	01/20/04	TriMedia Consultants	Dollhopf, R., U.S. EPA	Project Activities Sum- mary for Waste Character- ization and Consolidation Activities at the Quincy Smelter Site	129
6	01/07/04	Kelly, B., U.S. EPA	Keranen, A., MDEQ	Letter re: U.S. EPA's Re- quest that MDEQ Identify all ARARs for the Proposed Removal Action at the Quincy Smelter Site	1
7	02/18/04	Keranen, A., MDEQ	Kelly, B., U.S. EPA	Letter re: MDEQ's Identi- fication of all ARARs for the Quincy Smelter Site	2

<u>NO.</u>	<u>DATE</u>	<u>AUTHOR</u>	<u>RECIPIENT</u>	<u>TITLE/DESCRIPTION</u>	<u>PAGES</u>
8	05/03/04	Dollhopf, R., U.S. EPA	Karl, R., U.S. EPA	Action Memorandum: Request for a Time Critical Removal Action at the Quincy Smelter Site (PORTIONS OF THIS DOCUMENT HAVE BEEN REDACTED)	18
UPDATE #1 JULY 21, 2005					
1	06/00/04	ATC Associates, Inc.	Environmental Quality Management, Inc.	Asbestos Survey Report for the Quincy Mining Company Smelter Works w/Cover Letter	58
2	08/25/04	REAC	Brass, K.	Air and Soil Sampling for the Quincy Smelter Site	410
3	01/28/05	START	Kelly, B., U.S. EPA	Asbestos Abatement Assessment for the Quincy Smelter Site (Revision 2)	57
4	07/21/05	Kelly, B., U.S. EPA	Karl, R., U.S. EPA	Action Memorandum: Request for a Ceiling Increase and Change of Scope for a Time-Critical Removal at the Quincy Smelter Site (PORTIONS OF THIS DOCUMENT HAVE BEEN REDACTED)	19
UPDATE #2 APRIL 1, 2008					
1	06/04/04	Kelly, B., U.S. EPA	Distribution List	Pollution Report: POLREP No. 1 (Initial) for the Quincy Smelter Site	3
2	06/11/04	Kelly, B., U.S. EPA	Distribution List	Pollution Report: POLREP No. 2 (Waste Consolidation Complete) for the Quincy Smelter Site	3

<u>NO.</u>	<u>DATE</u>	<u>AUTHOR</u>	<u>RECIPIENT</u>	<u>TITLE/DESCRIPTION</u>	<u>PAGES</u>
3	07/10/04	Kelly, B., U.S. EPA	Distribution List	Pollution Report: POLREP No. 3 for the Quincy Smelter Site	3
4	08/06/04	Kelly, B., U.S. EPA	Distribution List	Pollution Report: POLREP No. 4 (Public Meeting and Fence Com- pletion) for the Quincy Smelter Site	3
5	08/24/04	Kelly, B., U.S. EPA	Distribution List	Pollution Report: POLREP No. 5 (Activity Based Sampling) for the Quincy Smelter Site	3
6	08/03/05	Kelly, B., U.S. EPA	Distribution List	Pollution Report: POLREP No. 6 (Final) for the Quincy Smelter Site	3
7	00/00/00	Kelly, B., U.S. EPA	Karl, R., U.S. EPA	Action Memorandum: Request for a Time Cri- tical Removal Action at the Quincy Smelter Site (PENDING)	

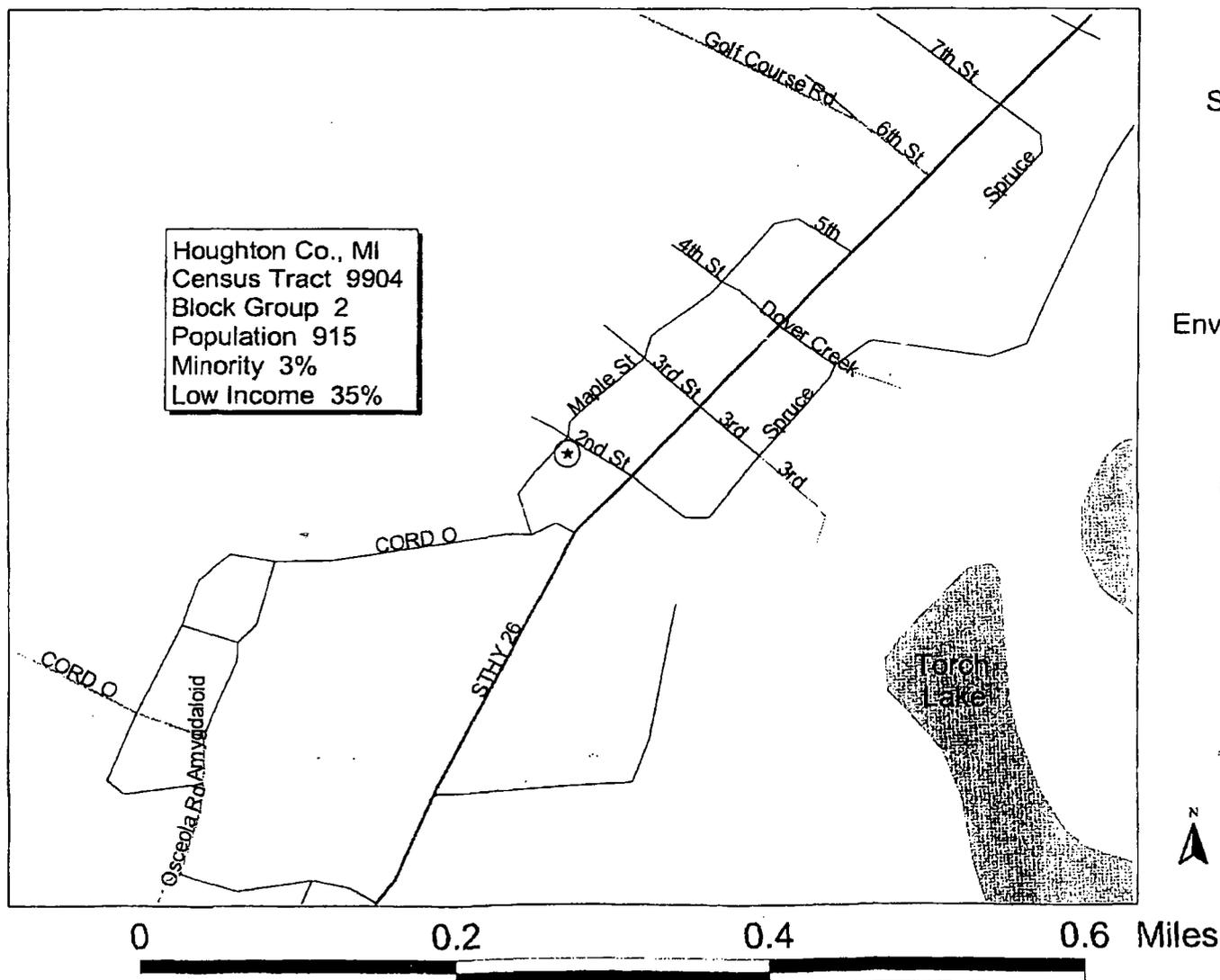
ATTACHMENT 4

**Region 5 EJ Analysis
Quincy Smelter Site
Franklin Township, Houghton County, Michigan
March 2008**

Region 5 Superfund EJ Analysis

Quincy Smelter Site

Houghton Co., MI



State of Michigan averages:

Minority: 21%%

Low Income: 29%

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

Minority: 42% or greater

Low Income: 58% or greater

⊛ Site Location

Date of Map 1/0/04

Source of Map: Census 2000 Database,
ArcView 3.0