ACTION MEMORANDUM

DATE: SEP 16 2004

SUBJECT: Request for a Ceiling Increase and Approval to Restart a Removal Action at the Barry Bronze Bearing Site, City of Camden, Camden County, New Jersey

FROM: Mark P. Pane, On-Scene Coordinator
Removal Action Branch

TO: George Pavlou, Director
Emergency and Remedial Response Division

THRU: Richard C. Salkie, Chief
Removal Action Branch

Site ID: **UX**

I. PURPOSE

The purpose of this Action Memorandum is to request a Ceiling Increase and approval to Restart a removal action, described herein, at the Barry Bronze Bearing Site (Site), located in the City of Camden, Camden County, New Jersey. The total funding increase requested in this memorandum is $552,000, of which $385,000 is from the Regional removal advice of allowance for mitigation contracting. If approved, the new total project ceiling will be raised to $602,000, of which $420,000 will be from the Regional removal advice of allowance.

CONCURRENCES								
Name:Barry Bronze		Init: sb	Date: 09/03/04		Filename: AM#0249			
Symbol	ERRD-RAB	ERRD-RAB	ERRD-RAB	ORC-NJSUP	ERRD-DD	ERRD-D		
Surname	Pane	Rotola	Salkie	Karlen	McCabe	Pavlou		
Date	9/14/04		9/14/04			9/16		

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

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A Removal Site Evaluation (RSE) was completed for this Site on July 9, 2004. The RSE determined that a release of hazardous substances has occurred at the Site and that a removal action under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) is warranted. Soil contaminated with heavy metal from the foundry operated at the Site was dumped behind the facility during the years of operation. The contamination has migrated over time and now encompasses the unpaved street adjacent to the facility which is routinely used by pedestrians and also contains an active railroad spur.

The Site is not proposed for listing on the National Priorities List (NPL). There are no nationally significant or precedent setting issues associated with this removal action.

UNITED STATES INFORMATION AGENCY

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The Site is not proposed for listing on the National Priorities List (NPL). There are no nationally significant or precedent setting issues associated with this removal action.

II. SITE CONDITIONS AND BACKGROUND

The Comprehensive Environmental Response, Compensation and Liability Information System ID Number for this time-critical Removal Action is NJC200400018

A. Site Description

1. Removal site evaluation (RSE)

The Removal Action Branch (RAB), within the U.S. Environmental Protection Agency Region 2 Superfund division, received a request from the City of Camden in January 2004, to evaluate the Site for removal action eligibility. An RSE was initiated in April 2004, and a final RSE report was issued on July 9, 2004 (see Attachment 1). The RSE concluded that high levels of lead, up to 42,400 ppm, exist at or near the surface of Bulson Street, located on the north side of the facility. Bulson Street is an unpaved City road which contains an active railroad spur and is routinely traveled by pedestrians. Vehicular traffic along this road is limited due to past dumping activities. Three soil samples collected from Bulson Street were also analyzed for Toxicity Characteristic Leachate Procedure (TCLP) and were determined to be a RCRA characteristic hazardous waste. Similar contamination inside the facility was also confirmed through wipe and soil samples.

The Site was used as a foundry for the casting of bronze metal into various molds by the same family business from 1928 until 1997. The operation consisted of melting various mixtures of copper, lead and tin to make specific alloys. The molten alloys were then poured into molds of sand and steel to form the desired castings. Heavy metal contaminated foundry sands were a waste product generated by the casting process. Prior to the 1980's, when NJDEP required the drumming and proper disposal of this waste, the contaminated sand was used to fill in potholes on Bulson Street.

The Barry Bronze facility has a front gate that opens to 7th Street and a fence around the perimeter of the property that is breached in a number of locations. The 19,000 square foot

building is relatively secure with all of the windows and doors locked. The building is structurally sound and continues to have active utility services (electricity, oil heat, municipal water). The building interior is extremely dusty and the dust contains percentage levels of lead.

Access to the interior of the building is restricted, however, occasional trespassing in the building has occurred in recent years and the owner, his employees, meter readers and servicemen access the building periodically.

Bulson Street is 460 feet long and about 60 feet wide. It runs east/west and is accessible as a through street for only one block between 7th and 8th Streets. In the past (when Barry Bronze was operating), Bulson Street received a significant amount of truck traffic but now it is almost exclusively used by pedestrians. Vehicular traffic is limited to occasional travel time "short cutting" and to the transportation of garbage for the purpose of illegal dumping on the street. Within the confines of the street are a buried gas main, a buried fiber optic cable and the active Penn Reading Seashore Rail Line (Camden to Winslow Branch), formerly owned and operated by Conrail. The rail road tracks bisect Bulson Street almost down its center and a 36 foot easement is in place to accommodate its use.

During the RSE numerous pedestrians and an occasional bicyclist were observed traveling on Bulson Street. Freight trains seem to travel along the tracks every two hours or so, generating significant quantities of lead contaminated dust with their passage. The high levels of lead contamination in the soil at the surface of Bulson Street along the northern exterior of the foundry building threatens anyone who utilizes the street as a thoroughfare, especially during dry windy days.

The Site is underlain by the Cretaceous merchantville clay which serves as an aquitard in the Potomac-Raritan-Magothy (PRM) aquifer system. The local groundwater flow is estimated to be to the east southeast. There are a number of municipal water system wells within four miles of the Site, but there are no private domestic well water supplies in the area. There is regional groundwater contamination in Camden, however it is unknown whether the Site has contributed to this contamination. There are no monitoring wells on the property and there has been no groundwater investigation of the Site.

The North Branch of the Newton Creek lies approximately 2,700 feet south west of the Site and flows into the Delaware River. There is no obvious migration route over land from the Site to the river.

An underground #2 fuel oil storage tank (6,000 gallons) was decommissioned (pumped and filled with sand) with NJDEP approval in 1994. The facility is currently heated with oil stored in a 5,000 gallon above ground storage tank in the rear of the property.

2. Physical location

The facility is located at 2204 South 7th Street and occupies Block 604, Lot 1 in the City of Camden. The 0.6 acre Site contains a 19,000 ft^2 concrete, block/steel industrial building which occupies approximately 80% of the property. Most of the remainder of the property is covered by an asphalt parking lot. The Site is accessed from 7th Street along its western boundary which is a residential setting with a church located at the corner. South of the Site are additional residences located on Florence Street. East of the Site is a large warehouse complex operated by Camden's Department of Education, and to the north lies Bulson Street and an active railroad. The portion of Bulson Street and the rail line between 7th and 8th Streets is situated on Block 578, Lot 1 (0.4 acres). North of Bulson Street is a 5 acre parcel of land owned by the City of Camden that is currently being developed for low income residential housing.

3. Site characteristics

The facility ceased operations in August 1997. The building and grounds appear to be well maintained and secure. Contamination on Bulson Street and inside the building was documented in the RSE via soil sampling and wipe samples. The owner has reported that occasional acts of vandalism do occur inside the building. These acts have involved vandals gaining access through the roof of the facility and then ransacking the various rooms inside the facility. Bulson Street has become a dumping area. Piles of construction debris, as well as household garbage, that have been dumped on the street have effectively limited vehicular traffic. Pedestrians still use Bulson Street and the railroad is active.

This will be the second EPA removal action undertaken at the Site. The objective of the action is to mitigate the threat posed by the metal contamination which exists in the soil on the surface of Bulson Street.

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

During the RSE, screening for lead in soil on Bulson Street and inside the facility was conducted at the Site using an XRF with confirmatory samples being sent to an off-site laboratory. The results of the RSE sampling indicate that lead, a designated hazardous substance under CERCLA, 40 CFR Table 302.4, is present at extremely high concentrations inside the facility and along its northern border which is Bulson Street.

As result of operations at the Barry Bronze facility, lead has been released to the environment and has contaminated Bulson Street. Based on laboratory analyses from the samples collected during the RSE, lead has been identified in the surface soils (0"-6" interval) on Bulson Street at

an average concentration of 4,239 ppm. Several samples contained lead at concentrations greater than 10,000 ppm with a high concentration of 42,400 ppm. Lead concentrations were greatest on Bulson Street near the Barry Bronze facility and are concentrated in the top foot of soil. TCLP results from the soil samples from Bulson Street range between 11.4 and 287 mg/L indicating the lead contaminated soil is a RCRA characteristic hazardous waste.

The mechanisms for past releases to the environment include air emissions, discharges onto the ground surface, and poor facility operations/waste management practices. The contaminated soil at the ground surface migrates along Bulson Street during dry periods when it is entrained in the wind as dust. Railroad traffic exacerbates the migration of contamination when the train creates wind which can entrain finer contaminated particles. People have been observed walking and biking through contaminated areas and potentially tracking lead contaminated soil off-Site.

The interior of the building is also contaminated with high levels of lead in the dust and the soil. However, the building is secure and being maintained by the owner. There are no significant releases to the environment from the interior of the building, therefore no actions are needed to address any contamination inside the building.

5. NPL status

The Site is not currently on the NPL and there are no known plans for its inclusion.

6. Maps, pictures and other graphic representations

Please see Appendix A of this Action Memorandum.

B. <u>Other Actions to Date</u>

1. Previous actions

Barry Bronze ceased its operations in August, 1997, triggering New Jersey Industrial Site Recovery Act (ISRA) requirements (ISRA Case # E97573). In accordance with ISRA a Preliminary Assessment (PA) and Site Investigation (SI) were completed by Barry Bronze in March 1998 and February 1999, respectively. In response to a May 1999, NJDEP ISRA inspection, Barry Bronze performed a limited remedial action to address heavy metal contamination in soils on the Site discovered during the SI. The remedial action work was documented in an August 2000, Site Inspection/Remedial Action Report. A second SI was completed in December 2001, focusing on the air compressor room and the furnace pit inside the building. Based on the results of post-excavation sampling completed by Barry Bronze, the remedial work completed at the Site has not adequately addressed the extensive soil/dust contamination inside or outside the building. The sampling conducted by EPA for this RSE supports this conclusion.

The owner of the property has indicated that he is financially incapable of continuing the ISRA cleanup and would like to give the property to the City of Camden for reuse. The City of Camden would like to accept the property and use it to support another tax paying small commercial business.

2. Current actions

During the initial RSE site visit on April 8, 2004, approximately 90 bags of potentially asbestos containing construction debris were observed on Bulson Street adjacent to the Barry Bronze property. The bags had been illegally dumped in this location and were in poor condition. The material in the bags was sampled and results showed that it contained 40% chrysotile friable asbestos. On April 20, 2004, verbal authorization was given to conduct a time critical removal action to address the threat posed by this material. On April 21, 2004 EPA mobilized to the Site and removed the bags and transported them in a double lined roll off container to Pioneer Crossing landfill in Birdsboro, Pennsylvania for disposal. On May 10, 2004 an Action Memorandum was signed documenting the verbal authorization for this removal action. A copy of this Action Memorandum is included as Attachment 2.

No other response actions have been taken at the Site since that time.

C. State and Local Authorities' Role

1. State and local actions to date

The City of Camden referred this Site to EPA for removal evaluation in January 2004. The City is actively involved in a revitalization effort of this area. New, low income housing has already been built and is fully occupied to the north-west of the Site. A new low income housing development is under construction on the property adjoining the Site to the north. The City would like to accept this property from the Barry Bronze Bearing Company for inclusion in their revitalization efforts, but is unwilling to do so until the environmental issues are addressed.

2. Potential for continued State/local response

EPA will coordinate all federal response activities with the City of Camden. Backfilling and paving Bulson Street will have to be accomplished with specifications provided by the City of Camden. Road closures and detours may also be necessary around Bulson Street during the EPA response action which must be approved by the City of Camden as well.

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

A. Threats to Public Health or Welfare

Analytical results of samples collected by EPA from soil samples along Bulson Street indicate that hazardous substances, mainly lead, are present in concentrations which may endanger public health and the environment. Samples of lead have been analyzed for TCLP and found to qualify as RCRA hazardous waste. This hazardous substance, as defined by Section 101(14), of CERCLA, is listed in Table 302.4 of the NCP.

Lead is a cumulative poison where increasing amounts can build up in the body eventually reaching a point where symptoms and disability occur. Particularly sensitive populations are women of child-bearing age, due to the fetal transfer of lead, and children. Cognitive deficits are associated with fetal and childhood exposure to lead. An increase in blood pressure is the most sensitive adverse health effect from lead exposure in adults. Other symptoms include: decreased physical fitness, fatigue, sleep disturbance, aching bones, abdominal pains, and decreased appetite. Long-term exposure can result in severe damage to the brain, blood-forming organs, and the nervous, urinary and reproductive systems. Effects on the kidney, nervous system and hemoglobin forming elements are associated with increasing blood lead concentrations, both in children and adults. Lead can also be a powerful systemic poison causing severe symptoms with acute exposures. Ingestion and inhalation of large amounts may lead to seizures, coma, and death.

The relationship between soil lead concentrations and the consequent impact on blood levels in children has been studied through numerous epidemiological studies. Based on these epidemiological studies, it is generally believed that persistent exposure to soil-borne lead results in an increase in blood lead levels (in children) of 1 to 9 ug/dl per 1,000 ppm lead in soil. EPA has determined that lead concentrations at or above 10 micrograms of lead per deciliter of blood presents risks to childrens health. Although this relationship may become less robust as exposure durations decrease and soil lead levels increase, it nonetheless provides compelling evidence of the potential lead hazard associated with the excessive lead concentrations found in the soil at the Site.

The release of CERCLA hazardous substances at this facility has occurred in the past due to on Site dumping and poor house keeping practices. The conditions at the Site continue to meet the criteria for a CERCLA removal action as described in the NCP, at 40 CFR 300.415(b)(2). The following criteria are directly applicable to the threats which exist at the Site:

(i) Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances, or pollutants, or contaminants;

Elevated levels of lead, a CERCLA designated hazardous substance, are present both inside and outside the Barry Bronze facility. The significant lead contamination in the soil at the surface of Bulson Street along the northern exterior of the foundry building is accessible to anyone who utilizes the street as a thoroughfare. Finer contaminated particles on the street are entrained in the wind as dust. Significant human exposure pathways for the lead include inhalation, dermal contact and to a lesser degree, ingestion. People utilizing Bulson Street for travel could be exposed to lead contaminated dust and could track lead contamination off-site. Regular train traffic and infrequent vehicular traffic also can serve to create airborne lead contamination and expose railroad employees and vehicle passengers. Wind can transport airborne lead contaminated dust resulting in off-Site exposure in nearby residential neighborhoods.

(iv) High levels of hazardous substances, or pollutants, or contaminants in soils largely at or near the surface, that may migrate;

There are high levels of hazardous substances in soils at the surface that may migrate Analytical testing has confirmed the presence of significantly elevated levels of lead in the surface soil on Bulson Street. During dry conditions, this material becomes airborne more readily and during wet conditions it lodges more easily onto tires passing over it. Persons that ride their bicycles or walk on Bulson Street can accumulate the material on their shoes or on the tires and possibly carry it into the home resulting in potential exposures to young children, if present. Trains and vehicular traffic on Bulson Street can also contribute to entraining lead contaminated particles in air and in tracking contaminated soil off-site.

(v) **Weather conditions that may cause hazardous substances, or pollutants, or contaminants to migrate or be released; and**

Wind can carry lead contaminated dust from the street to off-Site areas, including adjacent residential properties. Rain events may transport lead contaminated soil off-Site with surface run-off.

(vii) The availability of other appropriate federal or State response mechanisms to respond to the release.

There are no State/local response actions expected to mitigate the threats to public health or the environment on the Site.

IV. ENDANGERMENT DETERMINATION

Actual or threatened releases of hazardous substances from this Site, if not addressed by implementing the response action 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

A. Proposed Actions

1. Proposed action description

To mitigate the threats posed by this Site, EPA plans to excavate the contaminated soil along Bulson Street. The excavation will be based on data collected during the RSE and divided into two areas. Area 1, the area between the facility and the railroad tracks, will be excavated, backfilled and paved with asphalt. Area 2, the area between the rail road tracks and the adjacent property will be excavated, backfilled and new vegetation will be planted. However, any contamination that is associated with the railroad tracks can not be addressed because railroads prohibit excavation within certain distances from active rail lines for safety reasons. EPA will work with the railroad to maximize the extent of contaminated material that can be removed and/or to provide a protective barrier to prevent future airborne contamination. All excavated soil will be disposed of at an approved off Site disposal facility which complies with the EPA Off-Site Rule.

2. Contribution to remedial performance

The removal action at the Site is consistent with the requirement of Section 104(a)(2) of CERCLA, which states, "any Removal Action undertaken...should...to the extent practicable, contribute to the efficient performance of any long-term remedial action with respect to the release or the threatened release concerned." The removal action implemented to date , as well as those proposed in this memorandum are consistent with any future remedial action. These actions will have both stabilized and removed the potential sources of future releases from the Site into the environment.

3. Description of alternative technologies

Implementing disposal of the lead contaminated soil may provide an opportunity for some new technologies. Any technology selected will be based upon the criteria of effectiveness, implementability and cost.

4. EE/CA

Due to the time-critical nature of this removal action, an EE/CA was not and will not be prepared.

5. Applicable or relevant and appropriate requirements (ARARs)

ARARs that are within the scope of this Removal Action will be met to the extent practicable. The federal ARARs determined to be applicable for this Removal Action are the Resource Conservation and Recovery Act.

6. Project schedule

Field activities can be implemented immediately upon approval of this memorandum. Completion of the disposal activity can be achieved within four months of the effective start date. Paving the excavated portion of Bulson Street may be delayed based on the availability of asphalt. Installing vegetation to replace that which will be removed may have to be delayed until the Spring 2005, to maximize growth potential. This time-frame is based on favorable weather conditions and the availability of an approved disposal facility.

B. Estimated Costs

A summary of the initial funding authorized in the Action Memorandum signed on May 10, 2004, along with the proposed increase requested in this memorandum are presented below.

Extramural Costs

Regional Removal Allowance Costs:

	Funding Authorized in Action Memorandum Signed on May 10, 2004	Additional Funding Requested in this Memorandum	Total Funding Authorized and Requested
Total Cleanup Contractor Cost (including Contingency)	$35,000	$385,000	$420,000
RST, Extramural Costs	$0	$75,000	$75,000
Subtotal, Extramural Costs	$35,000	$460,000	$495,000
Extramural Cost Contingency	$15,000	$92,000	$107,000

TOTAL, REMOVAL ACTION PROJECT CEILING	**$50,000**	**$552,000**	**$602,000**

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

If the proposed actions described in this memorandum are not implemented, the threats posed by the Site will persist. The residential population surrounding this area is increasing as new homes are being built and families with small children take up occupancy. With more people in proximity to this area, the threat of exposure via direct or indirect contact will correspondingly increase. Exposure to the contamination posed from the Site is of particular concern due to the adverse health effects of lead on children.

VIII. OUTSTANDING POLICY ISSUES

There are no known outstanding policy issues associated with the Site at the present time.

IX. ENFORCEMENT

The owner of the Barry Bronze Bearing Company has been identified and has been very cooperative with EPA and the City of Camden in trying to resolve the environmental concerns at the Site. A limited ISRA cleanup was performed by the owner in 2001, with moderate success. The owner has indicated that he is financially incapable of performing any additional remediation of the Site. Enforcement efforts will be pursued concurrently with the proposed response action so as not to delay mitigation of the threats posed by the Site to the surrounding population.

The following chart estimates the costs which EPA believes are eligible for cost recovery for this response action.

	Funding Authorized in Action Memorandum Signed on May 10, 2004	**Additional Funding Requested in this Memorandum**	**Total Funding Authorized and Requested**
Direct Extramural Costs	$50,000	$552,000	$602,000
Direct Intramural Costs	$5,000	$100,000	$105,000

Subtotal, Direct Costs	$55,000	$652,000	$707,000
Indirect Costs (Regional Indirect Cost Rate 28.18%	$15,499	$183,734	$199,233
Estimated EPA Costs Eligible for Cost Recovery	$70,499	$835,734	$906,233

X. RECOMMENDATION

This decision document represents the selected Removal Action for the Barry Bronze Bearing Site, located in the City of Camden, Camden County, New Jersey. This document was developed in accordance with CERCLA, as amended, and is not inconsistent with the National Contingency Plan. This decision is based on the Administrative Record for the Site.

Conditions at the Site meet the NCP section 300.415(b)(2) criteria for a removal action. I recommend your formal approval of this Ceiling Increase and Removal Restart Action Memorandum. The total funding increase requested in this memorandum is $552,000, of which $385,000 is for mitigation contracting. If approved, the new total project ceiling will be raised to $602,000, of which $420,000 will be from the Regional removal advice of allowance.

Please indicate your authorization for the planned Removal Action at the Barry Bronze Bearing Site, as per current Delegation of Authority, by signing below.

APPROVAL: _____ **DATE:** 9/16/04
George Pavlou, Director
Emergency and Remedial Response Division

DISAPPROVAL: _____ **DATE:** _____
George Pavlou, Director
Emergency and Remedial Response Division

cc: (after approval is obtained)
G. Pavlou, ERRD-D
W. McCabe, ERRD-DD
R. Salkie, ERRD-RAB
J. Rotola, ERRD-RAB
J. Witkowski, ERRD-RAB
G. Zachos, ACSM/O
D. Karlen, ORC-NJSUP
P. Brandt, PAD
R. Manna, OPM-FMB
T. Grier, 5202G
P. McKechnie, OIG
J. Smolenski, NJDEP
E. Christman, NOAA
A. Raddant. DOI
C. Kelley, RST

APPENDIX A

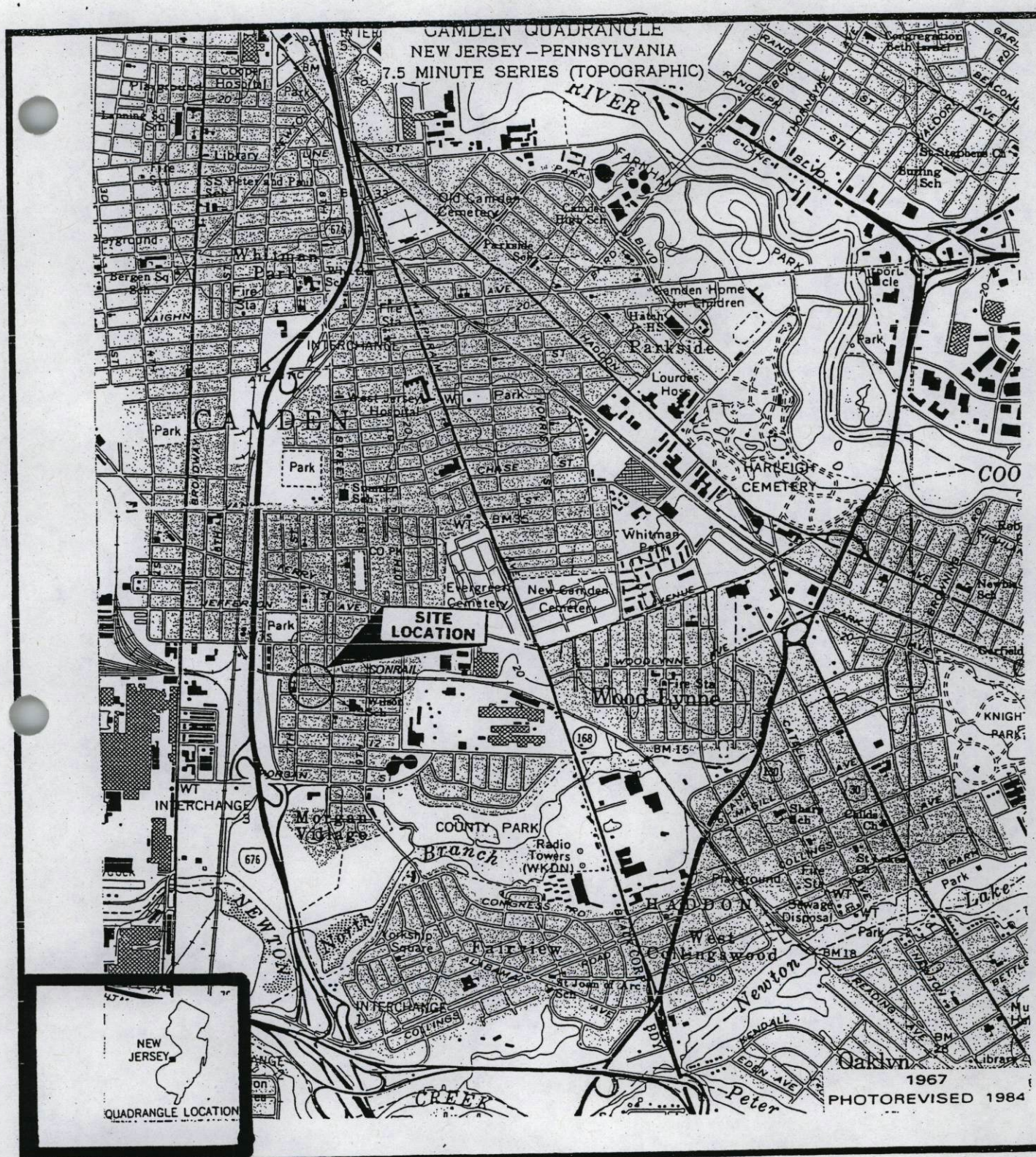


FIGURE 1.0:

Barry Bronze Bearing Company, Inc.
2204 South 7th Street

TTI ENVIRONMENTAL, INC.
9 East Stow Road
Marlton, New Jersey 08053
856/985-8800 www.ttienv.com

SCALE	DRAWN BY	DATE
1" = 2,000'	USGS	12/01
PROJECT	APP'D BY	DRAWING NO.
01-479	RTP	1.0

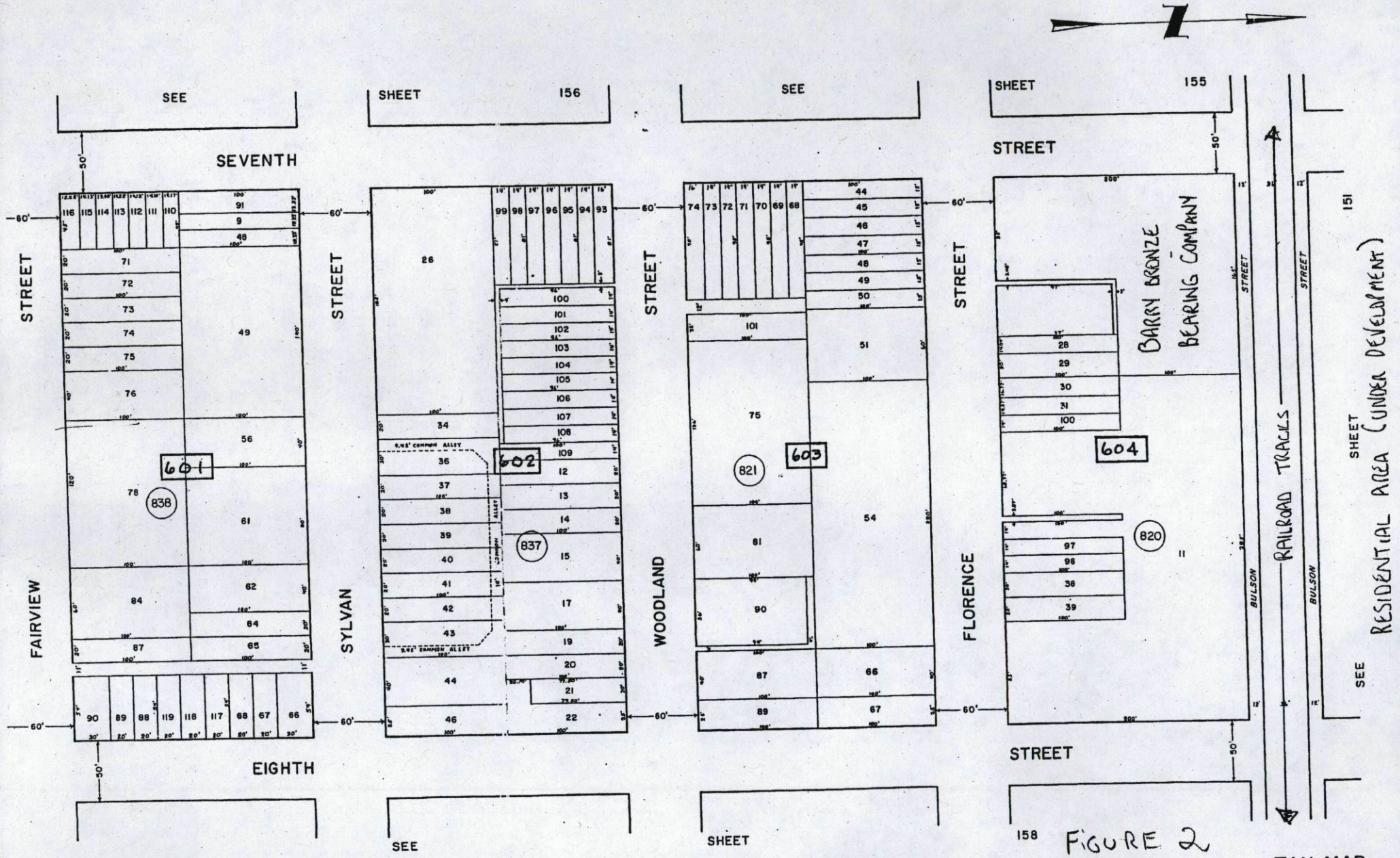


FIGURE 2

TAX MAP

CITY OF CAMDEN

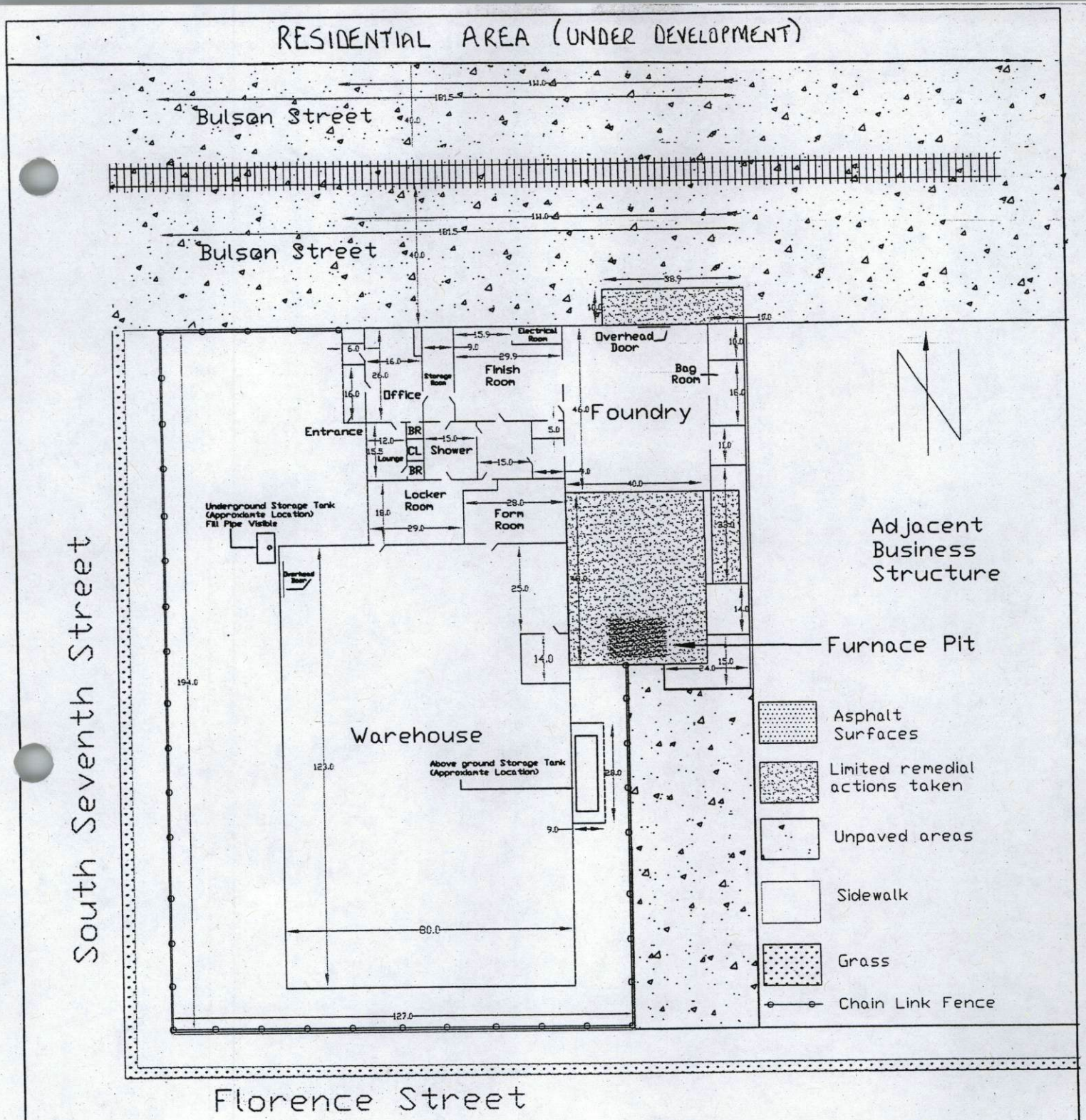
CAMDEN COUNTY

SCALE: 1" = 40' 1977

CHARLES C. SHOEMAKER
CITY ENGINEER

NEW JERSEY DEPARTMENT OF THE TREASURY
DIVISION OF TAXATION
LOCAL PROPERTY AND PUBLIC UTILITY BRANCH
APPROVED AS A TAX MAP PURSUANT TO THE PROVISIONS OF CHAPTER 175, LAWS OF 1913, ETC.
FOR THE DIRECTOR, DIVISION OF TAXATION
BY
LIC. #18434 CHIEF, ENGINEERING SECTION
DATE DEC 16 1985 SERIAL NO. 859

REMINGTON ENGINEERS, INC.
PENNSAUKEN, NEW JERSEY
REV. 9-1-86 12-11-87



GRAPHIC SCALE

19 0 19 38 FEET

1 " = 38'

FIGURE 4
INTERIOR LAYOUT
BARRY BRONZE BEARING CO. SITE
2204 SOUTH SEVENTH ST
CAMDEN, NEW JERSEY

Weston Solutions, Inc.
Federal Programs Division

IN ASSOCIATION WITH
INNOVATIVE TECHNOLOGICAL SOLUTIONS, INC.,
SCIENTIFIC AND ENVIRONMENTAL ASSOCIATES, INC.,
AND TERRANEAR PMC

US ENVIRONMENTAL PROTECTION AGENCY
REMOVAL SUPPORT TEAM
CONTRACT # 68-W-00-113

DRAWN BY: T. KISH
EPA OSC: DAVID ROSOFF
RST SPM: T. KISH
FILENAME: BARRYSINTERIORLAYOUT.DWG

DATE MODIFIED 07-01-04

ATTACHMENT 1

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION II

Date: July 9, 2004

Subject: Removal Site Evaluation for the Barry Bronze Bearing Company Site, City of Camden, Camden County, New Jersey

From: Dave Rosoff, On-Scene Coordinator
Removal Action Branch

To: File

Site I.D. No.: NJC200400018
REMOVAL ASSESSMENT RANKING: 8

I. INTRODUCTION

The Removal Action Branch (RAB) received a request from the City of Camden in January 2004 to evaluate the Barry Bronze Bearing Company, Inc. Site (Site) for removal action eligibility (Appendix A). The Site is located at 2204 South 7th Street in an urban commercial/residential area in the City of Camden, Camden County, New Jersey (Figure 1). Beginning in 1928, the Site was used as a foundry for the casting of bronze metal into various molds. Reportedly, waste foundry sands generated during the bronzing process were used to fill in the surface of Bulson Street, an unimproved city street immediately to the north of the facility. Currently, the facility is vacant but the windows and doors are securely locked. However, tresspassing into the building through openings in the roof has occurred occasionally over the last five years.

There has been and continues to be a release of CERCLA designated hazardous substances at the Site, which is defined as a facility under section 101(9) of CERCLA. Elevated levels of lead are present in the surface soils on Bulson Street and in the dust and foundry sand within the building due to past operating practices at the Site.

The high concentrations of lead on Bulson Street present an immediate public health concern. Travelers on the street and residents in the nearby residential areas could be exposed to unacceptable levels of this hazardous substance. The City of Camden considers the Site a "Brownfields" candidate and is working with the Site owner to find a private interest willing to reuse the Site.

II. SITE CONDITIONS AND BACKGROUND

A. Site Description

1. Physical Location

The Barry Bronze Bearing Company (Barry Bronze) facility is located at 2204 South 7th Street and occupies Block 604, Lot 1 in the City of Camden (Figure 2). The 0.6 acre Site contains a concrete block/steel industrial building (19,000 square feet) that occupies about 80% of the property. Most of the remainder of the property is covered by an asphalt parking lot. The Site is accessed from 7th Street along its western boundary and is bounded to the south by residences on Florence Street, to the east by a large warehouse complex operated by Camden's Department of Education, and to the north by Bulson Street (an unpaved dirt street) and the active Penn Reading Seashore Rail Line (Camden to Winslow Branch). The portion of Bulson Street and the rail line between 7th and 8th Streets is situated on Block 578, Lot 1 (0.4 acres) (Figure 3). North of Bulson Street is a large vacant parcel owned by the City of Camden that is slated for low income residential development in the near future.

2. Site History

The Site has been used as a foundry for the casting of bronze metal into various molds by the same family business since 1928. The operation consisted of the melting of copper, lead and tin to make alloys and the molding of these alloys in sand molds and steel jackets (See Appendix B). Heavy metal contaminated foundry sands were a waste product generated by the casting process. Prior to the 1980s, when NJDEP required the drumming and proper disposal of this waste, the contaminated sand was used to fill in potholes on Bulson Street. In July 1999, Barry Bronze treated and disposed of approximately 175 fifty-five gallon drums of heavy metal contaminated foundry sands (approximately 250 tons) that had accumulated on the Site.

Barry Bronze ceased its operations in August 1997 triggering New Jersey Industrial Site Recovery Act (ISRA) requirements (ISRA Case # E97573). In accordance with ISRA a Preliminary Assessment (PA) and Site Investigation (SI) were completed by Barry Bronze in March 1998 and February 1999, respectively. In response to a May 1999 NJDEP ISRA inspection, Barry Bronze performed a limited remedial action to address heavy metal contamination of soils on the Site discovered during the SI. The remedial action work was documented in an August 2000 Site Inspection/Remedial Action Report. A second SI was completed in December 2001 focusing on the air compressor room and the furnace pit inside the building. Based on the results of post-excavation sampling completed by Barry Bronze and on EPA's sampling conducted during this RSE, the remedial work completed at the Site has not adequately addressed the extensive soil/dust contamination inside or outside the building.

The owner of the property has indicated that he cannot afford to continue the ISRA cleanup and would like to give the property to the City of Camden for re-use. The City of Camden would like to accept the property and use it to support another tax paying small commercial business.

However, the City does not want to accept the property until the Site has been completely assessed and remediated so that it can be re-occupied safely.

3. Previous Work Relevant to this RSE

The 1999/2000 SI work focused on the investigation of used foundry sand deposition areas along Bulson Street (exterior) and interior soil and dust contamination in the furnace pit and on the foundry room floor. Soil sampling was conducted in these areas and samples were analyzed for TPH, priority pollutant metals and VOCs as deemed appropriate. Analytical results from the SI showed elevated levels of copper and lead in foundry sands used to fill in the road surface on Bulson Street along the north side of the foundry building and in front of the foundry's bay doors. Lead concentrations were found in concentrations above 600 ppm in 22 of 23 surface soil samples collected along Bulson Street and adjacent to the north wall of the foundry building. Building exterior lead concentrations in surface soil ranged from 739 to 27,200 ppm with an average of 7,437 ppm. Interior floor samples showed elevated levels of lead (up to 12,500 ppm) in the foundry room sand floor and TPH (up to 32,700 ppm) in the furnace pit.

4. Previous Removal Actions

During the initial RSE Site visit on April 8, 2004, approximately 90 bags of potentially asbestos containing construction debris were observed on Bulson Street adjacent to the Barry Bronze property. The bags had been illegally dumped in this location and were in poor condition. The material in the bags was sampled and results showed that it contained 40% chrysotile friable asbestos. On April 20, 2004, verbal authorization was given to conduct a time critical removal action to address the threat posed by this material. On April 21, 2004 EPA mobilized to the Site and removed the bags and transported them in a double lined roll off container to Pioneer Crossing landfill in Birdsboro, Pennsylvania for disposal. On May 10, 2004 an Action Memorandum was signed documenting the verbal authorization for the removal action.

5. Site Assessment Activities/Observations

Several Site visits were conducted in April and May 2004 for this RSE. Currently, the Site includes the vacant Barry Bronze facility and the unpaved (dirt) Bulson Street north of the facility.

The Barry Bronze facility has a front gate that opens to 7th Street and a fence around the perimeter of the property. The fence is breached in a number of locations. The 19,000 square foot building is relatively secure with all of the windows and doors locked. The layout of the building is depicted in Figure 4. The building is structurally sound and continues to have active utility services (electricity, oil heat, municipal water). The building interior is extremely dusty and the dust contains percentage levels of lead.

Access to the interior of the building is restricted, however, occasional trespassing in the building has occurred in recent years and the owner, his employees, meter readers and servicemen access the building periodically.

Bulson Street is 460 feet long and about 60 feet wide. It runs east/west and is accessible as a through street for only one block between 7th and 8th Streets. In the past (when Barry Bronze was operating), Bulson Street received a significant amount of truck traffic but now it is almost exclusively used by pedestrians. Vehicular traffic is limited to occasional travel time "short cutting" and to the transportation of garbage for the purpose of illegal dumping on the street. Within the confines of the street are a buried gas main, a buried fiber optic cable and the active Penn Reading Seashore Rail Line (Camden to Winslow Branch), formerly owned and operated by Conrail. The rail road tracks bisect Bulson Street almost down its center and a 36 foot easement is in place to accommodate their use.

During the RSE numerous pedestrians and an occasional bicyclist were observed traveling on Bulson Street. Freight trains seem to travel along the tracks at a rate of about 1 per every 2 hours. The significant lead contamination in the soil at the surface of Bulson Street along the northern exterior of the foundry building is accessible to anyone who utilizes the street as a thoroughfare.

The Site is underlain by the Cretaceous merchantville clay which serves as an aquitard in the Potomac-Raritan-Magothy (PRM) aquifer system. The local groundwater flow is estimated to be to the east southeast. There are a number of municipal water system wells within 4 miles of the Site but there are no private domestic well water supplies in the area. There is regional groundwater contamination in Camden, however it is unknown wether the Site has contributed to this contamination. There are no monitoring wells on the property and there has been no groundwater investigation of the Site.

The North Branch of the Newton Creek lies approximately 2,700 feet south west of the Site and flows into the Delaware River. There is no obvious migration route over land from the Site to the river.

An underground #2 fuel oil storage tank (6,000 gallons) was decommissioned (pumped and filled with sand) with NJDEP approval in 1994. The facility is currently heated with oil stored in a 5,000 gallon above ground storage tank in the rear of the property.

5. Release or Threatened Release into the Environment of a Hazardous Substance, or Pollutant or Contaminant

During the RSE, screening for lead in soil on Bulson Street and foundry sand and dust within the building was conducted at the Site using XRF. A percentage of these samples (approximately 20 to 30%) were analyzed by a laboratory using Inductive-Coupled Plasma (ICP) emission spectroscopy for confirmation. The two data sets were compared to determine their correlation (see the July, 2004 Weston XRF Analysis Report). Three soil samples from Bulson Street were

also analyzed for Toxicity Characteristic Leachate Procedure (TCLP) to determine if the soil is a RCRA characteristic hazardous waste.

The results of the RSE sampling indicate theat lead, designated as a CERCLA hazardous substance under 40 CFR Table 302.4, is present at extremely high concentrations inside and outside of the building on the Site.

Dust on the floors, walls and in the ventilation system within the building is grossly contaminated with lead (Table 1.2 and 3, Figures 5 through 8). Samples of building interior dust showed lead up to 23,200 ppm. Wipe samples from the walls showed lead concentrations of up to 54,800 ug/ft^2. Samples of sand in the foundry room showed lead concentrations up to 17,500 ppm. The persons currently accessing the building are being exposed to the contaminated dust and are also providing a potential avenue for additional lead contamination to migrate from the building to areas off of the Site. Future releases to the outside environment will continue on the clothing and shoes of anyone who enters the building.

As result of operations at the Barry Bronze facility lead has been released to the environment and contaminated Bulson Street. Based on laboratory analyses from the samples collected during the RSE, lead has been identified in the surface soils (0"-6" interval) on Bulson Street at an average concentration of 4,239 ppm. Several samples contained lead at concentrations greater than 10,000 ppm with a high concentration of 42,400 ppm. (Table 1.1 and Figures 9 and 10). Lead concentrations were greatest on Bulson Street near the Barry Bronze facility and are concentrated in the top 2 feet of soil. TCLP results from the soil samples from Bulson Street range between 11.4 and 287 mg/L indicating the lead contaminated soil is a RCRA characteristic hazardous waste (Table 2).

The mechanism for past releases to the environment include air emissions, discharges onto the ground surface, and poor facility operations/waste management practices. The contaminated soil at the ground surface migrates along Bulson street during dry periods when it is entrained in the wind as dust. Rail traffic exacerbates the migration of contamination when the train creates wind which can entrain finer contaminated particles. People have been observed walking and biking through contaminated areas and potentially tracking lead contaminated soil off-Site.

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

A. Threats to the Public Health or Welfare

Conditions at the Site meet the requirements of Section 300.415(b) of the National Contingency Plan (NCP) for the undertaking of a CERCLA removal action. Factors from the NCP Section 300.415(b)(2) that support conducting a removal action at the Site include:

(i) Actual or potential exposure to nearby human populations, animals, of the food chain from hazardous substances, or pollutants, or contaminants;

There is a potential exposure to hazardous substances by nearby populations from hazardous substances **(§300.415(b)(2)(i))**. Elevated levels of lead, a CERCLA designated hazardous substance, are present both inside and outside the Barry Bronze facility.

The significant lead contamination in the soil at the surface of Bulson Street along the northern exterior of the foundry building is accessible to anyone who utilizes the street as a thoroughfare. Finer contaminated particles on the street are entrained in the wind as dust. Significant human exposure pathways for the lead include inhalation, dermal contact, and to a lesser degree, ingestion. People utilizing Bulson Street for travel could be exposed to lead contaminated dust and could track lead contamination off-Site. Regular train traffic and infrequent vehicular traffic also can serve to create airborne lead contamination and expose railroad employees and vehicle passengers. Wind can transport airborne lead contaminated dust resulting in off-Site exposure in nearby residential neighborhoods.

Trespassers (persons have been known to illegally enter into the building since it has been unoccupied) or workers involved in interior activities (currently only the maintenance of the building) are exposed to high levels of lead inside the facility. Any unprotected person entering a building with heavy floor dust would disturb the dust and potentially be exposed to suspended particulates containing significant concentrations of lead. The contaminated dust could migrate outside the building on the clothing of people who access the interior of the building.

Lead is a cumulative poison where increasing amounts can build up in the body eventually reaching a point where symptoms and disability occur. Particularly sensitive populations are women of child-bearing age, due to the fetal transfer of lead, and children. Cognitive deficits are associated with fetal and childhood exposure to lead. An increase in blood pressure is the most sensitive adverse health effect from lead exposure in adults. Other symptoms include: decreased physical fitness, fatigue, sleep disturbance, aching bones, abdominal pains, and decreased appetite. Long-term exposure can result in severe damage to the brain, blood-forming organs, and the nervous, urinary and reproductive systems. Effects on the kidney, nervous system and heme-forming elements are associated with increasing blood lead concentrations, both in children and adults. Lead can also be a powerful systemic poison causing severe symptoms with acute exposures. Ingestion and inhalation of large amounts may lead to seizures, coma, and death.

The relationship between soil lead concentrations and the consequent impact on blood levels in children has been studied through numerous epidemiological studies. Based on these epidemiological studies, it is generally believed that persistent exposure to soil-borne lead results in an increase in blood lead levels (in children) of 1 to 9 ug/dl per 1,000 ppm lead in soil. Although this relationship may become less robust as exposure durations decrease and soil lead levels increase, it nonetheless provides compelling evidence of the potential lead hazard associated with the excessive lead concentrations found in the soil at the Site.

(iv) High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate; and (v) Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released;

There are high levels of hazardous substances in soils at the surface that may migrate **(§300.415(b)(2)(iv)).** Analytical testing has confirmed the presence of significantly elevated levels of lead in the surface soil on Bulson Street. During dry conditions this material becomes airborne more readily and during wet conditions it lodges more easily onto tires passing over it. Persons that ride their bicycles or walk on Bulson Street can accumulate the material on their shoes or on the tires and possibly carry it into the home resulting in potential exposures to young children, if present. Trains and vehicular traffic on Bulson Street can also contribute to entraining lead contaminated particles in air and in tracking contaminated soil off-Site. Weather conditions exist that may cause these hazardous substances to migrate or be released **(§300.415(b)(2)(v)).** Wind can carry lead contaminated dust from the street to off-Site areas, including adjacent residential properties. Rain events may transport lead contaminated soil off-Site with surface run-off.

(vi) Threat of fire or explosion

A fire in the Barry Bronze facility containing significant quantities of lead contaminated dust, foundry sand and building materials could result in the generation and release of a large airborne plume of smoke containing high concentrations of lead. This plume could easily migrate off of the Site into neighboring communities causing widespread exposure to high levels of airborne lead.

(vii) The availability of other appropriate federal or state response mechanisms to respond to the release;

There are no State/local response actions expected to mitigate the threats to public health or the environment on the Site.

B. Threats to the Environment

The amount of migration of lead contaminated soil/dust into the neighboring areas around the Site has not been documented. However, the numerous mechanisms for the migration of the lead contamination off of the Site, and the magnitude of the lead concentrations found in surface soil indicate a significant threat of release to the environment beyond the boundaries of the Site as it has been defined by this RSE.

V. CONCLUSIONS

The Barry Bronze Bearing Company Site is considered a facility as defined by Section 300.5 of the NCP. A release of a hazardous substance (lead) has occurred on the Site in a quantity and concentration that has resulted in a substantial threat to the public health and the environment.

There is a current exposure pathway existing to humans and the environment that may present an imminent and substantial endangerment and no other party, government or otherwise, is currently taking a timely response action to mitigate the threat.

The extremely high concentrations of lead present in soil on Bulson Street pose a health threat to unprotected individuals accessing the Site and a potential health threat to individuals residing or working in the vicinity of the Site. The inside of the Barry Bronze facility is highly contaminated with lead in the form of dust and foundry sand. People periodically accessing the building interior creates the potential for the migration of additional contamination to the outside. Any unprotected person entering the building would likely be exposed to airborne dust containing significant concentrations of lead.

VI. RECOMMENDATIONS

Based upon the conclusions presented above, it is recommended that a CERCLA Time-Critical Removal Action be undertaken to mitigate the threats associated with the release of lead contamination at the Site.

cc: Richard Salkie, RAB
John Witkowski, RAB
Joe Rotola, RAB
Jim Daloia, RPB
George Zachos, Site Assessment Manager
Mark Pane, OSC

ATTACHMENT 2

DATE: MAY 11 2004

SUBJECT: Confirmation of Verbal Authorization for a CERCLA Removal Action at the Barry Bronze Bearing Company Site, City of Camden, Camden County, New Jersey - **ACTION MEMORANDUM**

FROM: Christopher Jimenez, On-Scene Coordinator
Response and Prevention Branch

TO: George Pavlou, Director
Emergency and Remedial Response Division

THRU: Bruce Sprague, Chief
Response and Prevention Branch

Site ID No.: UX

I. PURPOSE

The purpose of this Action Memorandum is to confirm and document the verbal authorization granted by William McCabe, Deputy Director, Emergency and Remedial Response Division (ERRD), on April 20, 2004, to conduct a time-critical removal action described herein for the Barry Bronze Bearing Company Site, City of Camden, Camden County, New Jersey.

On April 8, 2004, an on-going Removal Site Evaluation (RSE) was being conducted at the above referenced Site. The OSC leading the RSE discovered what was thought to be approximately 40 brown plastic bags of building demolition debris. Based on the appearance of the material, two samples were taken and analysis confirmed the material to be 40% chrysotile asbestos. It was then decided that the Response and Prevention Branch (RPB) would collect and dispose of the bags of asbestos under the provisions of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, as amended by 42 U.S.C §§ 9601 et seq.

This Site is not on the National Priorities List (NPL) and there are no nationally significant or precedent setting issues associated with this Site.

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2ERR-RPB:Jimenez:6847:va:5/04/04

2ERRD-RPB-OPT	2ERRD-RPB-OPT	2ERRD-RPB	2ORC-NJSFB	2ORC-NJSFB	2ERRD	2ERRD
JIMENEZ	KODAMA	SPRAGUE	FAJARDO	KARLEN	McCABE	PAVLOU 5/10/04

II. SITE CONDITIONS AND BACKGROUND

A. Site Description

1. Removal Site Evaluation

On April 20, 2004, EPA RPB personnel received analytical results from two samples that were taken during an RSE that was conducted on April 8, 2004. Based on those results, which identified the dumped material as Asbestos Containing Material (ACM), verbal authorization was granted for collection and disposal of the ACM. Other factors that justified this action are the location and condition of the bagged material. The location that the bags of asbestos were dumped was a dirt road that is no longer used for vehicular traffic, but is frequently used for foot traffic. When the bags of ACM were discovered, many of them were found to be in poor condition. Loose or friable material was noted in torn bags and on the ground surface. Persons walking through the area could be exposed to the ACM by walking over the material and the friable asbestos could possibly become airborne.

On April 21, 2004, EPA RPB personnel and EPA Emergency and Rapid Response Services (ERRS) contractor mobilized to the Site. It was determined at that time that there were approximately 75 bags of the transite material as well as loose transite type material on the ground. Additionally, there was a significant amount of siding shingles that were believed to be ACM as well.

2. Physical Location

The dumping location for this Site is located north of the former Barry Bronze Bearing facility located at 2204 South 7th Street, in the City of Camden, Camden County, New Jersey. The material was located next to an active freight rail line, north of the Barry Bronze Bearing facility, on Bulson Street, a dirt road that no longer can accommodated vehicular traffic. The location is bounded on the east by South 8th Street, the west by South 7th Street and on the south by Florence Street. The area is commercial/residential with residences approximately 250 feet from the Site.

3. Characteristics of the Site

The Site is located in an urban commercial/residential area of the City of Camden, in Camden County, New Jersey. The Site is located behind an office/warehouse building formerly owned by Barry Bronze Bearing, and currently owned by Buy Rite Lumber, Pennsuaken, New Jersey. There is currently one tenant (Camden School System's Supply Warehouse) in a portion of the building. The Site is adjacent to an active freight rail line.

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

The following hazardous substances have been identified by analysis:

Hazardous Substance	Statutory Source for Designation as a Hazardous Substance
40% Chrysotile Asbestos	CERCLA

Asbestos is a known human carcinogen. Two types of cancers are associated with asbestos; mesothelioma, cancer of the pleural lining and lung cancer a malignant tumor of the bronchi. In addition to the cancer threat, asbestos may cause asbestosis, which is a scarring of lung tissue that diminishes the elasticity of the tissue, resulting in poor respiratory function.

5. **NPL Status**

At the present time, the Site is not on the NPL and there are no efforts underway to include the Site on the NPL.

B. **Other Actions to Date**

1. **Previous Actions**

No previous actions have taken place on this Site. However, the Site is currently part of an on-going RSE. The Site was originally referred to EPA by the City of Camden.

2. **Current Actions**

On April 21, 2004, personnel from RPB and EPA Emergency and Rapid Response Services (ERRS) contractor mobilized to the Site. The ERRS contractor arranged for a 30 cubic yard roll-off container to be mobilized to the Site, and also arranged for the material to be transported off-site for disposal. The ERRS contractor moved all the bags present into the double lined roll-off container. Bags that were damaged were placed inside a second bag, and loose material that was found at the Site, that appeared to be transite material was double bagged then put in the roll-off container. There were a total of 85 bags of the transite material. An additional 5 bags of potential ACM siding shingles were also bagged and put into the roll-off container.

C. **State and Local Authorities' Roles**

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

There are no actions being undertaken by either the state or local agencies.

2. Potential for Continued State/Local Response

There are no further actions by any state or local agency anticipated at this Site.

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

A. Threats to Public Health or Welfare

There was potential for direct human contact at the Site due to the open and/or torn bags of ACM. The area is heavily traveled by foot traffic, and is located in a residential neighborhood.

B. Threats to the Environment

There is a threat to both water and to surrounding soils from ACM if it is not addressed by implementing the response action selected in this Action Memorandum. Contamination of surrounding water or soil could, if not treated, lead to re-introduction of ACM into the atmosphere, causing a potential treat to human health. Also, there is a possibility that the friable asbestos could become airborne.

IV. ENDANGERMENT DETERMINATION

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

V. PROPOSED ACTIONS AND ESTIMATED COST

A. Proposed Actions

1. Proposed Action Description

Approximately 90 bags of ACM have been disposed of to date. The proposed removal action was to:

- Collect and repackage the bags of dumped ACM.
- Collect loose ACM from the area surrounding the Site.
- Transport and properly dispose of the bagged ACM at Pioneer Crossing Landfill in Birdsboro, Pennsylvania.

2. Contribution to Remedial Performance

There are no long-term remedial actions planned for this Site.

3. Description of Alternative Technologies

Alternative technologies will be considered so long as the technology proves to be cost effective, timely and efficient.

4. Engineering Evaluation/Cost Analysis (EE/CA)

Due to the time critical nature of this removal action, an EE/CA will not be prepared.

5. Applicable and Relevant and Appropriate Requirements (ARARs)

ARARs within the scope of this project, including RCRA and CERCLA regulations that pertain to the disposal of hazardous wastes, will be met to the extent practicable.

6. Project Schedule

The removal action was initiated on April 20, 2003, through verbal authorization. The cleanup of the ACM was completed on April 21, 2004. The material was received at Pioneer Crossing Landfill on April 23, 2004. RSE activities are on-going for the overall site.

B. Estimated Costs

Extramural Costs:

Regional Removal Allowance Costs:	Current Ceiling
Total Cleanup Contractor Costs (This cost category includes estimates for: ERRS, subcontractors, Notices to Proceed, and Interagency Agreements with Other Federal Agencies.	$ 35,000
Other Extramural Costs Not Funded from the Regional Allowance:	
Total RST, including multiplier costs	$ 0
Total CLP, ERT, AST	$ 0
Subtotal	$ 0
Subtotal, Extramural Costs	$ 35,000
Extramural Costs Contingency (30% of Subtotal, Extramural Costs; round to nearest thousand)	$15,000
TOTAL, REMOVAL ACTION PROJECT CEILING	$ 50,000

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

Delayed action, or no action, could have resulted in the release of hazardous substances into the environment, exposing nearby residents and commercial businesses and causing possible contamination of the soil.

VII. OUTSTANDING POLICY ISSUES

None

VIII. ENFORCEMENT

The On-Scene Coordinator will work closely with the Enforcement Team of the Removal Action Branch, Office of Regional Counsel, and local authorities in an attempt to locate all viable PRPs for cost-recovery purposes. The On-Scene Coordinator will also work closely with the On-Scene Coordinator responsible for any future actions should this Site be eligible for additional mitigation actions under the Removal Program.

Enforcement Cost Estimate

Based on full cost accounting practices, the total EPA costs for this removal action that will be eligible for cost recovery are estimated to be $70,499 and was calculated as follows:

EPA's Total Estimated Project-Related Costs

$50,000 (direct extramural costs) + $5,000 (direct intramural costs) = $55,000

28.18% (Anticipated Region II Indirect Cost Rate) x $55,000 = $15,499(indirect costs)

$55,000 + $15,499 = $70,499 **(Estimated EPA Costs for Removal Action)**

Note: 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 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 the removal action. The estimates are for illustrative purposes only and their use in this Action Memorandum may not be relied upon by any third party as binding upon EPA. Neither the lack of a total cost estimate nor deviation of actual costs from this estimate will affect the United Sates' right to cost recovery.

IX. RECOMMENDATION

This decision document represents the selected removal action for the Barry Bronze Bearing Company Site located in the City of Camden, Camden County, New Jersey, developed in accordance with CERCLA, as amended, and not inconsistent with the NCP. This decision is based on the Administrative Record for the Site.

This Action Memorandum confirms the verbal authorization granted by William McCabe, Deputy Director, Emergency and Remedial Response Division on April 20, 2004, for a total project ceiling of $50,000, of which $35,000 was for mitigation contracting. These funds were from the FY-2004 Advice of Allowance.

Please confirm your approval of the authorization of funding for the Barry Bronze Bearing Company Site, as per the current delegation of authority by signing below.

Approved: _____ Date:_____
George Pavlou, Director
Emergency and Remedial Response Division

Disapproved: _____ Date:_____
George Pavlou, Director
Emergency and Remedial Response Division

cc: (after approval is obtained)

G. Pavlou, 2ERRD
B. Sprague, 2ERR-RAB
D. Karlen, 2ORC-NJSFB
P. Brandt, 2CD
M. Mears, 2CD-PAT
P. McKechnie, 2IG
J. Fajardo, 2ORC-NJSFB
C. Kelley, RST
T. Grier, 5202G
R. Manna, 2OPM-FAMB
T. Riverso, 2OPM-GCMB
A. Raddant, USDOI
J. Daloia, 2ERR-RPB-ERT
D. Kodama, 2ERR-RPB-OPT
B. Dease, 2ERR-RPB-TSS
D. Rosoff, 2ERR-RAB

****<u>CONFIDENTIAL INFORMATION</u> ***

Attachment 3: Enforcement Addendum

ENFORCEMENT ADDENDUM

Barry Bronze Bearing Site

City of Camden, Camden County, New Jersey

A. PRP Search

The PRP search conducted to date has identified Barry Bronze Bearing Company and its owner, Mr. Paul J. DeCoursey Jr., as the primary PRPs for the Site. The facility is currently dormant, having operated from 1928 through 1997.

B. Notification of PRPs of Potential Liability and of the Required Removal Action

Mr. DeCoursey is the owner of the facility and has been the focus of all enforcement activities to date. EPA will continue to investigate Mr. DeCoursey's ability to pay costs incurred by EPA in performing response work at the Site.

C. Decision Whether to Issue an Order

On March 23, 2004, Mr. DeCoursey consented to provide access to EPA for the purposes of conducting the RSE. Mr. DeCoursey has been very cooperative in assisting EPA with its' assessment of the facility and the adjoining property. Mr. DeCoursey has indicated that he is financially incapable of completing the remediation of the Site.

D. Negotiation and Order Issuance Strategy

EPA is preparing to pursue Barry Bronze Bearing Company for recovery of its response costs expended on this response action. Barry Bronze Bearing Company has stated they are financially incapable of performing the necessary remediation work on the Site. Mr. DeCoursey has verbally indicated that he would like to donate the building to the City of Camden for use in the redevelopment plans for this area. The City is unwilling to accept this offer until the environmental concerns have been addressed.

Costs incurred during this removal action will be accurately documented to the extent possible through the issuance of pollution reports.