



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

MAR 21 2003

DATE:

SUBJECT: Confirmation of Verbal Authorization for the CERCLA Removal Action at the One Orient Way, Town of North Caldwell, Essex County, New Jersey -
ACTION MEMORANDUM

FROM: Mark Gallo, On-Scene Coordinator
Response and Prevention Branch

TO: George Pavlou, Director
Emergency and Remedial Response Division

THRU: Bruce E. Sprague, Chief
Response and Prevention Branch

Site ID No.: TP

I. PURPOSE

The purpose of this Action Memorandum is to confirm and document the verbal authorization of March 6, 2003, by George Pavlou, Director, Emergency and Remedial Response Division, to conduct the emergency removal action described herein at One Orient Way, Town of North Caldwell, Essex County, New Jersey (Site). The total project ceiling authorized is \$50,000, of which \$35,000 is for mitigation contracting.

EPA responded to a request from the New Jersey Department of Environmental Protection's Bureau of Emergency Response (NJDEP-BER), to perform a removal action under the provisions of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), as amended, 42 U.S.C. §§9601 *et. seq.* This request was made during the evening of March 5, 2003. This request concerned the existence of low-level radiation sources within a residential home. These sources were initially discovered by the NJDEP-BER on March 1, 2003. The NJDEP requested the assistance of the EPA to expedite the removal of the radiation sources from the residential neighborhood.

This Action Memorandum provides documentation of the removal and disposal of those hazardous substances, pollutants or contaminants from this residence.

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

II. SITE CONDITIONS AND BACKGROUND

A. Site Description

1. Removal Site Evaluation

Based on a request from NJDEP-BER, EPA responded during the morning of March 7, 2003, in order to perform a removal site evaluation of the Site which is located in a residential area. EPA confirmed earlier findings of the NJDEP. EPA Findings indicated that low-level radiation sources were staged within the first floor bathroom. The Site had previously contained chemical hazardous wastes that were removed by the NJDEP-BER. The owner of the residence was found deceased in the home on February 27, 2003 by the North Caldwell Police Department (NCPD) and the next of kin had yet to be identified. The Site was currently under the control of the NCPD. The owner/occupant was a 57 year old former electrical engineer by the name of Henry Jasinski.

Prior to EPA arrival, the NJDEP-BER had conducted a radiation survey of the Site, along with the NJDEP Radiation Protection Program. This survey was conducted on March 4, 2003. The NJDEP survey discovered the low-level radiation sources within the first floor bathroom. The NJDEP secured the bathroom and investigated potential disposal options. One of NJDEP's options was to request the assistance of the EPA. This option appeared to be the best with respect to mitigating the Site in an expedient manner.

On March 6, 2003, EPA received an inventory of items found during the NJDEP survey and observed that all surveyed sources were listed in Table 302.4 of 40 CFR 302, Radionuclides Listed Under CERCLA. Upon viewing the NJDEP survey information, and in consultation with the EPA Region 2 Radiation Program, the On-Scene Coordinator (OSC) made the determination to seek verbal authorization for a CERCLA Removal Action at the Site.

2. Site Characteristics

The Site is an approximate 2,000 square foot, two story, single family dwelling situated on an approximate quarter acre lot of a residential neighborhood. The first story of the dwelling contained an entry foyer, living room, bathroom, workshop, and laundry room. The radioactive sources were located and secured in the bathroom. The second story of

the dwelling was primarily used as living space. It contained two bedrooms, a family room, kitchen, and a study area. The study area appeared to have been converted into a workshop and contained many devices that appeared to be part of electrical experiments and/or devices of invention by the occupant, Mr. Jasinski.

The area within ½ mile of the Site can be characterized as residential with some light commercial use. A 2000 Census statistics report indicated the following:

Total Population	1,065
Total Households	440
% Minority	7.9 %
% Below Poverty	1.9 %

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

The radioactive materials stored in the bathroom of the house, include materials which are toxic and/or potentially carcinogenic. A complete inventory of materials was developed on March 7, 2003. Neither local nor state officials were capable to handle the materials within an acceptable time period. Additionally, no provisions existed for their ultimate disposition, once removed from the house. State and local officials requested assistance from EPA due to the need for proper handling and disposal of the hazardous substances. The following is a list of designated CERCLA hazardous substances identified at the Site.

<u>Substances Identified</u>	<u>Statutory Source for Designation as a Hazardous Substance under CERCLA</u>
Radium 226	Section 112 Clean Air Act (CAA)
Thorium 232	Section 112 Clean Air Act (CAA)
Americium 241	Section 112 Clean Air Act (CAA)

If released, the radioactive materials could have caused potentially detrimental and unnecessary exposures to surrounding populations and/or the environment. Improper handling could have resulted in a release of those materials.

All of the compounds listed above are radioactive isotopes. All radioactive isotopes emit ionizing radiation, which has the potential to be carcinogenic. Thorium-232, Americium-241, and Radium-226 all emit alpha particles, which has a primary path of exposure via inhalation and/or ingestion. Radium-226 and Americium-241 also emit gamma radiation as well.

Chemically, radium resembles calcium in its metabolism and may consequently be deposited in the bone from oral exposures. Its long half-life as a radioisotope (1620 years), combined with its long retention time in the body would allow cumulative toxicity with chronic exposure.

4. NPL Status

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

B. Other Actions to Date

1. Previous Actions

No previous actions had taken place at this Site.

2. Current Actions

There are no current operations going on at the Site. Materials have been shipped to an interim storage facility where materials will be solidified in concrete and left to cure for 28 days prior to shipping to final disposal location(s).

C. State and Local Authorities' Roles

1. State and Local Actions to Date

Upon the initial discovery of the incident NJDEP conducted an initial survey and discovered the radioactive materials along with several containers of corrosive, flammable, and/or reactive chemicals. The NJDEP conducted an action to remove the chemicals from the Site. NJDEP indicated to EPA that NJDEP did not have the resources to conduct a removal action for the radioactive materials within an appropriate time frame. A verbal request to EPA for removal consideration was made on March 6, 2003. The NJDEP indicated that the local government also lacked the resources to conduct this removal action.

2. Potential for Continued State/Local Response

Neither the NJDEP nor the local government had the resources available to do the necessary removal action at the Site. However, both organizations provided assistance to EPA during the removal action.

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

A. Threats to 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 NCP Section 300.415(b)(2) that support conducting a removal action at the Site include Sections (b)(2)(i),(iii) and (vii):

- (i) **Actual or potential exposure to nearby human populations, or the food chain from hazardous substances, pollutants and contaminants;**
- (iii) **Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers that may pose a threat of release;**
- (vii) **The availability of other appropriate federal or state response mechanisms to respond to the release.**

B. Threats to the Environment

As discussed in III.A., above, there was potential for hazardous substances being released to the environment by improper handling or disposal of the materials. Radioactive materials were present on the Site, in containers not appropriate for shielding and/or containing the ionizing radiation emitted from the radiation sources. Materials were stored in glass vials and small plastic containers.

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, or welfare, or the environment.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

A. **Proposed Actions**

1. Proposed Action Description

The following actions were used to mitigate the threats posed by the presence of hazardous substances at the Site:

- a) establish site stabilization;
- b) conduct full inventory during the assessment;
- c) stage all hazardous substances in a location where they could be properly handled;
- d) conduct field hazard categorization screening and/or Gamma Spectrometry of unknown materials to identify radioactive isotopes, and properly package all hazardous waste; and
- d) transport and disposal of hazardous substances and other materials generated during the removal.

The method of disposal is by landfill at a RCRA compliant hazardous waste disposal facility, in accordance with EPA's CERCLA Off-Site Disposal Rule. Prior to landfilling of radioactive materials, the materials will be solidified in a cement mixture, allowed to cure for 28 days, and then be shipped to the final disposal facility.

2. Contribution to Remedial Performance

This removal action has addressed the entire threat posed by the contamination at this Site. As such, we do not anticipate the need for any further long-term remedial action at this Site.

3. Description of Alternative Technologies

No alternative technologies were appropriate for conducting the removal at this Site.

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

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

VI. EXPECTED CHANGE IN THE SITUATION HAD ACTION BEEN DELAYED OR NOT TAKEN

Delayed action or no action would have resulted in potentially improper handling and/or disposal of the materials stored in the house. Additionally, there are questions regarding the ultimate use or intended purpose of those materials, which may have resulted in a release to the environment and/or exposure to the public.

VII. OUTSTANDING POLICY ISSUES

None.

VIII. ENFORCEMENT

Efforts will be made to identify any viable Potentially Responsible Parties (PRPs) to assume responsibility for the cost of the cleanup. The OSC will work with the Removal Action Branch and the Office of Regional Counsel in attempting to recover cleanup costs from any and all PRPs.

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 \$70,499 as shown below:

Direct Extramural and Intramural Costs

\$ 50,000 (Direct) + \$ 5,000 (EPA Intramural)	\$	55,000
28.18 % Region-specific Indirect Cost Rate X \$ 55,000	\$	<u>15,499</u>
Estimated EPA Cost for Removal Action:	\$	70,499

Footnote: 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 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 Action Memorandum represents confirmation of the verbal authorization on March 6, 2003, by George Pavlou, Director, Emergency and Remedial Response Division, for the removal action at the Orient Way Radiation Site, Town of North Caldwell, Essex County, New Jersey. The matters set forth here have been developed in accordance with CERCLA, as amended, and are not inconsistent with the NCP. These decisions are 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.

The total project ceiling is \$50,000, with a mitigation ceiling of \$35,000. Please indicate your approval of the authorization of funding for the Orient Way Radiation Site, as per the current delegation of authority, by signing below.

Approved: John Fusio Date: 3/21/03
 for George Pavlou, Director
 Emergency and Remedial Response Division

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

cc: (upon approval)

G. Pavlou, 2ERRD
 B. Sprague, 2ERR-RPB
 J. Higgins, 2ERR-RPB
 J. Daloia, 2ERR-RPB
 B. Dease, 2ERR-RPB
 J. Witkowski, 2ERR-RAB
 M. Truono, 2ERR-RAB
 D. Vizian, 2OPM-FMB
 K. Weaver, 2OPM-GCMB
 A. Tao, 2OPM-GCMB
 D. Karlen, 2ORC-NJSFB
 R. Manna, 2OPM-FMB
 P. Brandt, 2PA

D. Sweeney, NJDEP-BER
 P. McKechnie, 2OIG
 C. Beasley, 5202G
 C. Kelley, RST
 A. Raddant, USDOJ

*****CONFIDENTIAL*****

DO NOT RELEASE UNDER FOIA - ENFORCEMENT SENSITIVE

DO NOT PLACE IN ADMINISTRATIVE RECORD

DO NOT RELEASE TO PUBLIC

CONFIDENTIAL ENFORCEMENT ADDENDUM

Orient Way Radiation Site
One Orient Way
Town of North Caldwell, Essex County, New Jersey

A. Potentially Responsible Parties (PRP) Search

The PRP search for the Site has been initiated. As of the date of this Action Memo, no viable PRP has been identified.

The listed property owner, Henry Jasinski, was found deceased in the dwelling at One Orient Way, North Caldwell, NJ. Local authorities are still attempting to make contact with any living relatives.

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

Enforcement activities, including the issuance of a demand letter for removal costs, will be directed to any identified PRPs.

C. Decision to Issue an Order

The inability of the local authorities to make contact with any relatives of the deceased and the emergency nature of this action have precluded negotiation of an order.

D. Negotiation and Order Issuance Strategy:

This is not applicable, as described above.