United States Environmental Protection Agency - Region 2
Response and Prevention Branch
2890 Woodbridge Ave., MS-211
Edison, New Jersey 08837

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION REPORT

I. HEADING

Date: 27 March 2003

From: Mark Gallo, OSC

Subject: Orient Way Radiation Site
1 Orient Way
North Caldwell, NJ

To:

B. Sprague, 2ERR-RPB	D. Karlen, 2ORC-NJSFB
J. Higgins, 2ERR-RPB	R. Manna, 2OPM-FMB
J. Daloia, 2ERR-RPB	P. Brandt, 2PA
B. Dease, 2ERR-RPB	D. Sweeney, NJDEP-BER
J. Witkowski, 2ERR-RAB	R. Byrnes, EPA, 2OIG
M. Truono, 2ERR-RAB	C. Beasley, 5202G
A. Tao, 2OPM-GCMB	C. Kelley, RST
C. Petersen, 2ERRD-NJRB	A. Raddant, USDOI
G. Zachos, EPA 2ERRD	LCDR W. Blake, NOAA
W. Lometti, 2CID	A. Block, ATSDR

PolRepN°: One (1)

II. BACKGROUND

Site Number:	TP
Delivery Order N°:	0070
Response Authority:	CERCLA
NPL Status:	Not on NPL
Action Memorandum Status	Emergency Action (Pending Signature)
Start Date:	6 March 2003
Completion Date:	

III. SITE INFORMATION

On the evening of March 5, 2003, EPA was requested to conducted an emergency removal action at a residential property in North Caldwell, NJ. The dwelling owner/occupant was found deceased in the home by local police on February 27, 2003. Local PD discovered corrosive, flammable, and reactive chemicals in the dwelling and contacted County HazMat and NJDEP-BER. On February 28, 2003, the NJDEP-BER conducted an emergency removal and also discovered low-level radiation sources.

On March 6, 2003 the NJDEP-BER requested EPA to conduct an emergency removal action to contain, package and dispose the radioactive materials. NJDEP and Local Authorities were unable to conduct such an action within the necessary time frame. EPA obtained a verbal commitment to fund the action on March 6, 2003 and mobilized ERRS and RST on March 7, 2003.

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 owner/occupant.

IV. RESPONSE INFORMATION

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 site operations consisted of characterizing the radioactive materials using a Gamma Spectrometer and collecting surface area wipe samples which were screened for alpha/beta particles using a Radiation Particle Counter. This was conducted by a Health Physicists, sub-contractor (CoPhysics) to EPA's Emergency & Rapid Response Services (ERRS) Contractor. EPA, a representative from the EPA Removal Support Team (RST), and the Health Physicist from CoPhysics also conducted a radiation survey of the residence. No other radiation sources were discovered during that survey.

Site operations were completed on March 7, 2003 and the radioactive materials were shipped to an interim storage facility, Radiac Research, Brooklyn, NY. The radioactive materials will be mixed with and solidified in cement and allowed to cure for 28 days prior to transporting to the final disposal destination in Barnwell, South Carolina. The radioactive wastes included; radium-226 (old watch dials), americium-241 (old smoke detector device), and thorium oxide powder containing thorium-232.

V. NEXT STEPS

While awaiting final disposal, EPA will need to obtain a permit for disposal at the Barnwell, SC facility. Once a permit has been secured and the solidified radioactive waste has cured for the appropriate amount of time, EPA will initiate the final disposal of the wastes. A final Pollution Report will be generated upon receipt of Disposal Certificates.

VI COST TO DATE*

ERRS (Including Awaits)†	$	15,500.00
EPA	$	2,000.00
RST	$	500.00
USCG-AST	$	0.00
ERT / REAC	$	0.00
TOTAL	**$**	**18,000.00**
PROJECT CEILING	**$**	**50,000.00**
% OF PROJECT CEILING REMAINING		**64%**

* This is an estimated total

† ERRS cost is an estimate and includes all projected costs for such items as site security utilities and trailer

DISPOSITION OF WASTE

Waste Stream	Radionuclides	Quantity	Manifest	Disposal Facility
Radioactive Material, excepted package-limited quantity of material †	Radium 226 Americium 241 Thorium 232	20 lbs	RAD-76422	Radiac Research Brooklyn, NY (Interim) Chem Nuclear Barnwell, SC (Final) ††

† Non-RCRA waste, shipped as CERCLA waste

†† Final disposal awaiting permit and curing of cement. Estimate shipment for final disposal is April 7,2003.