

U.S. ENVIRONMENTAL PROTECTION AGENCY  
POLLUTION/SITUATION REPORT  
Wolff-Alport Chemical Company Radiological Site RV1 - Removal Polrep  
Final Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region II

**Subject:** POLREP #26  
Final PolRep  
Wolff-Alport Chemical Company Radiological Site RV1  
A282  
Ridgewood, NY  
Latitude: 40.6923130 Longitude: -73.9025100

**To:**  
**From:** Eric M. Daly, On-Scene Coordinator  
**Date:** 8/11/2014  
**Reporting Period:** July 09, 2014 thru August 11, 2014

## 1. Introduction

### 1.1 Background

<b>Site Number:</b>	A282	<b>Contract Number:</b>	EP-S2-10-01
<b>D.O. Number:</b>	0057	<b>Action Memo Date:</b>	8/21/2013
<b>Response Authority:</b>	CERCLA	<b>Response Type:</b>	Time-Critical
<b>Response Lead:</b>	EPA	<b>Incident Category:</b>	Removal Action
<b>NPL Status:</b>	Non NPL	<b>Operable Unit:</b>	
<b>Mobilization Date:</b>	10/23/2012	<b>Start Date:</b>	9/27/2012
<b>Demob Date:</b>	8/9/2014	<b>Completion Date:</b>	8/9/2014
<b>CERCLIS ID:</b>	NYC200400810	<b>RCRIS ID:</b>	
<b>ERNS No.:</b>		<b>State Notification:</b>	
<b>FPN#:</b>		<b>Reimbursable Account #:</b>	

#### 1.1.1 Incident Category

Short Term Time Critical Response

#### 1.1.2 Site Description

The original building was subdivided and currently, the site contains several buildings that have been divided into several businesses. The total land area covers 0.75 acres bound by Irving Avenue on the southwest, and Cooper Avenue on the northwest. At one time, a railroad spur extended to the rear of the buildings; now there is an active rail line adjacent to the site within 125 feet. The spur area is presently unpaved and vegetated. The rear of these buildings is partially fenced, mostly overgrown with vegetation, and is used for storage of construction equipment and a couple of small boats. The surrounding neighborhood contains light industry, commercial businesses and residences.

The businesses at the site include a delicatessen and grocery store (1125 Irving Avenue), office space and unoccupied residential apartments with an attached building housing a tire shop (1125 Irving Avenue) and mini-ATV shop; a building with an auto body shop (15-14 Cooper Avenue) and office space; two buildings used for warehouse purposes (1133-1139 Irving Avenue and 1129 Irving Avenue); and a commercial building with an auto repair shop (1127 Irving Avenue).

##### 1.1.2.1 Location

The Site is located at 1127-1129 Irving Avenue, in Ridgewood, New York located on the Brooklyn/Queens border.

##### 1.1.2.2 Description of Threat

The Site contains active businesses that operate within structures formerly used by Wolff-Alport, a processor of materials that contained radioactive properties. The presence of radioactivity has been documented within and underneath the identified buildings, in the soil at the rear of the structures along a former rail spur, underneath the sidewalk along Irving Avenue in front of the former Wolff Alport building. Persons that work in or access the buildings at the Site or traverse the public sidewalk in front of the Site or trespass the rear portion of the Site will be exposed to ionizing radiation by passing over or coming into contact with these impacted areas. The area around the Site is, in part, residential in nature. A deli/grocery store on the corner of Irving and Cooper Avenues may tend to increase the number of persons that access the sidewalk in front of the Site. The railroad spur behind the building appears to be an area that is accessed by people. Any excavation conducted at the Site, including on Irving Avenue, could result in increased direct gamma radiation exposures to persons working or walking in and around the disturbed area.

Surveys conducted at the Site indicate that elevated levels of radioactivity are present within one foot of the surface at the rear of the Site on the former rail spur. The area consists of bare soil overgrown with weeds. Although the parcel on which the former rail strip is reportedly considered abandoned and current ownership is questionable, the parcel is used to store heavy machinery, crane equipment and, on occasion, vehicles. As a result, the radioactive contamination can be spread offsite under this scenario and potentially be available for inhalation as a particulate since the streets near the Site sustain a significant amount of vehicular movement. Any excavation conducted at the Site, including on Irving Avenue, could result in an increased chance of contaminant migration, both directly on the roadway and through an airborne pathway, which could impact persons near the Site.

### 1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

## 2. Current Activities

### 2.1 Operations Section

#### 2.1.1 Narrative

Site Planning and Assessment Activities:

**August 31, 2012:** NYS DEC/ NYS DOH Referral received by Walter Mugdan, USEPA, ERRD Director.

**September 05, 2012:** First biweekly inter-agency phone conference

Participants:

United States Environmental Protection Agency (US EPA)  
Agency for Toxic Substances and Disease Registry (ATSDR)  
United States Department of Energy (US DOE)  
New York State Department of Conservation (NYS DEC)  
New York State Department of Health (NYS DOH)  
New York City Department of Health and Mental Hygiene (NYC DOHMH)  
New York City Department of Environmental Protection (NYC DEP)

**September 19, 2012:** Biweekly inter-agency phone conference.

**September 20, 2012:** OSC mailed out property access agreements in coordination with EPA ORC and EPA RAB Enforcement Team:

- Arctic Glacier (Block 3725/Lot 42-Businesses: Primo #2 and Terra Nova)
- LPL (Block 3725/Lot 44-Business: Primo #1)
- Department of Education (Block 3442/Lot 1-Business: IS 384 school)
- Naftali Steinmetz (Block/Lot-Business: Audrey Johnson Daycare)
- David Weiss (Block 3725/Lot 46-Business: Jarabacoa Deli)

**September 21, 2012:** OSC mailed out property access agreements:

- AFG (Block 3725/Lot 31-Business: Railroad Spur)

**September 24, 2012:** Arctic Glacier (Primo #2/Terra Nova) signs access agreement.

**September 25, 2012:** ERRD Director issues verbal funding in the amount of \$320,000 of which \$250,000 is

**September 26, 2012:** Wolff Alport Technical Workgroup held a phone conference to discuss shielding and possible shielding alternative.

**September 27, 2012:** Wolff Alport Property Owner/Business Operator/Worker Meeting

**September 27, 2012:** KEMRON Task Order Issued

**October 03, 2012:** Biweekly inter-agency phone conference.

**October 09, 2012:** Weston TDD processed for response action and Spanish interpreter.

**October 10, 2012:** Elected Official Information Session held.

**October 10, 2012:** Public Information Session held.

**October 11, 2012:** Naftali Steinmetz (Audrey Johnson Daycare) signs access agreement.

**October 12, 2012:** Action Memo short version draft submitted to RPB/RAB management.

**October 16, 2012:** EPA OSCs obtain concrete slab for shielding pilot study.

**October 17, 2012:** Community Board #4 Meeting held.

**October 17, 2012:** Biweekly inter-agency phone conference.

**October 18, 2012:** EPA OSCs obtain steel plates for shielding pilot study.

**October 18, 2012:** NYC Department of Education (IS 384 School) signs access agreement.

**October 22, 2012:** Lenny Piccolo (Primo #1) signs access agreement.

**October 22, 2012:** OSCs meet with Arctic Glacier Representatives (George Geanacopoulos, Lenny Piccolo, Iggy) to verify boundaries described in deeds/tax maps of Lots 42 and 44. It was confirmed that Primo #2 and Terra Nova are on Lot 42. Primo #1 is on Lot 44 (LPL). OSCs meet with Boro Cabinet Representatives (Cohen Brothers). OSCs request EPA Civil Investigator Team (Coakley/Savino) regarding Lot 31 ownership and abandoned vehicle (2 boats/1car) ownership.

## 2.1.2 Response Actions to Date

**October 23, 2012:** EPA OSC meet ERRS on-site. (Mobilization date)

**October 24, 2012:** EPA OSCs, EPA RIAB, NYC DOHMH, KEMRON, and Weston conducted shielding pilot study at the most elevated radiation levels along Irving Avenue Sidewalk in front of Lot 42 and 44 (Primo Auto Body Bays #1/ #2 and Terra Nova). Shielding study was also conducted inside of Primo Auto #2 Bay. The team also surveyed the sidewalk along Irving Avenue and delineated elevated radiation levels. The area was marked out with pink spray paint (NYC Color Code for survey work). OSC handed written access agreement to Boro Cabinet.

**October 25-26, 2012:** EPA OSCs, EPA RIAB, NYC DOHMH, KEMRON, and Weston tamp down foliage on Lot 31, stack debris, and conduct gross radiation survey to identify hot spots. Crane Company (Auringer) was contacted in person to remove remaining metal plates on Lot 31. The hole in the basement of IS 384 School was sealed.

**November 10, 2012:** EPA OSCs, EPA RIAB, NYC DOHMH, KEMRON, and Weston performed survey and delineated elevated radiation at Primo #1, Primo #2, and Terra Nova.

**December 10, 2012:** Radon canisters were placed in IS-384 crawl space area and throughout Audrey Johnson Daycare. The basement area of IS-384 and portions of Audrey Johnson Daycare were surveyed using the Rad7. One Rad7 unit was left in the IS-384 crawl space (where the sealed hole is located) to capture data for a three day period.

**December 13, 2012:** The radon canisters were picked up from IS-384. The Rad7 that was left for two days in IS-384 had some technical problems. The instrument was set up again on 12/13/12 and left it for collection until 12/19/12. The radon canisters were picked up from Audrey Johnson Daycare as well and all the canisters brought to the laboratory on 12/14/12. The Rad7 was used to complete the survey of the basement, offices and classrooms of Audrey Johnson Daycare. All quick survey readings using the Rad7 in both schools showed no increase above background in any of the occupied spaces. However, in one of the electrical closets in the basement of Audrey Johnson Daycare (A closet with an open window to Moffat Street) there were slight increased readings.

**December 18, 2012:** Radon canisters were placed in both Primo bays as well as Terra Nova. OSC Daly, Weston and NYC Health observed the workers in all three bays from 9 AM-5 PM to assist in determining the occupancy factor. The observers used the diagrams from the previous gamma delineation survey study to identify radiation level areas within the buildings. A chart was filled out with personnel, times and location specifics. This along with previous information/employee interviews will be used to determine the occupancy factor needed for the shielding calculations. OSC Daly is still working with the EPA attorney to gain access to the deli. This radon sampling will need to be performed separately.

**December 19, 2012:** The Rad7 was removed from IS-384 and then brought to Audrey Johnson Daycare basement closet for a three day run.

**December 21, 2012:** The radon canisters were picked up from both Primo bays and Terra Nova. The canisters were brought to the laboratory. The Rad7 was picked up from Audrey Johnson Daycare and then used to perform quick surveys at the Primo and Terra Nova Facilities.

**December 27, 2012:** The radon results for IS-384 and Audrey Johnson Daycare came back below the EPA action level of 4 pCi/l.

**January 02, 2013:** Bi-weekly inter-agency phone conference.

**January 03, 2013:** EPA OSC received the signed access agreement from the Bethel Church of God/Lot 31.

**January 08, 2013:** EPA OSCs met with NYC DOT to go over sidewalk shielding specifics and permit requirements.

**January 09, 2013:** The radon results for Primo and Terra Nova came back. There were a few readings that were slightly above the EPA action level of 4 pCi/l. Additional sampling will be performed in these areas to confirm these results.

**January 10, 2013:** EPA, NYC DOHMH and Weston performed the radiological survey on Lot #30 (Boro Cabinets) and Lot #31 (Old railroad spur).

**January 15, 2013:** The technical group had a phone conference discussing the shielding recommendation document compiled by EPA and NYC DOHMH.

**January 23, 2013:** David Weiss, Lot 46, faxed the signed access agreement.

**January 28, 2013:** OSC Daly visits Lot 46 tenants to set up radon sampling and analysis for February 4-6, 2013.

**February 4, 2013:** Radon canister placement at Deli Basement, Deli main floor, and Apartment # 2 (Lot 46). Canisters also placed at Primo #1 and Terra Nova for verification sampling.

**February 5, 2013:** Rad 7 Survey at Deli Basement, Deli main floor and Apartment #2

**February 6, 2013:** Deli Basement PIC survey conducted. Rad7 ran for 2 hours.

**February 7, 2013:** Radon canister results for Deli Basement, Deli main floor, and Apartment # 2 (Lot 46) are all below 4 pCi/l. However, there were elevated radon readings near basement hole that exhibited readings at

approximately 3 pCi/l. Radon canisters results for Primo #1 and Terra Nova were below 2.5 pCi/l. The Rad7 readings showed increased Thoron near the basement hole which is consistent with previous investigation of holes/drains in the area. Further radon sampling for these areas are being planned.

**February 13, 2013:** Bi-weekly inter-agency phone conference.

**March 21, 2013:** NYC DOHMH Health Physicist submitted revised proposed shielding document with new Lead layer options.

**March 25, 2013:** Property surveyor and fencing subcontractors were selected. The tentative start date for the surveying of Lot 31 is April 8, 2013. Fencing subcontractor will tentatively begin installation on April 9, 2013.

**April 08, 2013:** OSC and ERRS Mobilizes at the Site to prepare Lot #31 for fencing and shielding operations.

**April 09, 2013:** Property boundary survey and fence installation begins.

**April 10, 2013:** Monthly inter-agency phone conference.

**April 16, 2013:** Concrete Shielding is installed on Lot #31 (Railroad Spur Property) on the ground along the back of Primo #2 and Terra Nova section of the building. The fencing installation continues. Terra Nova Representatives (Lot #44) agrees with shielding proposal.

**April 17, 2013:** Rock and clean fill was dropped off and spread in the area of the office trailer (Moffat Street Gate) to form a capped section. The capped section serves multiple purposes. First it serves as shielding of the elevated radioactive soil. The Ludlum 19 readings of the capped area ranges from 10-15 microR/Hr. The Ludlum 19 readings at the edge of the capped area are 35-40 microR/Hr. Secondly, this cap will prevent spread of contaminated soil and will be the "clean" zone. This area will be utilized as the command post for upcoming operations as well as used for parking vehicles and equipment staging. The fencing installation continues. Once the fence is complete, the uncapped area will be off limits.

**April 19, 2013:** Fence is completed. OSC meets with radon mitigation system specialist to perform a walkthrough at the Terra Nova facility.

**May 02, 2013:** Property Owner for Lot #42 (Primo #2/Terra Nova) agrees to shielding proposal.

**May 05, 2013:** Property Owner for Lot #44 (Primo #1) agrees to shielding proposal.

**May 08, 2013:** Monthly inter-agency phone conference.

**May 14, 2013:** Primo Representative (Tenant at Lot # 42 and Lot # 44) agrees with shielding proposal.

**May 23, 2013:** KEMRON Response Manager provides OSC with cost estimate for remainder of response action.

**June 03, 2013:** OSC and KEMRON mobilize at site. The electrician installed an outlet for the radon mitigation system at Terra Nova Facility. Geotextile fabric and rock/soil mix were dropped off at Lot #31 in order to continue the coverage of the railroad spur property.

**June 06, 2013:** Rock/soil mix covering complete at Railroad Spur property. OSC and KEMRON demobe from Site.

**June 13, 2013:** NYS and NYC requested EPA's assistance in surveying the perimeter around the Wolff Alport Site. Video phone conference with EPA management, OSCs, EPA Health Physicist, NYC DOHMH, NYC DEP, NYS DOH, and NYS DEC.

**June 19, 2013:** Monthly inter-agency phone conference.

**June 26, 2013:** The Action Memo was revised by OSC Daly and OSC Ferriola and then sent to RPB and RAB Management.

**July 01, 2013:** Perimeter Survey phone conference with EPA management, OSCs, EPA Health Physicist, NYC DOHMH, NYC DEP, NYS DOH and NYS DEC.

**July 12, 2013:** Perimeter Survey phone conference with EPA management, OSCs, EPA Health Physicist, NYC DOHMH, NYC DEP, NYS DOH and NYS DEC.

**July 17, 2013:** Monthly inter-agency phone conference.

**July 23, 2013:** The Action Memo was revised and reviewed by RPB Management.

**July 25, 2013:** Perimeter Survey phone conference with EPA management, OSCs, EPA Health Physicist, NYC DOHMH, NYC DEP, NYS DOH and NYS DEC.

**July 26, 2013:** Perimeter Survey Plan finalized by EPA OSCs, EPA Health Physicist, NYC DOHMH, NYC DEP, NYS DOH and NYS DEC.

**July 29, 2013:** Perimeter Survey Field Teams mobilized at Wolff Alport Site (EPA -OSCs Daly and Ferriola, Oleg Povetko, Mazeeda Khan, NYC DOHMH, NYS DOH, Weston and KEMRON). Survey instrumentation utilized includes: Rad7 (Radon/Thoron Gas detection), Fluke Pressurized Ion Chamber Radiation Survey Meter (Hand held Gamma Radiation detection) and Mobile Detection System (Vehicle Gamma Radiation detection). Surface soil samples may be obtained by NYS DOH if elevated readings are discovered. Radon

canisters were placed in the Terra Nova office to obtain radon results after the mitigation system was modified on June 03, 2013.

**August 5, 2013:** Perimeter Survey completed.

**September 4, 2013:** OSC at the Site for mobilization and staging of two (2) 20'Conex Storage Containers and one (1) Office Trailer Generator. Weston Personnel was on-site to start labeling items and taking information in Primo #1.

**September 8, 2013:** Mobilization of OSC, ERRS (Foreman and two (2) Techs) and one (1) Weston Tech. Site Command Post Trailer set up. Railroad Spur Lot cleared of brush for staging. The labeling and inventory of Primo #1 equipment continues.

**September 9, 2013:** Mobilization of additional ERRS Personnel (Operator and one (1) tech). Primo #1 cleanout commences. Equipment being systematically relocated to staged storage containers Railroad Spur Property (Lot 31).

**September 10, 2013 thru September 13, 2013:** Relocation of equipment to storage containers continued. OSC Ferriola visited Site to finalize lead (Pb) Shielding design. A six foot deep pit was discovered under a wooden stage in the rear of Primo #1. Primo #2 Compressor is located on the stage. OSC Gallo coordinated site work on September 12th and September 13th.

**September 15, 2013:** Primo #1 stage dismantling and compressor relocation.

**September 16, 2013:** Primo #1 Pit cleared of debris. Gamma survey performed on the pit soil using the Ludlum 19. There were two areas (approximately 5'x3' each) that gave a reading of 500 microR/hr ( $\approx$ 333 microR/hr using PIC conversion) on contact. These same areas gave readings of 275 microR/hr ( $\approx$ 183 microR/hr using PIC conversion) at 3' above the soil surface. The average reading on contact throughout the pit was 225 microR/hr ( $\approx$ 150 microR/hr using PIC conversion). Relocation of materials from Terra Nova started.

**September 17, 2013:** Eighty yards of clean soil received to fill pit in Primo #1. Gamma survey was performed on the pit area with the clean fill and the readings ranged from 50 microR/hr to 100 microR/hr ( $\approx$ 33 microR/hr to 67 microR/hr using PIC conversion) on contact. Terra Nova vehicle was relocated to railroad spur and covered.

**September 18, 2013:** Primo #1 floor drain cleared and sewer piping located in the pit was capped. The filling of the pit with clean soil was completed and graded. Fence repairs made on the East side of the Fence as well as the gate on Cooper Avenue.

**September 19, 2013:** OSC Pellegrino is on-site to oversee activities. The lead shielding and wire mesh placement on the floor has commenced. Primo #1 Air Compressor was relocated to the front of the bay.

**September 20, 2013:** OSC Pellegrino is on-site to oversee activities. The lead shielding and wire mesh placement on the floor continues. Cecilia Echols (Public Affairs) visited the Site and passed out the updated fact sheet to the community.

**September 22, 2013:** The masons visited the site to finalize the preparation for concrete pour in Primo #1. The doors in the Terra Nova Office were raised. Terra Nova relocation of equipment continues.

**September 23, 2013:** The concrete pour in Primo #1 commenced. OSC Ferriola and Mazeeda Khan (EPA/RIAB) visited the site during the concrete shielding installation. Relocation of Terra Nova equipment continues.

**September 24, 2013:** The masons finished the concrete edges in Primo #1. The Ludlum 19 Post Shielding Gamma Survey of Primo #1 was conducted. The majority of the concrete floor readings were 50 microR/hr ( $\approx$ 33 microR/hr using PIC conversion) or lower. One area against the wall of Primo #2 had a reading of 75 microR/hr ( $\approx$ 50 microR/hr using PIC conversion). Tentative plans are being made for NYC and NYS representatives to survey Primo #1 with a PIC. Terra Nova relocation of equipment continues.

**September 25, 2013:** Cecilia Echols (Public Affairs) visited the Site and passed out the updated fact sheet to new locations in the community. Terra Nova relocation of equipment continues

**September 26-27, 2013:** OSC Pellegrino is on-site to oversee activities. Terra Nova relocation of equipment continues. Steel ramp materials for Primo #1 received and construction started.

**September 29, 2013:** Terra Nova relocation of equipment continues. Primo #1 small pit (water piping) located in the front of the bay is being shielded with lead (Pb) and concrete. Shielding specifics for the sidewalk along Irving Avenue utilizing a non-slip steel material are being developed.

**September 30, 2013:** Terra Nova relocation of equipment complete and concrete pour preparation commenced. After consultation with EPA and NYC Health Physicists, it was determined that a transition from 6 inches of concrete to 4 inches of concrete in the front of Primo #2 is sufficient shielding with 1/8 inches of lead (Pb). The transition will start at 19 feet from the entrance. This transition will lessen the pitch of the steel ramp.

**October 01, 2013:** Primo #1 Steel Ramp primer coating applied. The concrete prep and the laying of the wire mesh/lead (Pb) shielding continues in Terra Nova. The Federal Government announces shutdown. The shutdown will not affect the work at Wolff since it has been designated as Excepted.

**October 02, 2013:** Concrete Pour in the main area of Terra Nova. The Primo #1 Steel Ramp was painted with the non-slip coating.

**October 03, 2013:** OSC Pellegrino is on-site to oversee activities until 10/05/13. Cleanout of Terra Nova Office conducted. Interior office walls and floor prepped for concrete pour.

**October 04, 2013:** Terra Nova Office concrete poured and interior sheetrock spackled.

**October 05, 2013:** Terra Nova Office floor tiled. Materials ordered to replace storage closet.

**October 06, 2013:** Terra Nova tile grout put down. Sheetrock sanded and painted. Baseboard put up.

**October 07, 2013:** Terra Nova Office being finalized and the storage closet construction started. NYC Health Physicist and Weston are conducting post-shielding PIC surveys in Primo #1 and Terra Nova. Primo #1 sewer line back up. All readings were below 75 microR/hr with the exception of two areas in Primo #1 (an area in the left rear corner and one area that shares a wall with Primo #2). Both areas will be addressed.

**October 08, 2013:** Post shielding survey identified higher levels of gamma radiation near the left rear corner of Primo #1 (109 microR/hr with the PIC). This area was covered by a wooden stage and debris when the initial survey was conducted. Dirt and then lead (Pb) were placed inside the cinder blocks before being filled with concrete. This did not bring the gamma radiation down with a reading of 150 microR/hr with the Ludlum 19 (Approximately 100 microR/hr with the PIC conversion). The cinderblock section is now being entirely wrapped in lead and then a concrete bench poured over it to seal in the lead. The lead shielding alone provided enough to bring the reading down to 50 microR/hr using the Ludlum 19. NYC Department of Health and NYC DEP were contacted about Primo #1 sewer backup. Terra Nova storage closet construction continues.

**October 09, 2013:** Primo #1 framing and concrete pour in rear corner cinderblock area. Terra Nova storage closet construction continues. Post Shielding Survey diagram emailed out to the technical group. Wolff Monthly Phone Conference. OSC met with Arctic Glacier manager to discuss NYC DEP visiting area to conduct dye test from the facilities on both sides of Irving Avenue.

**October 10, 2013:** OSC Pellegrino overseeing site activities on 10/10/13 and 10/11/13. Overhead lighting and air compressor hookup installed in Primo #1. Equipment transfer from Primo #2 to Primo #1 started. Shelving and some supplies transferred from storage to Terra Nova.

**October 11, 2013:** Primo #1 compressor air line complete. Transfer of equipment continues from Primo #2 to Primo #1. NYC DEP performed dye test on sewer system. No blockage from Primo #1, Primo #2 and Terra Nova. The deli basement drains to Cooper sewer. Arctic Glacier facility (on opposite side of Irving Avenue from Primo and Terra Nova) experiencing blockage. NYC DEP will return on 10/16/13.

**October 13, 2013:** Transfer of equipment continues from Primo #2 to Primo #1. Expansion joints being cut into Terra Nova concrete floor.

**October 14, 2013:** Transfer of equipment continues from Primo #2 to Primo #1. The shielding "bench" installed in the rear left corner of Primo #1 is sufficient. Using the Ludlum 19, gamma levels on contact were 19 microR/hr along and around the bench. Previously, the readings in this area were 150 microR/hr with the Ludlum 19. New York Times reporter showed up at the site. OSC Daly provided historical information on the site as well as the specifics of the EPA Response Action.

**October 15, 2013:** Two small pits with thin layers of concrete were discovered along the side left wall of Primo #2. The concrete was removed with proper PPE while gamma readings taken with the Ludlum 19. The soil below read approximately 175 microR/hr on contact in the pit closer to the front of the building. The soil below the second pit averaged approximately 100 microR/hr.

**October 16, 2013:** NYC DEP visited site to run a dye test at Arctic Glacier Facility (Opposite side of Primo and Terra Nova). There is still no dye being observed and the water flow destination is still unknown. Return of equipment into Terra Nova has continued.

**October 17, 2013:** OSC Daly contacted by DNAInfo Reporter regarding site activity. Auto Lift in Primo #1 was assembled and the Auto Lift in Primo #2 was disassembled. The Federal Government shutdown ended.

**October 18, 2013:** New York Times Photographer visited the site. Cecilia Echols (EPA Community Involvement Coordinator) visited the site. The two smaller pits in Primo #2 were tampered and filled in with concrete. Preparation for shielding of Primo #2 floor continues.

**October 20, 2013:** Lead (Pb) shielding placement started in Primo #2.

**October 21, 2013:** Lead (Pb) shielding placement continues in Primo #2. Reporter for DNAInfo visits site and interviews Terra Nova and Primo operators. NYC Public Health Engineer visits site and inquires about Arctic Glacier drainage problems.

**October 22, 2013:** Lead (Pb) shielding placement continues in Primo #2. An area along the left wall of Primo #2 still has higher levels of gamma radiation (Ludlum 19 readings) even after the lead shielding was placed on the floor. This is the same area on the shared wall of Primo #1 that had increased readings post shielding. Placing lead (Pb) 6 inches along wall appears to bring down readings dramatically. Expansion joint installation begins. DNAInfo Article was released.

**October 23, 2013:** Lead (Pb) shielding placement continues in Primo #2. Installation of the lead trim along the left wall of Primo #2 begins. The galvanized steel sheet shipment arrived and was unloaded.

**October 24-25, 2013:** OSC Pellegrino was overseeing site activities. Lead (Pb) shielding placement completed in Primo #2. Expansion joints and forms set up for concrete pour. Cecilia Echols visited site on

10/25/13.

**October 27, 2013:** Concrete finisher on-site to finalize grade for concrete pour on October 28, 2013. ERRS beveling edges of galvanized steel for lower layer of sidewalk shielding.

**October 28, 2013:** Concrete pour in the main area of Primo #2. OSC Daly received a call from Wall Street Journal Reporter. Steel beveling continues.

**October 29, 2013:** Concrete pour at both rear and front ramp locations in Primo #2. Concrete was also poured underneath the office steps as well as the left wall shielding bench. The Wall Street Journal article on the Wolff Alport Site was released.

**October 30, 2013:** The left wall shielding bench in Primo #2 still exhibited 100 microR/hr readings above the bench using the Ludlum 19 instrument. The plaster from the hollow wall was removed, lead (Pb) inserted and re-plastered. The readings after were decreased to 50 microR/hr on contact using the Ludlum 19 instrument. A second Wall Street Journal Article on potential radioactive site throughout the country was released. The NY Times article on the Wolff Alport Site was released. A WNBC, Channel 4 TV reporter and cameraman visited Wolff Alport Site. OSC Daly gave an off-camera interview.

**October 31, 2013:** OSC Pellegrino overseeing site from 10/31/2013 until 11/04/13. The sealing of expansion joints in new concrete floor of Primo #2 was completed. NY1 TV News reporter visited the site. Terra Nova radon sampling canisters analyzed at laboratory. The readings were 1.6 pCi/L and below the 4.0 pCi/L action level..

**November 01, 2013:** Bottom layer steel beveling was completed. Bay door jambs/tracks for Primo #2 and Terra Nova were cut in preparation for sidewalk steel shielding. ERRS organized and staged steel for sidewalk layout.

**November 02, 2013:** Barrier with visibility screen erected. Self leveling grout was placed on the concrete sidewalk where needed and steel plates put in place. A steel lip along the building was welded to the sidewalk steel.

**November 03, 2013:** The laying of grout and steel plates continues in front of Primo #2 and Terra Nova. Light generators set up for night operations.

**November 04, 2013:** The laying of grout and steel plates continues in front of Primo #2 and Terra Nova. Spot welding between plates has started.

**November 05, 2013:** The laying of grout and lower steel plates continues in front of Primo #2 and Terra Nova. The welding of the seams of the bottom steel plates has started. Thomas Mongelli (EPA Remedial Program) and Cecilia Echols visited the site.

**November 06, 2013:** The laying of grout and steel plates continues in front of Primo #2 and Terra Nova. The welding of the seams of the bottom steel plates continues. Beveling of non-slip steel starts. FCA met with Mark Oldland to review site financial files.

**November 07, 2013:** The laying of grout and lower steel plates continues in front of Primo #2 and Terra Nova. The welding of the seams of the bottom steel plates continues. Beveling of non-slip steel continues. Heavy rains in the early afternoon stopped welding operations. Post shielding PIC survey of Primo #2 was conducted by NYC Health Physicist and Weston. All readings observed were below 50 microR/hr. OSC Ferriola participated in the survey.

**November 08, 2013:** The laying of grout and lower steel plates continues in front of Terra Nova and Arctic Glacier. The welding of the seams of the bottom steel plates continues. Beveling of non-slip steel continues. Heavy rains in the early afternoon stopped welding operations. Cecilia Echols visited the site.

**November 10, 2013:** The laying of grout and lower steel plates continues in front of Arctic Glacier. The welding of the seams of the bottom steel plates continues. Beveling of non-slip steel continues. The laying of lead (Pb) on the lower steel layer has started. Four layers of 1/8 inches of lead will be placed between the two layers of steel.

**November 11, 2013:** The laying of grout and lower steel plates continues in front of Arctic Glacier. The welding of the seams of the bottom steel plates continues. Beveling of non-slip steel continues. The laying of lead (Pb) on the lower steel layer continues. One empty Conex Storage Container was demobed from the site.

**November 12, 2013:** Snow and cold temperatures. The laying of grout and lower steel plates continues in front of Arctic Glacier. The welding of the seams of the bottom steel plates continues.

**November 13, 2013:** Cold temperatures. Non-Slip top layer steel put in place in front of Primo #2. Spot welding commenced on the top layer sheets in front of Primo #2.

**November 14, 2013-November 15, 2013:** OSC Pellegrino overseeing site from 11/14/2013 until 11/15/13. A third welder was added to the crew. ERRS continues to weld bottom layer of steel and top layer of non-slip steel.

**November 16, 2013-November 18, 2013:** ERRS continues to weld bottom layer of steel and top layer of non-slip steel. The remaining shipment of lead (Pb) shielding arrived. Final layers of lead shielding placed down in front of Arctic Glacier. The rear steel ramp for Primo #2 was constructed.

**November 19, 2013:** NY Times reporter visited the site. The steel welding for sidewalk shielding continues.

**November 20, 2013:** The steel welding for sidewalk shielding continues. ERRS checked the doorway opening at the Arctic Glacier Warehouse for sufficient height using the tallest Arctic Glacier truck.

**November 21 thru November 23, 2013:** OSC Pellegrino overseeing site during this time range. The post shielding PIC survey was conducted on the sidewalk on November 21<sup>st</sup>. The Primo #2 ramp was fabricated and installed. The steel welding for sidewalk shielding continues.

**November 24 thru November 27, 2013:** The steel ramp in front of Terra Nova started to lift due to extreme cold temperatures and the heat of the welding. Anchoring of the ramp was necessary. A minor steel ramp will need to be installed around the perimeter of the sidewalk shielding to avoid trip/fall hazard and to allow forklifts/low vehicles to drive onto sidewalk shielding into buildings. The bathroom for Primo #2 was shielded with lead (Pb) and concrete. The "hot spot" located along the wall of Primo #1 was shielded with lead and steel. The majority of equipment was returned to both Primo and Terra Nova. Partial personnel and equipment demobe started on 11/25/13. Total ERRS/RST personnel demobe on 11/27/13 for the holiday break.

**December 2, 2013:** ERRS RM, Operator and two welders returned to the site to finish the sidewalk steel shielding perimeter trim. Both non-slip and standard steel materials are delivered to site.

**December 3 thru December 8, 2013:** ERRS completes welding steel trim around the perimeter of the sidewalk shielding.

**December 9 thru 10, 2013:** Due to rain and snow, the asphalt placement around the perimeter of the sidewalk shielding had to be postponed. The remainder of equipment and container demobe was completed.

**December 11, 2013:** USEPA Region 02 Administrator announced the proposal to add the Wolff-Alport Chemical Company site in the Ridgewood section of Queens, New York to its Superfund list of the country's most hazardous waste sites.

**December 13, 2013:** The asphalt was installed around the perimeter of the sidewalk shielding.

**December 16-17, 2013:** The remainder of equipment was demobed from the site. The Lot #31 (Railroad Spur) fence gate keys were handed over to the property owner. The property owner has agreed to rent the property to Primo and Terra Nova for storage. Due to ice and snow, the PIC survey of the Railroad Spur was postponed until conditions improve. The PIC survey of Primo #1 secondary shielded area and Primo #2 bathroom was conducted. All readings were below established action limits.

**January 8, 2014:** OSCs went over Wolff Response Action report with Weston. The draft report will be revised and then sent to the other agencies for accuracy review. OSCs also participated in a phone conference with NYC DOT and NYC DOHMH in regard to discuss permit flags in the Wolff Alport Site area for DOT database.

**February 11, 2014:** KEMRON Subcontractor installed the bay door at Primo #2 and repaired the bay door at Terra Nova.

**April 02, 2014:** USEPA OSC Eric Daly, OSC Mike Ferriola, Oleg Povevko and Weston conducted the PIC survey at the railroad spur. This was the final survey work planned for this Response Action. Also, a videographer from New Yorker Magazine, Nate Lavey, completed his series of on-camera interviews with EPA. Nate previously interviewed Judith Enck (EPA Region 02 Regional Administrator) and Walter Muggan (Emergency & Remedial Response Division Director) at the 290 Broadway Office. Elias Rodriguez (EPA Public Information Officer) joined Mr. Lavey at Wolff Alport site to interview OSC Daly. OSC Daly was asked about the response actions, shielding work, radon mitigation system, how radiation is measured (use of a PIC was demonstrated) and our coordination with the businesses on-site. OSC Daly, in addition to OSC Ferriola and Oleg Povevko were taped "in action" as they completed a post-mitigation survey of the (railroad spur) area. The reporter's visit was a success despite a constant rain. The completed video is scheduled to run on the New Yorker web site concurrent with the anticipated announcement of Wolff Alport Site being placed on the NPL (End of April 2014).

**May 07, 2014:** The New Yorker released the Wolff Alport website/article based on the history of the site, interviews with EPA officials and the site visit on April 2, 2014.  
<http://www.newyorker.com/sandbox/projects/radioactive-nyc/>

**May 08, 2014:** The USEPA Region sends out a press release announcing that the Wolff Alport Site was added to the Superfund List.  
<http://r2notes3.r02.epa.gov/Announce.nsf/0/98492E877AB1FF0185257CD200552B06?OpenDocument>

The Radiation Assessment and Response Action Draft Report has been reviewed by EPA technical team and sent out to the interagency partners for comment.

**May 09, 2014:** The NYC DOHMH submitted comments to the Radiation Assessment and Response Action Draft Report

**July 02, 2014:** Tom Mongelli (Wolff Alport RPM) contacted OSC Daly regarding the Wolff Alport Site. The tenant reported to him that there was lifting in one section of the shielding...specifically the entrance to Primo #2.

**July 08, 2014:** OSC Daly and the KEMRON RM visited the site. The ramp that leads into Primo #2 has a lip and has lifted. Besides this being a trip/fall hazard, this is causing issues with the bottom of vehicles that are closer to the ground hitting the raised area. This is causing under carriage/muffler damage. The rest of the shielding inside the buildings and along the sidewalk appear unaffected by the cold to heat temperature shift and normal wear/tear. We left funding in place to address this anticipated occurrence. It



is anticipated that the work will take two full days to cut out, make some modifications to the ramp and anchor properly. There are some other minor rust prevention paint to apply to the non-galvanized pieces as well as bay door adjustments. OSC Daly discussed this work with the operator and the optimal time to perform this work is over a weekend in order not to interfere any further with their operations. We have scheduled this to take place on Saturday, August 9<sup>th</sup> and Sunday, August 10<sup>th</sup>.

**August 08 thru 09, 2014:** OSC Daly and the KEMRON RM mobilized at the Wolff Alport Site. The ramp leading into Primo #2 was disassembled and reconstructed. This medication allowed for easier passage of vehicles and anchored the ramp without any reduction in gamma shielding. Sections of the shielding were coated to prevent rusting. With the exception of unforeseen circumstances, this activity should conclude the response action.

**2.1.3 Enforcement Activities, Identity of Potentially**

**Responsible Parties (PRPs)**

The Wolff-Alport Chemical Company is the responsible party but this company went out of business in the 1950's.

**2.1.4 Progress Metrics**

<b>Waste Stream</b>	<b>Medium</b>	<b>Quantity/Volume</b>	<b>Manifest #</b>	<b>Treatment</b>	<b>Disposal</b>
Thorium	Subsurface/soil	-Surface gamma survey readings between 300-500 micro R/hr -Quantity/Volume Not Documented	N/A	Steel/lead (Pb)/concrete shielding	N/A
Thoron	Air	-Quantity/Volume Not Documented	N/A	Air ventilation system installed	N/A
Radium	Subsurface/soil	-Surface gamma survey readings between 300-500 micro R/hr -Quantity/Volume Not Documented	N/A	Steel/lead (Pb)/concrete shielding	N/A
Radon	Air	-Radon sampling results above 4.0 pCi/l --Quantity/Volume Not Documented	N/A	Air ventilation system installed	N/A

**2.2 Planning Section**

**Planned Response Activities**

No planned response activities.

**Next Steps**

OSC Daly will coordinate with the Remedial Program on the remedial action at Wolff Alport. OSC Daly will be participating in a Superfund Symposium in Brooklyn, NY on November 20, 2014. Wolff Alport Site will be a main topic. The FWACC Radiation Assessment and Response Action Report is undergoing review.

**Issues**

None.

**2.3 Logistics Section**

No information available at this time.

**2.4 Finance Section**

No information available at this time.

**2.5 Other Command Staff**

No information available at this time.

**3. Participating Entities**

**3.1 Unified Command**

**3.2 Cooperating Agencies**

- Agency for Toxic Substances and Disease Registry (ATSDR)
- United States Department of Energy (US DOE)
- New York State Department of Conservation (NYS DEC)

New York State Department of Health (NYS DOH)  
New York City Department of Health and Mental Hygiene (NYC DOHMH)  
New York City Department of Environmental Protection (NYC DEP)

**4. Personnel On Site**

As of 08/09/14, no personnel on-site

**5. Definition of Terms**

No information available at this time.

**6. Additional sources of information**

No information available at this time.

**7. Situational Reference Materials**

No information available at this time.