U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
DIAZ Removal - Removal Polrep
Final Removal Polrep

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region VI

Subject: **POLREP #3**
Final
DIAZ Removal
A6C4
West Memphis, AR
Latitude: 35.1070830 Longitude: -90.1930000

To:
From: Adam Adams, OSC
Date: 9/30/2011
Reporting Period: 07/13/2011 - 09/30/2011

1. Introduction

1.1 Background

Site Number:	A6C4	**Contract Number:**	EP-S6-07-01
D.O. Number:	0108	**Action Memo Date:**	7/6/2011
Response Authority:	CERCLA	**Response Type:**	Time-Critical
Response Lead:	EPA	**Incident Category:**	Removal Action
NPL Status:	Non NPL	**Operable Unit:**	
Mobilization Date:	7/13/2011	**Start Date:**	7/13/2011
Demob Date:	9/30/2011	**Completion Date:**	9/30/2011
CERCLIS ID:	ARR000005843	**RCRIS ID:**	
ERNS No.:		**State Notification:**	
FPN#:		**Reimbursable Account #:**	

1.1.1 Incident Category - Removal Action, EPA Lead

1.1.2 Site Description – The Diaz Intermediates Corp. manufactured high purity, halogentated, fine organics for the chemical industry, using bromine as the primary raw material. The facility is located on the south side of West Memphis, Arkansas, and consists of a process building, two tank farms, several staging pads pads, a boiler room, equipment shop, warehouse, loading dock, a laboratory, railroad spur, and offices.

The Site also contained approximately 2,000 containers, drums, and totes; 8 above ground storage tanks (ASTs); and 2 railcars. These all contained various different corrosive, flammable, and halogenated chemicals with varying quantities.

The site was initiated by the Arkansas Department of Environmental Quality (ADEQ) in September of 2007 requesting assistance from the EPA. ADEQ has monitored the site regularly and called into the EPA for assistance anytime there was a release or threat of release from the drums, totes, AST's, or any equipment or containments at the facility.

1.1.2.1 Location - The Site is located at 301 Wyanoke Road, West Memphis, Crittenden County, Arkansas 72301 in a rural industrial area near the Mississippi River. (35.107083 N / -90.193000 W)

1.1.2.2 Description of Threat - The facility manufactured high purity, halogenated, fine organics for the chemical industry, using bromine as the primary raw material. Characteristically, the threats include Toxics, Flammables, and Corrosives.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

This EPA Lead Removal Action was a teaming effort between EPA and ADEQ. The field activities were conducted from July 14, 2011 to September 30, 2011. The railcars, tanks, totes, drums, and smaller containers were inventoried and assessed, and it was determined that approximately 1,728 containers and approximately 100,715 gallons of liquids were abandoned at the Site. Samples were collected from approximately 5% of the labeled known drums and 100% of the unknowns, and field screened by Hazardous Categorization (HazCat) standard protocols to determine the characteristics of the materials.

During the course of the Removal Action, the drums and totes were consolidated, segregated, and staged in appropriate areas according to compatibility and like substances. Incompatibles were segregated apart and staged in different areas. Containers not in shippable condition were either bulked together or repackaged into shippable containers.

Daily air monitoring was conducted to monitor percent oxygen, explosive atmospheres, toxic, and volatile organic atmospheres around the Site, the warehouse, Exclusion Zone, and specific areas of operation prior to and during daily Site activities. Site activities were documented daily and Daily Progress Reports (DPRs) were completed and posted to the website (www.epaosc.org/DiazRemoval).

Efforts were made initially to get as much of the materials as possible back on the market. For the purposes of this POLREP and all Site documentation made on the website, in the Site logbook, on the DPRs, and in the files, the term "recycle" was used to imply getting the materials back on the market and not sent for disposal. The drums and totes were packaged into shippable containers, and efforts were made to obtain vendors for recycling materials. Out of the initial inventory on July 2011, total liquids recycled were approximately 24,815 lbs or 20,990 gallons (See table 1 in section 2.1.4). The remaining 86,545 gallons of waste were shipped for disposal in drums, totes, and in bulk (See table 1 in section 2.1.4).

All drums and totes previously emptied of their hazardous substances were decontaminated to “RCRA empty” condition, resized into smaller pieces, and disposed of off-Site. Total decontaminated and resized containers during the removal activities were (1,381) poly and (405) steel 55-gallon drums, and (18) 275-gallon totes. Nine (9) 30 cubic yard roll-off boxes were filled with the resized 1,804 containers and transported for disposal.

General maintenance was conducted throughout the Site daily. A final Site walk was conducted by the EPA OSC and ADEQ on September 30, 2011. An additional Site walk was also conducted with the EPA OSC and the local West Memphis Fire Department Hazmat. The mayor was notified of the project completion. The Site was secured and transferred back to ADEQ on September 30, 2011. During this Removal Action, approximately 1,323 containers of over 551,437 pounds or 107,535 gallons of hazardous substances, pollutants, or contaminants were removed from the Site.

2.1.2 Response Actions to Date

EPA has conducted several stabilization efforts at the abandoned Site between October 2007 and March 2011 and monitored the removal of approximately 40,070 gallons of hazardous substances by the security holding bank in April of 2011. The Site was monitored monthly by ADEQ, who contacted EPA in the event conditions at the Site warrant response stabilization efforts.

In April of 2011, the security holding bank sold some hazardous substances (See table 2 in Section 2.1.4) to a vendor. The vendor hired contractors and removed the estimated volumes of chemicals listed between April 10 and April 15, 2011. The chemicals listed and the volumes are estimates from the vendor. The EPA OSC and ADEQ Representative mobilized to the site to monitor this action and make sure there was no release of hazardous substances, which was separate and apart from the EPA Lead Removal Action.

During the EPA Lead Removal Action, conducted between July-September 2011, the remaining containers, drums and totes and contents were removed and either disposed or recycled off-Site. Contents of the above ground storage tanks were also removed and disposed of (See table 1 in Section 2.1.4).

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

The Potentially Responsible Party at this time is Diaz Intermediates Corp.

2.1.4 Progress Metrics

During this EPA Lead Removal Action, the following hazardous substances, contaminants, or pollutants were removed from the Site and recycled or disposed of appropriately.

Table 1. EPA Lead Removal Action Waste Log

Material / Content	Ship Date	Container Type	Qty.	Vol. Est. (lbs)	Vol. Est. (gal)	Disposal / Recycling	Facility / Vendor
Hydrochloric acid (all grades)	08/03/11	55-gal Poly	33	15,640	1,815	Recycling	Stateside Steel
White Oil (Hi-Quintex) SAE20	08/03/11	55-gal Steel	2	870	110	Recycling	Stateside Steel
Hydraulic oil (Monolec) SAE 20	08/03/11	55-gal Steel	1	435	55	Recycling	Stateside Steel
Gear Lubricant (Almasol Vari-Purpose)	08/03/11	55-gal Steel	1	435	55	Recycling	Stateside Steel
Mobile Cylinder Oil, Mineral	08/03/11	55-gal Steel	1	435	55	Recycling	Stateside Steel
Diatomite	08/03/11	Bags	20	1,000	-	Recycling	Stateside Steel
Silica, Oil (Non-RCRA, Non-DOT Regulated Material)	08/16/11	55-gal Steel	1	200	55	Disposal	Tradebe
Acidic inorganics (corrosive liquid) (Lab-pack)	08/16/11	55-gal Steel	1	39	55	Disposal	Tradebe
Basic inorganics (corrosive liquid) (Lab-pack)	08/16/11	55-gal Steel	1	21	55	Disposal	Tradebe
Carbon disulfide	08/16/11	5-gal poly	1	7	55	Disposal	Tradebe
Nitric acid	08/16/11	5-gal poly	1	11	55	Disposal	Tradebe
Potassium permanganate	08/16/11	5-gal poly	1	3	55	Disposal	Tradebe
Flammable liquid toxic (Lab pack)	08/16/11	30-gal poly	1	180	55	Disposal	Tradebe
Mercury	08/16/11	5-gal poly	1	4	55	Disposal	Tradebe
Sodium dithionite	08/16/11	5-gal poly	1	2	55	Disposal	Tradebe
Oxidizing liquid	08/16/11	5-gal poly	1	15	55	Disposal	Tradebe
Flammable liquid [acetone, methanol]	08/16/11	55-gal poly	2	650	110	Disposal	Tradebe
Flammable liquid [acetone, methanol]	08/16/11	55-gal poly	2	500	110	Disposal	Tradebe

Ferric chloride anhydrous	08/16/11	55-gal poly	2	560	110	Disposal	Tradebe
Aluminum chloride anhydrous	08/16/11	55-gal poly	13	2600	715	Disposal	Tradebe
Phosphorous amorphous	08/16/11	55-gal poly	1	120	55	Disposal	Tradebe
Non-RCRA, Non-DOT regulated material (Silica, Oil)	08/16/11	55-gal poly	1	200	55	Disposal	Tradebe
Corrosive liquid, D002 (acidic mixture)	09/08/11	5,000 gal tanker truck	1	41,020	4,000	Disposal	Vickery Environmental
x-Bromotoluene	09/14/11	55-gal Poly	72	40,860	3960	Disposal	PSC
Corrosive liquid, D002 (acidic mixture)	09/15/11	5,000 gal tanker truck	1	19,040	1,855	Disposal	Vickery Environmental
Dibromofluorobenzene/dibromotoluene	09/20/11	55-gal Poly	134	84,720	7,370	Disposal	PSC
x-Bromotoluene	09/20/11	55-gal Poly	29	37,860	1,595	Disposal	PSC
m-Bromoanisole	09/20/11	55-gal Poly	113	41,640	6,215	Disposal	PSC
Methanol	09/22/11	55-gal Poly	109	-	5,995	Disposal	Tradebe
Toluene; and toluenes with bromine	09/22/11	55-gal Poly	51	-	2,805	Disposal	Tradebe
m-Bromofluorobenzene (MBFB)	09/22/11	55-gal Poly	63	-	3,465	Disposal	PSC
m-Bromofluorobenzene (MBFB)	09/22/11	275-gal tote	10	-	2,750	Disposal	PSC
Fluoroanisole	09/22/11	55-gal Poly	1	-	55	Disposal	PSC
Bromobenzene	09/22/11	55-gal Poly	30	-	1,650	Disposal	PSC
n-Propylbromide	09/22/11	55-gal Poly	40	-	2,200	Disposal	PSC
Dibromofluorobenzene/dibromotoluene	09/22/11	275-gal tote	14	-	3,850	Disposal	PSC
Hydrobromic acid	09/26/11	55-gal Poly	220	-	11,110	Recycling	Altiras
Hydrobromic acid	09/27/11	55-gal Poly	128	-	7,040	Recycling	Altiras
Liquids, bromine	09/27/11	5,000 gal tanker truck	1	34,960	4,000	Disposal	Tradebe
Diazene (non-DOT/non RCRA regulated)	09/27/11	55-gal Poly	2	600	110	Disposal	PSC
Anisole	09/27/11	55-gal Steel	6	2,500	330	Disposal	PSC
Paint containers	09/27/11	55-gal Poly	9	3,600	495	Disposal	PSC
Bromopyridine	09/27/11	55-gal Poly	1	350	55	Disposal	PSC
Fluorobenzaldehyde	09/27/11	55-gal Steel	1	350	55	Disposal	PSC
Benzene	09/27/11	55-gal Poly	4	2,000	220	Disposal	PSC
Mercury (fluorescent lights)	09/27/11	55-gal Poly	1	1,000	55	Disposal	PSC
Bromophenol	09/27/11	55-gal Poly	1	350	55	Disposal	PSC
Bromochlorobenzene	09/27/11	55-gal Poly	1	350	55	Disposal	PSC
DBFB (non-DOT/non RCRA regulated)	09/27/11	55-gal Poly	1	350	55	Disposal	PSC
Oakite (hydrogen chloride) liquid	09/27/11	20-gal Poly	1	220	20	Disposal	PSC
Oakite (hydrogen chloride) solids	09/27/11	55-gal Poly	3	1,500	165	Disposal	PSC
Dibromobenzene (non-DOT/non RCRA regulated)	09/27/11	55-gal Poly	3	900	165	Disposal	PSC
2-Bromoethylbenzene	09/27/11	55-gal Poly	1	300	55	Disposal	PSC
Tribromobenzene (non-DOT/non RCRA regulated)	09/27/11	55-gal Poly	1	300	55	Disposal	PSC
Gear oil (non-DOT/non RCRA regulated)	09/27/11	55-gal Steel	4	2,000	220	Disposal	PSC
Sulfanic acid	09/27/11	55-gal Poly	2	800	110	Disposal	PSC
Flammable liquids [methanol, toluene]	09/28/11	5,000 gal tanker truck	2	86,420	10,800	Disposal	Tredebe
Liquids, bromine	09/28/11	5,000 gal tanker truck	1	-	4,500	Disposal	Tredebe
Liquids, bromine	09/29/11	5,000 gal tanker truck	1	37,300	4,600	Disposal	Tredebe
Flammable liquids [methanol, toluene]	09/29/11	5,000 gal tanker truck	1	-	4,900	Disposal	Tredebe
50% Caustic soda / 50% water solution	09/30/11	300-gal tote	3	-	750	Recycle	Stateside Steel
Dibromofluorobenzene/dibromotoluene (sludge)	09/30/11	275-gal tote	11	39,600	3,025	Disposal	PSC
Bromotoluene (sludge)	09/30/11	275-gal tote	5	13,600	1,375	Disposal	PSC
Bromobenzene (sludge)	09/30/11	275-gal tote	1	3,520	275	Disposal	PSC
Dibromofluorobenzene/dibromotoluene (solids)	09/30/11	55-gal Poly	30	23,500	1,650	Disposal	PSC
Activated Carbon	09/30/11	Bags	40	2,000	-	Recycling	Stateside Steel
Sodium thiosulfate	09/30/11	Bags	80	4,000	-	Recycling	Stateside Steel
Totals:			1323	551,437	107,860		

The following table provides vendor estimated volumes of the substances removed in April of 2011 during a removal conducted by the security holding bank's vendor of four 5,000-gallon tanker trucks and five box van trucks carrying 275-gallon totes, 55-gallon drums, and 5-gallon pails. The substances were not disposed of, but rather recycled and reused.

Table 2. Security Holding Bank Removal Action Waste Log

Waste Stream / Hazardous Substance	Medium	Volume (gal) (estimate)	Manifest #	Treatment	Disposal
Hydrobromic acid		20,025		N/A	Recycled
p-Dibromobenzene <.8% tetrabromobenzene		3,305		N/A	Recycled
p-Dibromobenzene .8%-12% tetrabromobenzene		170		N/A	Recycled
p-Dibromobenzene > 10% tetrabromobenzene		40		N/A	Recycled
p-Dibromobenzene (blue pails) no % listed		60		N/A	Recycled
p-Dibromobenzene (no labels)		15		N/A	Recycled
p-bromochlorobenzene		70		N/A	Recycled
p-Dibromobenzene (empty/cracked/bad)		125		N/A	Recycled
Methanol		1,815		N/A	Recycled
Aluminum Chloride		880		N/A	Recycled
Ferric Chloride		90		N/A	Recycled
n-propanol		2,365		N/A	Recycled
fluorobenzene		440		N/A	Recycled
2-bromopyradine		1,540		N/A	Recycled
p-Fluoroanisole		330		N/A	Recycled
n-propylbromide		825		N/A	Recycled
fluorobenzene		7,975		N/A	Recycled
empty tote		0		N/A	Recycled

2.2 Planning Section

2.2.1 Anticipated Activities
No further EPA actions will be conducted at the Site. The Site has been turned back over to ADEQ.

2.2.2 Issues
There have been no issues associated with this Removal Action.

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
2.5.1 Safety Officer
Safety Officers:

EPA - OSC Adams
ADEQ - Michael Gates
START-3 - Noel Biscocho
ERRS - Don Edgington

2.6 Liaison Officer

2.7 Information Officer
Information can be obtained at www.epaosc.org/DiazRemoval. Factsheets can been found in the documents section of this website, as well as at the Site and at the local repository on Avalon Street, just north of Broadway at the West Memphis library.

3. Participating Entities
3.1 Unified Command
This EPA Lead Removal Action was a teaming effort between EPA and ADEQ.

3.2 Cooperating Agencies
Agencies and organizations involved in this response effort include EPA, ADEQ, and EPA Contractors.

Additional local entities notified of the Site and this Removal Action:

City Hall - Mayor Johnson.
WMFD/Hazmat - Fire Chief Gately
Crittenden County Regional Hospital

4. Personnel On Site
Personnel on-Site during this response effort include EPA and EPA Contractors. ADEQ Representation was on-Site at their

discretion weekly and maintained a daily communication with the EPA OSC.

5. Definition of Terms

For the purposes of this POLREP and all Site documentation made on the website, in the Site logbook, on the DPRs, and in the files, the term "recycle" was used to imply getting the materials back on the market and not sent for disposal.

6. Additional sources of information

6.1 Internet location of additional information/report

Information can be obtained at www.epaosc.org/DiazRemoval.

6.2 Reporting Schedule

This is the Final POLREP.

7. Situational Reference Materials

No information available at this time.