U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Belpre Diethylether Release - Removal Polrep
Initial Removal Polrep

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V

Subject: **POLREP #1**
Initial POLREP
Belpre Diethylether Release
C51F
Belpre, OH
Latitude: 39.2784500 Longitude: -81.6378400

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From: Jon Gulch, On-Scene Coordinator
Date: 1/9/2014
Reporting Period: January 9-10, 2014

1. Introduction

1.1 Background

Site Number:	C51F	**Contract Number:**	
D.O. Number:		**Action Memo Date:**	
Response Authority:	CERCLA	**Response Type:**	Emergency
Response Lead:	EPA	**Incident Category:**	Removal Assessment
NPL Status:	Non NPL	**Operable Unit:**	
Mobilization Date:	1/9/2014	**Start Date:**	1/9/2014
Demob Date:		**Completion Date:**	
CERCLIS ID:		**RCRIS ID:**	
ERNS No.:		**State Notification:**	
FPN#:		**Reimbursable Account #:**	

1.1.1 Incident Category
Emergency Response

1.1.2 Site Description
Kratron Polymers facility on Davis Creek, which is a tributary to the Ohio River.

1.1.2.1 Location
Kraton Polymers located at 2419 State Route 618, Belpre, Ohio 45714

Latitude: N 39.27845
Longitude: W-81.63790

1.1.2.2 Description of Threat
Release of cyclohexane and diethylether into a retention pond that flows to Davis Creek, which is a tributary to the Ohio River. Both chemicals were detected in laboratory analytical samples obtained from Davis Creek approximately 100 yards from the Ohio River.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results
Visible sheen and elevated Photoionization (PID) results detected in the on-site pond and off-site in Davis Creek.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative
EPA responded, at the request of Ohio EPA, to provide oversight on the PRP response actions to the release.

2.1.2 Response Actions to Date
On January 9, 2014 at approximately 0315, the Photoionization (PID) and sheen detectors at the NPDES discharge location from the Kraton Polymers facility alarmed. Plant personnel immediately responded and implemented spill procedures, including notification to the National Response Center (NRC # 1070509). At approximately 0800, Ohio EPA requested assistance from EPA in responding to the release of cyclohexane and diethylether into the on-site pond and into Davis Creek, which is a tributary to the Ohio River. The Potentially Responsible Party (PRP) immediately began boom operations to collect the cyclohexane, which was freezing and floating to the surface of the pond due to low temperatures. The PRP also began aeration operations in the on-site pond and in Davis Creek to attempt to remove the diethylether and provide additional oxygen into the water column.

Notification to the U.S. Fish & Wildlife Service (USF&WS), Ohio Division of Natural Resources (ODNR), and West Virginia Division of Natural Resources (WVDNR) was completed due to a fish kill from the release. All dead fish are being collected for future inventory and ODNR will be continuing observation and investigation for future impact to wildlife. WVDNR collected downstream water samples at the Belleville Dam and Hydro and have sent the samples to a laboratory for analysis. WVDNR collected one dead seagull from the Ohio River and relinquished custody to the USF&WS.

The Ohio River Valley Water Sanitation Commission (ORSANCO) was contacted regarding their Early Warning Detection Network downstream of Belpre, Ohio to determine if the system was able to detect the chemicals that were released. ORSANCO provided information on water levels in the Ohio River; provided information about downstream water intakes and vulnerable populations; and provided contact information about the Belleville Dam and Hydro, which is now a downstream sampling location.

The PRP also continued sampling in the on-site pond and in Davis Creek and implemented downstream sampling at three locations (at various depths) in the Ohio River. The results are as follows:

The results of the 0530 sampling event (first samples) ranged from 20,300 ug/L (Outfall to Pond from process, Outfall 001) to 757,000 ug/L (Davis Creek) cyclohexane and 196,000 ug/L (Pond Inlet) to 310,000 ug/L (Outfall 001) diethylether.

The results of the 0900 sampling event ranged from 6,800 ug/L (Davis Creek) 23,200 ug/L (Pond Inlet, Station 01)
cyclohexane and 42,000 ug/L (Pond Inlet, Station 01) to 301,000 ug/L (Davis Creek) diethylether.

The results of the 1130 sampling event ranged from 1,270 ug/L (Pond Inlet, Station 01) to 6,530 ug/L (Outfall 001) cyclohexane and 1,640 ug/L (Pond Inlet, Station 01) to 176,000 ug/L (Outfall 001) diethylether.

The results of the 1510 sampling event ranged from 1,009 ug/L (Pond Inlet, Station 01) to 4,691 ug/L (Outfall 001) cyclohexane and 8,735 ug/L (Pond Inlet, Station 01) to 91, 050 ug/L (Outfall 001) diethylether.

The results of the 1920 sampling event ranged from 266 ug/L (Pond Inlet, Station 01) to 3500 ug/L (Outfall 001) cyclohexane and 581 ug/L (Pond Inlet, Station 01) to 45,700 ug/L (Outfall 001) diethylether.

The results of the 2200 sampling event ranged from 193 ug/L (Pond Inlet, Station 01) to 4302 ug/L (Outfall 001) cyclohexane and 387 ug/L (Pond Inlet, Station 01) to 54,234 ug/L (Outfall 001) diethylether.

The results of the 0000 sampling event (January 10, 2014) ranged from 678 ug/L (Davis Creek) to 2270 ug/L (Outfall 001) cyclohexane and 29400 ug/L (Outfall 001) to 31178 ug/L (Davis Creek) diethylether.

The PRP has continued to sample the same three locations (Pond Inlet, Outfall 001, and Davis Creek) every three hours, and will continue through the reporting period.

A sample location just upstream of the Belleville Dam was added to the sampling rounds and was first sampled by the PRP at 2100. The analytical results were non-detect from the 2100 sample and 25.8 ug/L from the 0300 sample.
The PRP took two samples from the Little Hocking Water Facility. The samples were taken from before and after the filtration system and the results of the sampling were non-detect for both analytes.

On January 10, 2014 at approximately 1025, a pipe burst releasing wet cyclohexane triggering an emergency response by the PRP. Wet cyclohexane contains cyclohexane, water, and >1% diethylether. The release was immediately suppressed with water spray and the runoff water cyclohexane mix was

contained and discharged into the on-site waste water collection system. There the cyclohexane was decanted from the mix and pumped into the waste oil collection tank. Some of the suppression water escaped the secondary containment system and but was directly diverted into the on-site pond. The cyclohexane in the pond was contained by booms and removed with vacuum trucks that were already in place from the initial release. At approximately 1330, the PRP as able to place a clamp around the pipe to stop the release. During the second event, OEPA and USF&WS used a boat to survey the Ohio River and no sheen was observed up to 2.5 miles downstream from Davis Creek. One Blue Herren was found dead down river and no distressed or dead fish were observed.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)
Kraton Polymers is the PRP.

2.1.4 Progress Metrics

Waste Stream	*Medium*	*Quantity*	*Manifest #*	*Treatment*	*Disposal*

2.2 Planning Section

2.2.1 Anticipated Activities
- Continue sampling at the Pond Inlet, Outfall 001, Davis Creek and Belleville Dam;
- Continue sampling in the Ohio River;
- Finish recovery of cyclohexane on the pond;
- Continue air monitoring at all collection points (PRP Industrial Hygiene);
- Continue aeration of Davis Creek for diethylether;
- Continue collection of impacted wildlife (fish) in Davis Creek; and
- Continue hazing activities to keep ducks out of the on-site pond.

2..2.1.1 Planned Response Activities
- Work with Federal and State Trustees on documentation of fish kill other potential wildlife impacts.
- Continue aeration of Davis Creek.
- Complete removal of cyclohexane from the pond with containment booms.
- Evaluate the data and determine the need for additional on-site treatment.

2.2.1.2 Next Steps
Continue oversight of PRP Removal Activities.

2.2.2 Issues
None.

2.3 Logistics Section
N/A

2.4 Finance Section

2.4.1 Narrative
On January 9, 2014, the phone duty officer requested a TDD for START assistance.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
TAT/START	$15,000.00	$0.00	$15,000.00	100.00%
Intramural Costs				
USEPA - Direct	$5,000.00	$0.00	$5,000.00	100.00%
USEPA - InDirect	$1,000.00	$0.00	$1,000.00	100.00%
Total Site Costs	$21,000.00	$0.00	$21,000.00	100.00%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer
N/A

2.5.2 Liaison Officer
N/A

2.5.3 Information Officer
N/A

3. Participating Entities

3.1 Unified Command
N/A

3.2 Cooperating Agencies
U.S. Fish & Wildlife Service
EPA-ERT
Ohio EPA
Ohio DNR
West Virginia DNR

4. Personnel On Site
EPA - 1
START - 1

5. Definition of Terms
N/A

6. Additional sources of information

6.1 Internet location of additional information/report
www.epaosc.org/BelpreDEE

6.2 Reporting Schedule
N/A

7. Situational Reference Materials
N/A