U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Nuplex Resins - Removal Polrep
Initial and Final Removal Polrep

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV

Subject: **POLREP #1**
Initial and Final Polrep
Nuplex Resins

Louisville, KY
Latitude: 38.1806353 Longitude: -85.7541060

To:
From: Art Smith, OSC
Date: 2/11/2010
Reporting Period: 02/02/2010 thru 02/10/10

1. Introduction

1.1 Background

Site Number:	B461	**Contract Number:**	
D.O. Number:		**Action Memo Date:**	
Response Authority:	CERCLA	**Response Type:**	Emergency
Response Lead:	PRP	**Incident Category:**	Removal Action
NPL Status:	Non NPL	**Operable Unit:**	
Mobilization Date:	2/2/2010	**Start Date:**	2/2/2010
Demob Date:	2/9/2010	**Completion Date:**	2/10/2010
CERCLIS ID:		**RCRIS ID:**	
ERNS No.:		**State Notification:**	
FPN#:		**Reimbursable Account #:**	

1.1.1 Incident Category: Active Production Facility

1.1.2 Site Description

1.1.2.1 Location - The site is located at 4730 Crittenden Drive in Louisville, KY. Paint resins have been manufactured at this location for over 60 years. The business was acquired by Nuplex Resins, LLC in 2005 from Akzo Nobel Coatings.

1.1.2.2 Description of Threat - Release of hazardous substances as a result of a tank overfilling accident on 02/01 at the process water building (N 38.1806353 latitude, W 85.7541060 longitude). Hazardous substances in the release include the volatile organic chemicals (VOCs) xylenes and toluene. The threat was potential exposure to hazardous substances in air in residences.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results -

2. Current Activities

2.1 Operations Section

2.1.1 Narrative - Early February 1, 2010, the Louisville Metropolitan Sewer District (MSD) began receiving odor complaints from residents in the area of the Nuplex Resins facility. Nuplex reported to have overfilled their onsite process wastewater tank by approximately 100 gallons. Onsite investigation by MSD revealed an approximate quarter-sized crack in Nuplex's permitted outfall structure that was discharging the released process water into the municipal sewer system. The process water contained a mixture of water and pure phase organic solvents. Samples of the discharge revealed the presence of xylene at concentrations of up to 536,000 parts per million (ppm). Toluene was also identified at 89,000 ppm. As the release entered the sewer system, the volatile organics within the process water partitioned into air and traveled through the system for a distance of several miles and into residential structures through sumps and dry traps in floor drains. Air monitoring was conducted by Louisville Fire Department (LFD) and Louisville Metro Public Health and Wellness (LMPHW) based upon complaints made through the 911 and MSD call system. Air monitoring indicated no explosive atmospheres within residential structures.

On February 2, OSC Smith responded to the incident at the request of the Kentucky Department

for Environmental Protection (KDEP). The failure mechanism appeared to be the lack of integrity of the concrete slab and sump within the process water building. Cracks in the sump and deteriorated expansion joints in the floor allowed pure phase solvent to migrate through the subsurface, where it contacted shallow groundwater and migrated into the sewer system (as described above) and also into soil outside of the process water building.

2.1.2 Response Actions to Date - The crack in the outfall structure was repaired and an inflatable bladder was inserted to prevent addtional discharge into the sewer. A mixture of solvent/water was pumped from the outfall structure and from pooled material within the subsurface which was exposed via soil excavation. Visible soil contamination was also removed in areas where pooled product was observed. Two collection sumps were installed upon completion of soil excavation to remove subsurface water which drains to these points. These sumps were outfitted with submersible pumps which run when the float rises to a certain point and this water is captured in a tank onsite. Slotted PVC piping was installed at the property line to serve as an additional point to capture subsurface vapors, but is not opereational at this time. The first manhole located downgradient of the facility is monitored with a photoionization detector (PID) on a daily basis to ensure rapid detection in the event that any solvent vapors are discovered in the sewer system. Water samples are collected daily at the same monitoring point and analyzed for VOCs.

A camera sewer survey was performed and no evidence of a direct connection from the plant outfall structure to the sewer system was discovered. Super Vac fans were staged on manholes to ventilate the sewer system of the vapors which had accumulated as a result of the incident.

Air sampling was conducted by KDEP and Nuplex Resin on February 4 at a residential location which exhibited the highest PID readings obesrved on February 1. ATSDR reviewed the results for these samples and reported that health based levels were not exceeded based on potential exposure for both short and long term durations.

As of February 8, all known releases into the sewer system have been stabilized, and the emergency has been abated. The OSC demobilized the site on February 9, and relinquished lead agency role to KDEP for the oversight of all environmental investigation/remediation necessary to address the full nature and extent of contamination associated with this incident.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs) - Nuplex Resins, LLC is the responsible party for this incident. At this time, EPA does not plan any additional involvement in the evaluation of potential environmental contamination as a result of the February 1, 2010 spill. That responsibility has been tranmsitioned to the KDEP State Superfund Program.

2.1.4 Progress Metrics - as of February 9:

Waste Stream	*Medium*	*Quantity*	*Manifest #*	*Treatment*	*Disposal*
pure phase solvent	soil/water	125 gallons			pending
contaminated water	sumps	4,500 gallons			pending

2.2 Planning Section

2.2.1 Anticipated Activities

2.2.1.1 Planned Response Activities - EPA has approved Nuplex's "Post-Incident Monitoring Plan" dated February 10, 2010. (See the documents tab of the website www.epaosc.org/nuplexresins for additional information on planned response activities in the near term).

2.2.1.2 Next Steps

2.2.2 Issues

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

2.6 Liaison Officer

2.7 Information Officer

2.7.1 Public Information Officer

2.7.2 Community Involvement Coordinator - A community meeting was held for the affected Beechmont neighborhood residents on February 8, 2010. The meeting was organized to provide the community with an overview of the incident, response and control actions, investigation and follow-up, and to provide the residents an opportunity to ask questions. Agencies involved with the meeting include: Nuplex Resins, LLC, Louisville Fire Department, Louisville Metropolitan Sewer District, Kentucky Department for Environmental Protection, Louisville Metro Public Health and Wellness, Louisville Metro Air Pollution Control, Kentucky Regional Poison Center of Kosair Children's Hospital, and U.S. EPA Region 4.

(For additional press coverage of the community meeting, please visit the documents ection of the website www.epaosc.org/nuplexresins).

3. Participating Entities

No information available at this time.

4. Personnel On Site

No information available at this time.

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.