

**ADMINISTRATIVE RECORD**

**A.O. POLYMER SITE  
Sparta, Sussex County, New Jersey**

Prepared by:

Region II Technical Assistance Team  
Roy F. Weston, Inc  
Major Programs Division  
Edison, New Jersey 08837

Prepared for:

Chaitanya Agnihotri, On-Scene Coordinator  
U. S. EPA Region II  
Removal Action Branch  
Edison, New Jersey 08837

February 1995

SDMS Document



110310

## Administrative Records in Local Repositories

The "Administrative Record" is the collection of documents which form the basis for the selection of a response action at a Superfund site. Under Section 113(k) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act (SARA), the EPA is required to establish an Administrative Record available at or near the site.

The Administrative Record file must be reasonably available for public review during normal business hours. The record file should be treated as a non-circulating reference document. This will allow the public greater access to the volumes and also minimize the risk of loss or damage. Individuals may photocopy any documents contained in the record file, according to the photocopying procedures at the local repository.

The documents in the Administrative Record file may become damaged or lost during use. If this occurs, the local repository manager should contact the EPA Regional Office for replacements. Periodically, the EPA may send supplemental volumes and indexes directly to the local repository. These supplements should be placed with the initial record file.

The Administrative Record file will be maintained at the local repository until further notice. Questions regarding the maintenance of the record file should be directed to the EPA Regional Office.

The Agency welcomes comments at any time on documents contained in the Administrative Record file. Please send any such comments to Chaitanya Agnihotri, Removal Action Branch, U.S. EPA Region II, 2890 Woodbridge Avenue, Edison, NJ 08837.

For further information on the Administrative Record file, contact Chaitanya Agnihotri, On-Scene Coordinator, U.S. EPA Region II, at (908) 906-6908.

**A.O. Polymer SITE**  
**ADMINISTRATIVE RECORD FILE**

**CONTENTS**

SITE IDENTIFICATION . . . . . SECTION 1.0  
REMOVAL RESPONSE . . . . . SECTION 2.0  
HEALTH ASSESSMENTS . . . . . SECTION 3.0  
PUBLIC PARTICIPATION . . . . . SECTION 4.0  
TECHNICAL SOURCES AND GUIDANCE DOCUMENTS . . . . . SECTION 5.0

**A.O. Polymer SITE**  
**ADMINISTRATIVE RECORD FILE**  
**INDEX OF DOCUMENTS**

The index of documents contains the following information about each document:

**Document #:** Site Code-Section First Page-Section Last Page  
**Title:** Abstract of Document Contents  
**Category:** Document Category/Section of Administrative Record File  
**Author:** Writer and Affiliation  
**Recipient:** Addressee or Public and Affiliation, if applicable  
**Date:** When Document was Created or Transmitted

Note: Items in the Administrative Record are for public access, and should be removed from the file only for copying. The cost of reproduction of the documents in the file is the responsibility of the person requesting the copy.

**A.O. POLYMER SITE  
ADMINISTRATIVE RECORD FILE  
LIST OF DOCUMENTS**

**Document #:** AOP- 1.1001 - 1.1001  
**Title:** Memorandum  
**Category:** Site Identification  
**Author:** George Meyer, Chief  
Hazardous Waste Compliance Branch  
**Recipient:** George Zachos, Chief  
Removal Action Branch  
**Date:** September 6, 1990

**Document #:** AOP - 1.2001 - 1.2005  
**Title:** Site Assessment Report  
**Category:** Site Identification  
**Author:** Technical Assistance Team  
**Recipient:** USEPA Region II  
Response and Prevention Branch  
**Date:** October 6, 1993

**Document #:** AOP - 2.1001 - 2.1015  
**Title:** Sampling QA/QC Work Plan for A.O. Polymer  
**Category:** Removal Response  
**Author:** Roy F. Weston, TAT  
**Recipient:** EPA  
**Date:** September 23, 1993

**Document #:** AOP - 2.2001 - 2.2013  
**Title:** Preliminary Assessment and Funding Authorization  
Request for a CERCLA Removal Action  
**Category:** Removal Response  
**Author:** Joseph V. Cosentino, On-Scene Coordinator,  
Response and Prevention Branch USEPA  
**Recipient:** William J. Muszynski, P.E.  
Acting Regional Administrator USEPA  
**Date:** September 30, 1993

**Document #:** AOP 2.2014 - 2.2019  
**Title:** Request for a Change in the Scope of the CERCLA  
Removal Action at the A.O. Polymer Site  
**Category:** Removal Response  
**Author:** Joseph V. Cosentino, On-Scene Coordinator,  
Response and Prevention Branch USEPA  
**Recipient:** William J. Muszynski, P.E.  
Acting Regional Administrator USEPA  
**Date:** September 1, 1994

**Document #:** AOP - 3.1001 - 3.1015  
**Title:** Health Assessment for A.O. Polymer  
**Category:** Health Assessments  
**Author:** Agency for Toxic Substances and Disease and  
Registry  
**Recipient:** Rich, Puvogel, NJCB  
**Date:** August 03, 1990

**Document #:** AOP - 4.1001- 4.1007  
**Title:** Community Relations Plan  
**Category:** Public Participation  
**Author:** Region II Technical Assistance Team  
**Recipient:** United States Environmental Protection Agency,  
Region II Removal Action Branch  
**Date:** January 1995

**Document #:** AOP - 4.2001 - 4.2001  
**Title:** Notice of Public Availability  
**Category:** Public Participation  
**Author:** EPA  
**Recipient:** Public  
**Date:** N/A

**Document #:** AOP - 4.3001 - 4.3001  
**Title:** A.O. Polymer Corporation  
**Category:** Public Participation  
**Author:** N/A  
**Recipient:** N/A  
**Date:** N/A

**Document #:** AOP - 5.1001 - 5.1002  
**Title:** EPA Regional Guidance Documents  
**Category:** Technical Sources and Guidance Documents  
**Author:** EPA  
**Recipient:** File  
**Date:** N/A

September 6, 1990

A.O. Polymer Corporation, Sparta, New Jersey

George Zachos, Chief  
Removal Action Branch

George Meyer, Chief  
Hazardous Waste Compliance Branch

The purpose of this memorandum is to refer the A.O. Polymer Corporation for a RCRA inspection. During removal assessment activities at this Superfund site, it was noted that the active facility may be improperly storing hazardous wastes. An NJDEP inspection of the facility on May 1, 1990 indicated that no hazardous waste is generated by the facility. There is also another related company at the site called Coatings and Adhesives.

According to the NJDEP report, A.O.Polymer makes polyurethane resins by reacting toluene diisocyanate, propylene glycol, xylol or methyl diisocyanate. They also make ketone resins. Coatings and Adhesives makes acrylic coatings. They blend acrylic emulsions with powdered waxes. Both operations carry out large batch reactions in various size reaction vessels. Both operations claim to clean their reaction vessels and reuse the washings in the next batch therefore never having to dispose of any wastes. All laboratory wastes are allegedly added to the batch operations and therefore not disposed of.

The facility obtained an U.S. EPA I.D. number for a one time disposal of laboratory chemicals but never delisted.

Aside from drums generated during the U.S. EPA remedial investigation, there are several hundred drums present at the site. Some of them are piled three and four high and are either dented or rusted. Most of them contain materials and some of these are oozing their contents. It appears that the facility may be accumulating some of this material speculatively.

Should you have any questions please contact Nick Magriples at FTS 340-6930.

cc. R. Salkie

FILE:A.O. Polymer:NPL ASMNTS:nmagriples

ERR-RAB ERR-RAB

MAGRIPLES ZACHOS

*Magriples*  
9/6

*G.H. Zachos*  
9/6/90

SITE ASSESSMENT REPORT  
A.O. POLYMER  
SPARTA, SUSSEX COUNTY, NEW JERSEY

Date of Site Assessment: 23 September 1993

Prepared by:

Technical Assistance Team  
Roy F. Weston, Inc.  
Major Programs Division  
Edison, New Jersey 08837

Prepared for:

USEPA Region II  
Response and Prevention Branch  
Edison, New Jersey 08837

Date Submitted: 6 October 1993



**SITE ASSESSMENT REPORT  
A.O POLYMER  
SPARTA, SUSSEX COUNTY, NEW JERSEY**

**INTRODUCTION**

A site assessment was conducted at A.O. Polymer on September 23, 1993. The objective of the investigation was to collect five drum liquid samples, five soil samples and three air samples. The drum and soil samples were to be sent for laboratory analysis for Target Compound List (TCL) and Cyanide analysis. The air samples were to be sent for Volatile Organic Compounds (VOC) analysis. The data is intended to verify previous and/or current releases to the environment from the improper storage and handling of chemicals at the facility.

A summary of all air monitoring conducted at the site and a copy of the air sampling data sheet, which details the calibration procedures for the air sampling pumps is contained in Attachment A. A copy of the Sampling Plan for the air, soil and drum/liquid samples is contained in Attachment B. The Sampling Trip Report, detailing sample types, sample volumes, analyses requested, sample locations and the name of the laboratory receiving the samples is contained in Attachment C. Attachment D contains the HazCat data sheets and Attachment E contains photographs of each sample location.

**BACKGROUND**

The A.O. Polymer site is an intermittently active chemical facility located at 44 Station Road, approximately one mile northeast of the Town of Sparta, Sussex County, New Jersey. This facility has been the site of organic chemical processes involved in the manufacture of ketone, urethane, and acrylic resins and various products since the early 1960s.

The A.O. Polymer facility occupies about four acres along the New York, Susquehanna and Western (NYS&W) Railway and is bound on the northeast by Station Park, on the southeast by Station Road, and on the southwest by the railway and a private gun club. The Sparta High School lies one half mile to the north-northeast of the site. The Wallkill River passes about 500 feet southeast of the site.

**SITE ASSESSMENT ACTIVITIES**

On Thursday, September 23, 1993, at 1045 hours, the Technical Assistance Team (TAT) arrived on site and met the U.S. Environmental Protection Agency On-Scene Coordinator (EPA OSC) who was talking to the owner of A.O. Polymer. TAT proceeded to set up the sample equipment and calibrate the air monitoring and air sampling equipment in anticipation of the sampling event.

A positive result was obtained for Xylene using the colorimetric detector tubes (Draegers) in the following areas:

- 50 ppm - in the storage building
- 10 ppm - in the warehouse building
- 10 ppm - the warehouse building
- 10 ppm - outside the warehouse building next to a drum shaped polymerized solid.

A positive result (50 ppm) was obtained using Toluene Draeger tubes in the storage building. The samples were collected by inserting the tube through a hole in the corrugated metal wall.

#### Drum/Liquid Sampling

At 1500 hours, TAT entered Trailer #2 and sampled three drums. Air monitoring conducted prior to sampling showed no readings above background (0 LEL/21% O<sub>2</sub>) on the CGI/O<sub>2</sub> and 0-5 units on the HNU.

Samples TAT-07, TAT-09, and TAT-10 were collected from the trailer. Sample TAT-11 was collected from an unlabeled drum in the vat/process room. Sample TAT-12 was collected from liquid on the plastic sheeting which was strewn on the floor of the storage room.

All of the drums from which samples were collected were marked with the appropriate sample number, and photodocumented. All markings on the drum were recorded and are contained in the HazCat data sheet (Attachment D).

All of the soil, air and drum/liquid sampling conducted at the site followed the guidance specified in the sampling plan (see Appendix B) and observed all required Health and Safety standards.

#### Field Test Results

Drum/Liquid samples TAT-07 to TAT-12 were tested on site by TAT with the "Haztech" HazCat Kit. Samples of a drum-shaped polymerized solid outside the vat/process building (TAT-13), liquid from under the solid (TAT-14) and a grab sample of water from the cooling pond (TAT-15) were also field tested. (The classification of the samples and complete field test results are included in Attachment D.)

It should be noted that Sample TAT-09 tested as a corrosive base liquid with a pH of 14. The drum that this sample was taken from was labeled as "Flammable". The field test revealed that the material was combustible but not flammable.

## CONCLUSIONS

The site investigation revealed the potential release of hazardous materials to the environment through current operational practices and/or past spillage. Draeger tube readings taken in work areas of the facility revealed organic vapors (Toluene and Xylene) present in the atmosphere. Trailer #2 has drums containing incompatible materials (corrosives, flammables) stored without regard to compatibility. Additionally the labels on the drums are missing or do not indicate the actual contents. Soil sampling at location TAT-03 revealed a very viscous, dark brown solid, one inch below the surface soil.

AO Polymer Site Assessment Report (September 23, 1994)

The following attachments were included in the original report:

- Attachment A: Air Monitoring Log and Air Sampling Data Sheet
- Attachment B: Sampling QA/QC Work Plan, Document #        of  
this Administrative Record
- Attachemnt C: Sampling Trip Report, Document #        of this  
Administrative Record
- Attachment D: Results of waste characterization field  
screening
- Attachment E: Photos taken during site assessment

The attachments not included in this Administrative Record are available for review at:

USEPA Region II Removal Action Branch  
2090 Woodbridge Avenue  
Edison, NJ 08837

Contact: Chaitanya Agnihotri, OSC  
(908) 906-6908

# Sampling QA/QC Work Plan

for

## AO Polymer

Prepared by  
Roy F. Weston, TAT

EPA Project No.: CB  
Contractor Work Order No.: 02-9309-0011  
EPA Contract No.: 68-WD-0036

### Approvals

Roy F. Weston, TAT

EPA

Tom O'Neill 9/23/93  
Tom O'Neill Date  
TAT QC

Joseph Cosentino  
Joseph Cosentino  
On-Scene Coordinator

9-23-93  
Date

Chris Burge 9/23/93  
Chris Burge Date  
Project Manager

## 1.0 BACKGROUND

The [suspected] contamination at the AO Polymer site is a result of spillage from manufacturing processes and chemical storage both within the plant and the outside storage areas. The site is located in Sparta, Sussex County, New Jersey. The nearest residents are located within 0.5 miles of the site, in a north direction. Other residents or significant environments in proximity to this site are located 1 miles due northwest and south of the site. AO Polymer is a Chemical Manufacturing site on 4 acres which has been operating for 36 years.

The types of material(s) handled at this site are semivolatile compounds, volatile compounds, acids and bases. The volume(s) of contaminated materials to be addressed are the areas of suspected previous spills, drums stored in trailers and drums stored in the process buildings. The contaminants of concern are toluene diisocyanate, xylene, formaldehyde, hydrochloric acid, sodium hydroxide, methyl ethyl ketone and isopropanol.

The basis of this information may be found in EPA, New Jersey Department of Environmental Protection and Energy (NJDEPE) and local health department inspections.

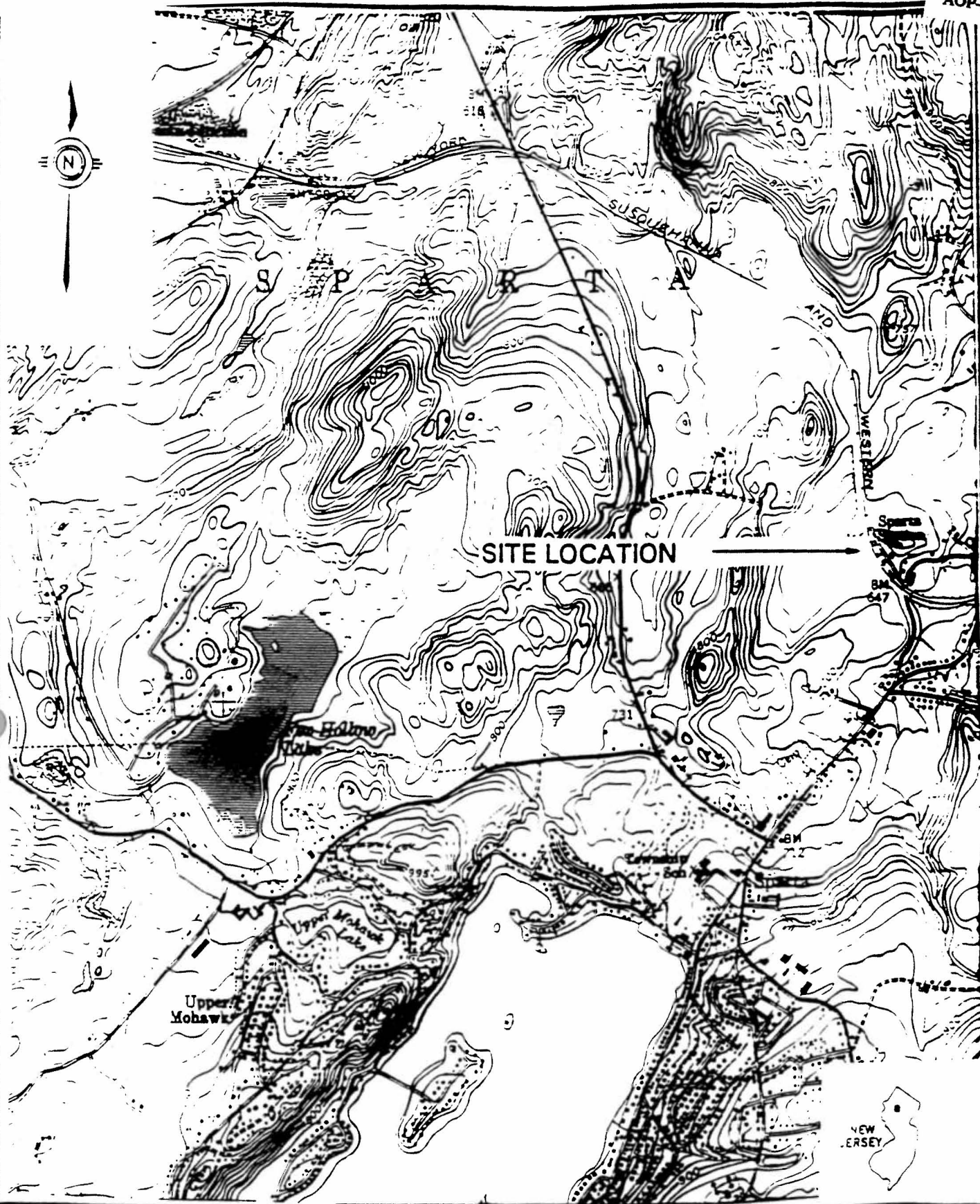
## 2.0 DATA USE OBJECTIVES

The objective of this sampling event is to determine the presence of contamination and the extent of contamination for the purpose of preparing a Removal Site Evaluation Report (RSE) for the EPA Response and Prevention Branch. The data will be evaluated against Federal/State Action Levels, NJDEPE soil contaminant levels and RCRA waste regulations.

## 3.0 QUALITY ASSURANCE OBJECTIVES

As identified in Sections 1.0 and 2.0 the objective of this project applies to the following parameters:

Parameters	Matrix	Intended Use Of Data	QA Objective
Cyanide	Drum Liquid	RSE	QA3
Cyanide	Soil	RSE	QA3
Target Compound List	Drum Liquid	RSE	QA3
Target Compound List	Soil	RSE	QA3
Volatile Organics	Air	RSE	QA2



Roy F. Weston, Inc.  
**MAJOR PROGRAMS DIVISION**

EPA PM  
 J. Cosentino

Figure 1  
 Site Location

AN ASSOCIATION WITH FOSTER WHEELER CORP.,  
 C.C. JOHNSON & MALHOTRA, P.C., RESOURCE  
 APPLICATIONS, INC. AND R.E. SARRIERA ASSOCIATES

TAT PM  
 C. Burge

A.O. Polymer  
 Sparta, NJ

## 4.0 APPROACH AND SAMPLING METHODOLOGIES

## 4.1 Sampling Equipment

The following equipment will be utilized to obtain environmental samples from the respective media/matrix:

Parameter/Matrix	Sampling Equipment	Fabrication	Dedicated
Cyanide in Drum Liquid	COLIWASA	glass	Yes
Cyanide in Soil	Scoop	stainless steel	Yes
Target Compound List in Drum Liquid	COLIWASA	glass	Yes
Target Compound List in Soil	Scoop	stainless steel	Yes
Volatile Organics in Air	Charcoal Tube	glass	Yes

## 4.2 Sampling Design

The sampling design is depicted on the attached Sample Location Map (Figure 4-1). Soil samples will be collected from obviously stained or areas suspected of contamination as identified by the OSC. Drum samples will be collected from any drums which are found to be leaking, unlabeled and/or deteriorated. These samples will also be identified by the OSC. Air samples will be collected from the process areas and in an upwind location from the process areas. The areas to be sampled will be identified by the OSC and will be based on wind direction.

## 4.3 Standard Operating Procedures

## 4.3.1 Sample Documentation

All sample documents will be completed legibly, in ink. Any corrections or revisions will be made by lining through the incorrect entry and by initialling the error.



## FIELD LOGBOOK

The field logbook is essentially a descriptive notebook detailing site activities and observations so that an accurate account of field procedures can be reconstructed in the writer's absence. All entries will be dated and signed by the individuals making the entries, and should include the following:

1. Site name and project number.
2. Name(s) of personnel on-site.
3. Dates and times of all entries (military time preferred).
4. Descriptions of all site activities, including site entry and exit times.
5. Noteworthy events and discussions.
6. Weather conditions.
7. Site observations.
8. Identification and description of samples and locations.
9. Subcontractor information and names of on-site personnel.
10. Date and time of sample collections, along with chain of custody information.
11. Record of photographs.
12. Site sketches.

## SAMPLE LABELS

Sample labels will clearly identify the particular sample, and should include the following:

1. Site name and number.
2. Time and date sample was taken.
3. Sample preservation.
4. Analysis requested.

Optional, but pertinent, information is the sample location. Sample labels will be securely affixed to the sample container. Tie-on labels can be used if properly secured.

## CHAIN OF CUSTODY RECORD

A Chain of Custody record will be maintained from the time that the sample is taken to its final deposition. Every transfer of custody must be noted and signed for, and a copy of this record kept by each individual who has signed. When samples (or groups of samples) are not under direct control of the individual responsible for them, they must be stored in a locked container sealed with a Custody Seal. The Chain of Custody record should include (at minimum) the following:

1. Sample identification number.
2. Sample information.
3. Sample location.
4. Sample date.
5. Name(s) and signature(s) of sampler(s).
6. Signature(s) of any individual(s) with control over samples.

## CUSTODY SEALS

Custody Seals demonstrate that a sample container has not been tampered with, or opened. The individual in possession of the sample(s) will sign and date the seal, affixing it in such a manner that the container cannot be opened without breaking the seal. The name of this individual, along with a description of the sample packaging, will be noted in the field logbook.

### 4.3.2 Sampling SOPs

## CHARCOAL TUBE SAMPLING

Charcoal tube sampling is performed by drawing a known volume of air through a charcoal adsorption tube. As air is drawn through the tube during sampling, gases and vapors are adsorbed onto the surface of the charcoal. After sampling the tubes are delivered to the laboratory for analysis. Charcoal tube sampling is utilized to identify specific contaminants in air. The greatest selectivity of activated charcoal is towards nonpolar organic solvent vapors, (e.g., carbon tetrachloride, chlorobenzene and toluene). Organic compounds that are gaseous at room temperature, reactive, polar, or oxygenated (aldehyde, alcohols and some ketones) are either not adsorbed (relatively early breakthrough) or inefficiently desorbed. Prior to sampling, the entire sampling train (rotometer, sampling pump, manifold, and charcoal tube) is calibrated for flow rate.

## DRUM SAMPLING

The most widely used method of sampling a drum involves the use of a glass thief. This method is quick, simple, relatively inexpensive, and requires no decontamination. The thief is inserted into the drum until a solid layer or bottom of the drum is encountered. The waste is allowed to equilibrate in the sample tube, which is then capped and removed for discharge by gravity into the sample container.

Another drum sampling device is the Composite Liquid Waste Sampler (COLIWASA). Collection with a COLIWASA allows a sample to be collected from the full depth of a drum and maintain it in the transfer tube until delivery

to the sample bottle. The COLIWASA is designed to permit representative sampling of multiphased wastes from containerized wastes. However, unlike the glass thief, a COLIWASA is extremely difficult to field decontaminate and relatively expensive, thereby making it impractical to throw away.

## SOIL SAMPLING

Collection of samples from near-surface soil will be accomplished with scoops. Surface debris will be removed to the required depth with this equipment, then a stainless steel or plastic scoop can be used to collect the sample. This method can be used in most soil types but is limited to sampling near surface areas. The use of a flat, pointed mason trowel to cut a block of the desired soil can be helpful when undisturbed profiles are required. A stainless steel scoop, lab spoon, or plastic spoon will suffice in most other applications. Each sampler will be used for one sample only. If stainless steel scoops are used they will be precleaned prior to the sampling event using the decontamination procedure described elsewhere in Section 4.0.

### 4.3.3 Sample Handling and Shipment

Each of the sample bottles will be sealed and labeled according to the following protocol. Caps will be secured with custody seals. Bottle labels will contain all required information including site name and sample number, time and date of collection, analysis requested, and preservative used. Sealed bottles will be placed in large metal or plastic coolers, and padded with an absorbent material such as vermiculite. All sample documents will be affixed to the underside of each cooler lid. The lid will be sealed and affixed on at least two sides with custody seals so that any sign of tampering is easily visible.

## 4.4 Schedule of Activities

Table 1: Proposed Schedule of Work

Activity -----	Start Date -----	End Date -----
Drum, soil and air sampling	09/23/93	09/23/93

## 5.0 PROJECT ORGANIZATION AND RESPONSIBILITIES

The EPA On-Scene Coordinator, Joseph Cosentino, will provide overall direction to Roy F. Weston, TAT staff concerning project sampling needs, objectives and schedule.

The Roy F. Weston, TAT Task Leader, Chris Burge, is the primary point of contact with the EPA On-Scene Coordinator. The Task Leader is responsible for the development and completion of the Sampling QA/QC Plan, project team organization, and supervision of all project tasks, including reporting and deliverables.

The Roy F. Weston, TAT Site QC Coordinator, Tom O'Neill, is responsible for ensuring field adherence to the Sampling QA/QC Plan and recording any deviations. The Site QC Coordinator is also the primary project team contact with the lab.

The following sampling personnel will work on this project:

Personnel -----	Responsibility -----
Chris Burge	Project manager
Suzanne May	Sample collection
Tom O'Neill	Sample Collection
William Sy	Sample Collection

The following laboratories will be providing the following analyses:

Lab Name/Location -----	Lab Type -----	Parameters -----
Accredited Labs Carteret, New Jersey	Private	All

## 6.0 QUALITY ASSURANCE REQUIREMENTS

The following requirements apply to the respective QA Objectives and parameters identified in Section 3.0 as shown in Tables 2A and 3B. The following QA Protocols for QA2 data are applicable to the air sample matrix and include:

1. Provide sample documentation in the form of field logbooks, the appropriate field data sheets and chain of custody records. Chain of custody records are optional for field screening locations.

2. All instrument calibration and/or performance check procedures/methods will be summarized and documented in the field/personal or instrument log notebook.
3. The detection limit will be determined and recorded, along with the data, where appropriate.
4. Document sample holding times; this includes documentation of sample collection and analysis dates.
5. Provide initial and continuing instrument calibration data.
- 6a. For soil, sediment and water samples, include rinsate blanks, field blanks and trip blanks, as specified in the attached table.
- 6b. For air samples, include lot blanks, field blanks, collocated samples, trip blanks, breakthrough, and QC positive samples, as specified in the attached table.
7. Performance Evaluation samples are optional, if available.
8. Choose any one or combination of the following three options:
  - (i). Definitive identification - confirm the identification of analytes on 10% of the screened (field or lab) or 100% of the unscreened samples via an EPA-approved method; provide documentation such as gas chromatograms, mass spectra, etc.
  - (ii). Quantitation - provide documentation for quantitative results from screening and the EPA-approved verification method (for screened samples) or just the quantitative results (in the case of unscreened samples).
  - (iii). Analytical error determination - determine the analytical error by calculating the precision, accuracy, and coefficient of variation on a subset of the screened or all of the unscreened samples using an EPA-approved method.

The following QA Protocols for QA3 data, as shown in Tables 2B and 3A, are applicable for the soil and liquid matrices and include:

1. Provide sample documentation in the form of field logbooks, the appropriate field data sheets and chain of custody records. Chain of custody records are optional for field screening locations.
2. All instrument calibration and/or performance check procedures/methods will be summarized and documented in the field/personal or instrument log notebook.
3. The detection limit will be determined and recorded, along with the data, where appropriate.

4. **Document** sample holding times: this includes documentation of **sample collection and analysis dates**.
5. **Provide** initial and continuing instrument calibration data.
- 6a. **For soil, sediment and water samples, include rinsate blanks, field blanks and trip blanks, as specified in the attached table.**
- 6b. **For air samples, include lot blanks, field blanks, collocated samples, trip blanks, breakthrough, and QC positive samples, as specified in the attached table.**
7. **Performance Evaluation samples are required.**
8. **Definitive identification on 100% of the "critical" samples by an EPA-approved method.**
9. **Quantitation - provide documentation for quantitative results from screening and EPA-approved verification methods (for screened samples) or just quantitative results (in the case of unscreened samples).**
10. **Analytical error determination on 100% of the "critical" samples by an EPA-approved method. Determine precision, accuracy and coefficient of variation. Determine false-positive and false-negative values.**

## 7.0 DELIVERABLES

The Roy F. Weston, TAT Task Leader, Chris Burge, will maintain contact with the EPA On-Scene Coordinator, Joseph Cosentino, to keep him informed about the technical and financial progress of this project. This communication will commence with the issuance of the work assignment and project scoping meeting. Activities under this project will be reported in status and trip reports and other deliverables (e.g., analytical reports, final reports) described herein. Activities will also be summarized in appropriate format for inclusion in monthly and annual reports. The following deliverables will be provided under this project:

### TRIP REPORT

A trip report will be prepared to provide a detailed accounting of what occurred during each sampling mobilization. The trip report will be prepared within two weeks of the sampling mobilization. Information will be provided on time of major events, dates, and personnel on-site (including affiliations). The trip report will be organized into three major sections: Background, Observations, Activities, Conclusions and Recommendations.

## MAPS/FIGURES

The maps showing sample locations will be provided.

## ANALYSIS

This sampling event requires analytical services. Documentation of lab selection, raw data, or results will be provided in the analytical report.

## DATA REVIEW

A review of the data generated under this plan will be undertaken. The assessment of data acceptability or useability will be provided separately, or as part of the analytical report.

## ANALYTICAL REPORT

An analytical report will be prepared for samples analyzed under this plan. Information regarding the analytical methods or procedures employed, sample results, QA/QC results, chain of custody documentation, laboratory correspondence, and raw data will be provided within this deliverable.

## 8.0 DATA VALIDATION

### QA2

Air sampling data generated under this QA/QC Sampling Plan will be evaluated accordingly with appropriate criteria contained in the Removal Program Data Validation Procedures which accompany OSWER Directive #9360.4-1. The results of 10% of the samples in the analytical data packages should be evaluated for all of the elements listed in Section 6.0 of the QA/QC Sampling Plan. The holding times, blank contamination, and detection capability will be reviewed for all remaining samples.

### QA3

Soil and liquid sample data generated under this QA/QC Sampling Plan will be evaluated accordingly with appropriate criteria contained in Removal Program Data Validation Procedures which accompany OSWER Directive #9360.4-1. This objective, the most stringent of all objectives, requires that at least 10% of the samples in the lab data package be evaluated for all of the elements listed in Section 6.0 of this QA/QC Sampling Plan. Of the remaining samples, holding times, blank contamination, precision, accuracy, error determination, detection limits, and confirmed identification will be reviewed. This objective also requires review of all elements for all samples in each analyte category (i.e. VOA's and PCB's) in every tenth data package received from an individual lab.

## TARGET COMPOUND LIST (TCL) AND CONTRACT REQUIRED QUANTITATION LIMITS (CROL)

Volatiles	CAS Number	Quantitation Limits*			
		Water ug/L	Low	Med.	On
			Soil ug/Kg	Soil ug/Kg	Column (pp)
1. Chloromethane	74-87-3	10	10	1200	(50)
2. Bromomethane	74-83-9	10	10	1200	(50)
3. Vinyl Chloride	75-01-4	10	10	1200	(50)
4. Chloroethane	75-00-3	10	10	1200	(50)
5. Methylene Chloride	75-09-2	10	10	1200	(50)
6. Acetone	67-64-1	10	10	1200	(50)
7. Carbon Disulfide	75-15-0	10	10	1200	(50)
8. 1,1-Dichloroethene	75-35-4	10	10	1200	(50)
9. 1,1-Dichloroethane	75-34-3	10	10	1200	(50)
10. 1,2-Dichloroethene (total)	540-59-0	10	10	1200	(50)
11. Chloroform	67-66-3	10	10	1200	(50)
12. 1,2-Dichloroethane	107-06-2	10	10	1200	(50)
13. 2-Butanone	78-93-3	10	10	1200	(50)
14. 1,1,1-Trichloroethane	71-55-6	10	10	1200	(50)
15. Carbon Tetrachloride	56-23-5	10	10	1200	(50)
16. Bromodichloromethane	75-27-4	10	10	1200	(50)
17. 1,2-Dichloropropane	78-87-5	10	10	1200	(50)
18. cis-1,3-Dichloropropene	10061-01-5	10	10	1200	(50)
19. Trichloroethene	79-01-6	10	10	1200	(50)
20. Dibromochloromethane	124-48-1	10	10	1200	(50)
21. 1,1,2-Trichloroethane	79-00-5	10	10	1200	(50)
22. Benzene	71-43-2	10	10	1200	(50)
23. trans-1,3-Dichloropropene	10061-02-6	10	10	1200	(50)
24. Bromoform	75-25-2	10	10	1200	(50)
25. 4-Methyl-2-pentanone	108-10-1	10	10	1200	(50)
26. 2-Hexanone	591-78-6	10	10	1200	(50)
27. Tetrachloroethene	127-18-4	10	10	1200	(50)
28. Toluene	108-88-3	10	10	1200	(50)
29. 1,1,2,2-Tetrachloroethane	79-34-5	10	10	1200	(50)
30. Chlorobenzene	108-90-7	10	10	1200	(50)
31. Ethyl Benzene	100-41-4	10	10	1200	(50)
32. Styrene	100-42-5	10	10	1200	(50)
33. Xylenes (Total)	1330-20-7	10	10	1200	(50)

\* Quantitation limits listed for soil/sediment are based on wet weight. The quantitation limits calculated by the laboratory for soil/sediment, calculated on dry weight basis as required by the contract, will be higher.



## TARGET COMPOUND LIST (TCL) AND CONTRACT REQUIRED QUANTITATION LIMITS (CRL)

Semivolatiles	CAS Number	Quantitation Limits*			On Column (ng)
		Water ug/L	Low Soil ug/Kg	Med. Soil ug/Kg	
34. Phenol	108-95-2	10	330	10000	(20)
35. bis(2-Chloroethyl) ether	111-44-4	10	330	10000	(20)
36. 2-Chlorophenol	95-57-8	10	330	10000	(20)
37. 1,3-Dichlorobenzene	541-73-1	10	330	10000	(20)
38. 1,4-Dichlorobenzene	106-46-7	10	330	10000	(20)
39. 1,2-Dichlorobenzene	95-50-1	10	330	10000	(20)
40. 2-Methylphenol	95-48-7	10	330	10000	(20)
41. 2,2'-oxybis (1-Chloropropane)*	108-60-1	10	330	10000	(20)
42. 4-Methylphenol	106-44-5	10	330	10000	(20)
43. N-Nitroso-di-n- propylamine	621-64-7	10	330	10000	(20)
44. Hexachloroethane	67-72-1	10	330	10000	(20)
45. Nitrobenzene	98-95-3	10	330	10000	(20)
46. Isophorone	78-59-1	10	330	10000	(20)
47. 2-Nitrophenol	88-75-5	10	330	10000	(20)
48. 2,4-Dimethylphenol	105-67-9	10	330	10000	(20)
49. bis(2-Chloroethoxy) methane	111-91-1	10	330	10000	(20)
50. 2,4-Dichlorophenol	120-83-2	10	330	10000	(20)
51. 1,2,4-Trichlorobenzene	120-82-1	10	330	10000	(20)
52. Naphthalene	91-20-3	10	330	10000	(20)
53. 4-Chloroaniline	106-47-8	10	330	10000	(20)
54. Hexachlorobutadiene	87-68-3	10	330	10000	(20)
55. 4-Chloro-3-methylphenol	59-50-7	10	330	10000	(20)
56. 2-Methylnaphthalene	91-57-6	10	330	10000	(20)
57. Hexachlorocyclopentadiene	77-47-4	10	330	10000	(20)
58. 2,4,6-Trichlorophenol	88-06-2	10	330	10000	(20)
59. 2,4,5-Trichlorophenol	95-95-4	25	800	25000	(50)
60. 2-Chloronaphthalene	91-58-7	10	330	10000	(20)
61. 2-Nitroaniline	88-74-4	25	800	25000	(50)
62. Dimethylphthalate	131-11-3	10	330	10000	(20)
63. Acenaphthylene	208-96-8	10	330	10000	(20)
64. 2,6-Dinitrotoluene	606-20-2	10	330	10000	(20)
65. 3-Nitroaniline	99-09-2	25	800	25000	(50)
66. Acenaphthene	83-32-9	10	330	10000	(20)
67. 2,4-Dinitrophenol	51-28-5	25	800	25000	(50)
68. 4-Nitrophenol	100-02-7	25	800	25000	(50)

\* = Previously known by the name bis(2-Chloroisopropyl) ether

Semivolatiles	CAS Number	Quantitation Limits*			On Column µg/L
		Water µg/L	Low	Med.	
			Soil µg/Kg	Soil µg/Kg	
69. Dibenzofuran	132-64-9	10	330	10000	(20)
70. 2,4-Dinitrotoluene	121-14-2	10	330	10000	(20)
71. Diethylphthalate	84-66-2	10	330	10000	(20)
72. 4-Chlorophenyl-phenyl ether	7005-72-3	10	330	10000	(20)
73. Fluorene	86-73-7	10	330	10000	(20)
74. 4-Nitroaniline	100-01-6	25	800	25000	(50)
75. 4,6-Dinitro-2-methylphenol	534-52-1	25	800	25000	(50)
76. N-nitrosodiphenylamine	86-30-6	10	330	10000	(20)
77. 4-Bromophenyl-phenylether	101-55-3	10	330	10000	(20)
78. Hexachlorobenzene	118-74-1	10	330	10000	(20)
79. Pentachlorophenol	87-86-5	25	800	25000	(50)
80. Phenanthrene	85-01-8	10	330	10000	(20)
81. Anthracene	120-12-7	10	330	10000	(20)
82. Carbazole	86-74-8	10	330	10000	(20)
83. Di-n-butylphthalate	84-74-2	10	330	10000	(20)
84. Fluoranthene	206-44-0	10	330	10000	(20)
85. Pyrene	129-00-0	10	330	10000	(20)
86. Butylbenzylphthalate	85-68-7	10	330	10000	(20)
87. 3,3'-Dichlorobenzidine	91-94-1	10	330	10000	(20)
88. Benzo(a)anthracene	56-55-3	10	330	10000	(20)
89. Chrysene	218-01-9	10	330	10000	(20)
90. bis(2-Ethylhexyl)phthalate	117-81-7	10	330	10000	(20)
91. Di-n-octylphthalate	117-84-0	10	330	10000	(20)
92. Benzo(b)fluoranthene	205-99-2	10	330	10000	(20)
93. Benzo(k)fluoranthene	207-08-9	10	330	10000	(20)
94. Benzo(a)pyrene	50-32-8	10	330	10000	(20)
95. Indeno(1,2,3-cd)pyrene	193-39-5	10	330	10000	(20)
96. Dibenz(a,h)anthracene	53-70-3	10	330	10000	(20)
97. Benzo(g,h,i)perylene	191-24-2	10	330	10000	(20)

\* Quantitation limits listed for soil/sediment are based on wet weight. The quantitation limits calculated by the laboratory for soil/sediment, calculated on dry weight basis as required by the contract, will be higher.

## TARGET COMPOUND LIST (TCL) AND CONTRACT REQUIRED QUANTITATION LIMITS (CRQL)

Pesticides/Aroclors	CAS Number	Quantitation Limits*		
		Water ug/L	Soil ug/Kg	On Column (2g)
98. alpha-BHC	319-84-6	0.05	1.7	5
99. beta-BHC	319-85-7	0.05	1.7	5
100. delta-BHC	319-86-8	0.05	1.7	5
101. gamma-BHC (Lindane)	58-89-9	0.05	1.7	5
102. Heptachlor	76-44-8	0.05	1.7	5
103. Aldrin	309-00-2	0.05	1.7	5
104. Heptachlor epoxide	1024-57-3	0.05	1.7	5
105. Endosulfan I	959-98-8	0.05	1.7	5
106. Dieldrin	60-57-1	0.10	3.3	10
107. 4,4'-DDE	72-55-9	0.10	3.3	10
108. Endrin	72-20-8	0.10	3.3	10
109. Endosulfan II	33213-65-9	0.10	3.3	10
110. 4,4'-DDD	72-54-8	0.10	3.3	10
111. Endosulfan sulfate	1031-07-8	0.10	3.3	10
112. 4,4'-DDT	50-29-3	0.10	3.3	10
113. Methoxychlor	72-43-5	0.50	17.0	50
114. Endrin ketone	53494-70-5	0.10	3.3	10
115. Endrin aldehyde	7421-36-3	0.10	3.3	10
116. alpha-Chlordane	5103-71-9	0.05	1.7	5
117. gamma-Chlordane	5103-74-2	0.05	1.7	5
118. Toxaphene	8001-35-2	5.0	170.0	500
119. Aroclor-1016	12674-11-2	1.0	33.0	100
120. Aroclor-1221	11104-28-2	2.0	67.0	200
121. Aroclor-1232	11141-16-5	1.0	33.0	100
122. Aroclor-1242	53469-21-9	1.0	33.0	100
123. Aroclor-1248	12672-29-6	1.0	33.0	100
124. Aroclor-1254	11097-69-1	1.0	33.0	100
125. Aroclor-1260	11096-82-5	1.0	33.0	100

\* Quantitation limits listed for soil/sediment are based on wet weight. The quantitation limits calculated by the laboratory for soil/sediment, calculated on dry weight basis as required by the contract, will be higher.

There is no differentiation between the preparation of low and medium soil samples in this method for the analysis of Pesticides/Aroclors.



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION II  
26 FEDERAL PLAZA  
NEW YORK, NEW YORK 10278

## DATE:

SUBJECT: Preliminary Assessment and Funding Authorization  
Request for a CERCLA Removal Action at the A.O. Polymer  
site, Sparta Township, Sussex County, New Jersey -  
ACTION MEMORANDUM

FROM: Joseph V. Cosentino, On-Scene Coordinator  
Response and Prevention Branch *Joseph V. Cosentino*

TO: William J. Muszynski, P.E.  
Acting Regional Administrator

THRU: George Pavlou, Acting Director *George Pavlou*  
Emergency and Remedial Response Division

Site ID No.: L3

I. PURPOSE

On August 24, 1993, Mr. Rich Puvogel, Remedial Project Manager for the Environmental Protection Agency's (EPA) New Jersey Superfund Section; requested that an assessment be conducted at the A.O. Polymer site to determine if the site met the criteria for conducting a Removal Action under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) as amended by 42 U.S.C. 9601 et. seq.

The purpose of this Action Memorandum is to request and document approval of funds for conducting a Removal Action at the A.O. Polymer site located in Sparta Township, Sussex County, New Jersey. This Action Memorandum recommends that a removal action be conducted to secure and stabilize the site. In addition, all on-site material will be inventoried and sampled. A second Action Memorandum will be submitted for the transport and proper disposal of the hazardous substances identified on-site.

## II. SITE CONDITIONS AND BACKGROUND

### A. Site Description

#### 1. Removal Site Evaluation

A.O. Polymer reportedly made/makes polyurethane resins by reacting toluene diisocyanate, propylene glycol, xylol, or methyl diisocyanate. Additional materials identified on-site include; sodium hydroxide, hydrochloric acid, xylene, xycol ether acetate, oxiane methyl-polymer, polyoxymethyl-1-2-ethanediyl, methyl methacrylate, glycidyl methacrylate and ethylene glycol.

Observations made at this site indicate the presence of several hundred drums and smaller containers throughout the property and within two open trailers. Most of the containers are either damaged, rusted or partially opened, and are generally stored improperly. Some are stacked four high on damaged pallets and/or tilted precipitously. The majority of the drums are stored on a concrete pad. Some of the drums had labels identifying the contents as hazardous substances. There are an estimated twenty-seven (27) tanks of unknown content. Four (4) of the tanks reportedly each contain an estimated 3,000 gallons of a liquid organic material. Most of these tanks and the associated piping have severely damaged suspect asbestos material on them. A tanker and three rail road tank cars of unknown contents is also present at the site.

Although there is a security gate, the site is readily accessible through the entrance of the Mohawk Gun Club, along the railroad tracks and through the vegetation at the rear of the site. The materials present on-site combined with unrestricted access present a potential danger of direct human contact.

The A.O. Polymer site presents a significant threat of release to the environment and a threat to public health. The haphazard manner in which hazardous substances are stored at the site, whether they be defined as wastes, by products, raw materials or product contribute to the chances of a significant release occurring.

#### 2. Physical Location

The A.O. Polymer site is an intermittently active chemical facility located at 44 Station Road, approximately one mile northeast of the Town of Sparta, Sussex County, New Jersey. Figure 1 presents a facility location map, Figure 2 depicts the facility. This facility has been the site of organic chemical processes involved in the manufacture of ketone, urethane, and acrylic resins and various other products since the early 1960's.

The A.O. Polymer facility occupies about four acres along the New York, Susquehanna and Western (NYS&W) Railway and is bounded to the northwest by an unnamed tributary of the Wallkill River, to the northeast by Station Park, to the southeast by Station Road, and to the southwest by the railway and a private gun club. The Sparta High School lies one-half mile to the north-northeast of the site. The Wallkill River passes about 500 feet to the southeast of the site.

The A.O. Polymer Site is located in the southwestern end of the Wallkill River Valley on the western flank of a small hill which rises to an elevation of approximately 700 feet. The Wallkill River Valley in the vicinity of the site is broad and level, with an average elevation between 600 and 640 feet. The Sparta Mountains to the east of the site rise to an elevation of over 1,200 feet. To the west, the Wallkill Valley is bordered by rugged hills which range in elevation from 900 to 1,100 feet.

Major surface water bodies in the vicinity of the site include the Wallkill River and an unnamed tributary to the Wallkill River which is located approximately 500 feet to the north of the site. The Wallkill River originates approximately 1.2 miles southwest of the site at the outlet of Lake Mohawk. Lake Mohawk is a privately owned and regulated 700 acre, multi-use impoundment surrounded by high density residential developments. From Lake Mohawk, the Wallkill River flows northeast passing about 200 feet southeast of the A.O. Polymer facility at it's closest approach. The facility appears to lie on the surface water divide, between the Wallkill River and the unnamed tributary which joins the Wallkill River about one mile northeast of the site. Five miles north of Sparta, the Wallkill River enters Franklin Pond and then joins Roundout Creek, which flows into the Hudson River in New York State.

Bedrock beneath the A.O. Polymer facility has been identified as the Allentown member of the Cambro-Ordovician Kittatinny Formation. The Allentown member is a thick, rhythmically bedded dolomite that locally contains significant solution cavities. An ancient fault zone termed the "zero-fault" separates the Allentown member from the pre-Cambrian-aged crystalline rocks lying to the west of the valley. The "zero-fault" is a normal fault which dips steeply to the southeast. Overlying the Allentown member are thick deposits of glacially deposited gravels, sands, silts and clays that range in thickness from 10 to nearly 200 feet.

In Sussex County, the cavernous members of Kittatinny Formation and stratified glacial drift found in buried river valleys, are the most productive aquifers for both public and private potable water wells. Thus, the Allentown member and the overlying glacial drift in the Wallkill River Valley are potentially important water resources.

Land use in the vicinity of the A.O. Polymer facility varies among high density residential developments, recreational land, and undisturbed forests and wetland areas. The residential and commercial centers of Sparta Township are located approximately one half to one mile south and southwest of the site. Land immediately west of the site is primarily undeveloped old fields. However, the Sparta Gun Club operates a shooting range on land directly to the northwest of the site. Immediately north and east of the site is Station Park, a multi-use recreational facility owned and maintained by Sparta Township. The park provides Sparta residents with year round opportunities for hiking and organized sports. The township has long-range plans for further development of the parkland.

Areas farther to the west, north, and east of the site are less populated. However, development for residential use is increasing. In the last two years, several new homes have been built in the hills northwest of the site.

The Sparta High School campus is located approximately one-half mile northeast of the site. The high density residential centers located to the south and west of the site are supplied with drinking water by the Lake Mohawk Water Company and Sparta Water District No. 1. These utilities obtain water from combined surface water and groundwater sources lying outside the study area. However, those residences lying to the north and east of the site, including the Sparta High School still rely on individual water wells for potable water.

### 3. Site Characteristics

A.O. Polymer is a facility engaged in the occasional production of polyurethane and ketone resins. From the early 1960's to 1977 the facility was owned and operated by Mohawk Industries, Inc. In 1977, the facility was purchased by the A.O. Polymer Corporation. A portion of the site reportedly owned by New York, Susquehanna and Western (NYS&W) Rail Road contains a four bay open garage containing abandoned material.

Significant site features include the site office and laboratory facilities, the main reactor building, assorted storage buildings, and a non-contact water cooling pond. An old railroad structure is located to the north of the site on railroad property. This building contains an estimated 100 to 150 drums, pails, bags and containers reportedly abandoned by Mohawk Industries. The yard surrounding the main buildings on the A.O. Polymer property contain approximately 27 storage tanks of various sizes, numerous drums containing corrosive, flammable, organic and toxic chemicals and old equipment.

Although there is a secure gate on the road to the site, the site is readily accessible through the entrance to the Mohawk Gun Club and through the vegetation at the rear of the site.

4. Release and Threatened Release Into the Environment of a Hazardous Substance, or Pollutant or Contaminant

Some of the materials improperly stored in drums and containers on-site are hazardous substances as defined by Section 101(14) of CERCLA. The following is a partial list of the hazardous substances found at the A.O. Polymer site.

<u>Substance</u>	<u>Statutory Source for Designation as a Hazardous Substance</u>
Toluene	RCRA, Section 3001 CWA, Section 311(b)(4) CWA, Section 307(a)
Sodium Hydroxide	RCRA, Section 3001
Xylene	RCRA, Section 3001 CWA, Section 311(b)(4)
Materials exhibiting the Characteristic of Corrosivity	RCRA, Section 3001 (as defined in 40 CFR, Part 261.22)
Materials exhibiting the Characteristic of Ignitability	RCRA, Section 3001 (as defined in 40 CFR, Part 261.21)



The potential health effects from these compounds are identified below:

SUMMARY OF POTENTIAL TOXICOLOGICAL  
EFFECTS OF SELECTED COMPOUNDS

Eye, skin, or respiratory system irritant  
Toxic by inhalation, ingestion, or  
contact  
Central nervous system damage  
Cardiovascular damage  
Kidney damage  
Liver damage  
Carcinogenic

SODIUM HYDROXIDE	X	X					
ASBESTOS		X					X
TOLUENE DIISOCYANATE		X					
HYDROCHLORIC ACID	X	X					
TOLUENE	X	X	X		X	X	
XYLENE	X		X	X	X	X	

An immediate threat at the site is an air release from the facility affecting the community, local high school, gun club, on-site workers and the park. On-site air monitoring using an organic vapor analyzer (OVA) and HNu indicated vapor levels in excess of 60 ppm above background levels outside of process buildings and in excess of 200 ppm within the buildings. Drager tube indicators detected toluene and xylene. Additionally, soil contamination currently exists on-site.

5. NPL Status

The site is presently on the National Priorities List (NPL). The remedial actions that have been performed at the site or that are scheduled to be performed at the site do not address the surface contamination caused by the improper storage of drums and abandoned materials on the A.O. Polymer site and on the adjacent property.

## B. Other Actions to Date

### 1. Previous Actions

In conjunction with a groundwater investigation, the New Jersey Department of Environmental Protection (NJDEP), presently the New Jersey Department of Environmental Protection and Energy's (NJDEPE), Division of Waste Management (DWM) began investigating reports of drum stockpiling. On September 25, 1978, A.O. Polymer Corporation was cited by NJDEP officials for violations concerning storage of hazardous wastes. This notice, however, was rescinded because wastes in question reportedly belonged to the former owner and operator of the facility, Mohawk Industries.

The DWM investigations implicated waste disposal and storage practices used by Mohawk Industries in the groundwater contamination problem. According to NJDEP files, waste handling practices under Mohawk included disposal of liquid chemical waste into unlined lagoons, stockpiling of over 800 decomposing drums, and burial of crushed and open drums containing waste materials.

In June 1979, the owners of the three affected wells filed damage claims with the state Hazardous Spill Fund, and in January of the following year, the District No. 1 Water Line was connected to these homes. This remedial action was partially financed by funds from the Hazardous Spill Fund.

In 1980, partial cleanup of the site, involving the removal of surface drums and the excavation and removal of buried drums, was initiated by NJDEP with funding available through the State Hazardous Spill Fund. This cleanup was undertaken in the three episodes identified below:

1. July-August 1980 - removal of about 600 drums and 1700 cubic yards of contaminated soils.
2. October 1981 - removal of 86 drums of material that had been sent to Mohawk Industries.
3. December 1981 - removal of contents of 264 drums and 120 cubic yards of crushed drums and debris.

These activities were essentially completed by December 1981, at a cost of approximately \$560,000.

Concern for the contamination of the Allentown aquifer and other domestic well water supplies, including the Sparta High School located one-half mile to the north, spurred additional groundwater investigations by NJDEP. After a site inspection in November 1981, A.O. Polymer was cited for failing to have a state

discharge permit for process water discharged to the cooling lagoon. The directive was dropped when A.O. Polymer insisted that the lagoon was lined with PVC and received non-contact water that contained no waste materials.

In January 1982, the Division of Water Resources installed 11 monitoring wells on and adjacent to the site to determine the extent of groundwater contamination. Sampling revealed that contamination had reached the Allentown formation, and could be found in monitoring wells in Station Park 300 yards to the northeast of the site.

Inspections of the A.O. Polymer operation continued through 1983. In May of 1983, it was discovered that laboratory sinks and other plant waste water discharged to septic tank systems. On June 10, 1983, NJDEP issued a directive letter ordering A.O. Polymer to provide: 1) sampling access for every septic tank; 2) acceptable storage for all drums containing pollutants; 3) a plot plan locating all storage tanks; and 4) submit a written report describing all actions taken to comply with these requirements. This directive was repeated on July 25, 1983, when A.O. Polymer failed to reply in a satisfactory manner.

A.O. Polymer contended that chemicals found in wells both on and off site were not used or produced by them in any of their processes, and were probably the result of past disposal practices associated with Mohawk operations.

In addition, to groundwater contamination, state inspectors acknowledge that a potential air contamination problem could exist at the site. State and local health department files contain numerous complaint records and affidavits documenting reports of odor in ambient air assumed to be emanating from the A.O. Polymer Plant. Complaints as recent as June 1986, are on file with the Sparta Health Department. Both the State Division of Environmental Quality and the Sparta Health Department have conducted site inspections after receiving complaints from nearby residents. As of the end of 1986, however, no evidence that New Jersey air quality codes have been violated has been obtained.

In 1984, investigation of the site was remanded to the Division of Hazardous Site Mitigation. In December 1986, a contract for an RI/FS at the site was issued to ICF/SRW Associates under the X-312 program. The Remedial Investigation/Feasibility Study (RI/FS) to identify remaining contamination problems, especially the extent of groundwater contamination, was initiated in September 1986. Field work was completed in June 1987. Follow-up sampling was performed in December 1987. The analytical data was reviewed and the Phase I RI final report was issued in

August 1988. A Phase II RI to further define the contaminated plume began in October 1989. The Town of Sparta's municipal water is supplied by another borough.

An NPL Assessment at this site was conducted in August of 1990. As a result of the NPL Assessment the site was referred to the Regional Resource Conservation and Recovery Act (RCRA) program.

## 2. Current Actions

An on-going Remedial Action addresses groundwater contamination. On March 31, 1992, EPA issued an Administrative Order under Section 106 of CERCLA to A.O. Polymer Corporation and to IBM. IBM is complying with the Order and undertaking the subsurface soil and groundwater remediation at the site. No current actions are being conducted at this site by either State or local governmental agencies.

### C. State and Local Authorities' Roles

#### 1. State and Local Actions to Date

State and/or Local Government have not been involved in the referral of this site, since it is an EPA lead NPL site.

#### 2. Potential for Continued State/Local Response

Neither the State or Local Government have the resources available to conduct the necessary removal action at this site. These organizations will act in a supporting role throughout the duration of this Removal Action.

### III. THREAT TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

#### A. Threats to Public Health or Welfare

The numerous hazardous substances, pollutants and contaminants stored haphazardly on-site present a threat to the public health and welfare as defined by Section 300.415(b)(2) of the National Contingency Plan (NCP) in that there is a significant potential for a release to occur. Many of the materials found at this site are toxic, flammable, and/or corrosive. Some of the materials are incompatible if mixed and present a significant threat of reaction and release. Many of these materials present a potential danger of direct human contact, since access to the site is essentially unrestricted. The most immediate threats at the site are children accessing the abandoned and improperly stored hazardous substances, and air releases of gasses or vapors which could affect the nearby residential community, the local high school, the gun club, and recreational users of the park.

## B. Threats to the Environment

The most immediate environmental threat at the site is an air release from the facility. On-site air monitoring using an organic vapor analyzer (OVA) and HNu indicated vapor levels in excess of 60 ppm above background levels outside of process buildings and in excess of 200 ppm within the buildings. Drager tube indicators detected toluene and xylene. Additionally, soil contamination currently exists on-site.

## IV. ENDANGERMENT DETERMINATION

Actual or threatened releases of hazardous substances from this facility may present an imminent and substantial endangerment to public health, or welfare, or the environment.

## V. PROPOSED ACTIONS AND ESTIMATED COSTS

### A. Proposed Action

#### 1. Proposed Actions Description

The objectives of this removal action are to eliminate the threat of release and the potential for exposure through direct human contact and on-site releases. This action proposes the following:

- Restricting access to the site and securing the property,
- Identification of all containerized material,
- Identification of areas of soil contamination,
- Stabilization and segregation of all containerized materials.
- Analysis of all materials requiring off-site disposal

#### 2. Contribution to Remedial Performance

The proposed actions will effectively contribute to the overall remediation of the site and is consistent with the objectives of the remedial action being taken at the site.

#### 3. Applicable or Relevant and Appropriate Requirements (ARARs)

ARARs within the scope of this project, particularly RCRA regulations that pertain to the disposal of hazardous wastes generated as a result of the proposed sampling activities, will be met to the extent practicable. Actions appropriate to protect the wetlands will be discussed with EPA's Biological and

Technical Assistance Group and U.S. Fish and Wildlife and will be implemented, as required.

4. Project Schedule

Measures to secure the site can be initiated within one week of approval of this action. In addition, measures to stabilize site conditions can begin within two weeks and sampling activities can be initiated concurrently with site stabilization activities.

B. Estimated Costs

1. Extramural Costs

<u>Regional allowance costs</u> (Total cleanup contractor costs include labor, equipment, materials, laboratory analysis includes 20% contingency.	\$500,000
---	-----------

Other extramural costs not funded from the regional allowance

Total TAT, including multiplier costs	\$100,000
---------------------------------------	-----------

Total ERT/REAC

CLP	\$50,000
-----	----------

Subtotal, Extramural costs	\$650,000
----------------------------	-----------

Extramural costs contingency (20% of subtotal, Extramural Costs; rounded to nearest thousand)	\$780,000
--	-----------

TOTAL, EXTRAMURAL COSTS

2. Intramural Costs

Intramural direct costs	\$100,000
-------------------------	-----------

Intramural indirect costs	\$100,000
---------------------------	-----------

TOTAL INTRAMURAL COSTS	\$200,000
------------------------	-----------

3. <u>TOTAL REMOVAL PROJECT CEILING</u>	\$980,000
---	-----------

VI. EXPECTED CHANGES IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

ditions at the site, if not addressed by the  
entation of these actions may present an imminent and  
ial endangerment to local residents through the potential  
to hazardous substances. If current conditions at the  
ce not addressed through a removal action, releases to the  
ment in the air media and the soil media will continue to

OUTSTANDING POLICY ISSUES

are no outstanding policy issues associated with this  
l action.

ENFORCEMENT

ite has been referred to EPA's Office of Regional Council<sup>SEI</sup>  
potential enforcement action. The On-Scene Coordinator will  
with the Program Support Branch, the Office of Regional  
l and NJDEPE in an attempt to identify and locate viable

RECOMMENDATION

Decision document represents a selected Removal Action for  
O. Polymer Site, Sparta, New Jersey. This document was  
oped in accordance with CERCLA and is not inconsistent with  
tional Contingency Plan (NCP).

is at the site meet the NCP Section 300.415(b)(2)  
ia for a removal action and I recommend your approval  
proposed removal action. The total project ceiling if  
ed will be \$980,000. Of this, an estimated \$500,000 will  
from the Regional Removal Allowance, and is within the  
al Advice of Allowance.

indicate your approval of the funding for the A.O. Polymer  
pursuant to your authority delegated by Assistant  
strator J. Winston Porter, May 25, 1988, Redelegation  
ndum, Delegation Number R-14-1-A.

ed:

W. Callahan  
William J. Muszynski, P.E.  
Regional Administrator

Date:

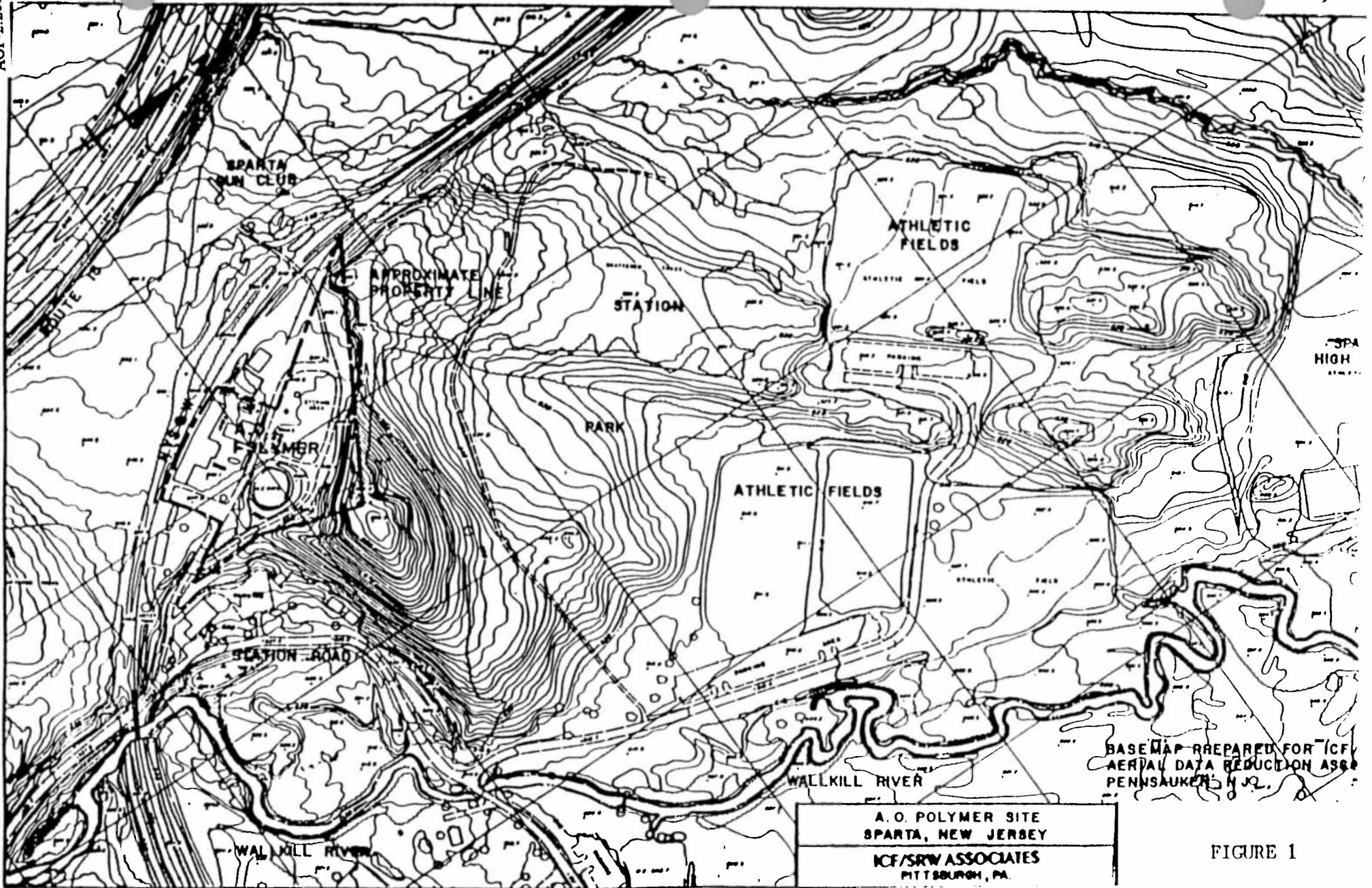
9/30/93

roved:

William J. Muszynski, P.E.  
Regional Administrator

Date:

after approval is obtained)



BASE MAP PREPARED FOR ICF/  
AERIAL DATA REDUCTION ASSN  
PENNSAUKEN, N.J.

A. O. POLYMER SITE SPARTA, NEW JERSEY
ICF/SRW ASSOCIATES PITTSBURGH, PA.

FIGURE 1





**1. Removal site evaluation**

See initial Action Memorandum attached.

**2. Physical location**

See initial Action Memorandum attached.

**3. Site characteristics**

See initial Action Memorandum attached.

**4. Release and threatened release into the environment of a hazardous substance, or pollutant, or contaminant**

On-site air monitoring using an organic vapor analyzer (OVA) and HNu indicated vapor levels in excess of 60 ppm above background levels at the opening of tanks outside of the process building. Analysis indicates that the tanks and associated pipe wrapping contain 30% asbestos. Hazcat field screening results indicate the presence of flammables, corrosives and organic chemical substances. In addition, potentially shock sensitive materials have been found at the Site. Most materials have been overpacked, however, it can be assumed that since many of the drums were leaking because of corrosion, the new drums would also leak.

The more immediate threat, which would cause a release, is the danger of direct human contact by area youths breaking into the buildings and performing acts of vandalism. Since many such acts have been performed at this Site, it is highly likely to reoccur.

**5. NPL status**

The Site is presently on the National Priorities List (NPL). However, the remedial actions at the Site did not address the portion of the Site currently occupied by A.O. Polymer.

**B. Other Actions to Date**

**1. Previous Actions**

On August 24, 1993, the Remedial Project Manager for the United States Environmental Protection Agency's (EPA) New Jersey Superfund Section, requested that an assessment be conducted at the Site to determine if it met the criteria for conducting a removal action under the CERCLA.

On August 25, 1993, members of the Response and Prevention Branch conducted a site visit and issued the owner/operator a Field Expedited Notice to Responsible Party in form requesting that all drums, containers and tanks be inventoried, sampled, identified and stabilized.

Based upon the findings of the removal site evaluation and a subsequent site visit, an Action Memorandum was prepared. The Acting Regional Administrator approved the Action Memorandum on September 30, 1993, authorizing a total project ceiling of \$980,000 of which \$500,000 is for mitigation contracting, to secure the Site and inventory, identify and stabilize the hazardous substances and wastes.

Prior to the approval of the Action Memorandum, the owner/operator of the Site expressed an interest in conducting a site clean-up and negotiating an Administrative Order on Consent (AOC) with EPA. An AOC was prepared and presented to the owner/operator. However, the owner/operator refused to enter into such an agreement with EPA and began a voluntary site clean-up, while claiming to be an active facility engaged in the production of a marketable product. By December 18, 1993, the owner/operator had removed several hundred drums and the bulk of the liquid material from the tanks.

Observations made following the attempted site clean-up indicate the presence of drums and smaller containers throughout the office, laboratory and warehouse building. Several drums were open and leaks and spills are apparent. Most of the smaller containers were either rusted or partially opened. All were unsecure and generally stored improperly. There are twenty-seven (27) tanks of unknown content. Although the owner/operator removed the bulk of the liquid material from these tanks, solids, sludges and residual liquids remain in the tanks. Several faulty valves were found to be leaking. Most of the tanks and the associated piping have severely damaged asbestos material on them.

As a result of the owner's claims of insufficient financial resources, the Site cleanup was not completed. The continuous trespassing by teenagers prompted the local health department to request the EPA to complete the cleanup started by the PRP. A removal action was initiated by EPA on April 27, 1994, to complete site stabilization activities.

The materials abandoned by the former owner/operator, continue to present a significant threat of release to the environment and a threat to public health. Measures taken during the initial removal action to segregate and stabilize materials were temporary and as such do not completely mitigate threats to human health and the environment.

## 2. Current actions

With the exception of the current EPA removal action to stabilize the Site, no other current federal or private actions are being conducted at this site. An on-going Remedial action addresses the past solvent recovery operations allegedly conducted by Mohawk Industries.

**C. State and Local Authorities' Roles**

**1. State and local actions to Date**

This is an EPA lead NPL site. There are no State or local actions taking place at the Site. State and local officials are routinely updated regarding on-going activities and programs.

**2. Potential for continued State/local response**

Since EPA has the lead at this Site, these organizations will act in a supporting role throughout the duration of this removal action.

**III. THREAT TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES**

**A. Threats to Public Health or Welfare**

The hazardous substances, pollutants and contaminants stored on-site present a threat to the public health and welfare as defined by Section 300.415(b)(2) of the (NCP) in that there is an actual on-going release and/or a significant potential for a release to occur. Many of the materials found at this site are toxic, flammable, and/or corrosive. Some of the materials are incompatible, if mixed, and present a significant threat of reaction and release.

These materials present a potential danger of direct human contact and access to the Site is essentially unrestricted.

**B. Threats to the Environment**

See initial Action Memorandum attached.

**IV. ENDANGERMENT DETERMINATION**

Actual or threatened releases of hazardous substances from this facility may present an imminent and substantial endangerment to public health, or welfare, or the environment.

**V. PROPOSED ACTIONS AND ESTIMATED COSTS**

**A. Proposed Action**

**1. Proposed actions description**

The objectives of this removal action are to eliminate the threat of release and the potential for exposure through direct human contact. This action proposes the following:

- the transport and disposal of all hazardous wastes, substances and pollutants identified during site stabilization;
- analysis of all remaining materials to determine if further action is required.

## 2. Contribution to remedial performance

The proposed actions will effectively contribute to the overall remediation of the site and is consistent with the present and any future remedial actions taken at the site.

## 3. Description of alternative technologies

Technology for the disposal of hazardous substances currently stored on the Site will be evaluated during the removal action when sampling data are available. The technology selected will meet the criteria for regulations, effectiveness, implementability and cost.

## 4. Engineering evaluation/cost analysis (EE/CA)

Due to the time-critical nature of this removal action, an EE/CA will not be prepared.

## 5. Applicable or relevant and appropriate requirements (ARARs)

See initial Action Memorandum attached.

## 6. Project schedule

Actions as outlined in this Action Memorandum can be initiated as soon as sample analysis, waste disposal profiles, and disposal bids are received. These tasks were initiated under the initial removal action.

## B. Estimated Costs

The additional activities as outlined in this Action Memorandum can be completed with the funding initially approved for this removal action. Costs will remain within the currently approved total project ceiling.

## VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

See initial Action Memorandum attached.

## VII. OUTSTANDING POLICY ISSUES

There are no outstanding policy issues associated with this removal action.

## VIII. ENFORCEMENT

A potentially responsible party (PRP) search has been conducted at the facility. The only PRP which was found was the A.O. Polymer Corporation which owns the property and operates the facility on it. The A.O. Polymer Corporation had initially attempted to perform removal activities, however it abandoned the facility and all cleanup efforts in December 1993. Attempts by the Sprata Health Department to contact the A.O. Polymer

Corporation or Mr. Pasin, its chief executive, through his attorney, proved fruitless. Therefore, in February 1994 EPA initiated a removal action to identify and stabilize the remaining hazardous substances on Site.

#### X. RECOMMENDATION

This decision document represents a selected removal action for the A.O. Polymer Site, Sparta, New Jersey. This document was developed in accordance with CERCLA as amended, and is not inconsistent with the NCP. This decision is based on the administrative record for the Site.

Conditions at the Site continue to meet the NCP Section 300.415(b)(2) criteria for a removal action and I recommend your approval of the proposed removal action. Costs will remain within the currently approved total project ceiling and a redirection of funds is not required.

Please indicate your approval and authorization of funding, as per current Delegation of Authority, by signing below.

/s/ William J. Muszynski

Approval: \_\_\_\_\_

William J. Muszynski, P.E.  
Deputy Regional Administrator

Date: SEP 1 1994

Disapproval: \_\_\_\_\_

William J. Muszynski, P.E.  
Deputy Regional Administrator

Date: \_\_\_\_\_

cc:(after approval is obtained)

J. Fox, RA  
K. Callahan, ERRD-D  
J. Frisco, ERRD-DDNJ  
R. Salkie, ERR-ADREPP  
G. Zachos, ERR-RAB  
J. Witkowski, ERR-RAB-TSS  
C. Moyik, ERR-PSB  
D. Karlen, ORC-NJSUP  
J. Marshall, EPD  
S. Murphy, EPM-FAM  
R. Gherardi, OPM-FIN  
D. Dietrich, 5202G  
T. Eby, 5202G  
C. Kelly, TATL  
J. Smolenski, NJDEP  
M. Pederson, NJDEP  
K. Delaney, NJDEP

# Health Assessment for

A.O. POLYMER

CERCLIS NO. NJD030253355

SPARTA, SUSSEX COUNTY, NEW JERSEY

AUG 03 1990

Agency for Toxic Substances and Disease  
U.S. Department of Health Service



## DEPARTMENT OF HEALTH &amp; HUMAN SERVICES

Public Health Service  
Agency for Toxic Substances  
and Disease Registry

## Memorandum

Date August 28, 1990

From William Nelson  
ATSDR Regional Representatives

Subject Completed Health Assessment

To Rich Puvogel, NJCB

Enclosed is a copy of the Preliminary Health Assessment or Full Health Assessment on the following site(s):

A. O. POLYMER  
NEW JERSEY

Additional health assessments may be conducted on the above site(s) as more information becomes available.

If you have any questions or would like to discuss the findings and/or recommendations, please feel free to contact either of us at 264-7662.

Thank you.

Enc.

cc: Peter Grevatt  
Nickie DiForte, NJCB  
Ray Basso  
John Frisco  
Richard Salkie  
George Buynoski  
Gregory Ulirsch



HEALTH ASSESSMENT  
A.O. POLYMER  
SUSSEX COUNTY  
SPARTA, NEW JERSEY

Prepared by:  
Environmental Health Service  
New Jersey Department of Health

Prepared for:  
Agency for Toxic Substances and Disease Registry (ASTDR)

OBJECTIVES

Phase I of the Remedial Investigation of A.O. Polymer has been completed, and a Phase II sampling plan is currently being reviewed. The objectives of this Health Assessment based upon the current stage of site remediation are to:

- \* Evaluate the potential past, current, and future exposure and public health impacts which may be associated with the site;
- \* Identify, if necessary, any actions that need to be taken to prevent or minimize exposure to hazards or contamination associated with the site;
- \* Identify, if necessary, additional exposure and sampling points;
- \* Identify, if necessary, gaps and deficiencies in the data or information associated with the site;
- \* Document the concerns of the community with respect to the site; and
- \* Assess whether a health study of the site is indicated.

SUMMARY

The A.O. Polymer site is an active four-acre manufacturing plant involved in the production of resins and plasticizers. The site has been an identified source of environmental contamination and the object of water quality and odor complaints for

approximately fifteen years. In 1980-81, the New Jersey Department of Environmental Protection (NJDEP) conducted a clean-up operation of contaminated soil from waste disposal lagoons and drums containing hazardous materials. Contamination of groundwater and surface water have been documented off-site and odor violations are currently being litigated. The site has been on the National Priority List since 1982, and has been the subject of investigation by a variety of Local, State, and Federal authorities. The site is currently being evaluated in a NJDEP Remedial Investigation and Feasibility Study (RI/FS). Phase I of the RI has recently been completed, and a Phase II sampling plan is currently under review.

Public health implications of the site are associated with groundwater use, the proximity of the local high school, contamination of surface water, and occupational exposure. There are actions that need to be undertaken at the site, and data gaps that need to be filled.

On the basis of the information reviewed, the A.O. Polymer Site is considered to be a potential public health concern. After consultation with Regional EPA staff and State and local health and environmental officials, the Epidemiology and Medicine Branch, Division of Health Studies, ATSDR, will determine if follow-up public health actions or studies are appropriate for this site.

#### SITE DESCRIPTION

The four-acre A.O. Polymer site is an active industrial operation located in Sparta Township, Sussex County. It is situated in a semi-rural area near the Wallkill River, about one-quarter mile from the commercial district of Sparta and one-half mile from the Sparta high-school. It is bordered on the northwest by an unnamed tributary to the Wallkill River, on the northeast by the Station Park recreation area, on the southeast by Station Road, and on the southwest by the New York, Susquehanna & Western railway. A private gun club and undeveloped wetlands also adjoin the property.

From the early 1960's to 1977, the plant was owned and operated by Mohawk Industries Inc. In 1977, the facility was purchased by the A.O. Polymer Corporation. Some of the manufacturing/mixing processes of Mohawk Industries are continued by A.O. Polymer (eg., the production of specialty polymers, plasticizers, paper coatings, as well as polyketone and acrylic resins).

In 1978 and 1979, NJDEP documented the contamination of soils, groundwater, and surface waters in the area of the chemical plant which allegedly resulted from substandard operational practices and waste disposal inadequacies by both Mohawk Industries and A.O. Polymer (Letter: ICF to NJDEP, 1987). Pollutants include numerous volatile organic compounds, phenols, phthalate esters, acetone, freon, and formaldehyde.

An extensive surface clean-up was performed in 1980-81 by NJDEP which included the removal of 600 drums of hazardous waste, and 165 truckloads of contaminated soil from three lagoons. In addition, 86 drums of contaminated alcohols were voluntarily removed by a responsible party.

The first complaints of odors in well water and air near the site were made by a nearby resident in 1973. Complaints intensified by 1978, and resulted in an investigation by the Sparta Health Department and NJDEP. The analysis of samples from several potable wells off-site confirmed contamination with volatile organics. In 1982, the NJDEP Division of Water Resources installed eleven monitoring wells. In 1984, the investigation was turned over to NJDEP Hazardous Site Mitigation, and in 1986 a contract was issued to a private sector consulting company for a Phase I RI/FS.

Throughout this period, A.O. Polymer was the focus of a variety of regulatory actions by Local, State, and Federal authorities (Letter: ICF to NJDEP, 1987). After a site inspection in November 1981, A.O. Polymer was cited by NJDEP for failing to have a State discharge permit for process water discharged to the cooling lagoon. This directive was dropped when A.O. Polymer insisted that the lagoon is lined and is only used to recycle cooling water for the reactor. In January 1982, NJDEP issued a directive order to redress a situation by which plant wastewater was being discharged into the plant septic system. These circumstances are still a focus of investigation. The NJDEP Division of Air Quality has issued three administrative orders to A.O. Polymer to come into compliance with air quality standards as a result of odor complaints. These are presently being challenged by the company.

In July 1984, the Town Council of Sparta adopted a resolution describing the environmental contamination associated with the A.O. Polymer site, and supporting the present remedial investigation by NJDEP (Resolution of Township of Sparta, 1984). The Sparta Fire Department, upon its most recent inspection of the site, uncovered several violations of their fire code and is presently preparing an emergency response plan for the community to deal with an industrial accident/fire scenario.

The Federal Occupational Safety and Health Administration (OSHA) investigated the A.O. Polymer site from April to August 1983 as a result of an internal referral regarding exposure of workers to TDI (toluene diisocyanate), formaldehyde, and resin dust. The results of this investigation were citations for failure to maintain a clean and orderly workplace, provide eye drenching facilities for the laboratory workers, and provide training to workers on fire management (Report of Malcolm Pirnie; Interview with OSHA regional office).

## SITE VISIT

A.O. Polymer site is located in close proximity to a busy commercial thoroughfare. It is situated at the end of a short side road leading from Main Street. There are several residences, a few small businesses, and a town recreation area close to the site. The principal features of the site are the railroad tracks bordering one side and a steep but negotiable embankment along the other side of the plant area. Two roads enter the site. Several buildings occupy the site, including the office building, plant operations buildings, and storage buildings. There are storage tanks on the site. Drums are interspersed throughout the area, some stored on pallets. The facility resides largely on dirt and sparse grassy areas.

The site is accessible by way of a variety of overland routes from the park or the railroad property. The owner has reported break-ins and vandalism to the police. There were footprints on the side of the embankment which leads to the park. The site is fenced near the entrance from the road and electronic surveillance equipment monitors this entrance. There is no guard at the site but a security alarm system is in place for some of the buildings.

Deer excrement was noted on the property and, according to a former local Health Officer, hunting is allowed in areas within several miles of the plant. The Wallkill River is stocked with trout and is fished by local residents. At least one resident who lives 0.6 miles downstream from the site lets his beef cattle drink directly from the Wallkill River.

There were no apparent odors off-site, during the site visit. However, NJDOH visitors noticed odors on-site at the reactor building (inducing nausea) and near the laboratory. Conversations with several nearby residents revealed that odors are noticed off-site intermittently, which vary in intensity. One resident reported that odors are usually worse on weekends and off-shift hours.

## COMMUNITY CONCERNS

Community concerns have centered around odor complaints, the threat of contamination of the high school drinking well (especially with formaldehyde), contamination of the park playing fields, and pollution of the Wallkill River.

The odor complaints controversy is still a very active issue after nearly fifteen years. Reports usually come from the east side of the plant although one resident informed the New Jersey Department of Health (NJDOH) that people on the other side of the

site also complain about the odors. Area residents have reported that odors are produced intermittently. Some complaints allege that odors are worse on weekends and off-shift times. The odors have been described as invoking a burning sensation in the back of the throat, causing eyes to water, and to be irritating.

The denial of an adjacent recreation park (Station Park) as a Green Acres selection has caused considerable consternation among residents and raised concerns whether potential health effects or noxious odors were factors that entered into the denial decision. The proposed referendum to construct a new high school on the Station Road tract near the site has been the subject of citizen debate and, according to a local official, is not likely to be approved (N.J. Herald, 1986).

#### ENVIRONMENTAL CONTAMINATION AND PHYSICAL HAZARDS

During the ten years the site has been under investigation, samples have been taken from the following media: both on-site and off-site potable wells; the A.O. Polymer cooling lagoon, on-site and off-site soils, waste containers, the Wallkill River, sub-surface soils, drums, ambient air, on-site and off-site monitoring wells, workplace air, and the on-site septic tank. Samples were analyzed for priority pollutants and tentatively identified compounds. Unless otherwise specified, the following information was taken from the RI/FS report.

In the most recent investigation (Phase I RI/FS), on-site soils were screened in May 1987 using a photo-ionization detector. These consisted of 15 subsurface soil samples and 1 surface sample. Three off-site samples were collected from Station Park as background. Samples were also drawn for groundwater analysis from 11 existing monitoring wells and 12 newly installed wells. Eight potable wells in the area were also sampled. A well located in Sparta approximately 0.75 miles southwest of the site was used as a background location. Off-site surface water samples were gathered at three stations on the Wallkill River and one sample from the cooling lagoon on A.O. Polymer property. Benthic sediment samples were also collected from the river bed at these three points. All samples were analyzed for 126 organic compounds and 24 inorganic substances found on the USEPA Hazardous Substance List. Additionally, freon 11 was targeted for analysis.

#### SOILS:

**Inorganic Data.** With the exception of zinc, magnesium and calcium there appears to be no apparent differences with regard to metal contaminants between on-site and off-site samples.

**Organic Data.** No organic pollutant compounds were found in the background samples. However, a number of organic chemicals were found in on-site samples including: polycyclic aromatic hydrocarbons (PAHs), halogenated aliphatic hydrocarbons (HAHs), monocyclic aromatic hydrocarbons (MAHs), phthalate esters, phenols, and ketones. The PAH contamination is generally a surface phenomenon while the HAH contamination (mostly chlorinated solvents) is a subsurface phenomenon. MAHs and phenolic compounds were found in connection with the HAHs and are believed to be the remnants from the Mohawk Industries waste burial lagoons. The PAHs may be due to past railroad fueling activities.

#### GROUNDWATER:

**Inorganic Data.** According to the most recent investigations, accurate background locations could not be established given the unpredictable occurrence and distribution of metals in the environment, land use, vegetation patterns, and geochemistry of the contaminants and aquifers. However, beryllium and nickel, although detected infrequently, were always recorded at levels above their comparative Ambient Water Quality Criteria (AWQC).

**Organic Data.** Groundwater contamination extends from the site in nearly every direction. Organic contaminants were found in 12 of 15 monitoring wells within a rectangular area around the site. The three uncontaminated wells are all bedrock wells. The highest level of organic contaminants was a total volatile organic chemical (TVOC) concentration of 21,306 ppb consisting mostly of 1,1,1-trichloroethane (TCA), trichloroethylene (TCE), and their breakdown products in combination with a high concentration of methyl isobutyl ketone (MIBK) and acetone. The next highest level of TVOC was 18,510 ppb, being almost all methyl ethyl ketone (MEK).

These results indicate that in addition to a contaminant plume moving east toward the Wallkill River, a contaminant plume is also moving north in the direction of the wetlands.

#### POTABLE WELLS:

**Inorganic Data.** Samples were not found to contain any significant levels of inorganic contaminants.

**Organic Data.** No organic contaminants were detected in wells that were sampled and are currently being used for potable water.

#### SURFACE WATER & SEDIMENT:

**Inorganic Data.** Beryllium, nickel, and cyanide were detected near the entrance to Station Park, but whether this is evidence of naturally occurring phenomena or site-related contamination is unclear.

**Organic Data.** Xylenes were detected at 17 ppb at the A. O. Polymer cooling lagoon, possibly due to plant processes or truck emissions on-site. Trans 1,2-dichloroethene was found at 6.3 ppb in the Wallkill River about 0.5 miles northeast of the site. Since this is the direction of one of the contaminant plumes, it could be indicative of contaminated groundwater discharge. PAHs were found upstream in greatest concentration and could result from the use of fossil fuels. However, toluene and di-n-butyl phthalate were recorded in downstream samples.

**FREON:**

Freon was often found in monitoring wells in samples with large amounts of other contaminants. Since A.O. Polymer was engaged in the refinement of contaminated freon, the detection of freon may be relevant.

**AIR:**

No air sampling was done in Phase I of the RI/FS.

**SEPTIC TANK:**

While several volatile organic contaminants were detected in the septic tank, their levels may not be high enough to indicate that the septic tank is a major source of contaminants found in monitoring wells. Residues of three phthalate compounds and benzoic acid were also detected.

The source of contaminants within the A.O. Polymer site has not been completely determined. There is some evidence that the former waste lagoons are not the source of all the pollutants, especially the MEK contaminant plume which appears to be heading in a southeasterly direction on an interception course with the main plume which is moving towards the Wallkill River. Possible sources of contamination may include the reactor building, abandoned tanks, small brick outbuildings, and the septic tank near the laboratory.

**PHYSICAL HAZARDS:**

There are reported to be corrosive and flammable chemicals on the site, along with stacks of drums and equipment that pose potential physical hazards. An emergency response plan is currently being developed by local fire prevention officials to address potential problems with on-site fires and/or explosions.

Table I lists chemicals that are included as contaminants of concern at the site. These chemicals were identified based on their toxicity, detected concentrations, and fate.

**TABLE I - Maximum Concentrations of Contaminants of Concern**

All Concentrations in Parts Per Billion (ppb)

Chemical	Groundwater	Soil
Methylene Chloride	956	-
Tetrachloroethylene	21,600	27,000
Carbon Tetrachloride	448	-
1,1,1-Trichloroethane	3,340	32,000
Trans 1,2-Dichloroethene	6,340	-
Trichloroethene	2,950	-
Methyl Ethyl Ketone	50,200	-
1,1-Dichloroethane	750	-
Toluene	840	61,000
Acetone	8,100	-
4-Methyl-2-Pentanone	2,900	-
Bis (2-ethylhexyl) Phthalate	97	41,000
Trichlorofluoromethane	-	53,000
Ethylbenzene	-	15,000
Xylenes (total)	-	34,000
Naphthalene	-	16,000

Source: Phase I Remedial Investigation Report.

All samples were from on-site. All soil samples reported in this table are from subsurface soils.

#### QUALITY ASSURANCE/QUALITY CONTROL

According to the RI, the validity of analytical results received from the laboratory and their suitability were independently evaluated by ICF/SRW Associates (the analysis was done by Compuchem) using EPA data validation procedures. Additionally, July 1987 NJDEP Data Validation Guidelines were used to evaluate the overall content of the data packages, sample holding times, and blank sample quality. Of wells sampled both by ICF/SRW and NJDEP, there was good correlation between the analyses, according to NJDEP.

Within the report from the Phase I RI/FS some problems are mentioned. There was potential interference with the lab analysis from at least one monitoring well due to the constituents of the groundwater in that area. Additionally, no validated or approved method exists for the analysis of formaldehyde at low concentrations in water.

In general, the quality of the data is judged to be acceptable for this health assessment.



## DEMOGRAPHICS

The residential population in the vicinity of A.O. Polymer is estimated to be 760 people (200 wells x 3.8 persons/household). However, the use of the park and the high school suggest that the population potentially at risk of exposure may be greater. The community has expressed concerns over the integrity of the surface water supplying Ogdensburg and Franklin Township, and the future degradation of a productive aquifer in Sussex County. The population affected by the plumes may grow due to development of the area, and the potential migration of the plumes.

The proximity of a gun club, wetlands, a railway, and a town park with many actively used playing fields is a special consideration. Similarly, the site is only 0.3 miles from a busy commercial and municipal area, and 0.5 miles from a public high school.

## ENVIRONMENTAL DATA GAPS

As the site has not yet been adequately characterized, there are data gaps associated with assessing the public health implications of the site. These include:

- \* The groundwater plumes and groundwater movement in the area need to be better delineated and evaluated. The Wallkill River is a source of water for townships farther downstream. The groundwater aquifer beneath the site is a potentially important water resource for a large area of future development.
- \* Off-site testing of soils in the run-off troughs at the northeast and southeast points of the site should be sampled. Sampling of on-site soils for residual contamination especially in the area of the NJDEP clean-up operations is needed.
- \* The question of odor complaints has been incompletely addressed to date, especially in view of the fact that certain noxious chemicals such as TDI and formaldehyde may pose hazards at levels at or below the odor threshold. A consultant engaged by the Sparta Health Department assessed the available information, and identified a list of potential odor-producing agents. In addition to TDI and formaldehyde, MEK, cyclohexanone, acrylates, and xylene were identified as potential source(s) of the odor (RI/FS report). Allegations of increased odor problems on weekend and off-shift hours must be investigated.

- \* Data is needed relating to soil gas concentrations in the area of the playing field.
- \* The presence of MEK at high concentrations in soils and monitoring wells in a localized area downgradient of the site suggests a source other than the old waste lagoon. The MEK plume source and direction needs to be identified with more certainty.
- \* In addition to the children using the playing fields and attending the high school, the existence of other sensitive populations must be identified, as part of the RI/FS.
- \* The consumption of potentially contaminated food (i.e. fish, wildlife, and domestic animals) by area residents needs to be examined.

#### EXPOSURE PATHWAYS

This site has exhibited the potential to expose the surrounding population and on-site workers by a variety of routes. Routes of migration are via the groundwater and surface water. Soil contamination on-site still exists and the possibility of off-site migration due to run-off must be considered as possible sources of dermal and inhalation exposure in recreation areas. Ingestion of contaminated food sources is another possible exposure pathway. Odor complaints carry the possibility of sporadic inhalation exposure.

On-site exposure of workers could occur by dermal and inhalation routes. The plant is accessible to trespassers who could be exposed to contaminants via inhalation, ingestion, and dermal absorption pathways.

#### PUBLIC HEALTH IMPLICATIONS

While several pollutants of concern have been detected, certain contaminants deserve special consideration. Both TCE and TCA can damage the liver and kidney, while MEK can increase the toxicity of these compounds. Formaldehyde is an eye and respiratory irritant, but it is not known if formaldehyde causes carcinogenic, mutagenic, or teratogenic effects in humans (though it has been linked to cancer in laboratory rats). Infants, children, the elderly, and people with a history of allergies or respiratory disease are more likely to develop a reaction from exposure to formaldehyde. With regard to TDI, one study found that 5% of workers exposed to TDI developed asthma while another found that TDI used in plasticizers produced allergic-like symptoms via inhalation. Other reported effects were a concentration dependent immunologic response and

decreases in pulmonary function with some long-term reductions in function. Phthalate esters are ubiquitous and persistent in the environment. Evidence suggests that they have the potential for causing cancer.

The relatively unrestricted access to the site is a potential hazard to the trespassers on the site. Unintentional or willful sabotage could pose a fire or explosion hazard.

#### CONCLUSIONS AND RECOMMENDATIONS

On the basis of the information reviewed, the A.O. Polymer Site is considered to be a public health concern because humans have probably been exposed to hazardous substances at concentrations that may result in adverse health effects. As noted in the Environmental Contamination and Physical Hazards, Exposure Pathways, and Public Health Implications sections, human exposure to TCE, TCA and MEK as well as TDI and formaldehyde is probably occurring and has probably occurred in the past via inhalation, dermal contact with soil and ingestion of contaminated food.

Many of the data gaps identified in this health assessment and recommendations in the Phase I RI/FS, will be addressed by the Phase II Remedial Investigation study. Proposed activities include the following: 1) investigation of A.O. Polymer hazardous chemical and waste storage, transfer, and disposal practices; 2) a soil gas investigation; 3) additional monitoring well installation; 4) pump testing for groundwater contamination remediation; 5) hydrogeologic investigation north of the site; 6) hydrogeologic investigation along the Wallkill River to determine if the groundwater discharges into the Wallkill; and 7) resampling of monitoring wells for VOCs and freon.

Access to the A.O. Polymer site needs to be restricted by fencing of the property. Signs need to be posted on the park side of the site to discourage trespassing.

Surface water monitoring of the unnamed northern tributary of the Wallkill and downstream waters, including Franklin Reservoir, should be undertaken since these waters are known to be used for recreation and animal husbandry.

Soil gas and surface soil sampling needs to be conducted on the nearby playing fields. Surface and subsurface soils need to be sampled in the run-off troughs formed at either end of the site.

A strategy to monitor air quality should be developed to define the nature and extent of air contamination originating at the site, and to address community concerns about intermittent odors from the site. Attention needs to be paid to the training of employees which may reduce reactor spills or inappropriate procedures that result in odor production and threats to worker health.

In accordance with CERCLA as amended, the A.O. Polymer site has been evaluated for appropriate follow-up with respect to health effects studies. Since a nonworker population exposed to on-site and off-site contaminants at a level of public health concern has not yet been identified, the A.O. Polymer site is not being considered for community follow-up health studies at this time. However, workers on-site may be exposed to contaminants at levels of public health concern and this should be referred to the appropriate authorities for possible follow-up. If data become available suggesting that human exposure to significant levels of hazardous substances is currently occurring or has occurred in the past, ATSDR and NJDOH will reevaluate this site for any indicated follow-up.

This Health Assessment was prepared by the State of New Jersey, Department of Health, Environmental Health Service, under a Cooperative Agreement with the Agency for Toxic Substances and Disease Registry. The Division of Health Assessment and Consultation and the Division of Health Studies of ATSDR have reviewed this Health Assessment and concur with its findings.

## REFERENCES

### Superfund Documents:

Agency for Toxic Substances and Disease Registry (ATSDR),  
Site Summary, 6/88.  
 New Jersey Department of Environmental Protection (NJDEP),  
 Fact Sheet, 4/1987.  
 NJDEP, Community Relations Plan, 1/86.  
 NJDEP, Phase I Investigation Report (Contract No. X-312):  
A.O. Polymer Site, July 1988.

### Memoranda, File reviews, Miscellaneous:

Sparta Township Fire Department, Memorandum, 1977.  
 Public Meeting in Sparta Township, Minute, April 1987.  
 Township of Sparta, Resolution No. 3159, July 24, 1984.

### Interviews:

A.O. Polymer President Sparta Township Health Officer NJDEP.  
 Bureau of Safe Drinking Water.  
 NJDEP Regional Office: Division of Environmental Quality.  
 NJDEP Regional Office: Division of Fish, Game, and Wildlife.  
 NJDEP Site Manager.  
 USEPA Site Manager.  
 United States Occupation Safety and Health Administration  
 (OSHA) Inspector.  
 Former employee of Mohawk Industries.  
 Hamm Sanitation Company Owner.  
 Local Fire Inspector.  
 Local Fire Prevention Office.  
 Residents near the site.  
 Worker at near-by business.

TAT-02-F-07399

**COMMUNITY RELATIONS PLAN**  
**A.O. POLYMER SITE**  
**SPARTA TOWNSHIP, SUSSEX COUNTY, NEW JERSEY**

Prepared by:

Region II Technical Assistance Team  
Roy F. Weston, Inc.  
Major Programs Division  
Edison, New Jersey 08837

Prepared for:

United States Environmental Protection Agency  
Region II Removal Action Branch  
Edison, New Jersey 08837

January 1995

## **I. BACKGROUND**

### **A. Site Description and Background**

The A.O. Polymer site is located at 44 Station Road, Sparta Township, Sussex County, New Jersey. The site occupies approximately four acres along the New York, Susquehanna and Western Railroad (NYS&WR) and is bound on the east and northeast by a forested area and Sparta Park, on the southeast by Station Road, and on the southwest and west by the railroad.

Significant site features include the site office and laboratory facilities, the main reactor building, a warehouse and a non-contact cooling water pond. The site was utilized as a chemical manufacturing facility from approximately 1957 to 1993. The facility was owned and operated by Mohawk Industries, Inc., until 1977, when the A. O. Corporation purchased the site and reportedly commenced with the production of plasticizers as well as polyurethane, acrylic and ketone resins by reacting toluene diisocyanate, propylene glycol, xylol, or methyl diisocyanate. At some time in the past, solvent reclamation also took place at the site. In addition to the abovementioned materials, sodium hydroxide, hydrochloric acid, xylene, xylol ether acetate, oxiane methyl-polymer, polyoxymethyl 1-1-2-ethanediyl, methyl methacrylate, glycidyl methacrylate, ethylene glycol and mercury were found on site. A.O. Corporation is under bankruptcy procedures at the present time.

Several hundred drums and smaller containers were present throughout the property and within two open trailers. Evidence of leakage was apparent from several drums and one of the trailers. Most of the containers were either damaged, rusted or partially opened, and improperly stored. There are approximately 27 tanks of unknown content. Four of the tanks reportedly contain an estimated 3,000 gallons of a liquid organic material abandoned by Mohawk Industries, the site owner until 1977. Most of these tanks and associated piping were insulated with severely damaged, suspected asbestos material. A tanker of unknown content was also present.

### **B. National Priorities List (NPL) Designation**

The site is presently on the NPL due to the extensive groundwater contamination. However, the remedial actions at the site do not address the portion of the site currently occupied by the A.O. Polymer facility.

## **II. THREAT**

### **A. Threat of Public Exposure**

Some of the materials found on site are hazardous substances as defined by Section 101(14) of CERCLA. The following is a partial list of hazardous substances: toluene, sodium hydroxide, asbestos, xylene, and materials exhibiting the characteristics of corrosivity and/or ignitability.

Groundwater and soil contamination are definite routes for contamination from the A.O. Polymer site.

Although there is a security gate, the site is readily accessible through an entrance maintained by the Mohawk Gun Club, along the railroad tracks, and through the vegetation at the north and east sides of the site. The materials present on site, combined with unrestricted access, present a potential danger of direct human contact.

The A.O. Polymer site, including the materials allegedly abandoned by the former owner/operator, Mohawk Industries, presents a significant threat of release to the environment and to public health.

### **B. Extent of Contamination**

The site presents a significant threat of release to the environment and to public health. The most immediate threat, which could cause a release, is the danger of direct human contact by area youth breaking into the facility and performing acts of vandalism. A number of such acts have occurred at the site in the past. Access to the flammable materials remaining in the 27 aboveground tanks and one underground storage tank is only partially limited and the asbestos-containing insulation materials are easily accessible. This situation holds significant potential for a release.

Soil contamination exists on site and the possibility of off-site migration due to runoff or upward discharge of groundwater are possible sources of dermal and inhalation exposure in recreational areas. An unnamed northern tributary of the Wallkill River, and downstream waters including Franklin Reservoir are used for drinking, recreation and animal husbandry.

### **C. Previous Actions to Abate Threat**

In 1980, partial cleanup of the site, involving the removal of surface drums and the excavation and removal of buried drums, was initiated by the NJDEP. This cleanup was undertaken in the following three phases:

- 1) July to August 1980 - removal of approximately 600 drums and 1,700 cubic yards of contaminated soil.
- 2) October 1981 - removal of 86 drums of material received by Mohawk Industries.
- 3) December 1981 - removal of the contents of 264 drums and 120 cubic yards of crushed drums and debris.



During the last quarter of 1993, the facility owner removed over 23,500 gallons of hazardous waste and 100 cubic yards of non-hazardous solids from the site. Additional materials were sold and/or given to former clients of A.O. Corporation.

In April and May 1994, EPA and its contractors inventoried, stabilized and identified the materials left on site. Tanks and piping covered by suspected asbestos-containing materials were wrapped with plastic.

In October 1994, 24 drums and 3 labpack containers were shipped from the site for disposal. During the week of November 14, 1994, all asbestos-containing insulation materials were removed from tanks and piping. Two 30-cubic yard roll-off containers were filled and shipped to the local landfill.

In December 1994, 3,200 gallons of waste flammable liquid were shipped from the site.

A soil-vapor extraction system began operating at the site in December 1994 and the installation of a groundwater treatment system is planned.

#### **D. Current Actions to Abate Threat**

At the present time, all liquids, sludges and solids remaining in the outside tanks and vats are being removed and transferred into drums. Upon completion of these activities, all drummed materials will be shipped from the site for disposal at approved facilities.

### **III. PROPOSED PROJECT**

#### **A. Project Objectives**

The Action Memorandum recommends that the hazardous substances identified and staged on site during the initial action be transported from the site for proper disposal.

#### **B. Project Tasks**

EPA will supervise completion of the following tasks:

- Securing the site;
- Inventorying materials abandoned on site;
- Overpacking leaking or damaged containers;
- Segregating materials;
- Sampling unknown materials;
- Analyzing unknowns;
- Removing bulk materials from tanks and vats; and
- Disposing and/or recycling all hazardous materials.

**C. Objectives of the Community Relations Plan**

- Provide accurate and concise information to interested citizens, officials and media;
- Coordinate local, state and federal response teams; and
- Enlist the assistance of local officials as needed.

The groups to whom the plan is directed are: citizens, citizen groups, local businesses, officials, and local, state and federal agencies working in conjunction with the Region II EPA.

Community relations information will be provided by EPA's Office of External Programs (OEP) with the knowledge of the Office of the Regional Administrator.

**D. Community Relations Activities**

<u>Date (s)</u>	<u>Activities</u>	<u>Objectives</u>	<u>Staff</u>
As needed	Meeting with state, county and local officials	To develop local contingency plans	OSC OEP Rep.
As needed	Press release	To brief the community and press on site status	OSC OEP Rep.
As needed	Fact sheets	To provide the public with removal activity information	OSC OEP Rep.
As needed	Briefings	To inform state and local officials about ongoing developments at the site	OSC OEP Rep.

As needed

Public  
Meetings

To discuss the  
need for response,  
review key decision  
points, explain  
cleanup methods and  
respond to the  
public's concerns

OSC  
OEP Rep.

**E. Key Officials and Contacts**

Federal Agencies

United States Environmental Protection Agency  
Region II Removal Action Branch  
Edison, New Jersey 08837  
(908) 906-6908

State Agencies

NJDEP  
401 E. State Street  
CN 402  
Trenton, NJ 08625  
(609) 292-2885

Federal Elected Officials

U.S. Senator Bill Bradley  
1 Newark Center  
Newark, NJ 07102  
(201) 836-1507

U.S. Senator Frank Lautenberg  
Suite 1510  
1 Gateway Center  
Newark, NJ 07102  
(201) 645-3030

U.S. Congressman Rodney Frelinghuysen  
22 N. Sussex Street  
Dover, NJ 07801  
(201) 328-7413

State Elected Officials

Senator Robert E. Littell  
Routes 23 & 517  
Box 328  
Franklin, NJ 07416  
(201) 827-2900

Assemblyman E. Scott Garrett  
61 Spring Street, 3rd. floor  
Newton, NJ 07860  
(201) 579-7585

Assemblyman Richard Kamin  
88 Bartley Avenue  
Suite B-4  
Flanders, NJ 07836  
(201) 584-5422

Local/County Officials

Sparta Township  
Municipal Building  
65 Main Street  
Sparta, NJ 07871

Mayor Michael Devine  
(201) 729-8278

Health Department  
(201) 729-6174

Township Manager  
(201) 729-8485

County of Sussex, NJ  
Health Department  
(201) 948-4545

County of Sussex, NJ  
County Administrator  
(201) 579-0250

MediaDaily Newspapers

New Jersey Herald  
P.O. Box 10  
Newton, NJ 07860  
(201) 383-1500

Star Ledger  
(800) 242-0850

Daily Record  
(800) 398-8990

Weekly Newspaper

Sparta Independent  
P.O. Box 436  
Sparta, NJ 07871  
(201) 729-7620

Radio

WNNJ-AM  
WNNJ-FM  
40 Yates Ave.  
P.O. Box 40  
Newton, NJ 07860  
(201) 383-3400

WSUS  
75 Main Street  
Franklin, NJ 07416  
(201) 827-2525

Television

WNYW-FOX 5  
1500 Harbor Blvd.  
Weehawkin, NJ  
(201) 348-3292

F. Suggested Locations for Information Repositories and Public Meetings

Information Repository

Carol Boutilier, Library Director  
Sparta Public Library  
22 Woodport Road  
Sparta, NJ 07871  
(201) 729-3101

Public Meetings

Location to be determined

**NOTICE OF PUBLIC AVAILABILITY****The United States Environmental Protection Agency Announces  
The Availability of the Administrative Record for  
the A.O. Polymer Site**

The U.S. Environmental Protection Agency (EPA) announces the availability for public review of files comprising the administrative record for the selection of the removal action at the A.O. Polymer Site. The EPA seeks to inform the public of the availability of the record file at this repository and to encourage the public to comment on documents as they are placed in the record file.

The administrative record file includes documents which form the basis for the selection of a removal action at this site. Documents now in the record file include: Agency of Toxic Substances and Diseases Registration (ATSDR) Health Assessment Memo, Sampling Work Plan and the EPA regional guidance documents list. Other documents will be added to the record files as site work progresses. These additional documents may include, but are not limited to, other technical reports, validated sampling data, comments, and new data submitted by interested persons, and the EPA responses to significant comments.

The administrative record files are available for review during normal business hours at:

Sparta Public Library  
22 Woodport Road  
Sparta, NJ 07871  
(201) 729-3101

U.S. EPA - Region II  
Removal Action Branch  
2890 Woodbridge Avenue  
Bldg 209  
Edison, N.J.  
Phone (908) 906-6908

Additional information is available at the following location:

Guidance documents and  
technical literature

U.S. EPA - Region II  
Removal Records Center  
2890 Woodbridge Avenue  
Bldg 205  
Edison, N.J.  
Phone (908) 906-6980

Written comments on the Administrative Record should be sent to:

Chaitanya Agnihotri  
On-Scene Coordinator  
Removal Action Branch  
U.S. EPA - Region II  
2890 Woodbridge Ave.  
Edison, NJ 08837

# A.O. Polymer Corporation

Sparta Township Sussex County

## Site Description

This is an active chemical manufacturing facility located on a four acre tract of land near the Wallkill River, one mile from the center of Sparta Township. Adjacent to the site are the township high school, a new township park, a gun club, and several private potable wells.

## Environmental Impact

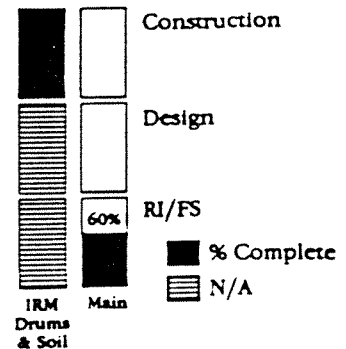
During the 1960s and 1970s previous owners disposed of much of their waste chemicals by dumping them into a pit and backfilling. Buried drums were crushed or opened prior to burial and the site was littered with numerous leaking drums in various stages of deterioration. As a result, the ground water in the immediate area is severely contaminated. New Jersey Department of Environmental Protection (NJDEP) and the local health department have been monitoring ground water quality since 1982.

## Status

The drums of waste and a large amount of contaminated soil were removed by the NJDEP in the early 1980s. A Remedial Investigation/Feasibility Study (RI/FS) to identify remaining problems, especially the extent of ground water contamination, was initiated in September 1986. Field work was completed in June 1987. Follow-up sampling was done in December 1987. The analytical data has been reviewed and the Phase I RI final report was issued in July 1988. A Phase II RI has begun to better define the contaminated plume.

<u>Activity</u>	<u>Action Date</u>	<u>Status</u>	<u>Estimated Costs (Millions)</u>	<u>Funding Source</u>	<u>Comments</u>
<b><u>Drum and Soil Removal</u></b>					
Const.	FY'80	C	\$0.590	State	
<b><u>Main</u></b>					
RI/FS	FY'86	U	\$1.200	Federal	
Design	FY'91				
Const.	FY'93				
O & M	FY'95				

HRS: 28.91  
 NJ Rank: 103  
 Superfund: NJDEP



## EPA REGIONAL GUIDANCE DOCUMENTS

The following documents are available for public review at the EPA Region II Field Office, Raritan Depot, 2890 Woodbridge Avenue, Edison, New Jersey during regular business hours. Contact Chaitanya Agnihotri, (908) 906-6908 for more information.

- \* Glossary of EPA Acronyms.
- \* Superfund Removal Procedures--Revision #3. OSWER Directive 9360.0-03B, February 1988.
- \* Hazardous Waste Operations and Emergency Response. Notice of Proposed Rulemaking and Public Hearings. 29 CFR Part 1910, Monday, August 10, 1987.
- \* Guidance on Implementation of Revised Statutory Limits on Removal Action. OSWER Directive 9260.0-12, May 25, 1988.
- \* Redelelegation of Authority under CERCLA and SARA. OSWER Directive 9012.10, May 25, 1988.
- \* Removal Cost Management Manual. OSWER Directive 9360.0-02B, April, 1988.
- \* Field Standard Operating Procedures (FSOP).  
#4 Site Entry.  
#6 Work Zones.  
#8 Air Surveillance.  
#9 Site Safety Plan.
- \* Standard Operating Safety Guides -- U.S. EPA Office of Emergency and Remedial Response, July 5, 1988.
- \* CERCLA Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (Superfund).
- \* SARA: Superfund Amendments and Reauthorization Act of 1986.
- \* NCP: National Oil and Hazardous Substances Pollution Contingency Plan. - Publication No. 9200.2-14.
- \* Guidance on Implementation of the "Contribute to Efficient Remedial Performance" Provision - Publication No. 9360.0-13.



Additional Guidance Documents are listed below and are available for review at the EPA Region II Removal Records Center.

- \* The Role of Expedited Response Actions (EPA) Under SARA - Publication No. 9360.0-15.
- \* Guidance on Non-NPL Removal Actions Involving Nationally Significant or Precedent Setting Issues - Publication No. 9360.0-19.
- \* ARARS During Removal Actions - Publication No. 9360.3-02.
- \* Consideration of ARARS During Removal Actions -Publication No. 9360.3-02FS.
- \* Public Participation for OSCs - Community Relations and the Administrative Record - Publication No.9360.3-05.
- \* Superfund Removal Procedures - Removal Enforcement Guidance for On-Scene Coordinators - Publication No. 9360.3-06.
- \* QA/QC for Removal Actions - Publication No. 9360.4-01.
- \* Compendium for ERT Air Sampling Procedures - Publication No. 9360.4-05.