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Site Name KOCH NORTH PARAXYLENE

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RptSegment 1

DocDate 5/8/1995

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Box SF4032

AccessLevel PUBLIC

Division WASTE MANAGEMENT

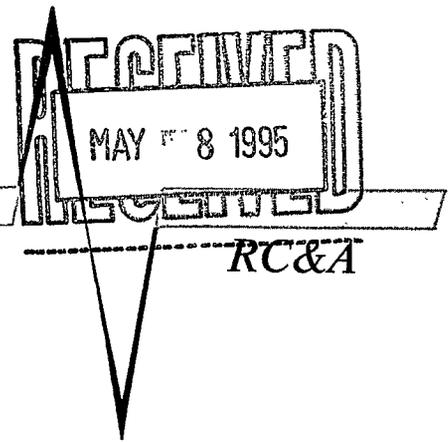
Section SUPERFUND

Program IHS (IHS)

DocCat FACILITY

Richard Catlin & Associates, Inc.

ENVIRONMENTAL ENGINEERS AND HYDROGEOLOGISTS



May 3, 1995

NCDEHNR

Attn: Mr. Bruce Parris
127 Cardinal Drive Extension
Wilmington, North Carolina 28402

Re: Koch Refining Company
North Terminal Tank 301 Paraxylene Release
Wilmington, North Carolina
RC&A Project No. 95033-A

Dear Mr. Parris:

In accordance with State and Federal regulations, enclosed please find two (2) copies of the 20 and 45 day reports concerning the above referenced site.

Free floating product has been detected at the site, subsequently, a free product recovery program (NCAC 15A2N.0705) has been initiated.

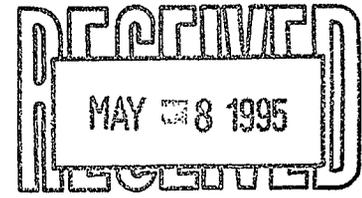
Please contact me if you need additional information concerning this incident.

Sincerely,

Stephan Tyler, Project Manager
Monitoring Operations

Enclosures

cc: Mr. Jim Strickland, Koch Refining



INITIAL SITE CHARACTERIZATION REPORT

15 NCAC 2N .0704

**TANK 301 PARAXYLENE
KOCH NORTH TERMINAL
WILMINGTON, NORTH CAROLINA**

APRIL 21, 1995

**PREPARED FOR:
KOCH REFINING COMPANY
WILMINGTON, NORTH CAROLINA**

RC&A PROJECT NO. 95033

**PREPARED BY:
RICHARD CATLIN & ASSOCIATES, INC.
P.O. BOX 10279
WILMINGTON, NORTH CAROLINA 28405-3755
(910) 452-5861**

INITIAL SITE CHARACTERIZATION
KOCH REFINING COMPANY
WILMINGTON, NORTH CAROLINA



RC&A PROJECT NO. 95033

APRIL 21, 1995

I) PURPOSE

The purpose of this report is to detail the initial site characteristics of the below referenced facility.

II) FACILITY:

Name: Koch Refining Company
North Terminal

Location: 3325 River Road
Wilmington, North Carolina

III) BACKGROUND:

On March 19, 1995 Koch personnel were engaged in transferring paraxylene from a tanker to above ground storage tank #301 at the KRC North Terminal. Due to a personnel error, Tank #301 was overfilled and approximately 293 barrels (12,306) gallons of paraxylene were inadvertently released. Mr. Jim Strickland of KRC notified Mr. Rick Shiver of the NCDEHNR Wilmington Regional office by telephone on March 19, 1995. On the same day, Southeastern Response & Remediation Inc. and Richard Catlin & Associates, Inc. personnel were contacted to initiate initial abatement activities.

The North Terminal occupies an area of approximately 37 acres. Thirty-three acres are located on the east side of River Road, and the remaining four acres are located on the west side of River Road.

The 33-acre site is bounded on the north by property now or formerly owned by the North Carolina State Ports Authority, on the east by property now or formerly owned by the Leonard Estate and by Worth Street, on the south by property now or formerly owned by Petroleum Fuel Terminal Company, and on the west by River Road. The remaining acreage is bounded on the north by property now or formerly owned by the North Carolina State Ports Authority and property now or formerly owned by the City of Wilmington, on the east by River Road, on the south and west by property now or formerly owned by Petroleum Fuel Terminal Company.

IV) RESPONSIBLE PARTY:

Company: Koch Refining Company

Contact: Mr. Jim Strickland

Telephone # (910) 799-0180

V) INITIAL SITE CHARACTERIZATION

<i>Requirements (40 CFR 280.63 (Subpart F))</i>	<i>Site Characteristics</i>
1. Data on the nature and estimate quantity of release;	1. 293 barrels (12,306 gallons) of paraxylene were released.
2. Data from available sources and/or site investigations concerning the following factors: surrounding population, water quality, use and approximate locations of wells potentially affected by the release, subsurface soil conditions, locations of subsurface sewer, climatological conditions, and land use;	2. Wilmington, North Carolina has a population of approximately 50,000. The main source of water for the Wilmington municipal water supply is the Cape Fear River from a site north of New Hanover County. Site soils consist of fine grained sands with some silts.
3. Results of the site check required under § 280.62(a)(5); and,	3. Analysis of soil samples obtained from the impacted soils indicated compliant levels of TPH/gas. Xylene concentrations in the samples ranged from <8.7 ppm to 80,000 ppm. The site still has remnant contamination from a paraxylene spill in 1981.
4. Results of the free product investigations required under § 280.62(a)(6), to be used by owners and operators to determine whether free product must be recovered under §280.64.	4. Free product recovery measures have been initiated. As of April 18, 1995, approximately 2,700 gallons of paraxylene have been recovered by the pumping efforts. Approximately 210 gallons have been extracted by the soil vent. An estimated 3,000 gallons of paraxylene are in the soil stockpiles.

VI) PLANNED ADDITIONAL ACTIVITIES

The soil vent system will maintain constant operation. The soil vent exhaust will be monitored monthly for the next three months.

Free product recovery operations will continue.

While installing the piezometers/recovery wells, remnants of the 1981 paraxylene spill are still evident around Tank #301.

We plan on submitting quarterly reports on the site remediation activities.

SITE CHECK AND INITIAL ABATEMENT REPORT

15 NCAC 2N .0702

TANK 301 PARAXYLENE
KOCH NORTH TERMINAL
WILMINGTON, NORTH CAROLINA

APRIL 21, 1995

PREPARED FOR:

KOCH REFINING COMPANY
WILMINGTON, NORTH CAROLINA

RC&A PROJECT NO. 95033

PREPARED BY:

RICHARD CATLIN & ASSOCIATES, INC.
P.O. BOX 10279
WILMINGTON, NORTH CAROLINA 284405-3755
(910) 452-5861

SITE CHECK AND INITIAL ABATEMENT REPORT

MARCH 19, 1995 TANK 301 PARAXYLENE RELEASE KOCH REFINING COMPANY, NORTH TERMINAL WILMINGTON, NORTH CAROLINA

I) PURPOSE:

The purpose of this report is to detail the initial abatement measures undertaken at the Koch Refining Company (KRC) North Terminal following the paraxylene release at Tank 301.

II) FACILITY:

Name: Koch Refining Company
North Terminal

Location: 3325 River Road
Wilmington, North Carolina

III) BACKGROUND:

On March 19, 1995 Koch personnel were engaged in transferring paraxylene from a tanker to above ground storage tank #301 at the KRC North Terminal. Due to a personnel error, Tank #301 was overfilled and approximately 293 barrels (12,306) gallons of paraxylene were inadvertently released. Mr. Jim Strickland of KRC notified Mr. Rick Shiver of the NCDEHNR Wilmington Regional office by telephone on March 19, 1995. On the same day, Southeastern Response & Remediation Inc. and Richard Catlin & Associates, Inc. personnel were contacted to initiate initial abatement activities.

The North Terminal occupies an area of approximately 37 acres. Thirty-three acres are located on the east side of River Road, and the remaining four acres are located on the west side of River Road.

The 33-acre site is bounded on the north by property now or formerly owned by the North Carolina State Ports Authority, on the east by property now or formerly owned by the Leonard Estate and by Worth Street, on the south by property now or formerly owned by Petroleum Fuel Terminal Company, and on the west by River Road. The remaining acreage is bounded on the north by property now or formerly owned by the North Carolina State Ports Authority and property now or formerly owned by the City of Wilmington, on the east by River Road, on the south and west by property now or formerly owned by Petroleum Fuel Terminal Company.

IV) RESPONSIBLE PARTY:

Company: Koch Refining Company

Contact: Mr. Jim Strickland

Telephone # (910) 799-0180

V) INITIAL ABATEMENT MEASURES:

Source of Paraxylene Release:

The release was due to a personnel error while transferring paraxylene from a tanker to Tank #301. KRC maintains a stringent training policy and personnel regularly participate in emergency drills with the local Clean Land and Harbor, Inc. Coop.

Contaminated Soils:

Excavation of impacted soils around Tank #301 was limited by the foundation of the tank itself and surrounding above/below ground pipelines. One hundred twenty cubic yards (180 tons) of contaminated soil was removed from the release area and properly stockpiled on-site. In order to determine initial contaminant levels, four soil samples were obtained from the impacted area for lab analysis. Lab data can be summarized as follows:

Sample I.D.	S-1	S-1	S-2	S-3
Depth (Feet)	2.0-2.5	5.5-6.0	5.5-6.0	5.5-6.0
TPH/Gas (ppm)	<2.2	<5.0	<1.9	<1.7
Xylenes (ppm)	80,000	47,000	38,000	<8.7

Reference Figure 2 for soil sample locations.

Prior to backfilling, a soil vent gallery was installed in the impacted soils. The soil vent system has been operating continuously since march 21, 1995. From March 21 through April 7, 1995 the soil vent system has extracted an estimated 1,734 pounds (± 210 gallons) of paraxylene; based on March 25 and April 7, 1995 soil vent exhaust sample data.

Soil Recovery, Inc. has been contacted to thermally treat the stockpiled soils. Due to the high volatility of paraxylene, and the high sand content of the soils, a high removal efficiency is expected by the thermal treatment process.

Free Product:

Piezometers were installed throughout the release area west (downgradient) of Tank #301. Free floating product was first detected in some of the piezometers on March 21, 1995. Free product recovery measures were initiated immediately. Free product and ground water have been pumped from the recovery wells through two 1,000 gallon gravity separators. While the recovered product is separated and stored, the ground water is pumped to KRC's on-site wastewater treatment plant. From March 21, to April 18, 1995 approximately 2,700 gallons of paraxylene have been recovered.

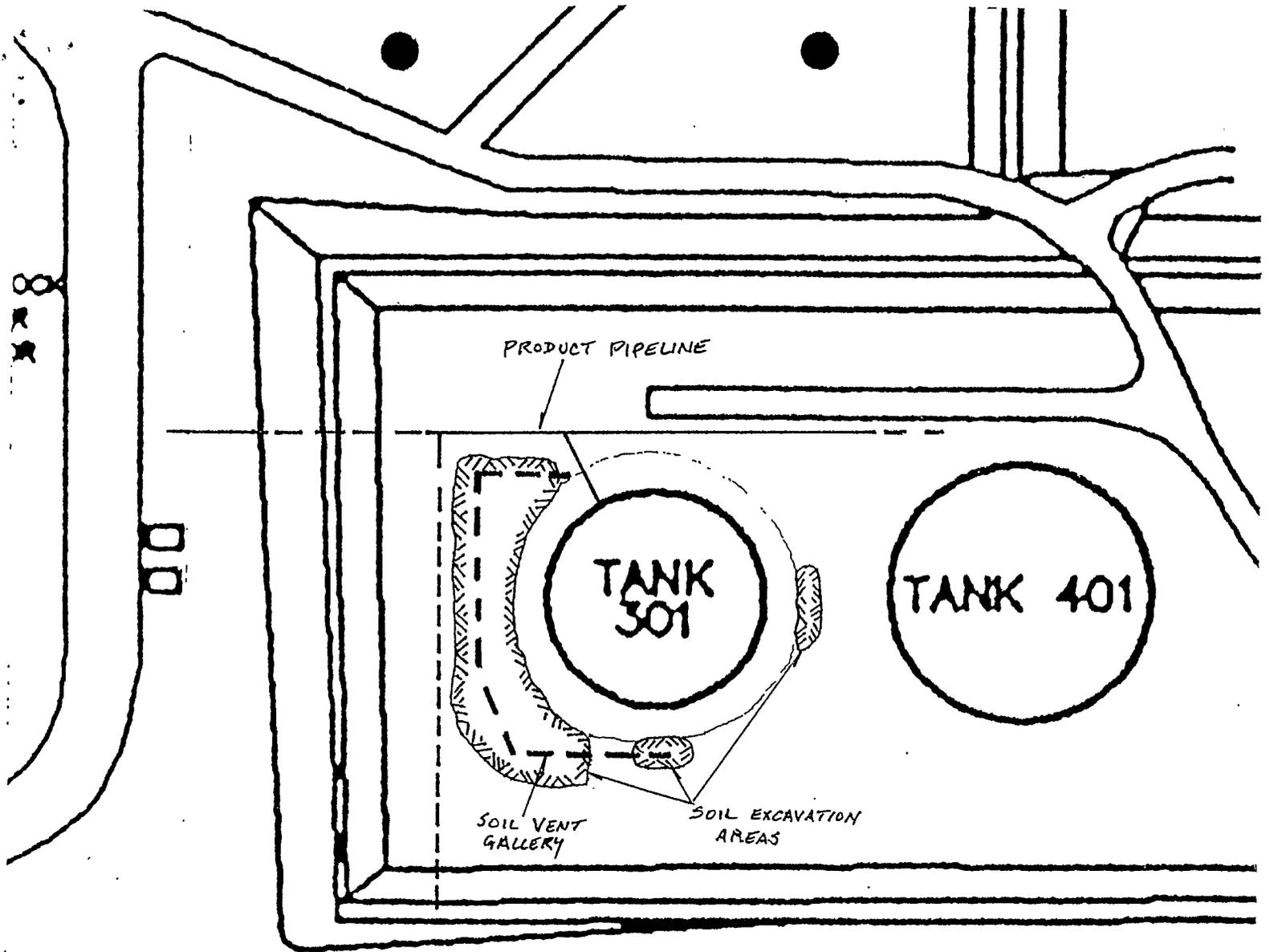
VI) PLANNED ADDITIONAL ACTIVITIES

The soil vent system will maintain constant operation. The soil vent exhaust will be monitored monthly for the next three months.

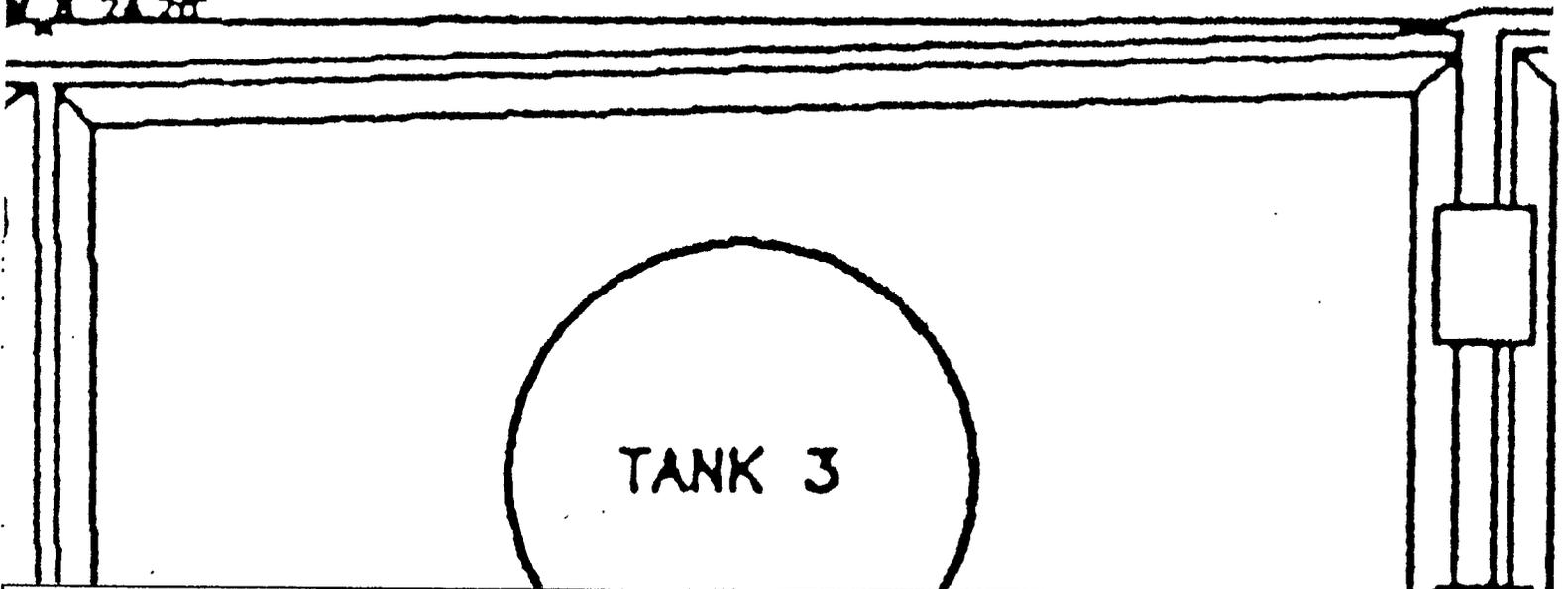
Free product recovery operations will continue.

While installing the piezometers/recovery wells, remnants of the 1981 paraxylene spill are still evident around Tank #301.

We plan on submitting quarterly reports on the site remediation activities.



M.A. 24.20



Richard Catlin & Associates, Inc. ENVIRONMENTAL ENGINEERS AND HYDROGEOLOGISTS <small>WILMINGTON, NC CHARLESTON, SC ATLANTA, GA WINSTON-SALEM, NC</small>	PROJECT KOCH FUEL, INC WILMINGTON, NC No. <i>May 95</i>	TITLE LOCATION OF EXCAVATIONS AND SOIL VENT GALLERY	FIGURE
	JOB NO. 8646	DATE DEC 94	SCALE: 1"=100'