UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION II
EDISON, NEW JERSEY 08837

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), EPA is required to establish an administrative record for every Superfund response action and to make a copy of the 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. Documents may be added to the record file as the site work progresses. Periodically, 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:

Mr. Dilshad Perera, On-Scene Coordinator
U.S. EPA, Region II
2890 Woodbridge Avenue
Building 209
Edison, New Jersey, 08837

The Agency may hold formal public comment periods at certain stages of the response process. The public is urged to use these formal review periods to submit their comments.

For further information on the administrative record file, contact Mr. Dilshad Perera, On-Scene Coordinator, U.S. EPA, Region II, (908) 321-4356.

REMOVAL ADMINISTRATIVE RECORD FILE STRUCTURE
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ZSCHIEGNER REFINING COMPANY SITE
ADMINISTRATIVE RECORD FILE *
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FACTUAL INFORMATION/DATA

Pollution Reports

P. 100001 - 100003 Pollution Report One: Zschienger Refining Company Site, prepared by Mr. Dilshad J. Perera, OSC, U.S. EPA, Region II, Recipients: See Distribution List, November 20, 1992.

P. 100004 - 100006 Pollution Report Two: Zschiegner Refining Company Site, prepared by Mr. Dilshad J. Perera, OSC, U.S. EPA, Region II, Recipients: See Distribution List, November 27, 1992.

P. 100007 - 100008 Pollution Report Three: Zschiegner Refining Company Site, prepared by Mr. Dilshad J. Perera, OSC, U.S. EPA, Region II, Recipients: See Distribution List, December 4, 1992.

P. 100009 - 100011 Pollution Report Four: Zschiegner Refining Company Site, prepared by Mr. Dilshad J. Perera, OSC, U.S. EPA, Region II, Recipients: See Distribution List, December 11, 1992.

P. 100012 - 100013 Pollution Report Five: Zschiegner Refining Company Site, prepared by Mr. Dilshad J. Perera, OSC, U.S. EPA, Region II, Recipients: See Distribution List, December 18, 1992.

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P. 100016 - 100017 Pollution Report Seven: Zschiegner Refining Company Site, prepared by Mr. Dilshad J. Perera, OSC, U.S. EPA, Region II, Recipients: See Distribution List, January 8, 1993.

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* Administrative Record File available 04/02/93

Note: Company or organizational affiliation is mentioned only when it appears in the record.

P. 100018 - 100019 Pollution Report Eight: Zschiegner Refining Company Site, prepared by Mr. Dilshad J. Perera, OSC, U.S. EPA, Region II, Recipients: See Distribution List, January 15, 1993.

P. 100020 - 100021 Pollution Report Nine: Zschiegner Refining Company Site, prepared by Mr. Dilshad J. Perera, OSC, U.S. EPA, Region II, Recipients: See Distribution List, January 22, 1993.

P. 100022 - 100023 Pollution Report Ten: Zschiegner Refining Company Site, prepared by Mr. Dilshad J. Perera, OSC, U.S. EPA, Region II, Recipients: See Distribution List, January 29, 1993.

P. 100024 - 100025 Pollution Report Eleven: Zschiegner Refining Company Site, prepared by Mr. Dilshad J. Perera, OSC, U.S. EPA, Region II, Recipients: See Distribution List, February 12, 1993.

P. 100026 - 100027 Pollution Report Twelve: Zschiegner Refining Company Site, prepared by Mr. Dilshad J. Perera, OSC, U.S. EPA, Region II, Recipients: See Distribution List, February 19, 1993.

Health and Safety Plan

P. 100028 - 100063 Report: Site Safety Plan, Zschienger Refining, Howell Township, Monmouth County, New Jersey, prepared in conjunction with U.S. EPA Region II - Removal Action Branch, and Roy F. Weston, Inc., Major Programs Division, Technical Assistance Team, November 19, 1992.

Sampling Plan

P. 100064 - 100081 Report: Sampling and Operations Plan for Zschiegner Refining, Howell Township, New Jersey, prepared by Mr. Desmond Devine, Foster Wheeler USA Corp., Technical Assistance Team - Region II, for Mr. Dilshad Perera, Response and Prevention Branch, U.S. EPA Region II, (undated).

Sampling Data/Data Summary Sheets/Chain of Custody Forms

P. 100082 - 100095 Report of Analysis for Asbestos, prepared by Garden State Laboratories, for Guardian Environmental Service, Inc., Project 11518E, February 9, 1993.

P. 100096 - 100130 Sampling Data Packet, prepared by U.S. EPA TAT II, November 20, 1992. The following are included:

A - 2 Sampling Location Maps
B - 3 Chain of Custody Records
C - Notes
D - Certificate of Analysis
E - Analysis Results

DECISION DOCUMENTS

Action Memorandum and Amendments

P. 200001 - 200002 Confirmation of Verbal Authorization for the Zschiegner Refining Co. Site, Howell Township, Monmouth County, New Jersey, to Ms. Kathleen C. Callahan, Director, Emergency and Remedial Response Division, from Mr. Dilshad J. Perera, On-Scene Coordinator, Response and Prevention Branch, through Mr. Richard C. Salkie, Associate Director for Removal and Emergency Preparedness Programs, November, 1992.

P. 200003 - 200014 Request for Ceiling Increase and Confirmation of Verbal Approval for the Zschiegner Refining Company Site, Howell Township, Monmouth County, New Jersey - ACTION MEMORANDUM, to Mr. Constantine Sidamon-Eristoff, Regional Administrator, from Mr. Dilshad J. Perera, On-Scene Coordinator, Response and Prevention Branch, through Ms. Kathleen C. Callahan, Director, Emergency and Remedial Response Division, December 23, 1992.

P. 200015 - 200024 Request for Removal Action Phase II for the Zschiegner Refining Company Site, Howell Township, Monmouth County, New Jersey - ACTION MEMORANDUM, to Mr. William J. Muszynski, P.E., Acting Regional Administrator, from Mr. Dilshad J. Perera, On-Scene Coordinator, Response and Prevention Branch, through Mr. George Pavlou, Acting Director, Emergency and Remedial Response Division, March 19, 1993.

PUBLIC PARTICIPATION

Public Notice of Administrative Record Availability

P. 300001 Notice of Public Availability Announces the Availability of the Administrative Record Zschiegner Refining Site, January 25, 1993.

Fact Sheets

P. 300002 Superfund Response Alert: Zschiegner Refining Site Emergency Removal Action Start, Howell, New Jersey, prepared by U.S. EPA, November 5, 1992.

P. 300003 - 300004 Facts: EPA Superfund Action at Zschiegner Refining Company in Howell Township, New Jersey, prepared by U.S. EPA Region 2, November 20, 1992.

P. 300005 Proclamation: To all Departments, Divisions, Emergency Services and Offices of the Township of Howell, New Jersey and to all Citizens of the Township and Persons within its Boundaries, for a Limited State of Emergency/Disaster within the Township of Howell.

Documentation of Public Meetings

P. 300006 - 300009 Community Safety Meeting Bullets For: Friday, November 13, 1992.

P. 300010 - 300013 Community Safety Meeting Bullets For: Friday, November 20, 1992.

P. 300014 - 300016 Community Safety Meeting Bullets For: Monday, November 30, 1992.

P. 300017 - 300026 Community Safety Meeting Bullets For: Friday, January 8, 1993. Bullets for previous meetings attached.

Press Coverage

ENFORCEMENT DOCUMENTS

Administrative Orders/Consent Decrees

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION II

INITIAL POLLUTION REPORT

I HEADING

Date: November 20, 1992

From: Dilshad J. Perera, OSC

To: C. Sidamon-Eristoff, EPA
W. Muszynski, EPA
K. Callahan, EPA
J. Marshall, EPA
W. McCabe, EPA
W. Mugdan, EPA
R. Salkie, EPA
B. Sprague, EPA
J. Daloia, EPA
D. Schwenk, EPA
R. Cahill, EPA
S. Becker, EPA
L. Miller, NJDEPE
J. Manuel, NJDEPE
L. Jargowsky, MCHD
G. Levine, OEM
T. Waskovich, Howell Admin.
ERRD, Washington (E-Mail)
TAT

Subject: Zschienger Refining Company Site

Polrep: One (1)

II. BACKGROUND

Site Number:	8E
Delivery Order Number:	0027-02-023
Response Authority:	CERCLA
NPL Status:	Non-NPL
Action Memorandum:	Draft
Start Date:	11-02-1992

III. SITE INFORMATION

On October 31, 1992, the US Drug Enforcement Agency (DEA) conducted a drug raid at Zschienger Refining Co.(ZRC), located at 1442 Maxim-Southard Road, Howell Twp., New Jersey and arrested the owner/operator for the illegal manufacture of methamphetamine. As a result of the drug raid, the facility came to the attention of the local and state environmental regulatory agencies. On November 02, 1992, OSCs from

Region II's Response and Prevention Branch responded to the site. Upon the OSC's site evaluation, it was determined that immediate action needed to be taken. The NJDEPE official on site requested that EPA conduct a removal action under the provisions of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) as amended by the Superfund Reauthorization Act (SARA).

In addition to the methamphetamine lab, Mr. Zschienger operated a precious metal recovery operation for the primary metals of gold, silver, platinum and nickel. It is believed that some of his material was obtained under consignment.

The site consists of a 230ft by 30ft metal building. Approximately 1,400 containers of lab chemicals have been identified as being present inside the building. Included in this preliminary list of compounds are: cans of anhydrous ether, sodium peroxide and chloroform.

There are approximately 2,200 gallons of acids, bases and cyanide solutions in open vats and bins.

The containers found on site show signs of deterioration. The sodium peroxide, in particular is in an unsafe condition, the contents have reacted and spewed out. The vats also appear to be in poor condition, and the building floor shows sign of erosion. A cinder block loading platform found along the northern side shows evidence of severe erosion.

The site is in a residential area, the nearest home being approximately 100ft; two additional homes are located within 100yds. All three homes receive their potable water from private wells. A large subdivision is located directly across the street, a second large subdivision is located approximately 0.2 miles east on Maxim-Southard Road.

The site is situated between two brooks, the Haystack, which flows through the property, and Ground Hog. Both brooks drain into the Metedeconk River, a portable water source for Brick Twp.

IV. REMOVAL ACTIONS

On November 02, 1992, OSCs requested and received a verbal authorization for a project ceiling of $250,000 of which $200,000 is for mitigation contracting. On this same day, the ERCS contractor was instructed to provide 24-hour security starting at 0800hrs on November 03.

On November 04, at the request of local and state environmental regulatory agencies a small press conference was held at the Southard Firehouse.

On November 09, 1992, ERCS/TAT/US Coact Guard Atlantic Strike Team(AST)/EPA mobed to the site and began establishing the contamination reduction zones (CRZ). The OSC requested the assistance of AST to monitor health and safety aspects of the removal action.

OSC organized a committee of local and state officials consisting of Howell Twp. Environmental Task Force, Howell Police and Fire Department, a NJDEPE representative, ATSDR, Howell Twp. Administrator, Howell Twp. O.E.M., Howell First Aid Squad, Monmouth County Health Department and the EPA. The primary purpose of the formation of the committee is to ensure that first responders will have the latest information as the removal action proceeds, regarding materials uncovered inside the building. Secondly, to address public concerns. The committee will convene every friday afternoon at the site command post. As part of the meeting, personnel with current OSHA certification will make a site entry for first hand knowledge of the status of inside the building. This will improve a response, should one become necessary. The committee will also generate a site specific emergency plan, thus ensuring a well coordinated and efficient response.

The first such meeting was held on November 13, 1992. Site security and traffic warning signs for Maxim-Southard Road were discussed. The First Aid Squad described procedures to be followed for several medical emergency scenarios. Equipment inventory was discussed in the event of their need to address an emergency on site. OSC offered to participate in a town meeting at the mayor's discretion.

On November 11, officials from the Canadian Coast Guard and Canadian Environmental Strike Team visited the site.

A septic tank was uncovered and assessed for sampling at a future date.

Two soil samples will be taken from a suspected acid run off area. Two sediment samples will be taken from a creek that the runoff empties into. Two water samples will be taken from the same creek. All samples will be analyzed for TCL/TAL/CN.

V. NEXT STEPS

Upon completion of the CRZ and construction of at least two egress points per working location, all liquid and sludge material in vats and bins will be transferred into stable containers. Subsequent to this operation, all debris and items that need not be protected from the environment will be staged outdoors. As soon as working space is made available, spill containment/fire extinguishers will be placed in key locations. A chemist will then be brought on-site to begin the labpacking operations.

V. COST INFORMATION

Mitigation Contracts	$115,000
TAT	$ 2,500
Intermural	$ 9,000
Total	$126,500
Project Ceiling	$250,000

Percent of funds Remaining 49.4%

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION II

POLLUTION REPORT

I HEADING

Date: November 27, 1992

From: Dilshad J. Perera, OSC B Sprague (for)

To: K. Callahan, EPA
J. Marshall, EPA
W. McCabe, EPA
W. Mugdan, EPA
R. Salkie, EPA
B. Sprague, EPA
J. Daloia, EPA
D. Schwenk, EPA
R. Cahill, EPA
S. Becker, EPA
L. Miller, NJDEPE
J. Manuel, NJDEPE
J. Jargowsky, MCHD
G. Levine, OEM
T. Waskovich, Howell Admin.
ERRD, Washington (E-Mail)
TAT

Subject: Zschiegner Refining Company Site

Polrep: Two (2)

II. BACKGROUND

Site Number:	8E
Delivery Order Number:	0027-02-023
Response Authority:	CERCLA
NPL Status:	Non-NPL
Action Memorandum:	Draft
Start Date:	11-02-1992

III. SITE INFORMATION

See Pollution Report One (1)

IV. REMOVAL ACTIONS

During the week of November 23 work continued at the site.

The following items have been completed:

1. Decon shed and emergency shower stall
2. Decon pad
3. Restaging of all empty vats and bins
4. Runoff catch basin, contingency purposes in the event of a fire
5. Egress doors constructed
6. Railings on loading platform
7. Interior lighting
8. Parking lot
9. Recommendations made by an EPA industrial hygienist
10. Well pump hook-up

On November 20, at the request of the OSC, a site Health & Safety audit was conducted by an EPA industrial hygienist. Recommendations were made and subsequently implemented.

ORC assigned to the project visited the site on November 20. All site physical changes were pointed out. The purpose for the changes were discussed. In addition, photographs taken of the interior were shown.

On November 23, an open container was noted fuming. Drager tube, specific for hydrogen chloride, was utilized to evaluate the fumes. A one ppm reading was observed; along with previous pH testing with a meter, it was concluded that the liquid contained hydrochloric acid. The container was covered. The previous two day weather conditions can be characterized as heavy and continual rain.

The committee meeting was held on November 20. OSC requested that a site specific community emergency plan be developed. It was also stressed that the plan needs to be in place as soon as possible, since lab packing will begin in the upcoming weeks. The meeting revolved around the formulation of the basic framework. The plan will essentially adhere to the Incident Command System.

On November 02, 1992, OSC requested and received a verbal authorization for a project ceiling of $250,000, of which $200,000 is for mitigation contracting. On this same day, the ERCS contractor was instructed to provide 24-hour security starting at 0800hrs on November 03.

On November 24, a past employee was brought to the site. This individual worked at the facility for approximately six months as part of a 1965 high school year work-study program. A member of the Howell Twp. Environmental Task force, also a member of the committee, provided a surveillance camera and monitor. This provided a display of the building interior without having the past employee enter the hotzone. Though there have been significant changes, the basic refining process is essentially the same.

Site will be demobed for the Thanksgiving holidays, work will resume Monday, November 30.

V. NEXT STEPS

1. Continue transfer of open vats and bins.
2. Chemists for labpacking will be brought on site when all vats/bins have been transferred and work areas maximized.
3. Daily chemical inventory transfer to the fire department via computer telecommunications.
4. Continue development of community emergency plan.

V. COST INFORMATION

Mitigation Contracts	$133,000
TAT	$ 5,000
Intermural	$ 18,000
Total	$156,000
Project Ceiling	$250,000

Percent of funds Remaining 37.6%

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION II

POLLUTION REPORT

I HEADING

Date: December 04, 1992

From: Dilshad J. Perera, OSC

To: K. Callahan, EPA
J. Marshall, EPA
W. McCabe, EPA
W. Mugdan, EPA
R. Salkie, EPA
B. Sprague, EPA
J. Daloia, EPA
D. Schwenk, EPA
R. Cahill, EPA
S. Becker, EPA
L. Miller, NJDEPE
J. Manuel, NJDEPE
L. Jargowsky, MCHD
G. Levine, OEM
T. Waskovich, Howell Admin.
ERRD, Washington (E-Mail)
TAT

Subject: Zschiegner Refining Company Site

Polrep: Three (3)

II. BACKGROUND

Site Number:	8E
Delivery Order Number:	0027-02-023
Response Authority:	CERCLA
NPL Status:	Non-NPL
Action Memorandum:	Draft
Start Date:	11-02-1992

III. SITE INFORMATION

See Pollution Report One (1)

IV. REMOVAL ACTIONS

Transferring of liquids in open vats and rubber garbage bins are ongoing. The initial liquids being transferred are strong acids.

Debris restaging is ongoing, allowing for a safe working environment.

On November 26, Lakewood and Ciba-Giegy HAZMAT units visited the site to become familiarized with site conditions in the event their services are required in an emergency. The HAZMAT units suggested that acid vapor suppressants be used in the event of a fire.

Committee developed a draft of the Community Site Specific Emergency Plan. The final plan is anticipated to be approved next week.

AST and TAT began Hazcatting of transferred material for best staging purposes.

NOAA and additional AST representatives visited the site to observe site operations and site Health and Safety Protocol planning to further refine their programs.

An hotzone evacuation drill was performed during the week. This exercise was executed with good results.

On December 3, an ex-employee of the facility was invited to the site to describe facility operations. A perimeter walk and video viewing was conducted. The employee recollected significant gold, nickel and silver recovery processes. The ex-employee worked from 1969-73.

V. NEXT STEPS

1. Continue transfer of open vats and bins.
2. Labpacking chemists will be brought on site when all vats/bins have been transferred and work areas maximized.
3. Daily chemical inventory transfer to the fire department via computer telecommunications.
4. Continue development of community emergency plan.

V. COST INFORMATION

Mitigation Contracts	$155,000
TAT	$ 6,500
Intermural	$ 26,000
Total	$187,500
Project Ceiling	$250,000

Percent of funds Remaining 25.0%

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION II

POLLUTION REPORT

I HEADING

Date: December 11, 1992

From: Dilshad J. Perera, OSC

To: K. Callahan, EPA
J. Marshall, EPA
W. McCabe, EPA
W. Mugdan, EPA
R. Salkie, EPA
B. Sprague, EPA
J. Daloia, EPA
D. Schwenk, EPA
R. Cahill, EPA
S. Becker, EPA
L. Miller, NJDEPE
J. Manuel, NJDEPE
L. Jargowsky, MCHD
G. Levine, OEM
T. Waskovich, Howell Admin.
ERRD, Washington (E-Mail)
TAT

Subject: Zschiegner Refining Company Site

Polrep: Four (4)

II. BACKGROUND

Site Number:	8E
Delivery Order Number:	0027-02-023
Response Authority:	CERCLA
NPL Status:	Non-NPL
Action Memorandum:	Draft
Start Date:	11-02-1992

III. SITE INFORMATION

See Pollution Report One (1)

IV. REMOVAL ACTIONS

Transferring of liquids in open vats has been completed. Liquid transfer to the plastic garbage bins are ongoing. Approximately 1,400 gallons of acid/oxidizers, based on hazcatting by TAT, have been transferred. The pH of this material is less than 2.0, with the vast majority is less than 1.0.

Debris restaging is ongoing, allowing for a safe working environment.

On December 04, 1992, two ERCS employees felt nauseous and had a foul taste in their mouths. An ambulance was called, as a precautionary measure since these two individuals were performing the same task, in identical levels of protection. At the hospital, blood test were conducted. Elevated liver enzymes were the only anomalies noted. Follow up blood tests were conducted on November 09, 1992. Results will be forthcoming.

Members of the Environmental Task Force responded, including the pre-assigned incident commander as tentatively agreed upon in the community emergency plan. The plan was activated to the extent necessary.

As a result of the incident described above, medical monitoring program was initiated to develop a base line.

Sample data was received. Two soil, two sediment and two water samples were collected on November 20, 1992 by TAT and Atlantic Strike Team. The samples were analyzed for TAL, TCL and cyanides. Metals including silver, chromium, lead and copper were detected. A water sample indicated the presence of trichloroethane, toluene, benzene and 1,2 dichloroethane in parts per billion levels.

V. NEXT STEPS

1. Continue transfer of open vats and bins.
2. Labpacking chemists will be brought on site when all vats/bins have been transferred and work areas maximized.
3. Daily chemical inventory transfer to the fire department via computer telecommunications.
4. Continue development of community emergency plan.
5. Sample soil for TCLP metals.
6. Sample for XRF calibration and grid site for XRF screening.

V. COST INFORMATION

Mitigation Contracts	$165,000
TAT	$ 9,000
Intermural	$ 35,000
Total	$209,000
Project Ceiling	$250,000

Percent of funds Remaining 16.4%

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION II

POLLUTION REPORT

I HEADING

Date: December 18, 1992

From: Dilshad J. Perera, OSC

To: K. Callahan, EPA
J. Marshall, EPA
W. McCabe, EPA
W. Mugdan, EPA
R. Salkie, EPA
B. Sprague, EPA
J. Daloia, EPA
D. Schwenk, EPA
R. Cahill, EPA
S. Becker, EPA
L. Miller, NJDEPE
J. Manuel, NJDEPE
L. Jargowsky, MCHD
G. Levine, OEM
T. Waskovich, Howell Admin.
ERRD, Washington (E-Mail)
TAT

Subject: Zschiegner Refining Company Site

Polrep: Five (5)

II. BACKGROUND

Site Number:	8E
Delivery Order Number:	0027-02-023
Response Authority:	CERCLA
NPL Status:	Non-NPL
Action Memorandum:	Draft
Start Date:	11-02-1992

III. SITE INFORMATION

See Pollution Report One (1)

IV. REMOVAL ACTIONS

Liquid transfer of all identified open containers has been completed. ERCS is in the process of transferring the sludge and solids remaining in the transferred vats.

On Monday, December 14, 1992, the subcontracted lab-pack chemists were on site to evaluate the site conditions. A draft work plan requested by the OSC was received on December 15; OSC, TAT, Guardian and the USCG Atlantic Strike Team (AST) had several recommendation which were forwarded to the subcontractor.

ERT agreed to conduct precious metals analyses on selected samples. ERT will analyze for the specific precious metals: gold, silver, platinum and nickel. Thirty-eight samples will be initially shipped to Edison on December 22, 1992.

Results from EPA soil sampling conducted on November 20, 1992 were forwarded to ATSDR.

TAT and OSC are currently developing a soil sampling plan to determine extent of soil contamination and soil removal areas. The development of the sampling plan will be done in consultation with ATSDR. ATSDR will also be consulted in assigning clean-up standards.

The weekly committee meeting informed the Howell Township mayor-elect of mitigation actions taken on-site and the work schedule for the immediate future. The mayor-elect was informed that the township is not eligible for CERCLA reimbursement, with an unsigned LEPC plan.

V. NEXT STEPS

1. Continue transfer of sludges and solids from open vats and bins.
2. Continue debris restaging.
3. Establish work zones for Lab-packing operations.
4. Refining the soil sampling and analyses plan.
5. Establishment of clean-up standards for soil.
6. Refining the Community Site Specific Emergency Plan.

V. COST INFORMATION

Mitigation Contracts	$185,000
TAT	$ 11,000
Intermural	$ 44,000
Total	$240,000
Project Ceiling	$250,000

Percent of funds Remaining 4.0%

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION II

POLLUTION REPORT

I HEADING

Date: December 25, 1992

From: Dilshad J. Perera, OSC

To: K. Callahan, EPA
J. Marshall, EPA
W. McCabe, EPA
W. Mugdan, EPA
R. Salkie, EPA
B. Sprague, EPA
J. Daloia, EPA
D. Schwenk, EPA
R. Cahill, EPA
S. Becker, EPA
L. Miller, NJDEPE
J. Manuel, NJDEPE
L. Jargowsky, MCHD
G. Levine, OEM
T. Waskovich, Howell Admin.
ERRD, Washington (E-Mail)
TAT

Subject: Zschiegner Refining Company Site

Polrep: Six (6)

II. BACKGROUND

Site Number:	8E
Delivery Order Number:	0027-02-023
Response Authority:	CERCLA
NPL Status:	Non-NPL
Action Memorandum:	Draft
Start Date:	11-02-1992

III. SITE INFORMATION

See Pollution Report One (1)

IV. REMOVAL ACTIONS

Sludge transfer, hazcat of samples and debris segregating operations are ongoing.

On December 21, 1992, an attempt was made to transfer acidic material from a vertical tank

on the loading platform. The Southard Fire Department provided their snorkel truck to assist with the transfer. The transfer pump failed within five minutes, due to an inappropriate, rental company installed fitting. Isolation of the problem caused time delays. Completion of the transfer will be held off until after the Christmas break. This action was supported by the fire chief.

The subcontractor, selected on a cost basis, submitted a wholly inadequate work plan. The firm was given an opportunity to rework the plan, however, the plan still remained futile. This phase will be re-bidded; contractors will be invited to site in order develop a site specific work plan. The plans submitted will be primarily evaluated on technical merit, followed by the low bid.

On December 22, 1992, 50 samples were submitted to ERT for precious metal analyses, specifically gold, silver, nickel and platinum. ERT will initially run the samples for gold. The remaining parameters will be analyzed based on the results for gold.

A recon of the property perimeter was conducted with the fire chief to determine potential disposal areas other than those previously observed.

First responder committee members toured the building on December 23, following the routine committee meeting.

From December 25, 1992 to January 04, 1993, the site will be demobed for the Christmas and New Year Holidays.

V. NEXT STEPS

1. Continue transfer of sludges and solids from open vats and bins.
2. Continue debris restaging.
3. Re-bidding of the Lab-packing operations.
4. Refining the soil sampling and analyses plan.
5. Establishment of clean-up standards for soil.
6. Refining the Community Site Specific Emergency Plan.

VI. COST INFORMATION

Mitigation Contracts	$ 175,000
TAT	$ 13,000
Intermural	$ 53,000
Total	$ 241,000
Project Ceiling	$ 250,000
Percent of funds Remaining	3.6%

NOTE: Mitigation Contracting totals includes awaits. The total increase is lower due to the awaits projected for the duration of the project, such as hotel, trailer rental and security were removed.

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION II

POLLUTION REPORT

I **HEADING**

Date: January 8, 1993

From: Dilshad J. Perera, OSC

To: K. Callahan, EPA
J. Marshall, EPA
W. McCabe, EPA
W. Mugdan, EPA
R. Salkie, EPA
B. Sprague, EPA
J. Daloia, EPA
D. Schwenk, EPA
R. Cahill, EPA
S. Becker, EPA
L. Miller, NJDEPE
J. Manuel, NJDEPE
L. Jargowsky, MCHD
G. Levine, OEM
T. Waskovich, Howell Admin.
ERRD, Washington (E-Mail)
TAT

Subject: Zschiegner Refining Company Site

Polrep: Seven (7)

II. **BACKGROUND**

Site Number:	8E
Delivery Order Number:	0027-02-023
Response Authority:	CERCLA
NPL Status:	Non-NPL
Action Memorandum:	Draft
Start Date:	11-02-1992

III. **SITE INFORMATION**

See Pollution Report One (1)

IV. **REMOVAL ACTIONS**

During the week of December 28th, the Action Memorandum and a procurement request for an additional $550,000 was approved.

100016

The site remobed on January 4, after a holiday break.

Sludge transfer, hazcating of samples and debris segregating operations are ongoing.

Potential labpack subcontractors were on-site during the week for re-bidding on the labpack operation. Prospective subcontractors were invited to the site in order to develop a site specific work plan. The plans submitted will be evaluated primarily on technical merit, followed by the low bid. A meeting was arranged for one of the subcontractors to discuss procedures stated in their work plan. The work plan did not adequately detail their approach.

Legal counsel for the PRP is sending a private investigator and Zschiegner's sister to the site, on Friday, January 08, 1993, to review documents left on site at the time of his arrest. EPA has informed the law firm of the potential health and safety risk when untrained personnel enter the restricted and hot zones.

Immediate action was required to contain and safely transfer the contents of a fuming drum whose contents was later determined to be hydrofluoric acid. Proper measures were taken to transfer the fuming liquid safely.

The committee meeting will be held on Friday as usual, it is anticipated that the new town administrator will be in attendance.

V. NEXT STEPS

1. Continue transfer of sludges and solids from open vats and bins.
2. Continue debris restaging.
3. Re-bidding of the Lab-packing operations.
4. Refining the soil sampling and analyses plan.
5. Establishment of clean-up standards for soil.
6. Refining the Community Site Specific Emergency Plan.

V. COST INFORMATION

Mitigation Contracts	$ 200,000
TAT	$ 14,000
Intermural	$ 61,000
Total	$ 275,000
Project Ceiling	$ 1,080,000
Percent of funds Remaining	74.5%

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION II

POLLUTION REPORT

I HEADING

Date: January 15, 1993

From: Dilshad J. Perera, OSC

To: K. Callahan, EPA
J. Marshall, EPA
J. Frisco, EPA
W. Mugdan, EPA
R. Salkie, EPA
B. Sprague, EPA
J. Daloia, EPA
D. Schwenk, EPA
R. Cahill, EPA
S. Becker, EPA
L. Miller, NJDEPE
J. Manuel, NJDEPE
L. Jargowsky, MCHD
G. Levine, OEM
T. Waskovich, Howell Admin.
ERRD, Washington (E-Mail)
TAT

Subject: Zschiegner Refining Company Site

Polrep: Eight (8)

II. BACKGROUND

Site Number:	8E
Delivery Order Number:	0027-02-023
Response Authority:	CERCLA
NPL Status:	Non-NPL
Action Memorandum:	Draft
Start Date:	11-02-1992

III. SITE INFORMATION

See Pollution Report One (1)

IV. REMOVAL ACTIONS

Sludge transfer, hazcat of samples and debris segregating operations are ongoing.

Two of the four bidders on Labpack operations have submitted a site specific work plan. The plans submitted will be primarily evaluated on technical merit, followed by the low bid.

Setup of a sample plan, written by TAT, for soil contamination is underway. The completed plan will be submitted to ATSDR for review.

The committee meeting will be held on Friday, as usual.

TAT has placed the Administrative File in the Howell Township, Free Public Library. Legal Notices from the EPA were filed with the local newspapers of the STAR LEDGER and ASBURY PARK PRESS.

Emergency Plans were prepared for various Hotzone incidents.

V. NEXT STEPS

1. Continue transfer of sludges and solids from open vats and bins.
2. Continue debris restaging.
3. Reviewing work plans for the Labpacking operations as they are submitted.
4. Refining the soil sampling and analyses plan.
5. Establishment of clean-up standards for soil.
6. Refining the Community Site Specific Emergency Plan.
7. A follow up Industrial Hygiene audit will be implemented next Wednesday.

V. COST INFORMATION

Mitigation Contracts	$	318,000
TAT	$	14,000
Intermural	$	69,000
Total	$	275,000
Project Ceiling	$	1,080,000
Percent of funds Remaining		64.2%

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION II

POLLUTION REPORT

I HEADING

Date: January 22, 1993

From: Dilshad J. Perera, OSC

To:
K. Callahan, EPA
J. Marshall, EPA
J. Frisco, EPA
W. Mugdan, EPA
R. Salkie, EPA
B. Sprague, EPA
J. Daloia, EPA
D. Schwenk, EPA
R. Cahill, EPA
S. Becker, EPA
L. Miller, NJDEPE
J. Manuel, NJDEPE
L. Jargowsky, MCHD
G. Levine, OEM
T. Waskovich, Howell Admin.
ERRD, Washington (E-Mail)
TAT

Subject: Zschiegner Refining Company Site

Polrep: Nine (9)

II. BACKGROUND

Site Number:	8E
Delivery Order Number:	0027-02-023
Response Authority:	CERCLA
NPL Status:	Non-NPL
Action Memorandum:	Draft
Start Date:	11-02-1992

III. SITE INFORMATION

See Pollution Report One (1)

IV. REMOVAL ACTIONS

Sludge transfer, hazcat of samples and debris segregating operations are ongoing. Restaging of glass carboys from the outside loading platform to the building interior was completed. General cleanup, along with setup of additional lighting were completed on the building's interior.

Two of the four bidders on Labpack operations have submitted a site specific work plan. The plans submitted will be primarily evaluated on technical merit, followed by the low bid.

A followup Safety Audit by an EPA I.H. was performed.

TAT completed a sample plan to determine the extent of soil contamination. The plan will be submitted to ATSDR for review.

The committee meeting will be held on Friday, as usual.

Emergency Plans were prepared for various Hotzone incidents.

V. NEXT STEPS

1. Continue transfer of sludges and solids from small containers.
2. Continue debris restaging.
3. Reviewing work plans for the Labpacking operations as they are submitted.
4. Implementation of Soil Sampling Plan.
5. Establishment of clean-up standards for soil.
6. Refining the Community Site Specific Emergency Plan.

V. COST INFORMATION

Mitigation Contracts	$ 340,000
TAT	$ 17,000
Intermural	$ 78,000
Total	$ 435,000
Project Ceiling	$1,080,000

Percent of funds Remaining 59.7%

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION II
POLLUTION REPORT

I HEADING

Date: January 29, 1993

From: Dilshad J. Perera, OSC

To: G. Pavlou, EPA
J. Marshall, EPA
J. Frisco, EPA
W. Mugdan, EPA
C. Moyik, EPA
R. Salkie, EPA
B. Sprague, EPA
J. Daloia, EPA
D. Schwenk, EPA
R. Cahill, EPA
S. Becker, EPA
L. Miller, NJDEPE
J. Manuel, NJDEPE
L. Jargowsky, MCHD
G. Levine, OEM
T. Waskovich, Howell Admin.
ERRD, Washington (E-Mail)
TAT

Subject: Zschiegner Refining Company Site

Polrep: Ten (10)

II. BACKGROUND

Site Number:	8E
Delivery Order Number:	0027-02-023
Response Authority:	CERCLA
NPL Status:	Non-NPL
Action Memorandum:	Draft
Start Date:	11-02-1992

III. SITE INFORMATION

See Pollution Report One (1)

IV. REMOVAL ACTIONS

Transfer of liquids from poly drums that are not DOT shippable are ongoing. In addition debris segregation and hazcatting are on going.

During the week, an ex-employee visited the site to review his experiences of work at Zschiegner Refining. This ex-employee also confirmed the theory that spent acid solutions were dumped onto the surrounding soil surface.

The Howell Township Town Manager, Mr. Corin, was on-site to review actions that have been taken to mitigate hazards on-site.

On January 28th, a 5 gallon drum, with crystal growth, was evaluated. Based on hazcatting results, it was concluded that the drum may potentially contain sodium peroxide. For health and safety concerns, this drum will be treated as if it were sodium peroxide.

On January 29th, OSCs provided an overview of Removal Program activities, including emergency drill conducted at the Fried Industries site in E. Brunswick to the Southard Fired Department personnel. TAT also presented an overview of proper personal protection when working with the corrosive fumes that may be liberated in the event of a fire at the Zschiegner site.

On January 29th, during our weekly meeting the Committee reviewed possible options for all potentially shock sensitive and explosive material that is known to be on site.

V. NEXT STEPS

1. Continue transfer of sludges and solids from small containers.
2. Continue debris restaging.
3. Reviewing work plans for the Labpacking operations as they are submitted.
4. Implementation of Soil Sampling Plan.
5. Establishment of clean-up standards for soil.
6. Refining the Community Site Specific Emergency Plan.

V. COST INFORMATION

Mitigation Contracts	$ 360,000
TAT	$ 23,000
Intermural	$ 85,000
Total	$ 468,000
Project Ceiling	$1,080,000
Percent of funds Remaining	56.6%

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION II

POLLUTION REPORT

I HEADING

Date: February 12, 1993

From: Dilshad J. Perera, OSC

To: G. Pavlou, EPA
J. Marshall, EPA
J. Frisco, EPA
W. Mugdan, EPA
R. Salkie, EPA
B. Sprague, EPA
J. Daloia, EPA
D. Schwenk, EPA
R. Cahill, EPA
S. Becker, EPA
L. Miller, NJDEPE
J. Manuel, NJDEPE
L. Jargowsky, MCHD
G. Levine, OEM
T. Waskovich, Howell Admin.
ERRD, Washington (E-Mail)
TAT

Subject: Zschiegner Refining Company Site

Polrep: Eleven (11)

II. BACKGROUND

Site Number:	8E
Delivery Order Number:	0027-02-023
Response Authority:	CERCLA
NPL Status:	Non-NPL
Action Memorandum:	December 30, 1992
Start Date:	11-02-92

III. SITE INFORMATION

See Pollution Report One (1)

IV. REMOVAL ACTIONS

Transfer of liquids from poly drums that are not DOT shippable are ongoing. In addition debris segregation and hazcatting are on going.

Provided the local fire department with an update of MSDS's for materials found on-site.

Performed hazcat on suspected drug samples.

The local fire department assisted with the transfer of corrosive liquid from an exterior tank.

NJ State Police were on-site to discuss the detonation of potentially shock sensitive and explosive material that are known to be on site.

Suspected asbestos containing material was analyzed for negative results.

Body alarms were acquired for Hot Zone personnel, which activate when personnel are motionless for thirty seconds or longer.

The weekly committee meeting is planning to execute a safety drill in the upcoming months.

V. NEXT STEPS

1. Continue transfer of sludges and solids from small containers.
2. Continue debris restaging.
3. Implementation of Soil Sampling Plan.
4. Establishment of clean-up standards for soil.
5. Refining the Community Site Specific Emergency Plan.

V. COST INFORMATION

Mitigation Contracts	$400,000
TAT	$283,300
Intermural	$102,000
Total	$530,000
Project Ceiling	$1,080,000
Percent of funds Remaining	50.9%

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION II

POLLUTION REPORT

I. HEADING

Date: February 19, 1993

From: Dilshad J. Perera, OSC

To: G. Pavlou, EPA
J. Marshall, EPA
J. Frisco, EPA
W. Mugdan, EPA
R. Salkie, EPA
B. Sprague, EPA
J. Daloia, EPA
D. Schwenk, EPA
R. Cahill, EPA
S. Becker, EPA
L. Miller, NJDEPE
J. Manuel, NJDEPE
L. Jargowsky, MCHD
G. Levine, OEM
T. Waskovich, Howell Admin.
ERRD, Washington (E-Mail)
TAT

Subject: Zschiegner Refining Company Site

Polrep: Twelve (12)

II. BACKGROUND

Site Number:	8E
Delivery Order Number:	0027-02-023
Response Authority:	CERCLA
NPL Status:	Non-NPL
Action Memorandum:	Draft
Start Date:	11-02-1992

III. SITE INFORMATION

See Pollution Report One (1)

IV. REMOVAL ACTIONS

Transfer of liquids from poly drums that are not DOT shippable are ongoing. In addition, debris segregation and hazcatting are on going.

Lab-pack subcontractor was selected. Lab-packing operations are scheduled to start on February 24th.

Three additional potentially explosive materials were discovered: sodium peroxide, hydrogen peroxide and benzoyl peroxide.

NJ State Police bomb squad will be on site on Wednesday, February 24nd to discuss options. Township has provided tentative approval, pending EPA's assurances that detonation on their property will not lead to residual contamination.

V. NEXT STEPS

1. Continue transfer of sludges and solids from small containers.
2. Continue debris restaging.
3. Implementation of Soil Sampling Plan.
4. Establishment of clean-up standards for soil.
5. Refining the Community Site Specific Emergency Plan.
6. Begin Lab-packing operation.
7. Detonation of explosive materials.

V. COST INFORMATION

Mitigation Contracts	$ 417,000
TAT	$ 29,000
Intermural	$ 111,000
Total	$ 557,000
Project Ceiling	$1,080,000
Percent of funds Remaining	48.4%

TAT-F-06781

SITE SAFETY PLAN

Project Name:	Zschienger Refining
	Howell Township
	Monmouth County, New Jersey
ERCS Delivery Order #:	0027-02-0023
TAT Technical Direction Document #:	02-9210-~~00~~ 4317
U.S. EPA Site I.D.#:	8E

Prepared in Conjunction with

The U.S. Environmental Protection Agency
Region II - Removal Action Branch
Edison, New Jersey

and

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

Adopted By: _____ Date: 19 Nov 92
For U.S. Environmental Protection Agency

Adopted By: _____ Date: _____
For Roy F. Weston, Inc.

Adopted By: _____ Date: 19 Nov 92
For Guardian Environmental Services

Adopted By: _____ Date: 19 Nov 92
For U.S. Coast Guard

100028

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- ATTACHMENT E - DRUM SAMPLING SOP
- ATTACHMENT F - EXCAVATION SOP
- ATTACHMENT G - ZSCHIEGNER REFINING SAFETY PLAN AMENDMENTS
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GLOSSARY OF ACRONYMS

ANSI	-	AMERICAN NATIONAL STANDARDS INSTITUTE
APR	-	AIR PURIFYING RESPIRATOR
ACGIH	-	AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS
CFR	-	CODE OF FEDERAL REGULATIONS
CGI	-	COMBUSTIBLE GAS INDICATOR
CSEP	-	CONFINED SPACE ENTRY PERMIT
ERCS	-	EMERGENCY RESPONSE CLEAN-UP SERVICES
HNU-PID	-	HNU PHOTOIONIZATION DETECTOR
IDLH	-	IMMEDIATELY DANGEROUS TO LIFE & HEALTH
MREM/hr	-	MILI-ROENTGENS EQUIVALENT IN MAN PER HOUR
NIOSH	-	NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY & HEALTH
OSC	-	ON-SCENE COORDINATOR
OSHA	-	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
OVA	-	ORGANIC VAPOR ANALYZER
PPM	-	PARTS PER MILLION
RM	-	RESPONSE MANAGER
SCBA	-	SELF-CONTAINED BREATHING APPARATUS
SOP	-	STANDARD OPERATING PROCEDURE
SPCC	-	SPILL PREVENTION CONTROLS & COUNTERMEASURES
TAT	-	TECHNICAL ASSISTANCE TEAM
TLV	-	THRESHOLD LIMIT VALUE
U.S. EPA	-	U.S. ENVIRONMENTAL PROTECTION AGENCY
GES	-	GUARDIAN ENVIRONMENTAL SERVICES
TWA	-	TIME WEIGHTED AVERAGE
PEL	-	PERMISSIBLE EXPOSURE LIMIT

INTRODUCTION AND ZSCHIEGNER REFINING ENTRY REQUIREMENTS

This document describes the health and safety guidelines developed for the Zschiegner Refining to protect Zschiegner Refining personnel, visitors, and the public from physical harm and exposure to hazardous materials or wastes. The procedures and guidelines contained herein were based upon the best available information at the time of the plan's preparation. Specific requirements will be revised when new information is received or conditions change and a safety plan modification is necessary to ensure the safety of workers or the public. A written amendment will document all changes made to the plan. Amendments to this plan are included in Attachment H. Where appropriate, specific OSHA standards or other guidance will be cited and applied.

DAILY SAFETY MEETINGS

Daily safety meetings will be held at the start of each shift to ensure that all personnel understand Zschiegner Refining conditions and operating procedures, to ensure that personal protective equipment is being used correctly and to address worker health and safety concerns.

ZSCHIEGNER REFINING SAFETY PLAN ACCEPTANCE ACKNOWLEDGMENT

The OSC or designated representative shall be responsible for informing all individuals entering the exclusion zone of the contents of this plan and ensuring that each person signs the Safety Plan Acknowledgment Form in Attachment I. By signing the Safety Plan Acknowledgment Form, individuals are recognizing the hazards present Zschiegner Refining and the policies and procedures required to minimize exposure or adverse effects of these hazards.

In the event of an Zschiegner Refining emergency, additional hot-zone entry personnel will be briefed on the emergency sections of this plan.

TRAINING REQUIREMENTS

All personnel (including visitors) entering the exclusion zone must have completed training requirements for hazardous waste site work in accordance with OSHA 29 CFR 1910.120, or be qualified by previous training or experience. Documentation of training requirements is the responsibility of each employer.

MEDICAL MONITORING REQUIREMENTS

All personnel (including visitors) entering the exclusion zone must have completed appropriate medical monitoring requirements required under OSHA 29 CFR 1910.120(f). Documentation of medical monitoring is the responsibility of each employer. If there are additional medical monitoring requirements for this site, evidence of compliance must also be included.

FIT TESTING REQUIREMENTS

All personnel (including visitors) entering the exclusion zone using a full-face negative pressure respirator must have successfully passed a qualitative respirator FIT test in accordance with OSHA 29 CFR 1910.1025; 1926.58; or, ANSI within the last 12 months. Documentation of FIT testing is the responsibility of each employer. If applicable, quantitative FIT testing is required for the use of negative pressure respirators for protection against airborne asbestos fibers, arsenic and lead.

1.0 ZSCHIEGNER REFINING BACKGROUND AND SCOPE OF WORK

1.1 ROLES AND RESPONSIBILITIES

On-Scene Coordinator (OSC):

The OSC, as the representative of the U.S. EPA, is responsible for overall project administration and for coordinating health and safety standards for all individuals Zschiegner Refining at all times. All applicable OSHA standards shall be observed. However, each contractor (as an employer under OSHA) is also responsible for the health and safety of its employees. If there is any dispute with regards to health and safety, the following procedures shall be followed:

1) Attempt to resolve the issue at Zschiegner Refining, and;

2) If the issue cannot be resolved, on-site personnel shall consult off-site supervisors for assistance and the specific task operation in dispute shall be discontinued until the issue is resolved.

Response Manager (RM):

The Response Manager, as the field representative for the ERCS clean-up contractor, has the responsibility for fulfilling the terms of the delivery order. The RM must oversee the project and ensure that all technical, regulatory and safety requirements are met. It is the RM's responsibility to communicate daily with the OSC regarding Zschiegner Refining clean-up progress and any problems encountered.

Technical Assistance Team (TAT):

The Technical Assistance Team is responsible for providing the OSC with assistance and support in regards to all technical, regulatory and safety aspects of Zschiegner Refining activity. The TAT is also available to advise the OSC on matters relating to sampling, treatment, packaging, labeling, transport, and disposal of hazardous materials, but is not limited to the above-mentioned.

Atlantic Strike Team - U.S.Coast Guard:

The Team will monitor health and safety issues, along with Zschiegner Refining operations. The team will also assist in all matters as directed by the OSC.

1.2 Key Personnel

U.S. EPA On-Scene Coordinator (OSC):	Dilshad Perera U.S. EPA Region II 2890 Woodbridge Avenue Edison, New Jersey 08837 (908) 321-4356
ERCS Contractor:	Guardian Environmental Services 1280 Porter Road Bear, DE 19701 (302) 834-1000
Response Manager (RM):	Tracy A. Walker
Zschiegner Refining Site Health & Safety Officer:	Dilshad Perera, EPA-OSC U.S.C.G.National Strike Force
Alt. Health & Safety Officer:	MSTC T.J. Zernick Desmond Devine Tracy A. Walker
Technical Assistance Team (TAT):	Roy F. Weston, Inc. 1090 King Georges Post Road Suite 201 Edison, New Jersey 08837 (908) 225-6116
TAT Representatives:	Desmond Devine

1.3 Zschiegner Refining Background

The Zschiegner Refining site is located in Howell Township, Monmouth County, New Jersey. The area is primarily residential/rural. Zschiegner Refining was a precious metal refining laboratory for many years. The refinery helped cover for the illegal production of methamphetamine during its final days. The federal Drug Enforcement Administration arrested the facility operator for making 30 pounds of methamphetamine after an eighteen month investigation. On November 2, 1992, the United States Environmental Protection Agency (USEPA) conducted a site assessment. A verbal authorization of funds was approved at this time to remove dangers present on the Zschiegner Refining Site. The Technical Assistance Team (TAT) conducted a site assessment on November 4, 1992. The work to be conducted at Zschiegner Refining is to stablilize, treat and remove all hazardous materials, drums and laboratory chemicals contained at Zschiegner Refining. The drums and laboratory chemicals will be disposed of at a RCRA approved TSDF, meeting the requirements of the CERCLA Off-Site Policy.

1.4 Scope of Work for ERCS Contractor

The ERCS crew will be stabilizing, and packaging all hazardous materials as deemed necessary for transport, disposal and/or treatment at designated facilities. Day to day operations, as directed by the OSC will be performed, along with documentation of Daily Costs, and maintenance of Security.

1.5 Scope of Work for TAT

TAT will provide technical assistance for all phases of the removal action, including air monitoring during Zschiegner Refining stabilization and drum repackaging. Instruments to be used for Zschiegner Refining air monitoring are the Hnu (photoionization detector), OVA (organic vapor analyzer), and CGI/O_2 (combustible gas indicator/oxygen meter). Sample analysis will also be arranged. TAT will also observe and photodocument ERCS's Zschiegner Refining activities. Other activities include cost accounting and any other site specific tasks which may require technical expertise.

2.0 TASK SAFETY AND HEALTH RISK ANALYSIS

This Hazard Assessment identifies the general hazards associated with specific Zschiegner Refining operations and presents an analysis of documented or potential chemical hazards that exist at Zschiegner Refining. Every effort must be made to reduce or eliminate these hazards. Those which cannot be eliminated must be guarded against by use of engineering controls and/or personal protective equipment.

A Zschiegner Refining Safety Logbook will be dedicated to all relevant observations, safety meetings, and additional safety information. A dedicated file consisting of copies of all OSHA Certification papers will also be made available. Standard Operating Procedures will be made

available for specific operations at Zschiegner Refining, and can be found in a binder dedicated to Zschiegner Refining's Safety and Contingency Plans.

A Safety Meeting Log binder will be available with copies of all topics discussed during the morning Safety Meetings.

2.1 Activity Specific Hazards and SOPs

2.1.1 Hazards and SOPs Associated with Identifying Drum Contents:

- Splash hazard from leaking containers and drums
- Slip, trip, fall
- Cold stress - see Attachment C
- Inhalation of hazardous vapors/dusts

Caution will be taken to avoid splashes and other hazards. Air monitoring will be performed prior to initiation of activity and during activities. PPE will be utilized as outlined in Section 4.6.

2.1.3 Hazards and SOPs Associated with Drum/Container Sampling:

- Splash hazard
- Slip, trip, fall
- Punctures
- Inhalation of hazardous vapors/dusts

Caution will be used to reduce the physical hazards of the job. Opening of drum/container will be done with non-sparking tools to reduce explosion hazards. Protective measures stated in the Material Safety Data Sheets (MSDS) for identified compounds will be used. PPE will be utilized as outlined in Section 4.6.

2.1.4 Hazards and SOPs Associated with Drum Bulking:

- Splash hazard
- Flammable materials
- Violent reaction of incompatible materials
- Heavy machinery
- Inhalation of hazardous vapors/dusts
- Explosion hazard
- Cold stress - See Attachment C
- Punctures

- Slip, trip, fall

All compatible containers will be opened and inspected to determine the amount of liquid in each container. Compatible materials will be combined into existing drums if the drums are in good condition, or into new drums. Drum opening will be performed with non-sparking tools. Work performed in the immediate area of heavy equipment will be performed only after eye contact has been established with the machine operator. Precautions will be taken to reduce physical hazards and to reduce the risk of explosion hazard by following the Material Safety Data Sheets (MSDS). PPE will be utilized as outlined in section 4.6. Workers will be monitored for or cold stress.

2.1.5 Hazards and SOPs Associated with Overpacking:

- Splash hazard
- Heavy machinery
- Noise
- Inhalation of hazardous vapors/dusts
- Explosion hazard
- Cold stress - See Attachment C
- Punctures
- Slip, trip, fall

Precautions will be taken to reduce physical hazards and to reduce the risk of explosion hazard by following the Material Safety Data Sheets (MSDS). PPE will be utilized as outlined in Section 4.6. Workers will be monitored for cold stress.

2.1.6 Hazards and SOPs Associated with Lab Pack operations:

- Spills or leaks caused by damaged containers.
- Fires, explosions and/or vapor generation resulting from uncontrolled chemical reactions.
- Physical injury resulting from moving heavy containers and repacked drums.
- Mislabeled materials.
- Mixing of non-compatible materials.

Train personnel in proper packing techniques. Have a chemist inspect, classify and segregate materials without opening them before packing. All unknowns will be segregated and staged in a designated area. Prior to handling or transporting lab packs, make sure all non-essential personnel have moved to a safe distance away. If crystalline material is noted at the neck of any bottle, handle it as shock-sensitive waste (due to

the potential presence of nitrates, ethers and peroxides). Maintain continuous communication with the Zschiegner Refining Safety Officer and/or the command post until handling operations are complete. Pack bottles for shipment to an approved disposal facility with sufficient cushioning and absorption materials to prevent excessive movement and to absorb all free liquids which may leak. Palletize lab packed drums prior to transport.

2.2 General Hazards at Zschiegner Refining

Lighting - Work areas must have adequate lighting for employees to see to work and identify hazards (5-foot candles) minimum comparable to a single 75-100 watt bulb). Personnel should carry flashlights in all normally dark areas for use in the event of a power failure. Applicable OSHA standards for lighting - 29 CFR 1910.120 (m) - shall apply.

Electrical Power - All electrical power must have a ground fault circuit interrupter as part of the circuit. All equipment must be suitable and approved for the class of hazard. Applicable OSHA standards for electrical power - 29 CFR 1926 Subpart "K" shall apply.

Drum Handling - The movement and opening of drums will be done in accordance with 29 CFR 1910.120 (j).

Cold Stress - When the temperature falls below 40°F and personnel are wearing protective clothing, a cold stress monitoring program shall be implemented as appropriate. Employees shall have access to break periods and drinking water as necessary. Cold stress is discussed in detail in Attachment C.

Eye Wash Protection - All operations involving the potential for eye injury, splash, etc., must have approved eye wash units locally available as per 29 CFR 1910.151 (c).

Fire Protection/Fire Prevention - Operations involving the potential for fire hazards shall be conducted in a manner as to minimize the risk. Non-sparking tools and fire extinguishers shall be used or available as appropriate. Sources of ignition shall be removed. When necessary, explosion-proof instruments and/or bonding and grounding will be used to prevent fire or explosion.

Utilities - Overhead and underground utility hazards shall be identified and or inspected prior to conducting operations involving potential contact.

Heavy Machineries/Equipment - At a minimum, all heavy equipment shall have safety features as per 29 CFR 1910/1926 Subpart "O".

Open Excavation - Work areas in and around open excavation shall be clearly defined. Excavation protocols shall be followed as per Attachment G.

Slips, Trips and Falls - Caution will be used to reduce general physical hazards. Where there is a fall potential, it will be guarded or posted to prevent employee use.

2.3 Chemical Hazards

Information obtained from the initial site assessment have indicated that chemical hazards exist at Zschiegner Refining. Detailed hazard information for these chemicals are presented in the Material Safety Data Sheets contained in the Zschiegner Refining Safety Binder.

Contaminant	TLV/PEL	IDLH	Physical Properties	Routes of Exposure	Symptoms of Acute Exposure	First Aid	Instrument to Detect
Ether (Ethyl Ether, Ethyl Oxide)	8hr TWA: 400 ppm	19,000ppm	Colorless,water white,extremely volatile liquid.	Inhalation; skin absorption; ingestion; skin/eye contact	Narcotic effects such as sleepiness or giddiness, eye irritation, irritation of skin,respiratory system	Eye : irrigate Skin: soap wash Swallow: medical attention Inhalation:Remove to fresh air,support breathing if necessary	OVA
Sodium Peroxide	None Established	None established	Yellowish, white powder, odorless	Inhalation of powder; Skin or eye contact	Irritation, chemical burns to eyes, skin, mucous membranes	Eye: irrigate Skin: soap wash Breath: respir-ratory support, fresh air Swallow: medical attention	*
Sodium Hydroxide	0.5 mg/m^3	2 mg/m^3	Off-white to white, hygroscopic solid. No odor.	Inhalation; skin absorption; ingestion; skin/eye contact	Irritation to burning, scarring of eyes, nose, throat. Destructive to tissue.	Eye: irrigate Skin: soap wash Breath: respiratory support Swallow: medical attention	Draeggar Tubes
Acetic Acid, Glacial	8 hr TWA: 10 ppm (25 mg/m^3)	None Established	Clear Colorless liquid with a pungent, vinegar-like odor	Inhalation; skin absorption; ingestion; skin/eye contact	Irritation of nose,respiratory system, eyes;	Eye: irrigate Skin: soap wash Breath: respiratory support Swallow: medical attention	Draeggar Tubes
Chromic Acid	8 hr TWA: 0.05 mg/m3 (Ceiling 0.1mg/m3)	30 mg/m3	dark red liquid	Inhalation; skin absorption; ingestion; skin/eye contact	Irritation of eyes, nose, respiratory system; dermatitis	Eye: irrigate Skin: soap wash Breath: respiratory support Swallow: medical attention	Draeggar Tubes

Contaminant	TLV/PEL	IDLH	Physical Properties	Routes of Exposure	Symptoms of Acute Exposure	First Aid	Instrument to Detect
Nitric Acid	2 ppm 5 mg/m3	None Established	Water white, slight yellow	skin, eyes, mucose membranes of the respiratory tract, teeth	Irritation or corrosive burns of skin and/or eyes and upper respiratory tract	Eye: irrigate Skin: soap wash Breath: respiratory support Swallow: medical attention	Dreggar Tubes

* At the discretion of the OSC, air sampling for particulates will be conducted in accordance with relevant NIOSH recommendations.

3.0 TRAINING AND FIT TESTING REQUIREMENTS

Refer to Introduction for Zschiegner Refining Entry Requirements.

4.0 PERSONAL PROTECTIVE EQUIPMENT

The following is a brief description of the personal protective equipment which may be required during various phases of the project. The U.S. EPA terminology for protective equipment will be used: Levels A, B, C and D.

Respiratory protective equipment shall be NIOSH-approved and use shall conform to OSHA 29 CFR Part 1910.134 requirements. Each employer shall maintain a written respirator program detailing selection, use, cleaning, maintenance and storage of respiratory protective equipment.

4.1 Level A Protection Shall Be Used When:

- The extremely hazardous substance requires the highest level of protection for skin, eyes and the respiratory system;
- Substances with a high degree of hazard to the skin are known or suspected;
- And Chemical concentrations of vapors are known to be above IDLH levels;
- Biological hazards requiring Level A are known or suspected; or,
- Unknown organic vapor concentrations range from 500 units or above.

4.1.1 Level A Protective Equipment at a Minimum Shall Consist of:

- Fully encapsulating exposure suit (selected for resistance to chemical(s) at Zschiegner Refining);
- Chemical resistant boot covers worn over safety-toe work boots;
- Chemical resistant outer gloves (disposable);
- Chemical resistant inner gloves (disposable);
- Pressure demand SCBA or airline system with egress bottles;
- Hard hat;
- Disposable outer suit (optional), and;
- Use of the "buddy system" for Zschiegner Refining entry personnel and appropriate back-up support personnel.

4.2 Level B Protection Shall Be Used When:

- The substance(s) has been identified and requires a high level of respiratory protection but less skin protection;
- Concentrations of chemicals in the air are IDLH or above the maximum use limit of an APR with full-face mask;
- Oxygen deficient or potentially oxygen deficient atmospheres (< 19.5%) are possible;
- Confined space entry requires Level B; or,
- Unknown organic vapor concentrations range from 5 to 500 units and a significant skin hazard is not anticipated.

4.2.1 Level B Protective Equipment at a Minimum Shall Consist of:

- Chemical-resistant coverall: Saranex/Poly-coated Tyvek;
- Steel-toe work boots with chemical-resistant overboots or disposable boot covers: Rubber;
- Disposable inner gloves: Surgical type;
- Disposable outer gloves: Neoprene, Solvex, or Nitrile;
- Supplied air - pressure demand SCBA or airline system with 5-minute egress bottle;
- Hard hat, and;
- All joints taped with duct tape.

NOTE: Use of Level B personal protective equipment requires that three (3) persons must be available as backup ready to provide emergency assistance. The readiness of backup personnel will be determined during the Daily Safety Meetings.

4.3 Level C Protection Shall Be Used When:

- The same level of skin protection, but a lower level of respiratory protection is required;
- The types of air contaminants have been identified, concentrations measured, and an air-purifying respirator is available that can remove contaminants;
- The substance has adequate warning properties and all criteria for the use of APR respirators has been met, and;
- 1-5 units of unknown organic vapors above background levels are anticipated.

4.3.1 Level C Protective Equipment at a Minimum Shall Consist Of:

- Chemical-resistant coveralls: Saranex/Poly-coated Tyvek type;
- Steel-toe work boots with chemical-resistant overboots or disposable boot covers: Rubber;
- Disposable inner gloves: Surgical type;
- Disposable outer gloves: Neoprene, Solvex, or Nitrile;
- Full-face air purifying respirator (APR);
- Chemical cartridge or canister type MSA GMC-H or equivalent;
- Hard hat, and;
- All joints taped with duct tape.

NOTE: Tyvek may be substituted as coveralls and surgical gloves as disposable outer gloves when only dust contaminants are present.

4.4 Level D Protection Shall Be Used When:

- The atmosphere contains no known hazard; and,
- Work functions preclude splashes, immersion or the potential for unexpected inhalation of, or contact with, hazardous concentrations of harmful chemicals.

4.4.1 Level D Protection Equipment at a Minimum Shall Consist of:

- Standard work uniform or coveralls;
- Safety-toe work boots;
- Gloves as needed;
- Safety glasses;
- Splash shield as needed, and;
- Hard hat.

4.5 Safety Equipment Which May Be Required For Specific Tasks:

- Chemical-resistant aprons;
- Acid suits;
- Goggles;
- Face shields;
- Five-minute escape device;
- Welders goggles or shields; and,
- Hearing protection.

4.6 Activity Specific Levels of Protection:

The required level of protection is specific to the activity being conducted. At Zschiegner Refining the minimum levels of protection are as follows:

Activity	Level of Protection	Special Requirements
Labpacking Operation	Level B	Air monitoring for organic vapors and explosive atmospheres will be conducted during labpacking activities.
Drum Opening Drum Sampling Drum Bulking	Level B	Air monitoring for organic vapors, aerosols, and explosive atmospheres will be conducted in and around unknowns
Drum Overpacking	Level B	When handling drums in poor condition
Entry and Air Monitoring in Hot Zone for Any Activity	Level B/C	Will depend on activity being performed; location outside hot zone may be monitored in Level D

NOTE: All work in Level C will be performed with constant air monitoring results of less than 5 units or under the TLV of known contaminants.

5.0 MEDICAL MONITORING REQUIREMENTS

Refer to Introduction for Zschiegner Refining Entry Requirements.

6.0 AIR MONITORING AND ACTION LEVELS

According to 29 CFR 1910.120 (h), air monitoring shall be used to identify and quantify airborne levels of hazardous substances and health hazards in order to determine the appropriate level of employee protection needed at Zschiegner Refining.

6.1 Routine Air Monitoring Requirements:

- Upon initial entry to rule out IDLH conditions;
- When the possibility of an IDLH condition or flammable atmosphere has developed;
- When work begins on a different portion of the site;
- Contaminants other than those previously identified are being handled;
- A different type of operation is initiated;
- Employees are handling leaking drums or containers or working in areas with obvious liquid contamination; and,
- Continuously during confined space work.

Air monitoring will consist at a minimum of the criteria listed below. All air monitoring data will be documented and submitted to the OSC and available in the command post Zschiegner Refining files for review by all interested persons. Air monitoring instruments will be calibrated and maintained in accordance with the manufacturer's specifications. There will be a Safety File made available with all air-monitoring logs.

6.2 Zschiegner Refining Air Monitoring Requirements:

Instrument	Compounds To Detect	Frequency	Comments/ Action Level
Combustible Gas Indicator/(CGI)	Explosive/flammable atmospheres	Constantly during Level C operations and as outlined in Section 6.1	> 20% LEL - Operations cease and amelioratory actions investigated

Instrument	Compounds To Detect	Frequency	Comments/ Action Level
Oxygen Meter	Oxygen	Constantly during Level C operations and as outlined in Section 6.1	< 19.5% - Wear SCBA: CGI readings invalid 19.5-23% Normal ambient air >23% cease operations and amelioratory actions investigated
HNU-PID Organic Vapor Analyzer	Organic vapors and gases	Constantly during Level C and as outlined in Section 6.1	> 5ppm - Upgrade PPE for unknowns > 500 ppm - Upgrade to Level A
Radiation meter	Radiation	Upon the discovery of any new material Periodically as determined by OSC and as outlined in Section 6.1	0.01-0.02 mR/hr average background $\leq$ 1 mR/hr continue investigation with caution > 1 mR/hr evacuate and proceed only on advice of a Health Physicist

In addition, Long Duration Sampling Tubes will also be utilized for monitoring of specific compounds, including Acetic acid, Nitric acid and Hydrogen Cyanide. For each pair of hot-zone entry technicians, one technician will wear the air monitoring tube, while the second technician will be responsible for checking that a color change has not occurred. In the event of a color change, the tubes will then be set up on six foot posts in six locations surrounding Zschiegner Refining, to monitor for contaminants leaving Zschiegner Refining. Aerosol monitors will also be in use. Upon reaching action levels for dust of 5mg/m3 Level B PPE will be implemented. At 50mg/m3 air sampling will

be implemented along with Level A PPE; this is based on the TLV and IDLH for cyanide in a worst case scenario.

7.0 ZSCHIEGNER REFINING CONTROL AND STANDARD OPERATING PROCEDURES

7.1 Work Zones:

The primary purpose for Zschiegner Refining controls is to establish the hazardous area perimeter, to reduce migration of contaminants into clean areas and to prevent access or exposure to hazardous materials by unauthorized persons. At the end of each workday, the Zschiegner Refining should be secured or guarded, to prevent unauthorized entry. Zschiegner Refining work zones will include:

-7.1.1 Support Zone
-7.1.2 Restricted Zone
-7.1.3 Contamination Reduction Zone
-7.1.4 Exclusion Zone

7.1.1 Support Zone:

Areas between the front fence line and high-visibility fence constitute the support zone. This area is used for parking of vehicles, command post and sanitation facilities, and receipt of deliveries. Personnel entering this zone may include delivery personnel, visitors, security guards, etc., who will not necessarily be permitted in the exclusion zone. Access beyond the support zone will be restricted to authorized personnel only.

All personnel arriving at Zschiegner Refining will upon arrival, sign-in at the guard shack at the entrance gate and then must directly report to the command post prior to walking in the support zone.

All non-business related personnel related personnel are required to be accompanied by on-site personnel.

A map of the work zones for Zschiegner Refining appears in Attachment B.

7.1.2 Restricted Zone

This area is restricted to authorized personnel only, authorization to be given by the OSC. All must wear hard hats, safety glasses, and work boots with disposable booties. With exception to the access area to the decon shed.

7.1.3 Contamination Reduction Zone:

The contamination reduction zone will provide a location for removal of contaminated personal protective equipment and final decontamination of personnel and equipment. All personnel and equipment should exit only via the contamination reduction area.

7.1.4 Exclusion Zone:

The exclusion zone will be the "hot-zone" or contaminated area inside the Zschiegner Refining perimeter. This includes the building, and two associated loading docks. Under normal operating procedures entry to and exit from this zone will be made through the CRZ. All entering the hotzone will sign the hot zone entry/exit log located at the contamination reduction area. Appropriate warning signs to identify the exclusion zone will be posted (i.e. "DANGER - AUTHORIZED PERSONNEL ONLY", "PROTECTIVE EQUIPMENT REQUIRED BEYOND THIS POINT", etc.). Exit from the exclusion zone must be accompanied by personnel and equipment decontamination as described in Section 8.0.

In addition, the basement area will be considered a confined space area. A Confined Space Permit must be signed to enter this area. The confined space SOP will be adhered to when working in this area.

7.2 General Field Safety and Standard Operating Procedures:

- The "buddy system" will be used at all times by all field personnel. No one is to perform field work alone. Maintain continuous communication with the Zschiegner Refining Safety Officer and/or the command post at all times. All emergency messages shall have priority over all non-emergency communications. The exclusion zone will have less than ten people working inside at any one time. This allows for the use of radio communication as an alarm system as discussed in OSHA Regs.1910.165.

- Whenever possible, avoid contact with contaminated (or potentially contaminated) surfaces. Walk around (not through) puddles and discolored surfaces. Do not kneel on the ground or set equipment on the ground. Stay away from any waste drums unless necessary. Protect equipment from contact by bagging.

- Eating, drinking, or smoking is permitted only in designated areas in the support zone.

- Hands and face must be thoroughly washed upon leaving the work area and before eating, drinking, or any other activities.

- Beards or other facial hair that interferes with respirator fit are prohibited.

- All equipment must be decontaminated or discarded upon exit from the exclusion zone.

- All personnel exiting the exclusion zone must go through the decontamination procedures described in Section 8.0.

- Safety equipment described in Section 4.0 will be required for all field personnel unless otherwise approved by the Zschiegner Refining Health and Safety Officer.

- Practice administrative hazard control for all Zschiegner Refining areas by restricting entrance to exclusion zones to essential personnel and by using operational SOPs.

8.0 DECONTAMINATION PROCEDURES

In general, everything that enters the exclusion zone at Zschiegner Refining, must either be decontaminated or properly discarded upon exit from the exclusion zone. All personnel, including any state and local personnel must enter and exit the hot zone through the decon area. Prior to demobilization, contaminated equipment will be decontaminated and inspected by the OSC or a designated alternate before it is moved into the support zone. All material that is generated by decontamination procedures will be stored in a designated area in the exclusion zone until disposal arrangements are made.

All personnel must sign the "HOT ZONE ENTRY/EXIT LOG" when entering and exiting the exclusion zone. These records will be available in a file, maintained in the command post.

NOTE: The type of decontamination solution to be used is dependent on the type of chemical hazards. The decontamination solution for Zschiegner Refining is soap and water. Decontamination solution will be changed daily (at a minimum) and collected and stored at Zschiegner Refining until disposal arrangements are finalized.

8.1 Procedures for Equipment Decontamination:

Following decontamination and prior to exit from the hot zone, the OSC or a designated alternate, shall be responsible for insuring that the item has been sufficiently decontaminated. This inspection shall be included in the Zschiegner Refining log.

8.2 Procedure for Personnel Decontamination:

This decontamination procedure applies to personnel at Zschiegner Refining wearing Level B and C protection. These are the minimum acceptable requirements:

Station 1: Segregated Equipment Drop

Deposit equipment used at Zschiegner Refining (tools, sampling devices and monitoring instruments, radios, etc.) on plastic drop cloths. These items must be decontaminated or discarded as waste prior to removal from the exclusion zone.

Station 2: Outer Boot and Glove Removal

Remove outer boots and gloves. If outer boots are disposable, deposit in container with plastic liner. If non-disposable, store in a clean dry place.

Station 3: Outer Garment Removal

Remove chemical-resistant outer garments and deposit in container lined with plastic. Dispose of splash suits as necessary.

Station 4: Respiratory Protection Removal

Remove hard hat, face piece, and if applicable, deposit SCBA on plastic sheets. APR cartridges will be discarded as appropriate. Wash and rinse respirator at least daily. Wipe off SCBA and store in safe place.

Station 6: Inner Glove Removal

Remove inner gloves. Deposit in container for disposal.

Station 7: Field Wash

Thoroughly wash hands and face with soap and water.

PPE Segregation: Disposable PPE will be used at all times, where possible, to reduce the need for decontamination and minimize the volume of rinse water generation. Used PPE will be segregated in two distinct containers; grossly and minimally contaminated. It is imperative to keep these waste-streams independent of each other for disposal at a future date.

9.0 EMERGENCY RESPONSE PLAN

It is essential that site personnel be prepared in the event of an emergency. Emergencies can take many forms; illnesses or injuries, chemical exposure, fires, explosions, spills, leaks, releases of harmful contaminants, or sudden changes in the weather. The following sections outline the general procedures for emergencies. Emergency information should be posted as appropriate.

9.1 Emergency Contacts: Channel One on Emergency Standby Radio

Fire: (908) 938-4111

Police: (908) 938-4111

Ambulance: (908) 938-4111

Hospital: The local First Aid Squad will determine which hospital from those listed below

Jersey Shore Medical Center	Paul Kimball Hospital
Route 33 East	Route 9 South
Neptune, NJ	Lakewood, NJ
(908) 776-4203	(908) 363-1900
(Major Chemical/Body Injuries)	(Minor Chemical/Bodily Injuries)

Chemical Trauma Capabilities?

Yes, also has poison center	No.

EPA Hotline: (908) 548-8730

Directions from Zschiegner Refining to Hospital (See Map in Attachment A):

For Jersey Shore Medical Center:
Turn north on Maxim Southard Road. Turn right on Maxim Road. Turn left onto Farmingdale Road to 195 East to 138 East to 18 North to 33 East and Jersey Shore Medical Center is on left side.

For Paul Kimball Hospital:
South on Route 9 for three miles, the hospital is on the right side.

NOTE: Maps and directions to the hospital will be posted in the decontamination area and EPA and TAT vehicles.

The following individuals have been trained in CPR and First Aid:

Dilshad Perera	Desmond Devine

9.2 Additional Emergency Numbers:

Chemtrec	(800) 424-9300
TSCA Hotline	(800) 424-9065 (202) 544-1401
ATSDR	(404) 639-0615 24hr ERT (404) 329-3311 (404) 566-7777
AT & F (Explosives Info.)	(800) 424-9555
Weston Medical Emergency Service	(513) 421-3063
Weston 24-Hour Hotline	(215) 524-1925 (215) 524-1926
Pesticide Information Service	(800) 845-7633
EPA Emergency Response Team (ERT)	(908) 321-6660
RCRA Hotline	(800) 424-9346
CMA Chemical Referral Center	(800) 262-8200
National Poison Control Center	(800) 942-5969
U.S. DOT	(202) 366-0656 (Daytime only) (202) 426-2075 (Hotline)
Weston TAT Office	(908) 225-6116
U.S. EPA Region II Response and Prevention Branch Hotline	(908) 548-8730
NJDEPE	(609) 292-7172 (24hrs)
Monmouth County Health Department	(908) 431-7456 (24hrs)
Guardian Environmental Services	(302) 571-2842 (24hrs) pager (302) 834-1000 (24hrs)
U.S. Guard/Atlantic Strike Team	(609) 724-0008

9.3 EMERGENCY EQUIPMENT AVAILABLE AT ZSCHIEGNER REFINING

Communications Equipment	Location
Public Telephone:	N/A
Private Telephone:	EPA - (908) 905-2708/905-0976 ERCS - (908) 905-0279/905-0384
Portable Telephone:	N/A
Two-Way Radios:	ERCS
Facsimile	EPA/ERCS (908) 905-0519
Medical Equipment	
First Aid Kits:	In TAT and ERCS vehicles, command post/storage trailers, contamination reduction zone
Inspection:	Monthly by TAT and ERCS personnel
Stretcher/Backboard:	contamination reduction zone
Eye Wash Station:	contamination reduction zone
Oxygen:	N/A
Safety Shower:	Water will be available on-site
Fire-Fighting Equipment	
Fire Extinguishers:	In ERCS vehicles, command post/storage trailers, contamination reduction zone, hot zone and through out the building
Inspection:	Monthly by TAT and ERCS personnel
Spill or Leak Equipment	
Absorbent Pads:	contamination reduction zone/Inner Work Zone Staging Area

Dry Absorbent:	contamination reduction zone/Inner Work Zone Staging Area
Neutralizing Agents:	contamination reduction zone/Inner Work Zone Staging Area

9.4 Project Personnel Responsibilities During Emergencies:

ON-SCENE COORDINATOR (OSC)

As the administrator of the project, the OSC has primary responsibility for responding to and correcting emergency situations. The OSC must:

- Take appropriate measures to protect personnel including: withdrawal from the exclusion zone, upgrading or downgrading the level of protective clothing and respiratory protection, or total evacuation and securing of Zschiegner Refining.

- Take appropriate measures to protect the public and the environment including isolating and securing Zschiegner Refining, preventing run-off to surface waters and ending or controlling the emergency to the extent possible.

- Ensure that appropriate Federal, State and local agencies are informed, and emergency response plans are coordinated. In the event of fire or explosion, the local fire department should be summoned immediately. In the event of an air release of toxic materials, the local authorities should be informed in order to assess the need for evacuation. In the event of a spill, sanitary districts and drinking water systems may need to be alerted.

- Ensure that appropriate treatment or testing for exposed or injured personnel is obtained;

- Determine the cause of the incident and make recommendations to prevent the recurrence; and,

- Ensure that all required reports have been prepared.

U.S.COAST GUARD/ATLANTIC STRIKE TEAM

The USCG/AST must immediately report emergency situations to the OSC, take appropriate measures to protect Zschiegner Refining site personnel and assist the OSC as necessary.

Note: All vehicles shall be parked, with keys in ignition, in such a manner that the PCT or or designated person can quickly remove them from the site parking area.

RESPONSE MANAGER (RM)

The RM must immediately report emergency situations to the OSC, take appropriate measures to protect Zschiegner Refining site personnel and assist the OSC as necessary in responding to and mitigating the emergency situation.

TECHNICAL ASSISTANCE TEAM (TAT)

The TAT must immediately report emergency situations to the OSC, take appropriate measures to protect Zschiegner Refining site personnel and assist the OSC as necessary.

9.5 Medical Emergencies:

Any person who becomes ill or injured in the exclusion zone must be decontaminated to the maximum extent possible. If the injury or illness is minor, full decontamination should be completed and first aid administered prior to transport. If the patient's condition is serious, at least partial decontamination should be completed (i.e., complete disrobing of the victim and redressing in clean coveralls or wrapping in a blanket.) First aid should be administered while awaiting an ambulance or paramedics. All injuries and illnesses must immediately be reported to the OSC.

Any person being transported to a clinic or hospital for treatment should take with them information on the chemical(s) they to which they have been exposed at Zschiegner Refining. ATSDR will be the primary liasion in the event of chemical exposure.

MSDS sheets are available in a separate folder, next to the Health and Safety Plan in the Command Post.

Any vehicle used to transport contaminated personnel, will be tested and cleaned as necessary.

9.6 Fire or Explosion:

In the event of a fire or explosion, the local fire department should be summoned immediately. Upon their arrival the OSC or designated alternate will advise the fire commander of the location, nature and identification of the hazardous materials at Zschiegner Refining.

If it is safe to do so, Zschiegner Refining site personnel may:

- Use fire fighting equipment available at Zschiegner Refining to control or extinguish the fire; and,
- Remove or isolate flammable or other hazardous materials which may contribute to the fire.

9.7 Spill or Leaks:

In the event of a spill or a leak, Zschiegner Refining site personnel will:

- Inform their supervisor immediately;
- Locate the source of the spillage and stop the flow if it can be done safely; and,
- Begin containment and recovery of the spilled materials.

9.8 Evacuation Routes and Resources:

Evacuation routes have been established by work area locations for Zschiegner Refining. All outside work areas have been provided with two designated exit points. Evacuation should be conducted immediately, without regard for equipment under conditions of extreme emergency. See Zschiegner Refining site map for evacuation routes.

- Evacuation notification will be by verbal communication via radio.
- Keep upwind of smoke, vapors or spill location.
- Exit through the decontamination corridor if possible.
- If evacuation is not via the decontamination corridor, Zschiegner Refining site personnel should remove contaminated clothing once they are in a location of safety and leave it near the exclusion zone or in a safe place. Emergency PPE drops will be located at the exit areas.
- The OSC or designate will conduct a head count to insure all personnel have been evacuated safely.
- In the event that emergency site evacuation is necessary, all personnel are to:

  1. escape the emergency situation;
  2. decontaminate to the maximum extent practical; and,
  3. meet at the command post.

- In the event that the command post is no longer in a safe zone, MEET DIRECTLY ACROSS MAXIM_SOUTHARD ROAD (IN THE FIELD).

- Leave all vehicle keys in the ignition. If safe a PCT/or desiganted person will be responsible for removing vehicles from the parking area, to allow fire engines on-site.

- Codes for radio communication and their description:
  CODE 1 - Leave Hot Zone Immediately
  CODE 2 - Spill
  CODE 3 - Fire/Explosion
  CODE 4 - Medical Emergency
  CODE 5 - Regular Break/Leave Hot Zone

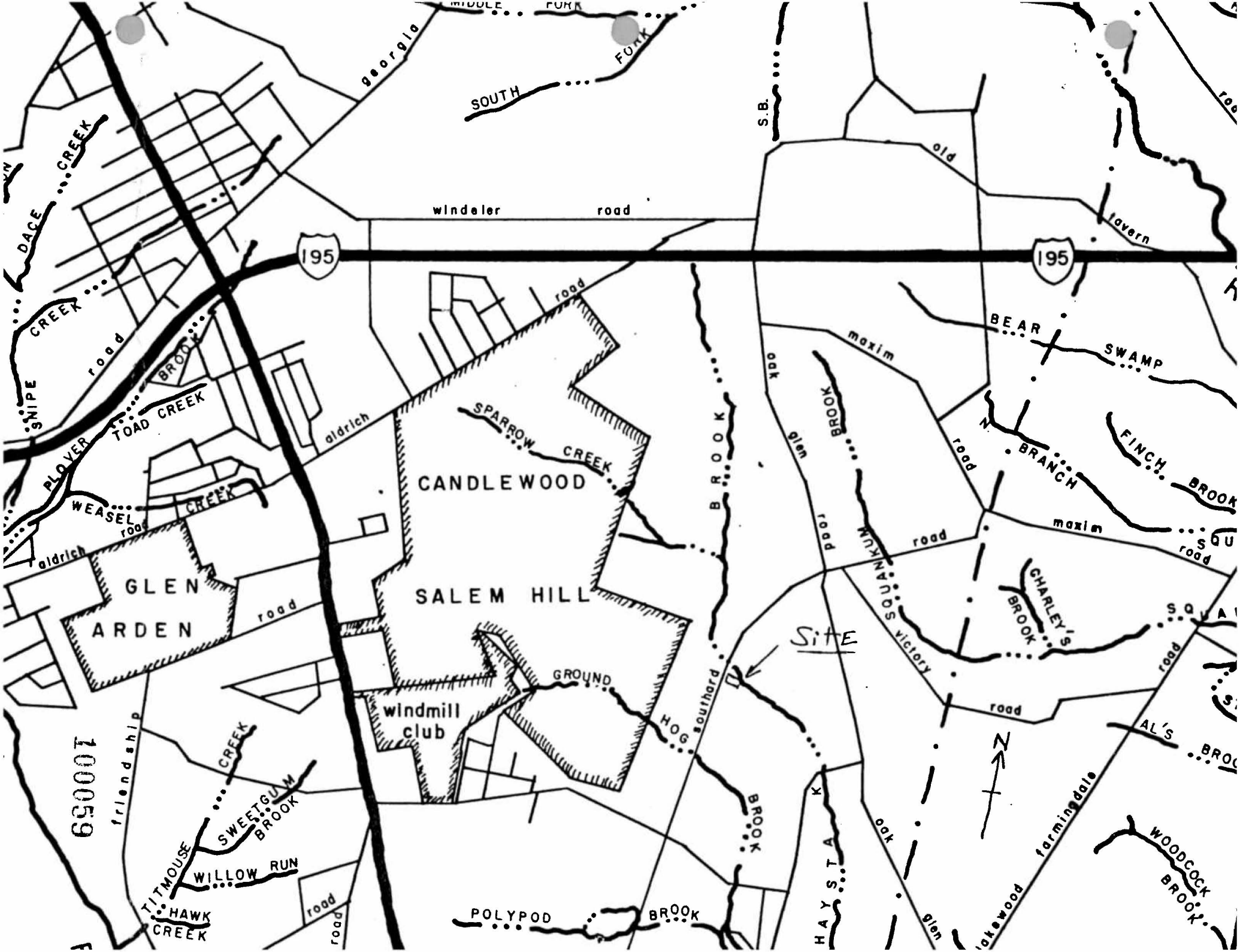
In the event of an emergency, all will exit the nearest egress so as to meet at the command post. Disposable PPE receptacles will be positioned at egress points for use during an emergency.

A binder of the local community's Contingency Plan will be made available as they evolve. This will be located next to the Site Safety Plan.

There will be a Committee Meeting every Friday. This Committee will be made up of local authorities and first responders.

A chemical inventory will be provided to the local community on a routine basis. This will be set up with the local Fire Department and the First Aid Squad.

ATTACHMENT A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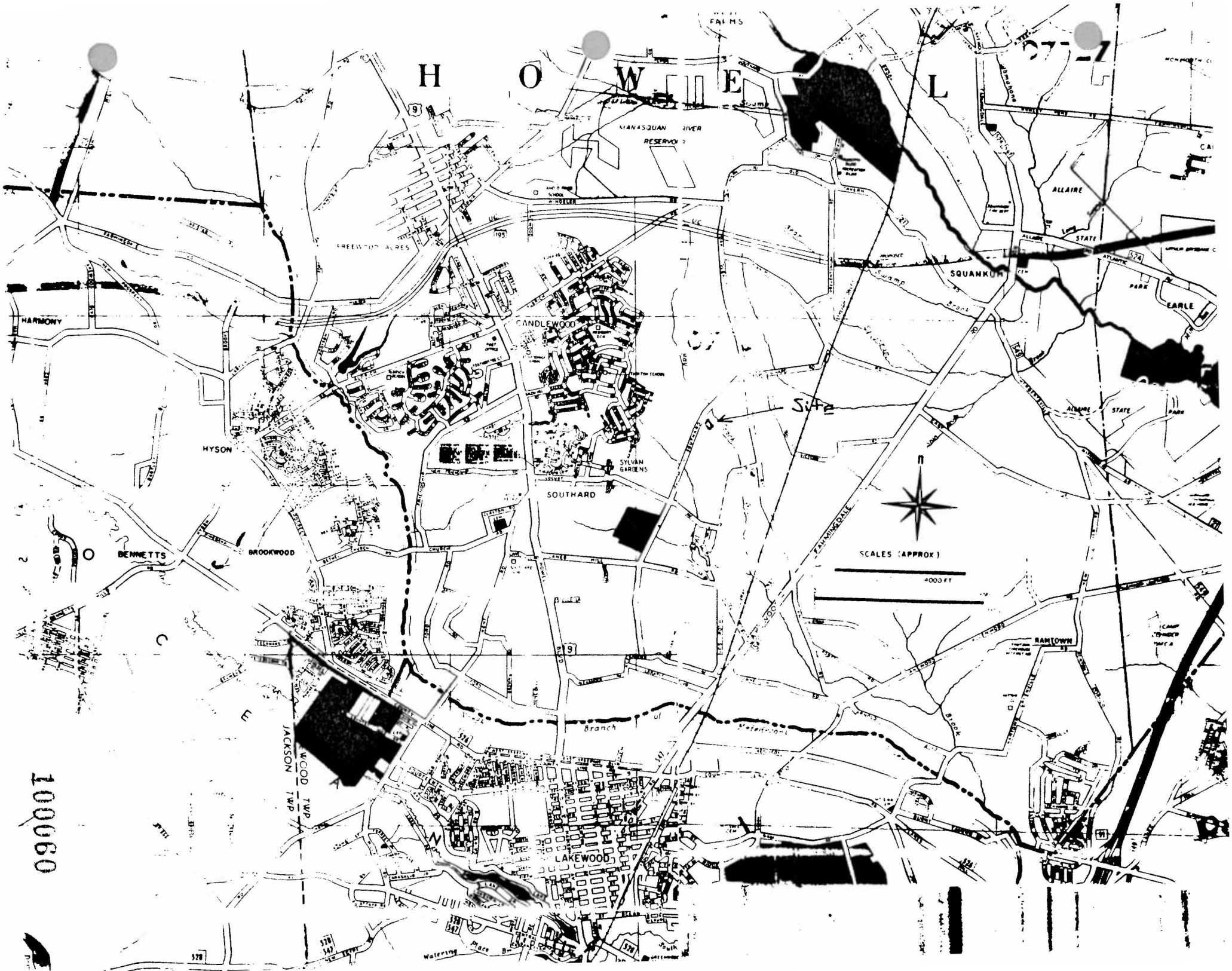
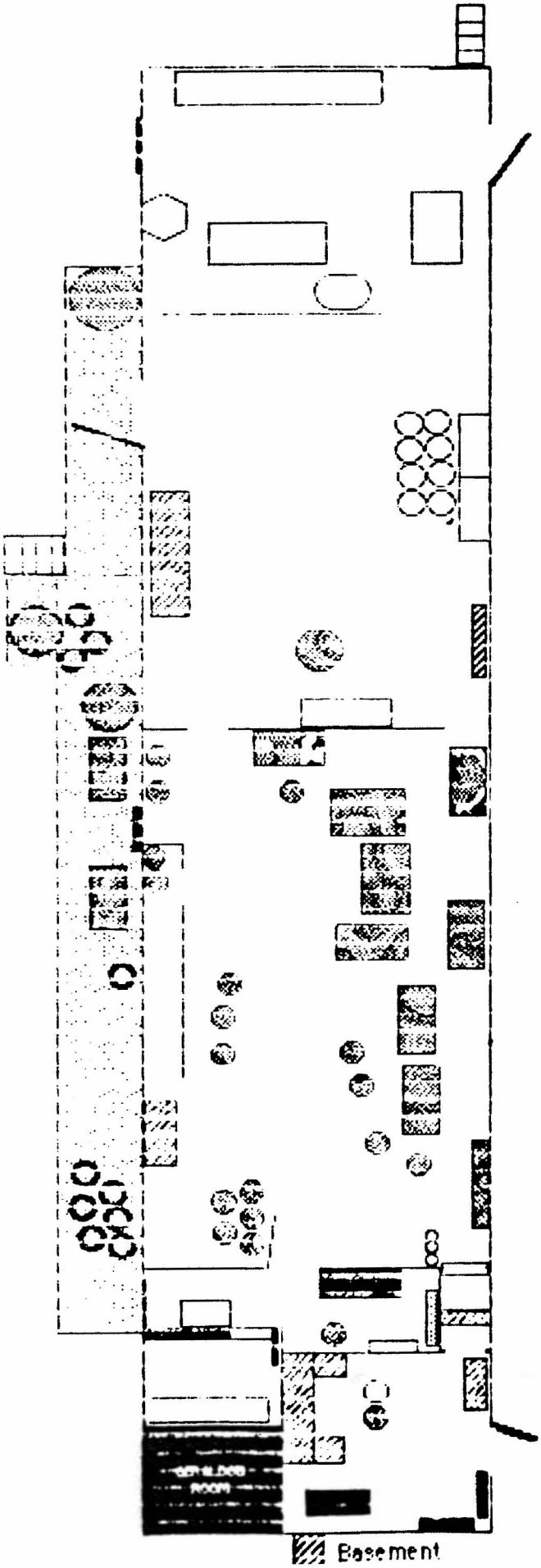
SPARROW CREEK
CANDLEWOOD
SALEM HILL
GLEN ARDEN
road
BROOK
oak glen
poor road
maxim
road
BEAR SWAMP
N. BRANCH
FINCH BROOK
maxim road
SQUANKUM
victory road
CHARLEY'S BROOK
Site
GROUND
windmill club
HOG
southard
road
AL'S
BROOK
friendship
CREEK
SWEETGUM BROOK
TITMOUSE
WILLOW RUN
HAWK CREEK
road
road
POLYPOD BROOK
HAYSTA
oak glen
lakewood
farmingdale
WOODCOCK BROOK
69007


H O W E L
Site
HARMONY
HYSON
BENNETTS
BROOKWOOD
CANDLEWOOD
SYLVAN GARDENS
SOUTHARD
ALLAIRE
STATE
SQUANKUM
EARLE
PARK
FARMINGDALE
RAMTOWN
LAKEWOOD
JACKSON TWP
SCALES (APPROX)
4000 FT
100060

ATTACHMENT B



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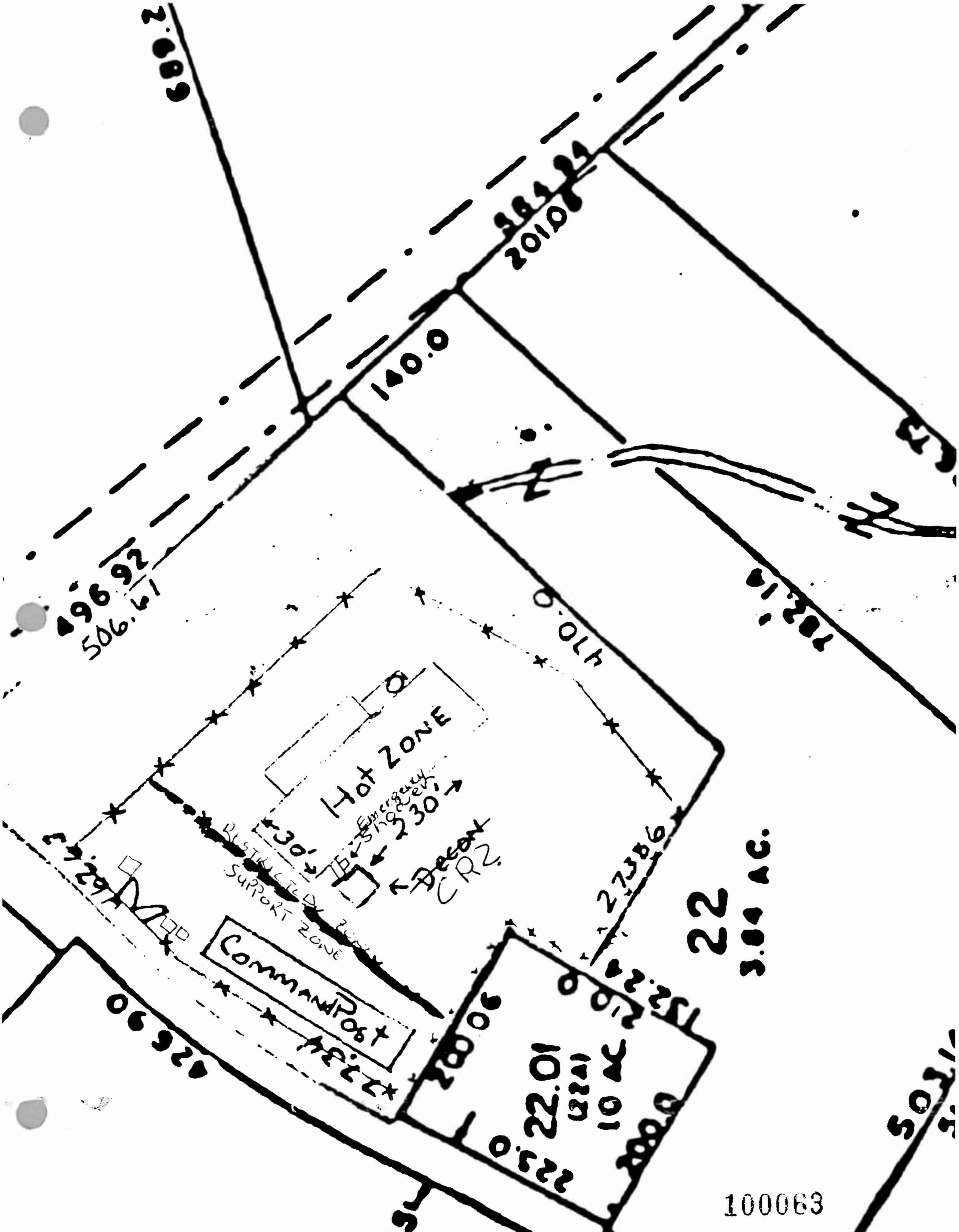


140.0
201.0
496.92
506.61
410
782.14
Hot ZONE
Emergency Shower
230'
←30'→
Decon CR2
RESTRICTED ZONE
SUPPORT ZONE
CommandPost
273.86
22
3.84 AC.
22.01
10 AC
200.0
223.0
926.90

100063

TAT-02-06824

SAMPLING AND OPERATIONS PLAN FOR ZSCHIEGNER REFINING HOWELL TOWNSHIP, NEW JERSEY

Prepared For: _____

Dilshad Perera
Response and Prevention Branch
U.S. EPA Region II
Edison, NJ 08837

Prepared By: Desmond Devine

Desmond Devine,
Foster Wheeler USA Corp.,
Technical Assistance Team - Region II

Concurred With By: Jerry V. Wright for

Tammie McRae
ATSDR

100064

TABLE OF CONTENTS

I. BACKGROUND

The Zschiegner Refining Site is the subject of this planned sampling and data collection activity. The site is located at 1442 Maxim Southard Road, Howell Township, Monmouth County, New Jersey, 07731. See the attached Site Location Map, Figure 1-1.

On October 31, 1992, the Federal Drug Enforcement Agency (DEA) conducted a drug raid at the facility. The owner/operator, Mr. Zschiegner, was arrested for illegally manufacturing meth-amphetamine. USDEA also discovered environmental problems related to the on-site metals operations.

The EPA will conduct stabilization activities and determine the extent of soil contamination. The 6.1 acre property has a 230 by 30 foot metal building . The fenced building area encompasses approximately 2.5 acres. Gold, silver, platinum and nickel, among other metals, were recovered by the company for thirty years. It has been alleged that recovery materials were received just prior to the DEA raid.

The building contains open vats and bins with 2,000 gallons of corrosive liquid. In addition, there are approximately 1,400 lab-pack sized containers. There are numerous poly-drums, containing nitric acid, acetic acid, hydrochloric acid and ammonium hydroxide. Drums, labeled sodium cyanide, have been identified. The building floors, particularly around the vats, show evidence of erosion.

Interviews with ex-employees have indicated that spent acid solutions, too weak for "stripping" gold and silver, would be regularly decanted into floor drains or emptied by hose. Both lead to a loading dock edge, which is now severely eroded, and stressed vegetation areas. This discharge would cause accumulation of plating metals in the surrounding soil. The drains were sealed in the 1980's to comply with a Monmouth County Health Department audit.

The runoff meets Haystack Brook, which flows through the property within 100 yards of the building. The brook feeds into the Metedeconk River, approximately 4 miles from the site, which serves as a drinking water supply for Brick Township.

II. PURPOSE

The purpose of this project is to determine the extent of contamination and area of excavation. The primary tool being utilized to achieve this goal is the XRF, an instrument that provides real time results and cost savings.

III. LOGISTICS

All samples will be collected in phases. All phases will follow the layout presented in Table I.

TABLE I

PHASE SAMPLE DEPTH, PHASE SUMMARY

PHASE I	0" to 3", 15 Laboratory Samples, XRF Calibration and XRF Sampling and Analysis
PHASE II	3" to 6", XRF Sampling and Analysis
PHASE III	6" to 12", XRF Sampling and Analysis
PHASE IV	12" to 18", XRF Sampling and Analysis
PHASE V	18" to 24", XRF Sampling and Analysis
PHASE VI	24" to 36", XRF Sampling and Analysis
Subsequent PHASES	One foot deeper in depth, XRF Sampling and Analysis

A triangular grid sampling strategy will be employed. Samples will be taken at grid nodes, when practical. Additional investigation may be necessary in areas with high levels of contamination at grid nodes surrounding a physical barrier, also in areas with extreme variations in concentrations. These investigations will be taken on a case by case scenario.

One activity of Phase I Sampling is for XRF Site-Specific Screening. This is defined as XRF scanning with the benefit of having a site-specific calibration model installed. A few sample locations on the grid map have previously been sampled. From the remaining locations, fifteen samples will be analyzed by laboratory, the balance will be analyzed by XRF. The same laboratory will be used for consistency, to the extent practicable. Laboratory analysis will be performed to: verify the presence of elemental contamination, provide data for a site-specific calibration model, confirm XRF screening results and confirm XRF sampling results. The results will also enable ATSDR to set up cleanup standards and allow for estimation of cleanup costs.

Background soil and water samples will be analyzed for TAL/TCL and TCLP. TAL and TCLP analyses will be compared, providing a % difference in results. The % difference, in conjunction with an ATSDR health guideline for Soil Removal Action Levels, will serve as a reference during excavation. All results will be tabulated and presented in a 3-D layout. EPA will employ a Removal Action Level temporarily set 30% below ATSDR's standard to allow for standard variances in laboratory analysis.

Subsequent phases will concentrate on previously sampled areas which had elevated contaminant levels. Sample locations will be similar to previous sampling events, but at greater depths. Approximately 10% of the points will be re-screened to verify instrument precision.

Besides systematic grid sampling, other grab samples such as background samples may be collected and analyzed based on site features and initial assessment results.

Haystack Brook acts as a natural barrier, based on a visual assessment, preventing contamination from reaching soil on the other side. Sampling will be performed, on a limited basis, on the far side of this brook.

ATSDR will only receive data from laboratory analyzed samples to establish a Health Standard and a Removal Action Level. The remaining sample areas will be analyzed by XRF.

Soil excavation will continue until the removal standard has been reached, leaving behind "clean" soil. A wedge will be excavated, with one foot of extra depth and length surrounding the contaminated area. The larger pattern will ensure minimum excavation by not allowing additional contact with "clean" soil. XRF samples will be taken after excavation. The sample locations will utilize the same grid system that was set up on the surface. If the soil is determined to be "clean", soil samples will be shipped for TAL analysis with the most strict EPA QA/QC Level, III.

IV. ANALYTICAL PROCESS

Laboratory Analysis of samples will follow the protocol of those listed in TABLE II. Any changes will be documented in the site logbook. If there is a major change in the soil matrix, additional TCL/TAL laboratory sample analysis will be necessary. This is necessary due to the adverse affect on XRF instrument readings and matrix spike recoveries.

TABLE II

Matrix	Sample Preparation	Preserve with	Method	Holding Time (Days)	Vol.
Solid (Soil)	Method-1311	Ice	VOA 8240 SVOA 8270 Total CN 13 PP Metals	10 10 14 180	1 Qt
Water	Method-1311	Ice	VOA 624 SVOA 625 Total CN 13 PP Metals	10 5 14 180	2x40 1 Qt 1 L 1 L
Sediment	Method-1311	Ice	VOA 8240 SVOA 8270 Total CN 13 PP Metals	10 10 14 180	1 Qt
Solid (Soil)	Method-1311	Ice	TCLP Method	14	4x8oz

PHASE I

A. OBJECTIVE AND SCOPE:

The Objective of Phase I Sampling includes the setup of a grid system for proper sampling locations. Grid nodes that lie west of the brook will be sampled at a depth of zero to three inches for TAL/TCL analysis of soil, sediment and water grab samples. This phase will provide data for a XRF instrument calibration curve. Split samples from the same locations will be analyzed for TCLP metals.

The first sampling phase will also include soil grab samples previously taken from the runoff areas which were analyzed for full TAL/TCL laboratory analyses. The preliminary sampling was performed in order to have basic TCL/TAL data. These samples will be combined with additional samples from Phase 1 for XRF calibration. These sample locations are presented on the SAMPLE LOCATION MAP (20 NOV 1992). Two soil samples were taken from two runoff area locations (from the grid pattern locations of Q14 and O25 on the GRID MAP). Water and sediment samples were taken from Haystack Creek (from the grid pattern locations of Q14 and U22 on the GRID MAP). The preliminary sampling data was condensed and presented on Table III. These same locations will be sampled for TCLP metals analysis during Phase 1, along with fifteen other locations which will be analyzed with TAL\TCL\TCLP methods. The remaining grid node locations will utilize the XRF instrument for data.

B. PROCEDURE

Summary of the Soil Sampling SOP is presented in APPENDIX A.

C. METHOD

An EPA QA/QC Level of One is required for this project. The samples will be analyzed for parameters listed in the Laboratory Analysis section.

LABORATORY ANALYSIS

Laboratory analysis of soil samples will be performed on selected samples to: verify presence of elemental contamination, provide data for a site-specific calibration model, confirm XRF screening results and confirm XRF sampling results. All laboratory analysis results will be presented to ATSDR.

XRF ANALYSIS

The remaining sample locations will be analyzed by the XRF instrument. The development of a site-specific model is necessary in order to compensate for soil characteristics unique to the site.

Site specific models are developed by first scanning pure element standards of the elements of interest to establish qualitative identification. Spectral interferences will be eliminated at this time. Calibration standards are chosen from those split samples that contain concentrations in the range of interest (usually near the action level). The samples are scanned by the instrument and laboratory values are assigned to that measurement. Linear regression models are then created that address both interferences and inter-elemental effects. Confirmation samples can also be used to increase the accuracy. A calibration check can be performed every ten to twenty samples by scanning one standard with a concentration near the action level.

D. RESULTS

TABLE III

COMPOUND	#1	#2	#3	#4	#5	#6	*
Cyanide					3.69		0.03
Arsenic						1.5	0.010
Chromium				125.8	419.6	10.9	0.07
Copper			5	1097.7	190.3	1033.9	0.07
Lead				11.8	12	32.1	0.20
Mercury	0.0007	0.0013		0.142		0.109	0.005
Nickel	0.11	0.13	7	194.1	99.4	30.7	0.10
Silver					100.4	115.7	0.05
Zinc	0.07	0.08	6.7	10.7	18.2	32.3	0.03
Ethyl-benzene	15ug/L						5 ug/L
Total Xylene	46ug/L						5 ug/L
1,1,1 Trichloro-ethane		39ug/L					5 ug/L
Toluene		12ug/L					5 ug/L
1,2 Dichloro-ethane		43ug/L					5 ug/L
Benzene		13ug/L					5 ug/L

* Detection Limit (ppm unless otherwise stated)
* additional results will be added from Phase I Sampling

LIST OF FIGURES

E. ANOMALIES

F. CONCLUSION

APPENDIX A

SOIL SAMPLING SOP

This recommended protocol outlines procedures and equipment for the collection of representative samples from surface and subsurface locations.

Surface sampling commonly refers to the collection of samples at a 0-6 inch depth. This is most efficiently accomplished with the use of a trowel or scoop. For samples at lower depths, a decontaminated bucket auger or power auger may be needed to advance the hole to the point of collection. Another clean bucket auger can then be used to collect the sample. For samples at depths greater than three feet, the use of a drill rig and split spoon sampler will be necessary. In some situations, sample locations can be accessed with the use of a backhoe.

Whether surface or subsurface, and whether a bucket auger or drill rig is used to access the sample, several considerations are important during soil sample collection. An attempt must be made to maintain sample integrity by preserving its physical form and chemical composition to as great an extent as possible. First, the mechanism used to advance the hole must be properly decontaminated. The device then used for actual sample collection should not be same as that used to advance the hole. This instrument should be appropriately decontaminated, as should any instrument utilized to transfer the sample into the sample bottle.

Secondly, care must be taken in handling the sample. The sample should be transferred into the sample bottle as quickly as possible, with no mixing, to assure that the volatile fraction is not lost. It is also recommended that for volatile organics analysis of soils, the laboratory performing the analysis should provide wide mouth bottles (4 ounce) for sample collection. This will reduce disturbance of the sample and may help prevent the loss of volatiles.

Soil sampling is generally accomplished through the use of one of the following samplers:

- scoop or trowel
- tulip bulb-planter
- bucket auger
- soil coring device/silver bullet sampler
- waste pile sampler
- power auger (in conjunction with another device)
- split spoon sampler
- Shelby tube sampler

1. Surface Sampling

As a preliminary measure, the field team will conduct a site reconnaissance to document significant site features, delineate site boundaries and locate permanent markers. A site map/sketch will be expanded upon based on the complexity of the site activities. The map will be used by the field team to select or document soil sampling locations and XRF screening points.

At the desired location, clear surface debris (e.g., rocks and twigs). Collect an adequate portion of soil from a depth of 0-6 inches, using a trowel or other device listed above. Transfer the sample directly into the sample container. For samples at lower depths, advance the hole using a bucket auger or power auger that has been properly decontaminated. Once at the desired depth, use a clean auger to retrieve the sample. Use a decontaminated spatula or trowel to transfer the sample directly into the sample bottle.

All samples collected will be homogenized using standard equipment. Sample homogeneity is important to ensure that a representative sample is obtained for XRF sampling and laboratory analysis. Homogenization also helps to minimize XRF scanning and analytical errors associated with the sample. Soil samples will be XRF sampled, archived and/or submitted to an analytical laboratory for analysis.

2. Subsurface Sampling

For sampling depths greater than three feet, a drill rig should be employed to advance a borehole to the desired depth. As with the near-surface samples, all down-hole devices must be thoroughly decontaminated. Once the desired depth is reached, a decontaminated sampling device (e.g., a split spoon or Shelby tube sampler) may be advanced by the drill rig. Upon retrieval, the split spoon should be opened, its contents logged if desired, and then immediately transferred into a sample bottle using a decontaminated spatula or spoon. If a Shelby tube is utilized, it should be properly sealed and prepared for shipment.

The samples collected at each location will be transported via overnight shipping for TCLP/TAL/TCL analyses.

SAMPLE CONTAINERS:

All sample containers will be Eagle-Picher laboratory precleaned glassware, as specified by the USEPA Sample Management Office Contract Lab Program.

XRF samples may use sealable 1/2 gallon plastic bags.

SAMPLE LABEL:

Each sample will be accurately and completely identified. All labels will be moisture resistant and able to withstand field conditions. Sample containers will be labeled prior to sample collection. The information on each label will include the following, but is not limited to:

i. Date of Collection
ii. Site name
iii. Sample identification/location
iv. Analysis requested

SAMPLE CUSTODY PROCEDURES:

EPA Chain-of-Custody will be filled out and maintained throughout the entire site activities as per TAT Standard Operating Procedures (SOP) on sample handling, Sample Container C o n t r a c t specifications and EPA Laboratories SOP. The Chain-of-Custody form to be used lists the following information:

i. Project name;
ii. Sample number;
iii. Number of sample containers;
iv. Description of sample including specific location of sample collection;
v. Identity of persons(s) collecting the sample;
vi. Date and time of sample collection;
vii. Date and time of custody transfer to laboratory (if the sample was collected by a person other than laboratory personnel);
viii. Identity of person accepting custody(if the sample was collected by a person other than laboratory personnel);
ix. Identity of laboratory performing the analysis.

The scope of this phase entails collecting samples from fifteen different sample locations. The following samples will be taken:

1. Background - upstream, North of creek (sediment, soil, water)
2. The remaining samples will be situated horizontal to three runoff areas emanating from the building.

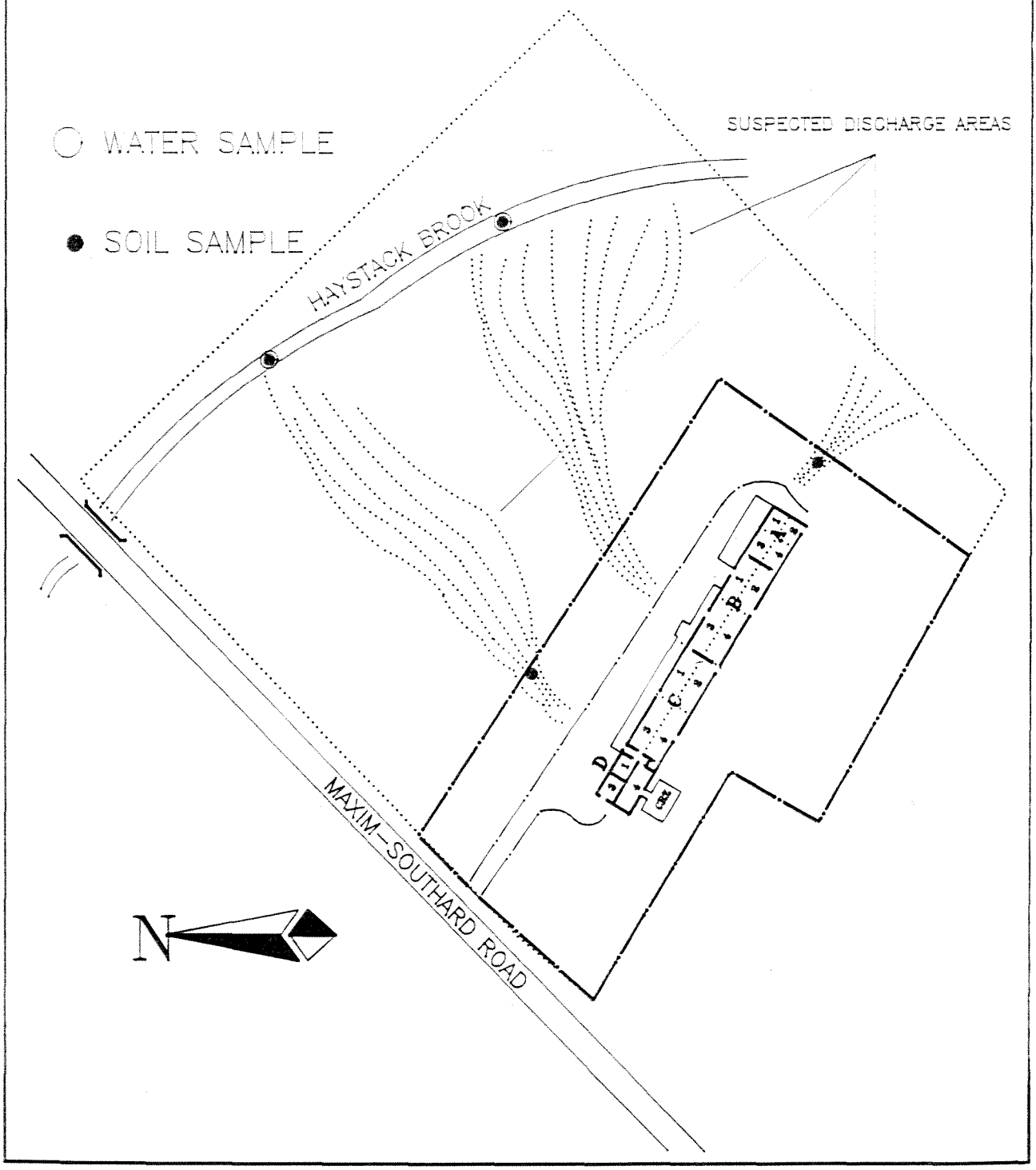
APPENDIX B

APPENDIX C

ZSCHIEGNER REFINING COMPANY SITE

SAMPLING LOCATION MAP (20 NOV 1992)

US EPA REGION II, RESPONSE & PREVENTION BRANCH



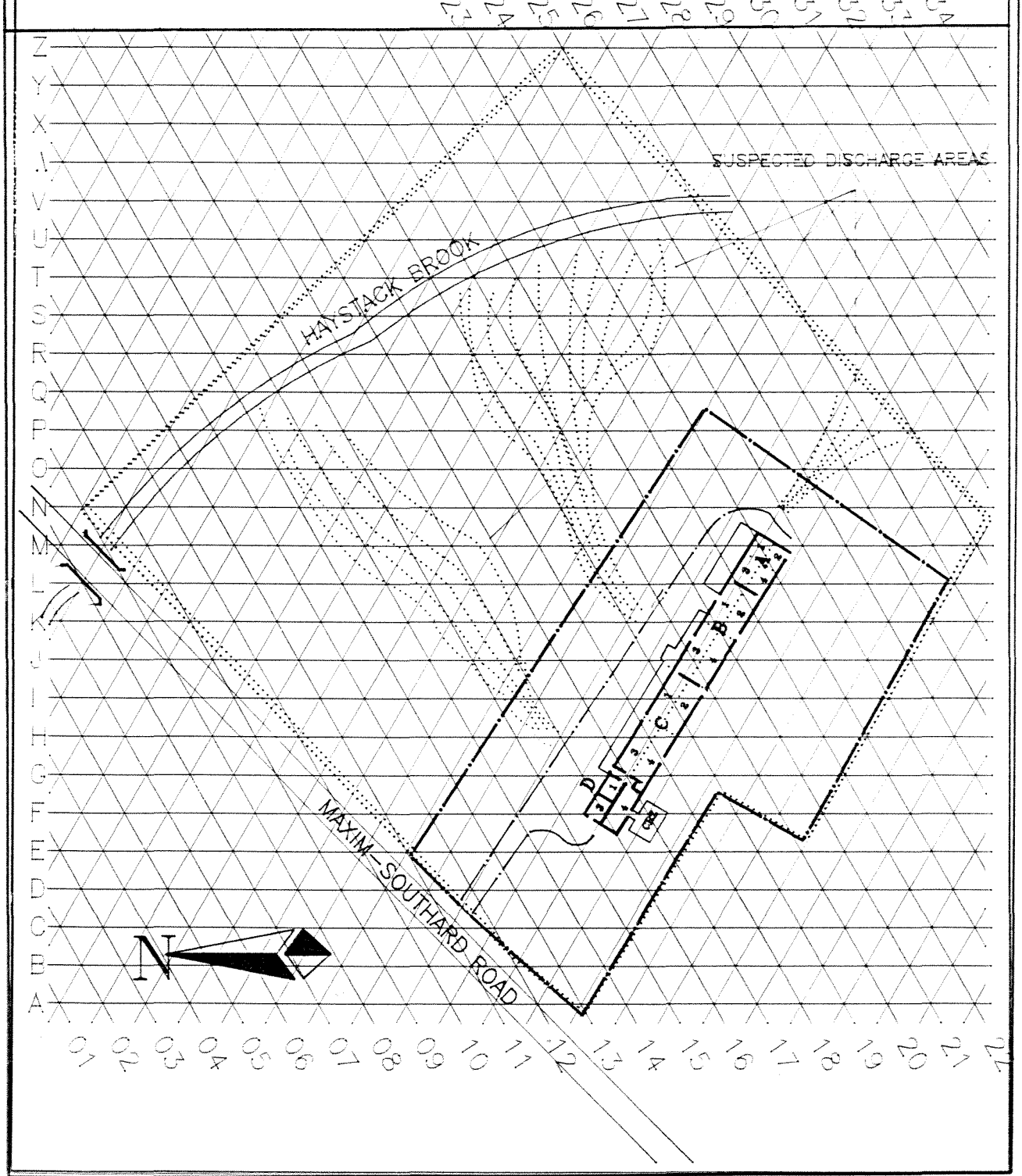
100080

ZSCHIEGNER REFINING COMPANY SITE

1442 MAXIM–SOUTHARD ROAD

HOWELL TOWNSHIP, NEW JERSEY 07731

US EPA REGION II, RESPONSE & PREVENTION BRANCH



100081

ATTN: Tracy Awalt

Summary Fax Report

Client: Guardian Environmental Services, Inc

Project 11518E

Analysis Type PLM

Samples 1

Billing # 600572

Date: 2/09/93

	Sample ID	%(s) & Type(s) of Asbestos	Comments
1	C4	ND *	
2			
3			
4			
5			
6			
7			
8			
9			
10	Fax:		
11	(908)685-0519		
12			
13			
14			
15			
16			
17			
18			
19			
20			

* Negative Results for Asbestos analysis of insulation material on site.

GARDEN STATE LABORATORIES, INC.

Bacteriological and Chemical Testing

410 Hillside Avenue
Hillside, NJ 07205

Telephone (908) 688-8900
Fax (908) 688-8966

MATHEW KLEIN, M.S., Director
HARVEY KLEIN, M.S., Lab Supervisor

REPORT OF ANALYSIS

REPORT # 921113222
CLIENT # MON01
DATE SUBMITTED: 11/13/92

TO: MONMOUTH COUNTY HEALTH DEPT
3435 RT. 9

FREEHOLD NJ 07728
ATT: G. HULSE

SAMPLE TYPE: SOIL
SAMPLE ID: C92-57 - SITE 1 PLATINUM CHM. - SOIL REAR OF BUILDING
SAMPLE LOCATION:

DATE SAMPLED: 11/6/92 TIME SAMPLED: 11:07 AM

W. STRICEK

ANALYSIS	RESULT	UNITS	
Flash Point - closed cup	100	°F	
Sulfide	156.	mg/kg as received	
Cyanide	2.90	mg/kg as received	

= less than, not detected.

Certified by U.S. Public Health Service, N.J. Dept. of Health and N.J.D.E.P.-Lab #20044

100083

GARDEN STATE LABORATORIES, INC.

Bacteriological and Chemical Testing

410 Hillside Avenue
Hillside, NJ 07205

Telephone (908) 688-8900
Fax (908) 688-8966

MATHEW KLEIN, M.S., Director
HARVEY KLEIN, M.S., Lab Supervisor

DEC 16 1992

REPORT OF ANALYSIS
VOLATILE ORGANIC COMPOUNDS

TO: MONMOUTH COUNTY HEALTH DEPT.
3435 HIGHWAY #9

FREEHOLD NJ 07728
ATT: MR. GREG W. HULSE

REPORT # 921113222
CLIENT # MON01
DATE SUBMITTED: 11/13/92

SAMPLE TYPE: SOIL
SAMPLE ID: C92-57
SAMPLE LOCATION: @SITE #1 - PLATINUM CHEMICALS - SOIL FROM BACK OF BUILDING

DATE SAMPLED: 11/6/92 TIME SAMPLED: 11:07 AM
SMPLR - W. STRUCK

COMPOUND	RESULT
Chloromethane	<53.5
Bromomethane	<53.5
Dichlorodifluoromethane	<53.5
Vinyl Chloride	<53.5
Chloroethane	<53.5
Methylene Chloride	<53.5
Trichlorofluoromethane	<53.5
1,1 Dichloroethylene	<53.5
1,1 Dichloroethane	<53.5
trans-1,2 Dichloroethlylene	<53.5
Chloroform	131111
1,2 Dichloroethane	<53.5
1,1,1 Trichloroethane	<53.5
Carbon Tetrachloride	<53.5
Bromodichloromethane	<53.5
1,2 Dichloropropane	<53.5
trans-1,3 Dichloropropene	<53.5
Trichloroethlyene	<53.5
Dibromochloromethane	<53.5
Methyl tert-Butyl Ether	<53.5
Isopropyl Ether	<53.5

COMPOUND	RESULT
1,1,2 Trichloroethane	<53.5
cis-1,3 Dichloropropylene	<53.5
Benzene	<53.5
2-Chloroethylvinyl ether	<53.5
Bromoform	<53.5
1,1,2,2 Tetrachloroethane	<53.5
Tetrachloroethylene	<53.5
Toluene	<53.5
Chlorobenzene	<53.5
Ethylbenzene	<53.5
p-Xylene	<53.5
m-Xylene	<53.5
o-Xylene	<53.5
1,2 Dichlorobenzene	<53.5
1,3 Dichlorobenzene	<53.5
1,4 Dichlorobenzene	<53.5
cis-1,2 Dichloroethylene	<53.5
Acrolein	<535
Acrylonitrile	<535
Date of Analyses	11/17/92

RESULTS ARE IN UG/KG DRY WT. ppb
<=LESS THAN, NONE DETECTED. ANALYSIS PERFORMED BY GAS CHROMATOGRAPHY/MASS SPECTROMETRY USEPA METHOD 624

Certified by U.S. Public Health Service, N.J. Dept. of Health and N.J.D.E.P.–Lab #20044

100084

PEAK SEARCH COVER SHEET

GARDEN STATE LABORATORIES, INC.

Bacteriological and Chemical Testing

410 Hillside Avenue
Hillside, NJ 07205

Telephone (908) 688-8900
Fax (908) 688-8966

MATHEW KLEIN, M.S., Director
HARVEY KLEIN, M.S., Lab Supervisor

PEAK SEARCH FOR: MONMOUTH COUNTY

DATE SUBMITTED: 11-13-92

TEST REQUIRED: VOA 415

G.S.L. I.D.: C222

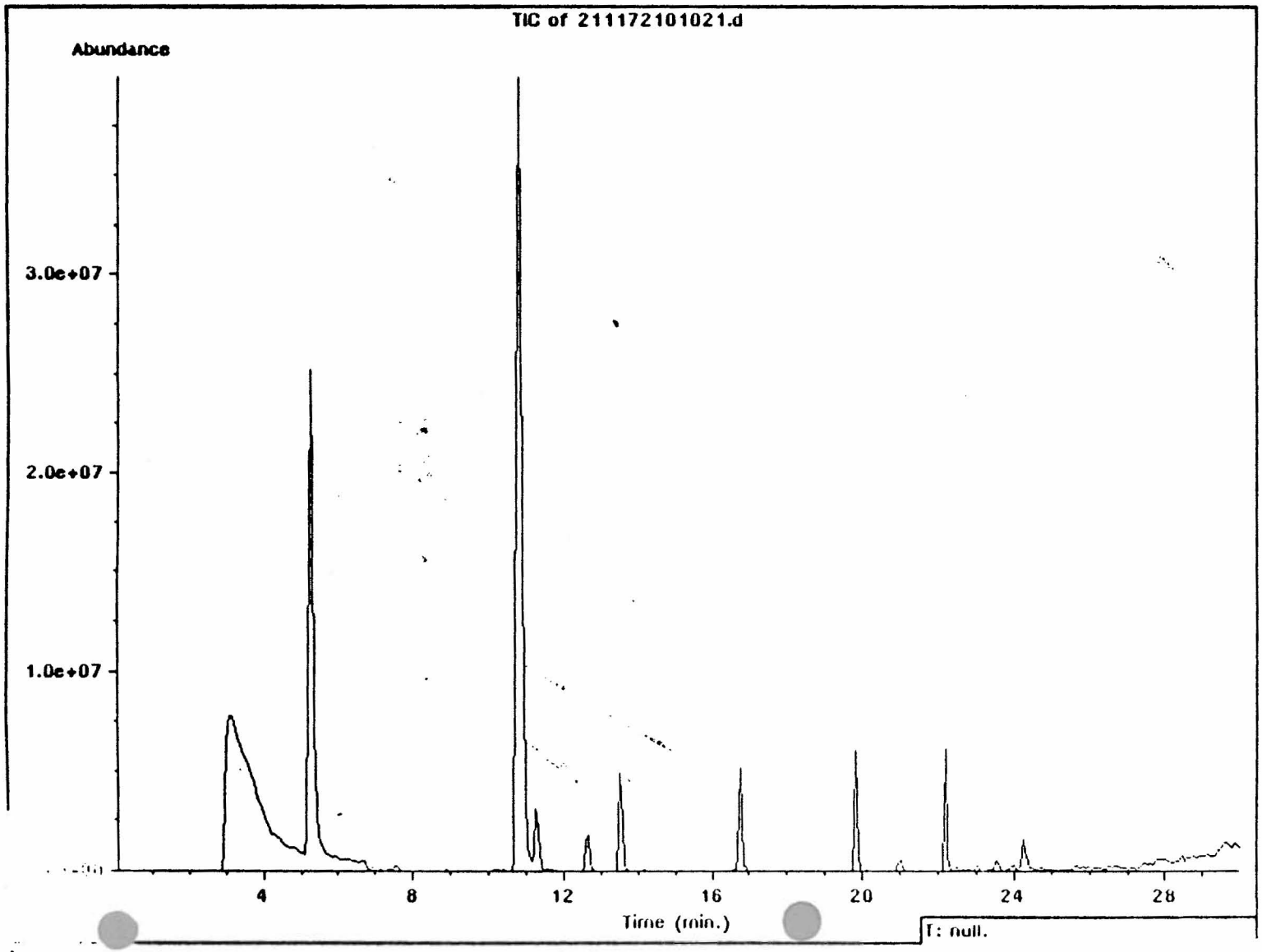
COMPUTER I.D.: 211122101021

CLIENT I.D. _____

Certified by U.S. Public Health Service, N.J. Dept. of Health and N.J.D.E.P.–Lab #20044

100085

100086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4
8
12
16
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24
28
Time (min.)
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5.91	237241900	32.83	0			0
UNKNOWN			CAS #:			
6.67	103438200	14.31	0			0
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21.02	43570360	5.89	83	WILEY.l		71345
2-Propyldecan-1-ol			CAS #:			
23.02	17699430	2.39	64	WILEY.l		34982
UNKNOWN			CAS #:			
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23.99	20217970	2.73	0			0
Cyclopentasiloxane, decamethyl			CAS #: 541-02-6			
24.26	140664300	19.01	74	WILEY.l		129068
UNKNOWN			CAS #:			
25.67	35043160	4.74	0			0
1,2-Pentadiene, 4,4-dimethyl-			CAS #: 26981-77-1			
27.45	10448870	1.41	9	WILEY.l		1524
Tridecanol			CAS #: 26248-42-0			
27.61	5854964	0.79	59	WILEY.l		34971
[(E)-6,7-Epoxy-3,7-dimethyl-2-			CAS #:			
28.48	20026570	2.71	12	WILEY.l		40204
Cyclohexane, 1,1'-(1,4-butaned			CAS #: 6165-44-2			
28.75	15450540	2.09	25	WILEY.l		124902
UNKNOWN			CAS #:			
28.91	10281320	1.39	0			0
1-Decanol			CAS #: 112-30-1			
29.56	43360140	5.86	10	WILEY.l		120974

Tentatively Identified Compound

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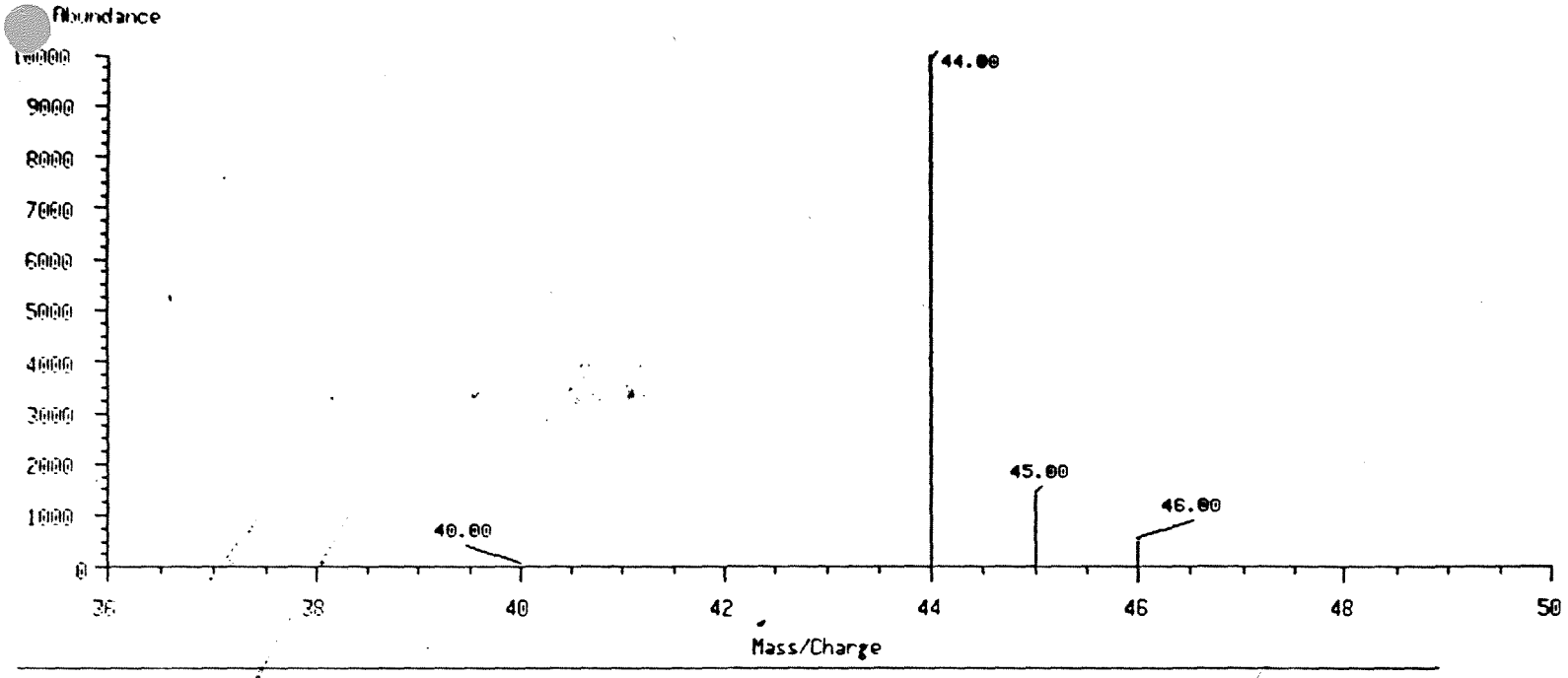

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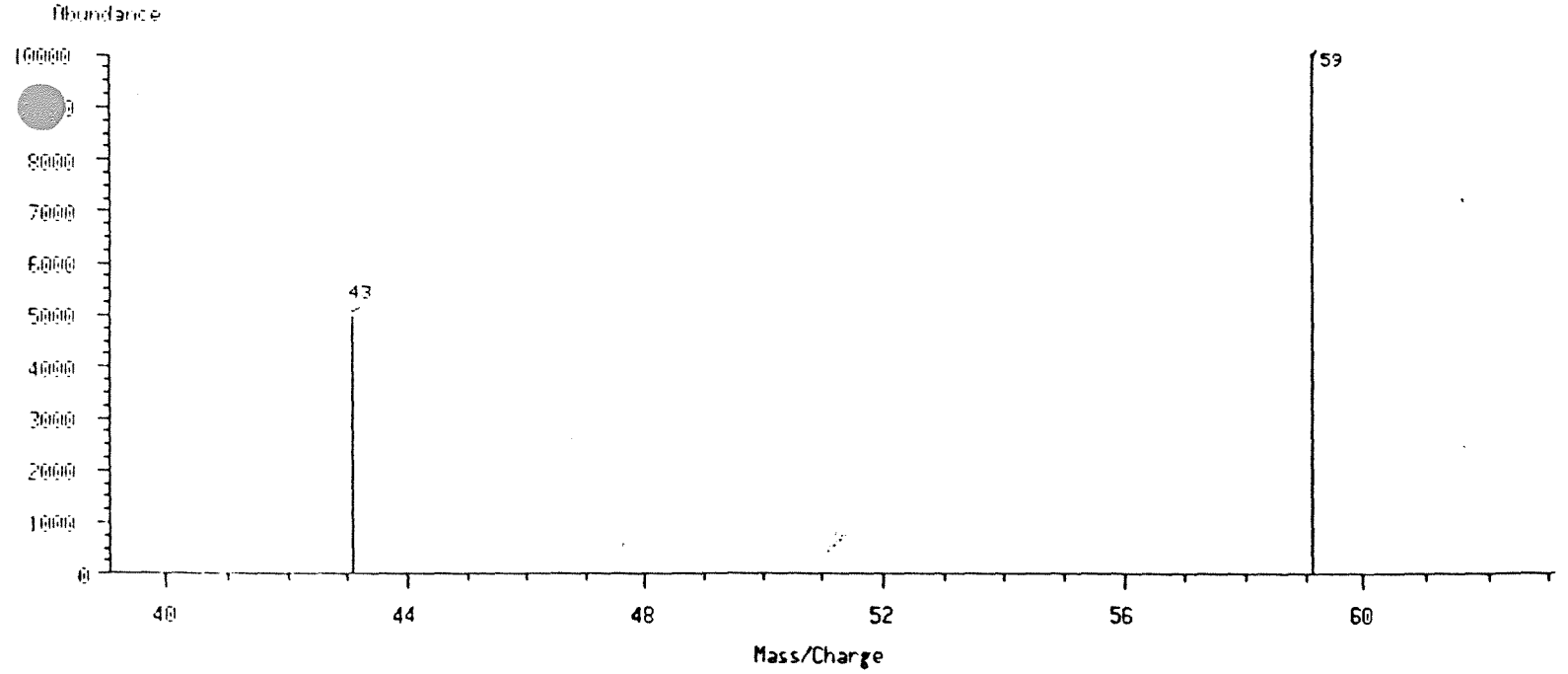

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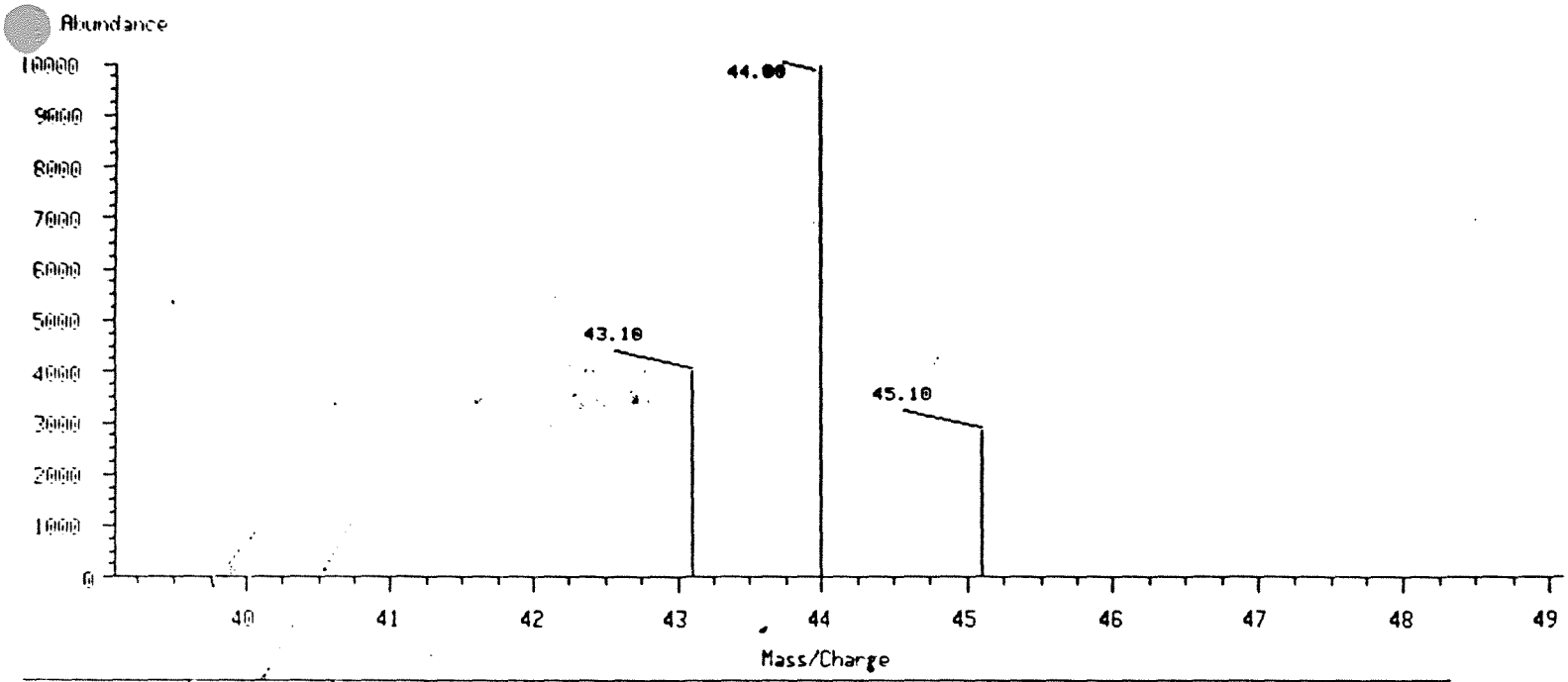

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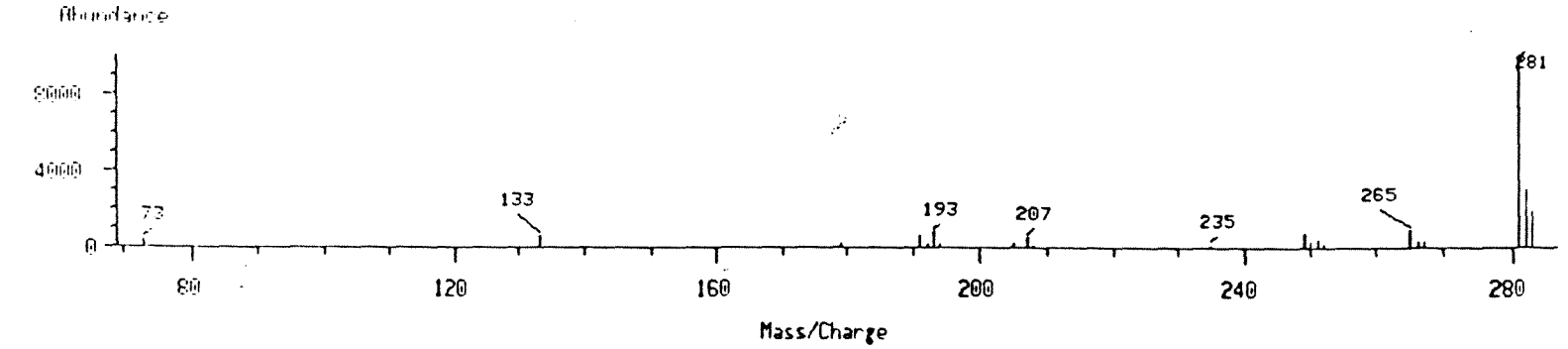

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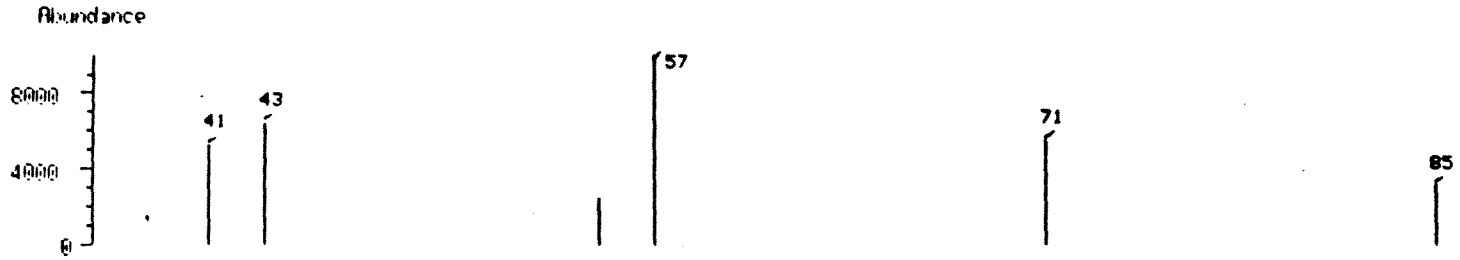
Tentatively Identified Compound

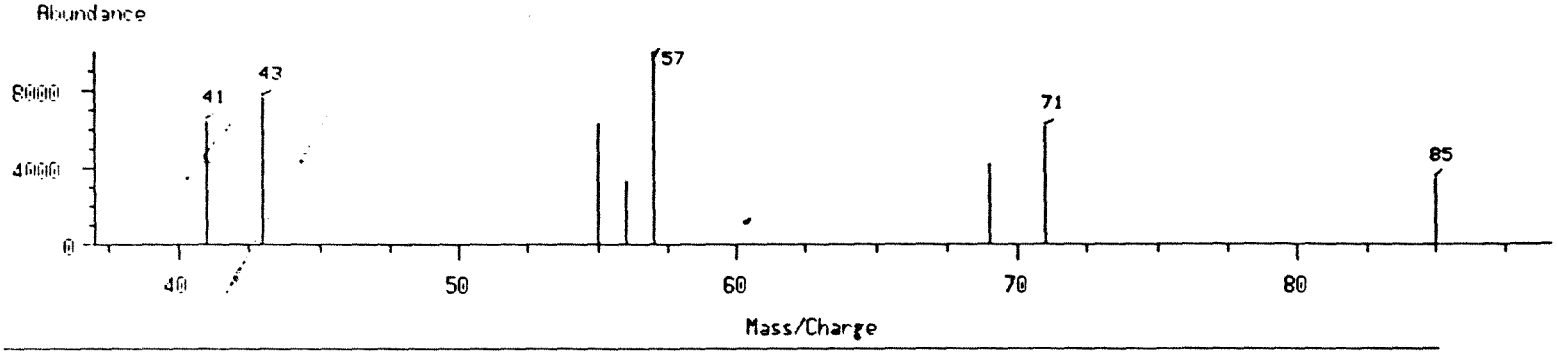
PBM Library File: /chem/database/WILEY.l

	CAS #	LIB INDEX	MATCH QUALITY
1. 2-Propyldecan-1-ol		34982	64

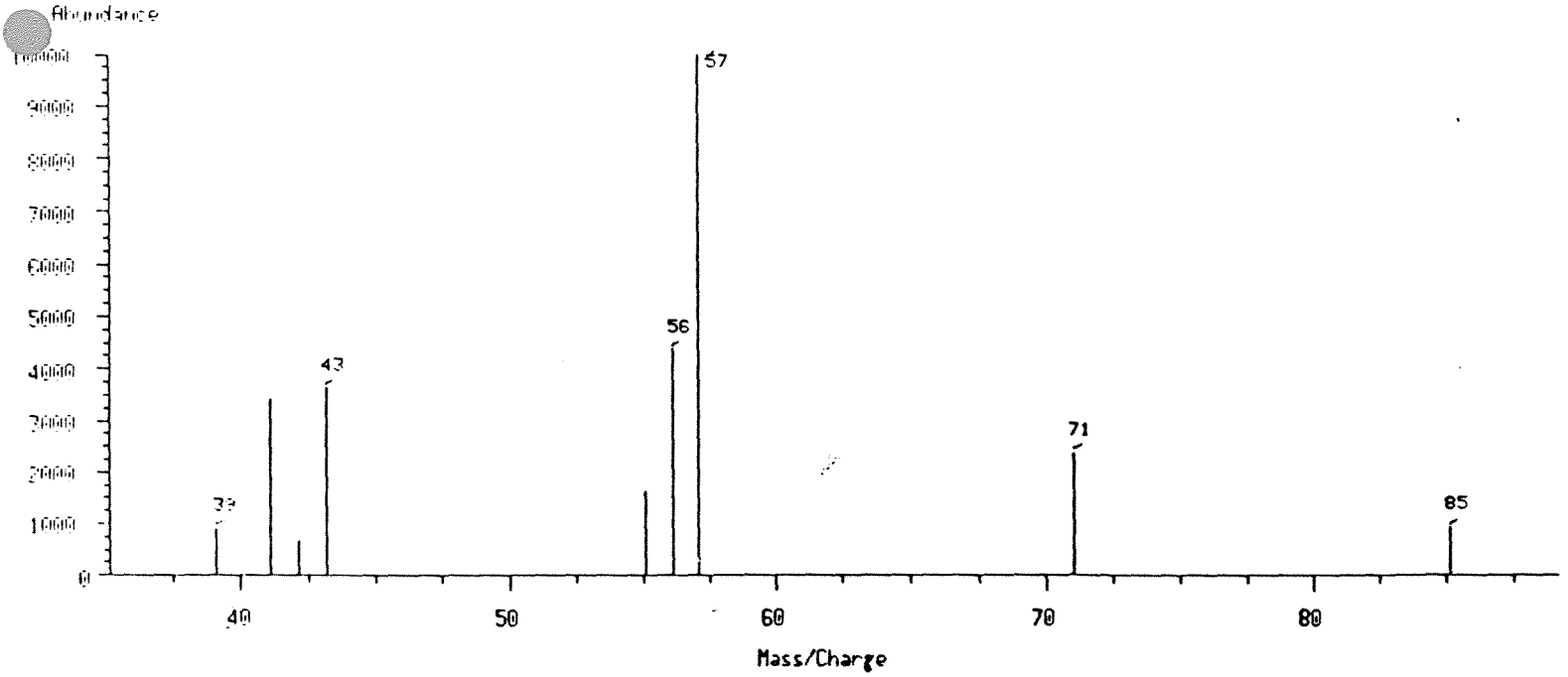
Scan 426 (23.022 min) of 211172101021.d SUBTRACTED SCALED



#34982: 2-Propyldecan-1-ol



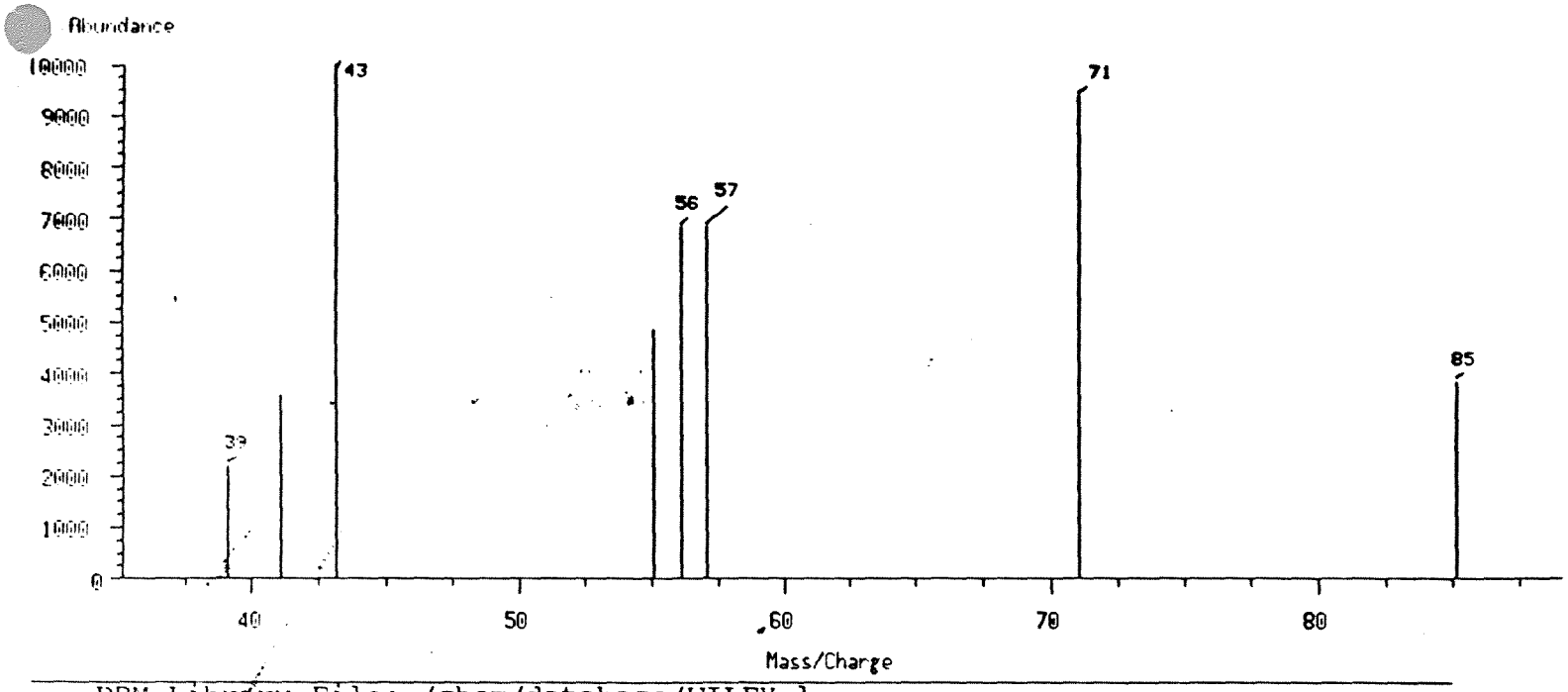
Scan 436 (23.562 min) of 211172101021.d SUBTRACTED SCALED



100090

Tentatively Identified Compound

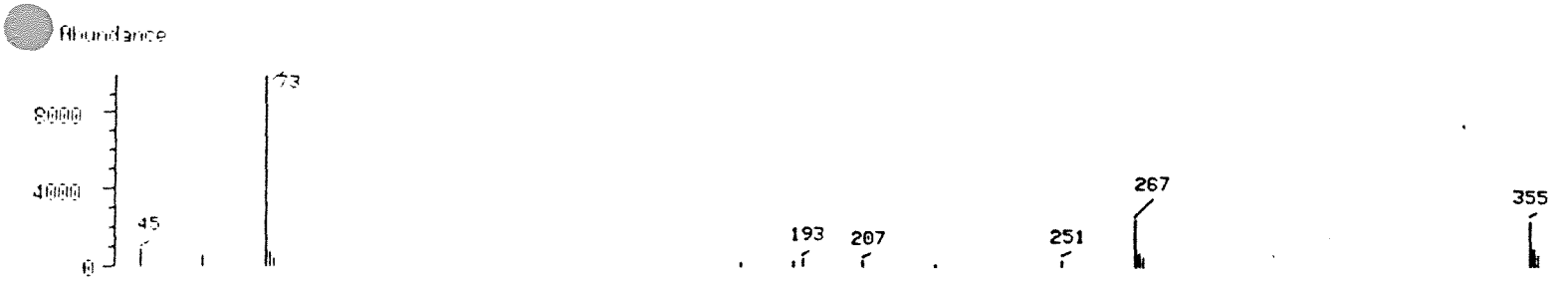
Scan 444 (23.994 min) of 211172101021.d SUBTRACTED SCALED



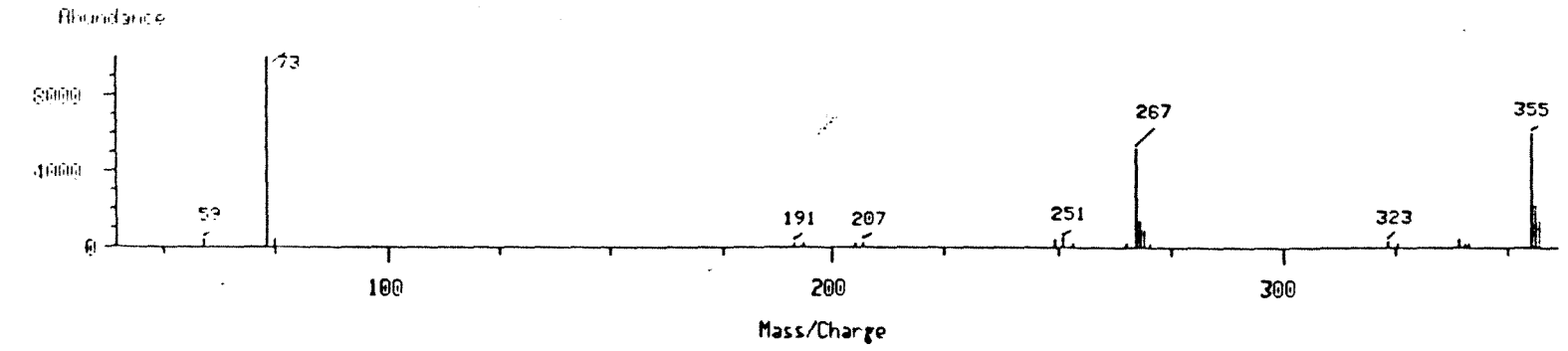
PBM Library File: /chem/database/WILEY.l

	CAS #	LIB INDEX	MATCH QUALITY
1. Cyclopentasiloxane, decamethyl-	541-02-6	129068	74

Scan 449 (24.263 min) of 211172101021.d SUBTRACTED SCALED



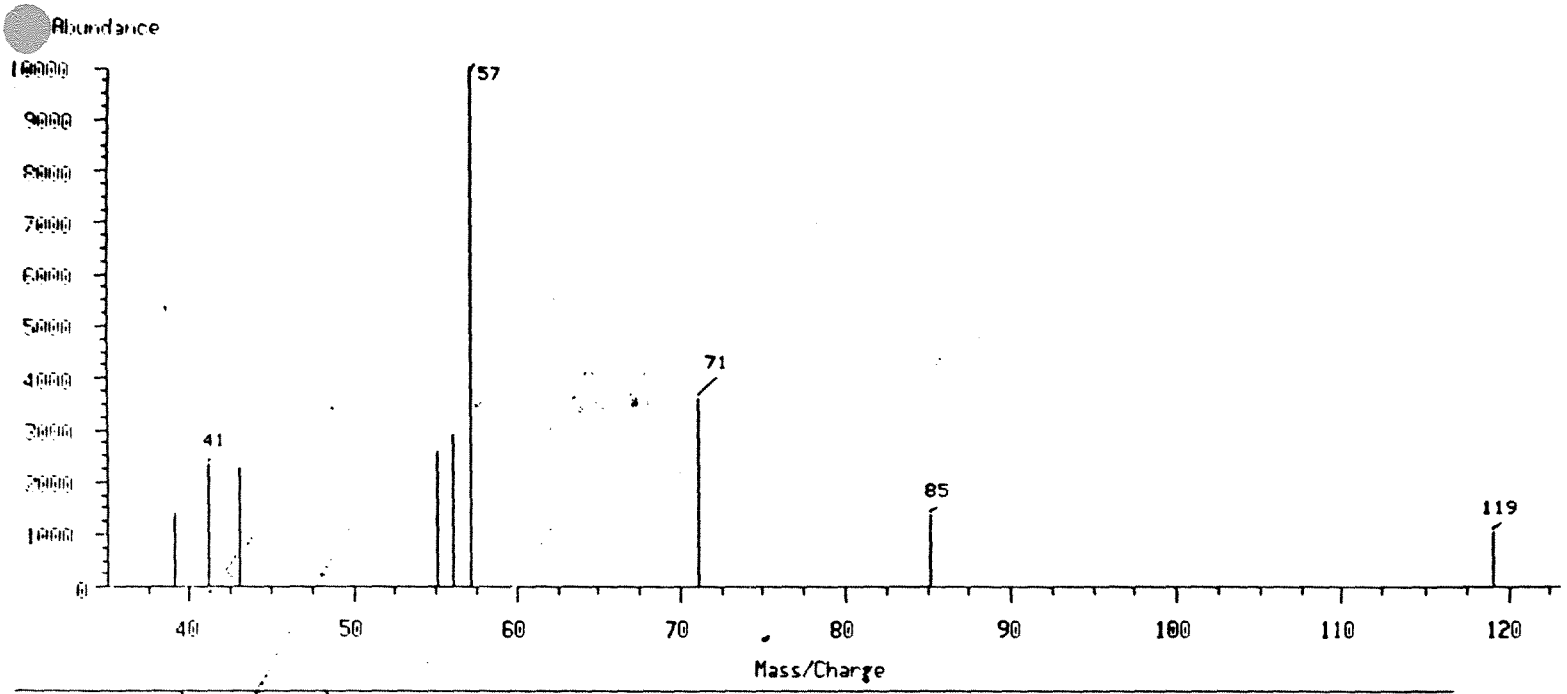
#129068: Cyclopentasiloxane, decamethyl-



100091

Tentatively Identified Compound

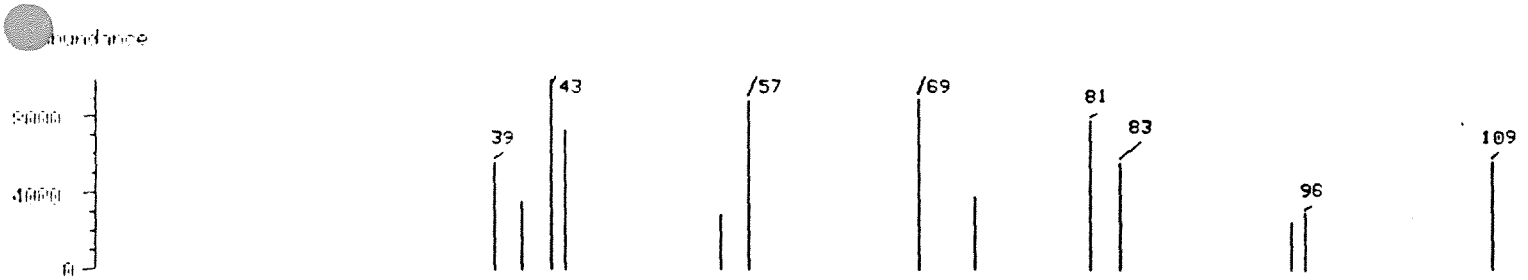
Scan 475 (25.667 min) of 211172101021.d SUBTRACTED SCALED



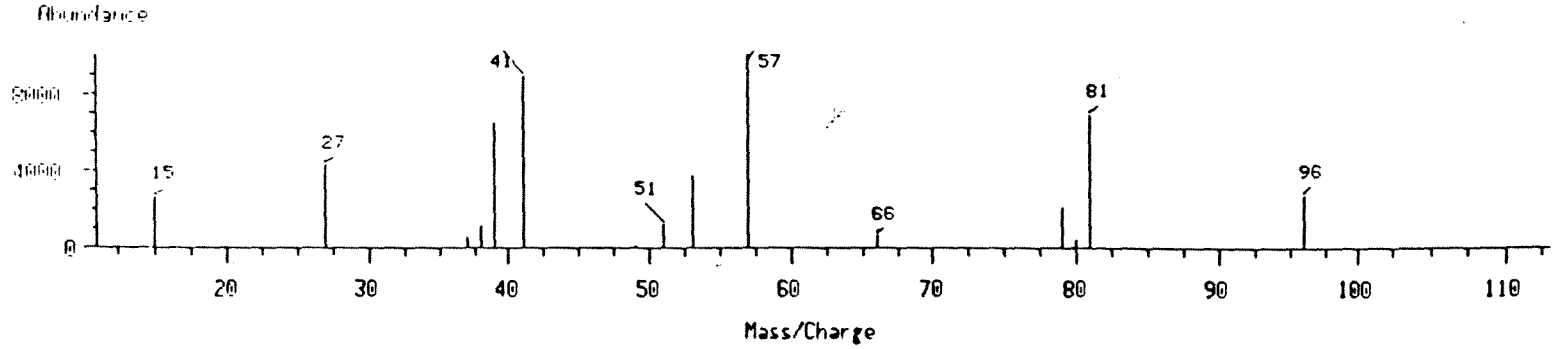
PBM Library File: /chem/database/WILEY.1

		CAS #	LIB INDEX	MATCH QUALITY
1.	1,2-Pentadiene, 4,4-dimethyl-	26981-77-1	1524	9

Scan 508 (27.449 min) of 211172101021.d SUBTRACTED SCALED



#1524: 1,2-Pentadiene, 4,4-dimethyl-



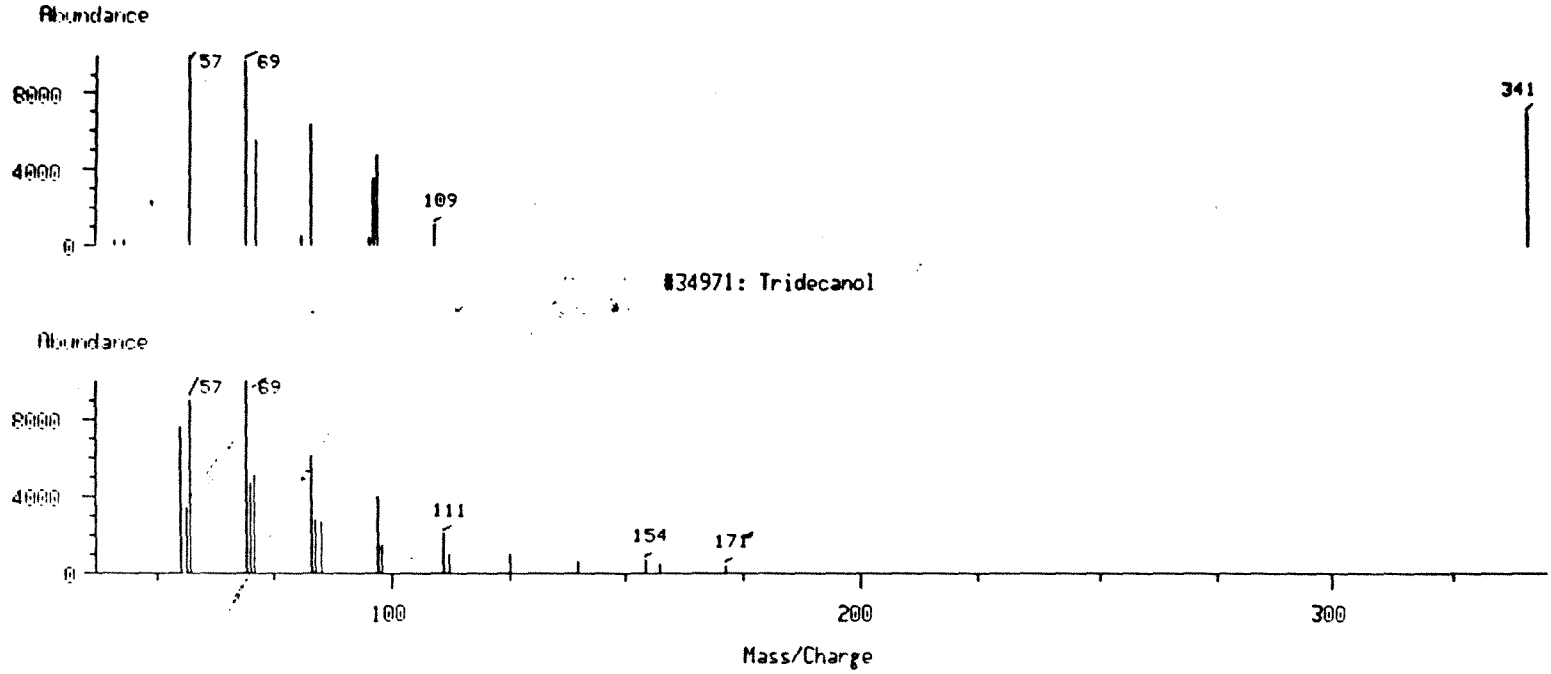
100092

Tentatively Identified Compound

PBM Library File: /chem/database/WILEY.l

	CAS #	LIB INDEX	MATCH QUALITY
1. Tridecanol	26248-42-0	34971	59

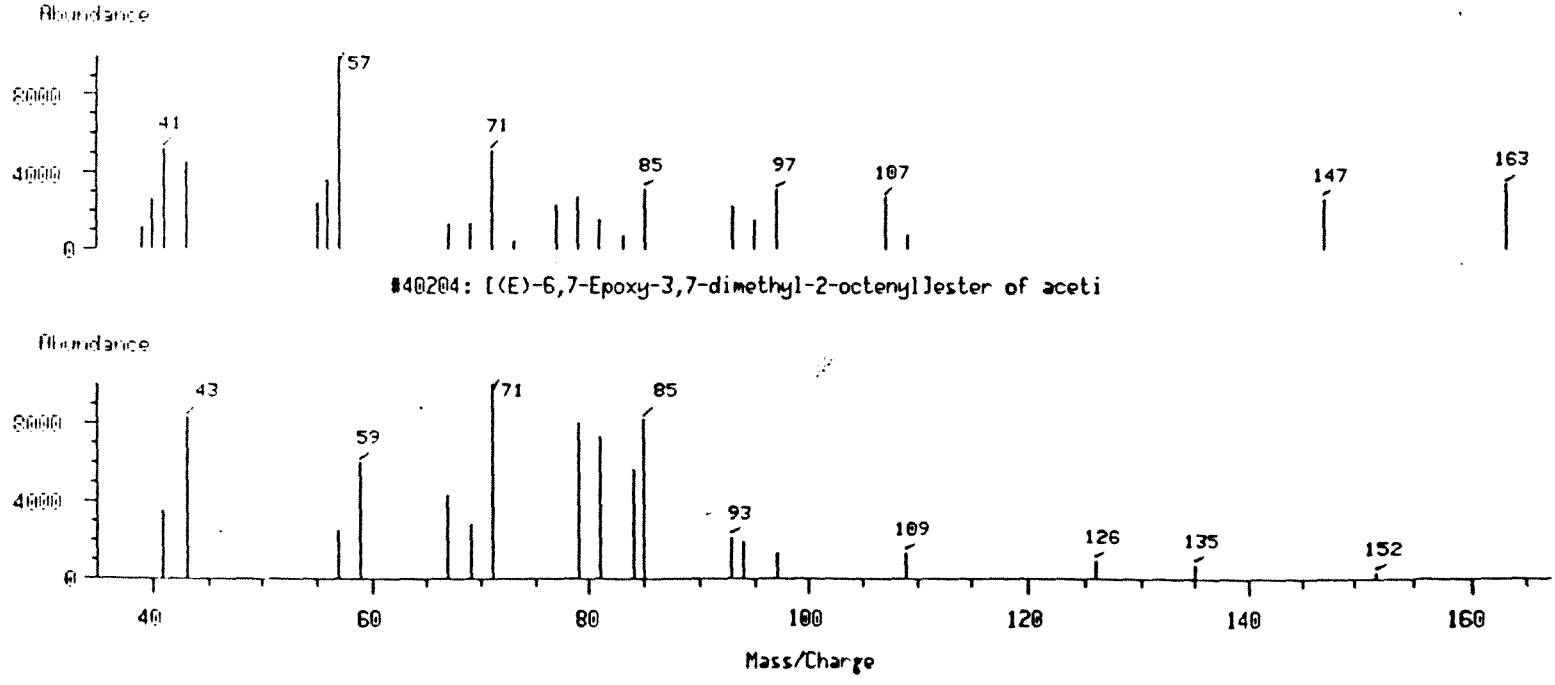
Scan 511 (27.611 min) of 211172101021.d SUBTRACTED SCALED



PBM Library File: /chem/database/WILEY.l

	CAS #	LIB INDEX	MATCH QUALITY
1. [(E)-6,7-Epoxy-3,7-dimethyl-2-octen		40204	12

Scan 527 (28.475 min) of 211172101021.d SUBTRACTED SCALED



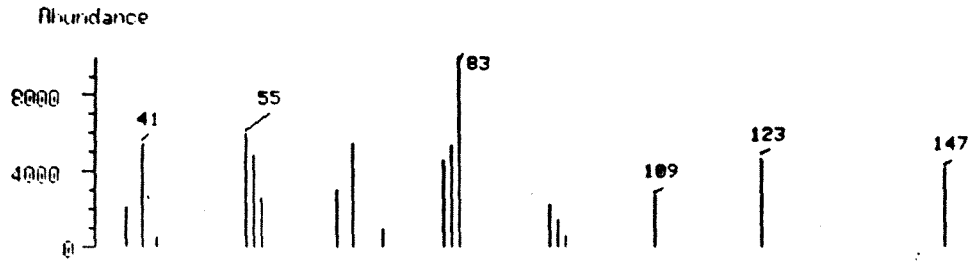
100093

Tentatively Identified Compound

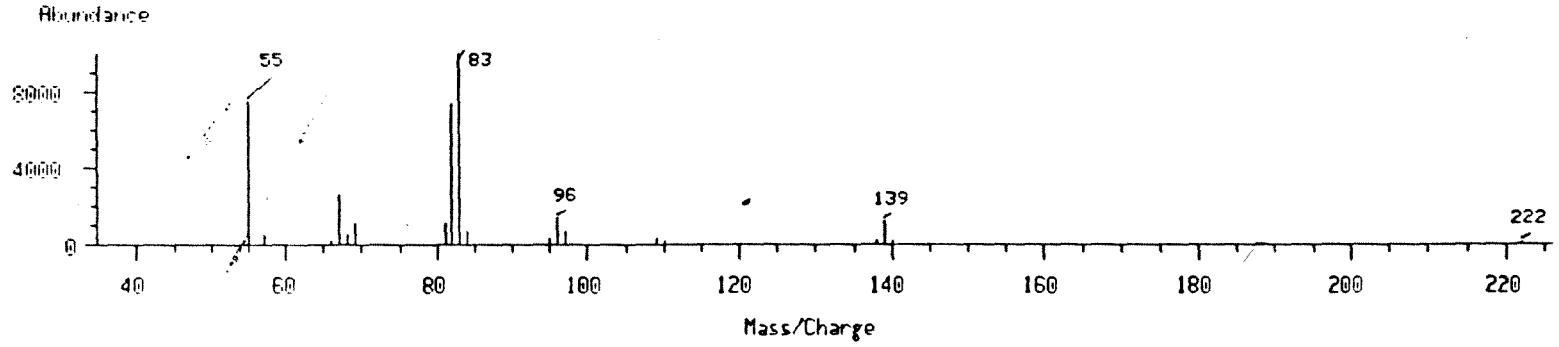
PBM Library File: /chem/database/WILEY.l

	CAS #	LIB INDEX	MATCH QUALITY
1. Cyclohexane, 1,1'-(1,4-butanediyl)b	6165-44-2	124902	25

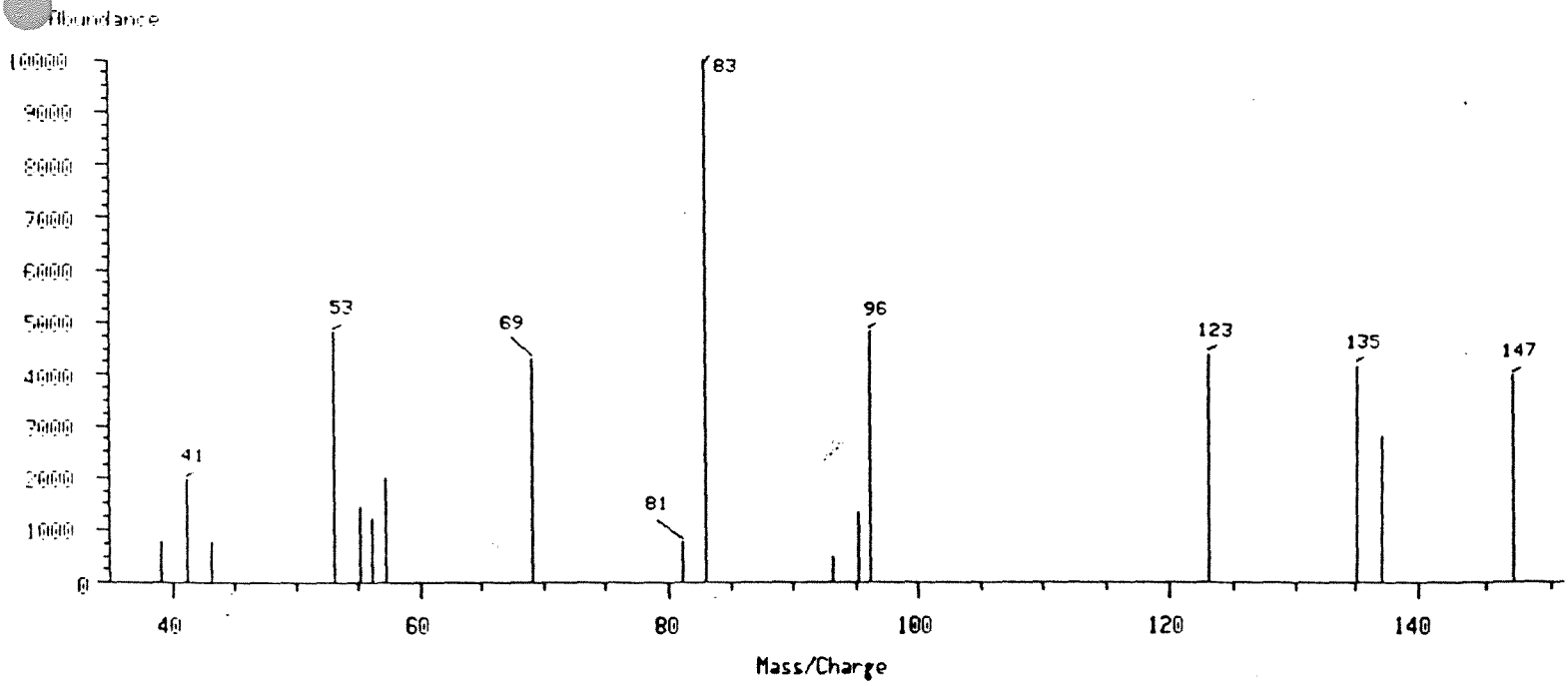
Scan 532 (28.745 min) of 211172101021.d SUBTRACTED SCALED



#124902: Cyclohexane, 1,1'-(1,4-butanediyl)bis-



Scan 535 (28.907 min) of 211172101021.d SUBTRACTED SCALED



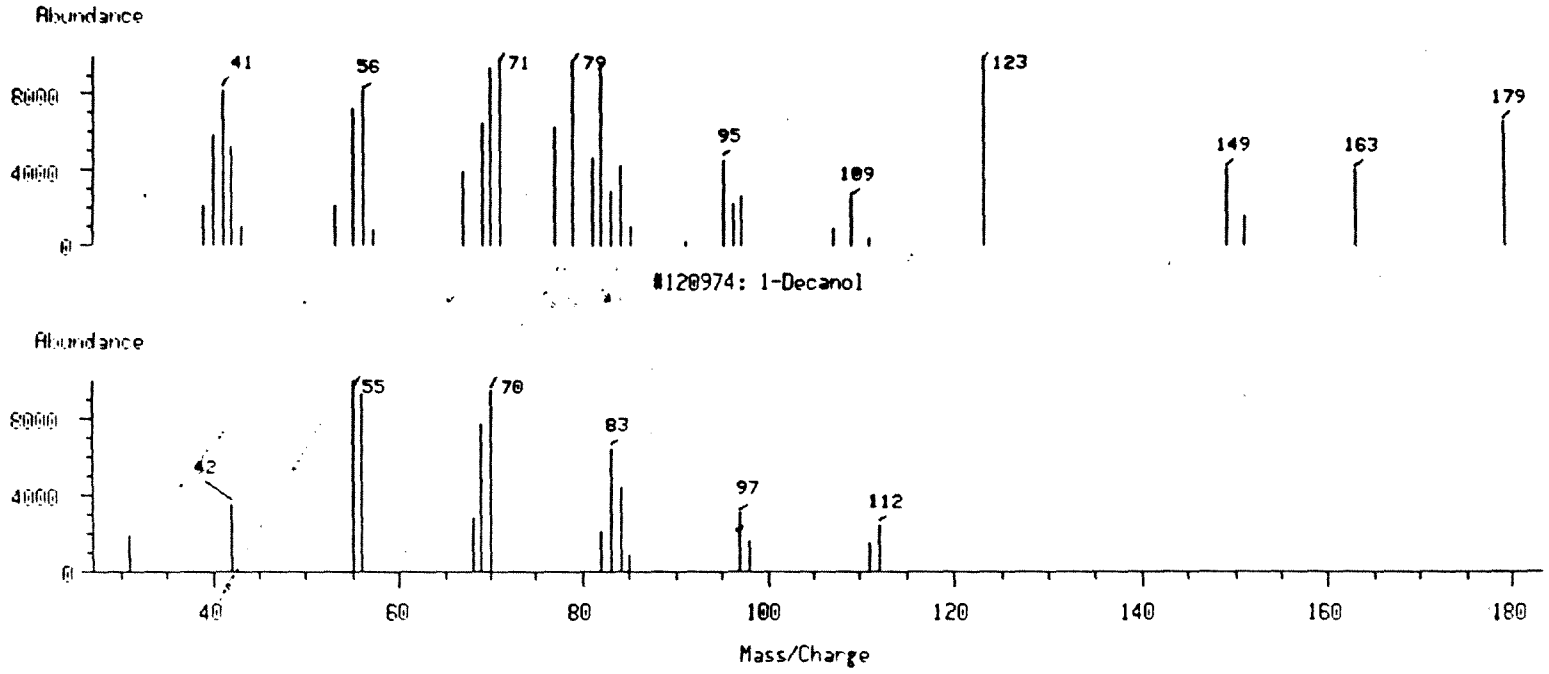
100094

Tentatively Identified Compound

PBM Library File: /chem/database/WILEY.l

	CAS #	LIB INDEX	MATCH QUALITY
1. 1-Decanol	112-30-1	120974	10

Scan 547 (29.555 min) of 211172101021.d SUBTRACTED SCALED



Date Sampled 11/20/92

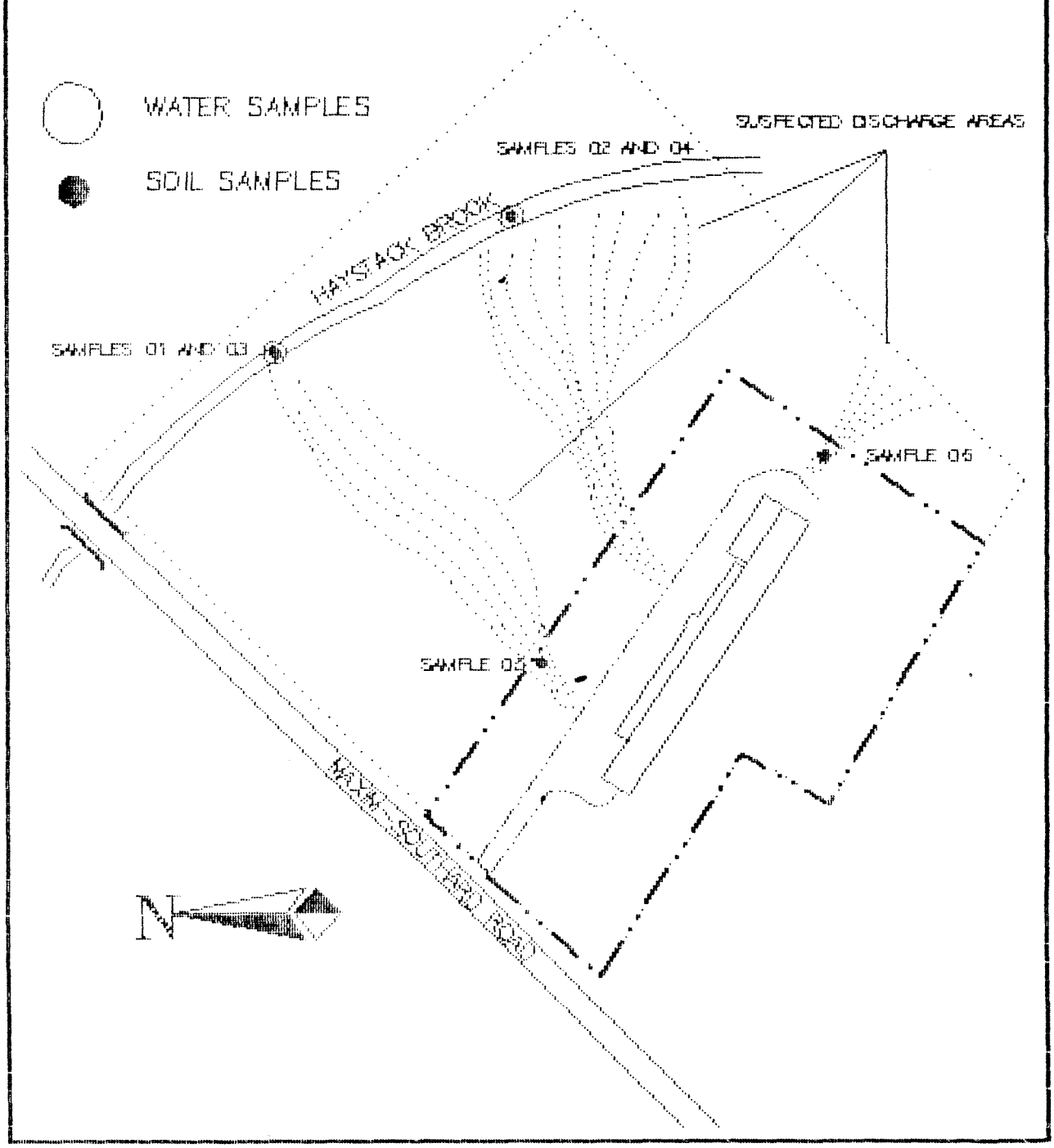
COMPOUND	SAMPLE 1	2	3	4	5	6	Detection Limit
Cyanide					3.69		0.03mg/L
Arsenic						1.5	0.010mg/L
Chromium				125.8	419.6	10.9	0.07mg/L
Copper			5	1097.7	190.3	1033.9	0.07mg/L
Lead				11.8	12	32.1	0.20mg/L
Mercury	0.0007	0.0013		0.142		0.109	0.0005mg/L
Nickel	0.11	0.13	7	194.1	99.4	30.7	0.10mg/L
Silver					100.4	115.7	0.05mg/L
Zinc	0.07	0.08	6.7	10.7	18.2	32.3	0.03mg/L
Ethylbenzene	15						5 ug/L
Total Xylene	46						5 ug/L
Chloroform							5 ug/L
1,1,1 Trichloroethane		39					5 ug/L
Toluene		12					5 ug/L
1,2 Dichloroethane		43					5 ug/L
Benzene		13					5 ug/L

100096

ZSCHIEGNER REFINING COMPANY SITE

SAMPLING LOCATION MAP (20 NOV 1992)

US EPA REGION II, RESPONSE & PREVENTION BRANCH

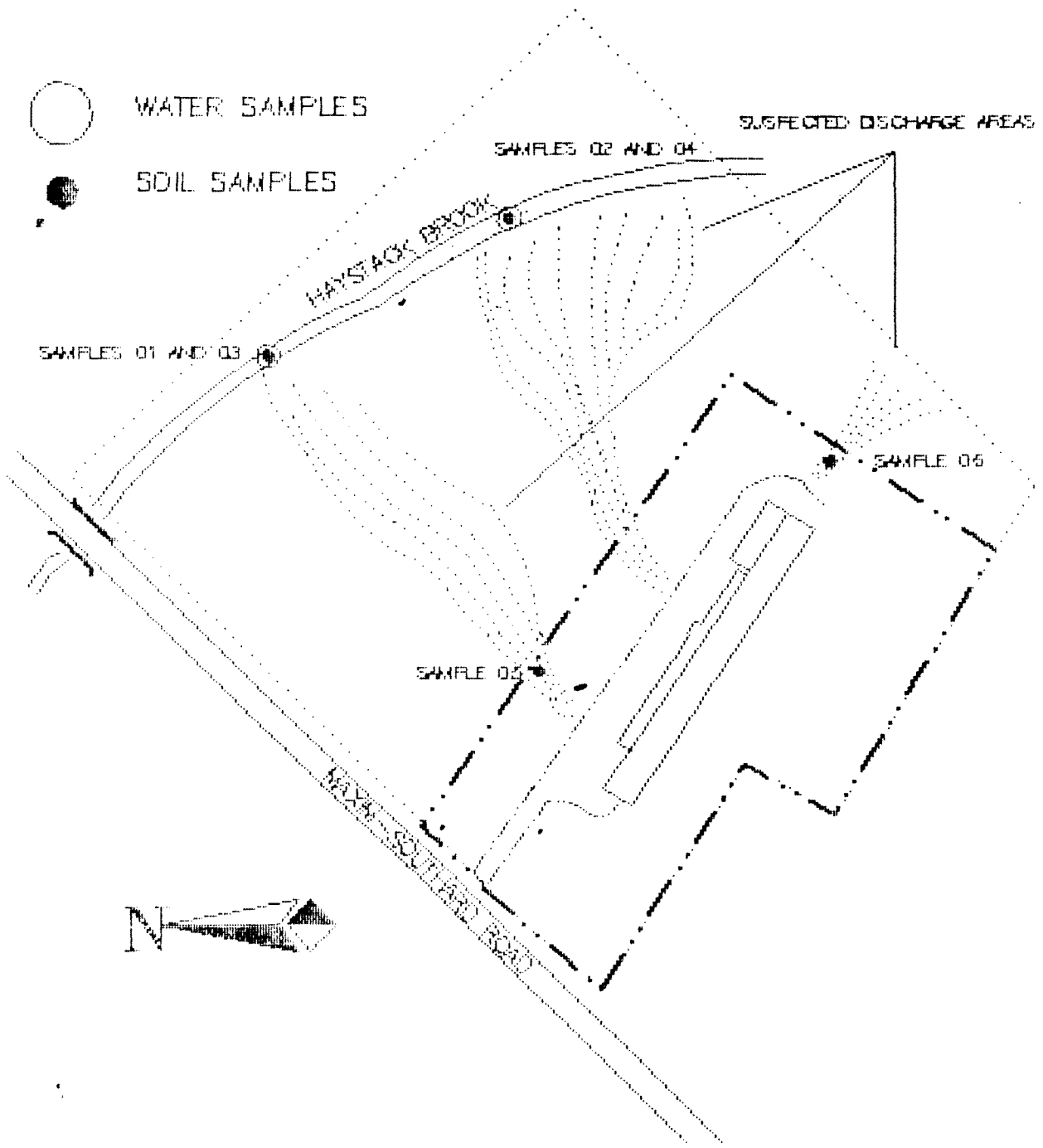


100097

ZSCHIEGNER REFINING COMPANY SITE

SAMPLING LOCATION MAP (20 NOV 1992)

US EPA REGION II, RESPONSE & PREVENTION BRANCH



100098

CHAIN OF CUSTODY RECORD

ENVIRONMENTAL PROTECTION AGENCY – REGION II
Environmental Services Division
EDISON, NEW JERSEY 08817

Name of Unit and Address:		EPA PM
USEPA TAT II Zschiengen Refining Howell Township, NJ		Dilshad Perera 908 321 4356

Sample Number	Number of Containers	Description of Samples
01	5	2 x 40ml liquid VOA, 1xQt liquid BNA, 1x Liter liquid Me ↳(PRESERVED w/HCL) ↳(PRESERVED w/HNO3 1 x Liter liquid Cyanide → (preserved w/NaOH)
02	5	" " " " " "
03	1	1 x 1Qt (SEDIMENT) VOA, BNA, TAL, CN-
04	1	1 x 1QT (sediment) VOA, BNA, TAL, CN-
05	1	1 x 1QT (Soil) VOA, BNA, TAL, CN-
06	1	1 x 1QT (Soil) VOA, BNA, TAL, CN-

Person Assuming Responsibility for Sample:	Time	Date

Sample Number	Relinquished By:	Received By:	Time	Date	Reason for Change of Custody
Sample Number	Relinquished By:	Received By:	Time	Date	Reason for Change of Custody
Sample Number	Relinquished By:	Received By:	Time	Date	Reason for Change of Custody
Sample Number	Relinquished By:	Received By:	Time	Date	Reason for Change of Custody

100099

Page No.

CHAIN OF CUSTODY RECORD

ENVIRONMENTAL PROTECTION AGENCY — REGION II
Environmental Services Division
EDISON, NEW JERSEY 08817

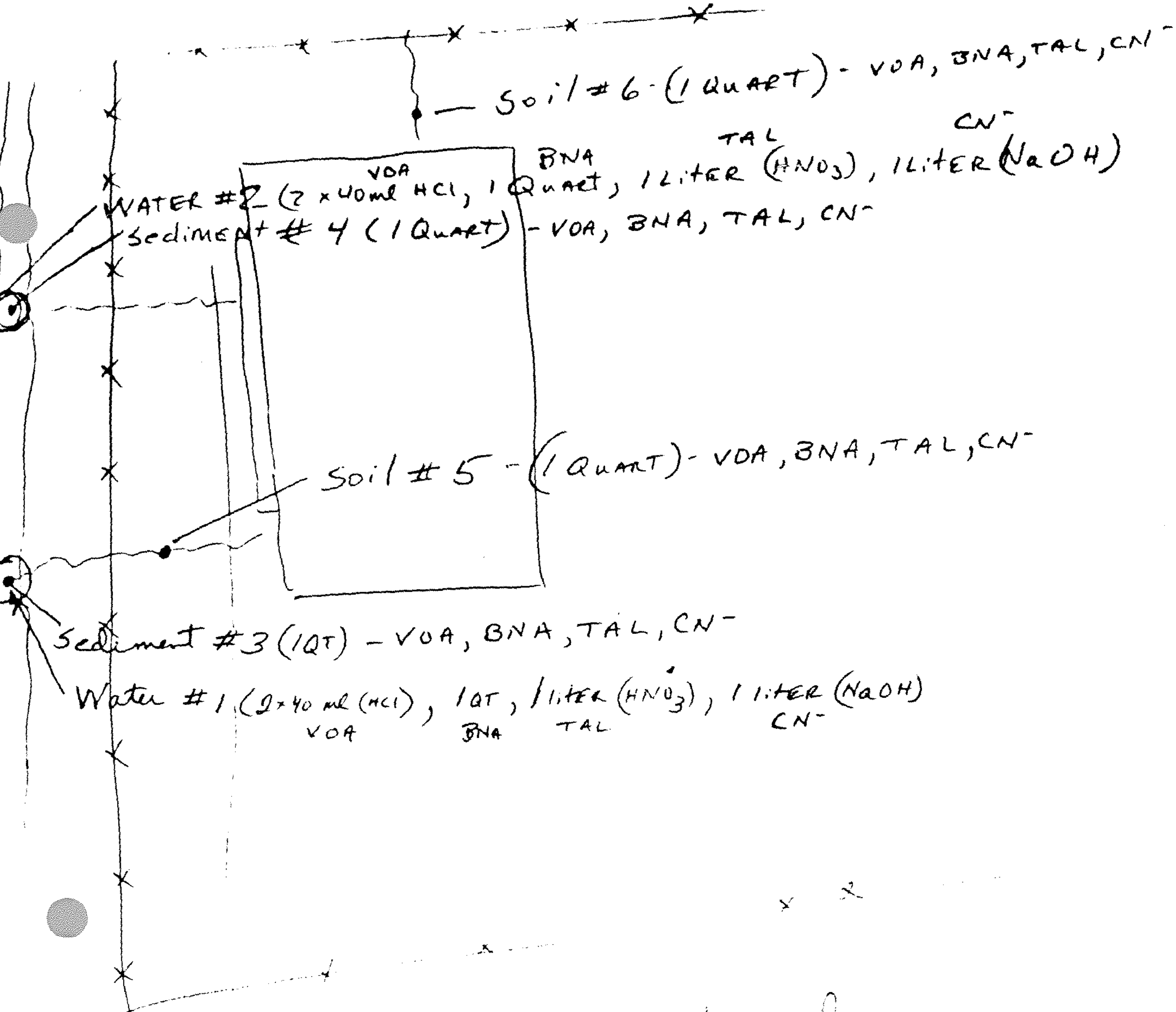
Name of Unit and Address: USEPA TAT II
[illegible] Refining
Howell Township, NJ

Sample Number	Number of Containers	Description of Samples
1	5	[illegible] liquid VOA, 1xQt liquid BNA, 1x Liter liquid Me (PRESERVED w/HCL) (PRESERVED w/HNO3); 1 x Liter liquid Cyanide → Preserved w/NaOH)
02	5	" " " " " "
03	1	1 x 1Qt (SEDIMENT) VOA, BNA, TAL, CN-
04		1 x 1QT (sediment) VOA, BNA, TAL, CN-
05	1	1 x 1QT (Soil) VOA, BNA, TAL, CN-
		1 x 1QT (Soil) VOA, BNA, TAL, CN-

Person Assuming Responsibility for Sample:	Time	Date
[illegible]		[illegible]

Sample Number	Relinquished By:	Received By:	Time	Date	Reason for Change of Custody

108100


Soil #6 (1 Quart) - VOA, BNA, TAL, CN-
WATER #2 (2 x 40ml HCl, 1 Quart, 1 Liter (HNO3), 1 Liter (NaOH)
VOA BNA TAL CN-
Sediment #4 (1 Quart) - VOA, BNA, TAL, CN-
Soil #5 - (1 Quart) - VOA, BNA, TAL, CN-
Sediment #3 (1QT) - VOA, BNA, TAL, CN-
Water #1 (2 x 40 ml (HCl), 1QT, 1 liter (HNO3), 1 liter (NaOH)
VOA BNA TAL CN-

100101

C-Nem Service
603-673-5440
603-673-0366

JAY Crystal

TOM WALKER

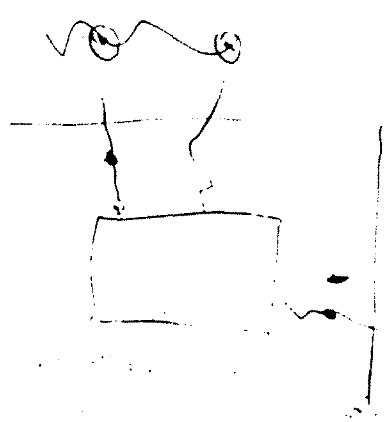
6 Samples locations - 2 water < VOA's (40ml VOA x 2 preserve less than 2p; BNA's (solvent hexane Rinse, 1quart, Teflon CAP); TAL (1Quart Plastic - preserved w/Nitric ≤2; CN⁻ (1Quart PlAstic - preserved NaOH/ ≥11ph
- 2 sediment < 1 Quart for each, 1 Quart
- 2 soil < 1 Quart for each, 1 Quart

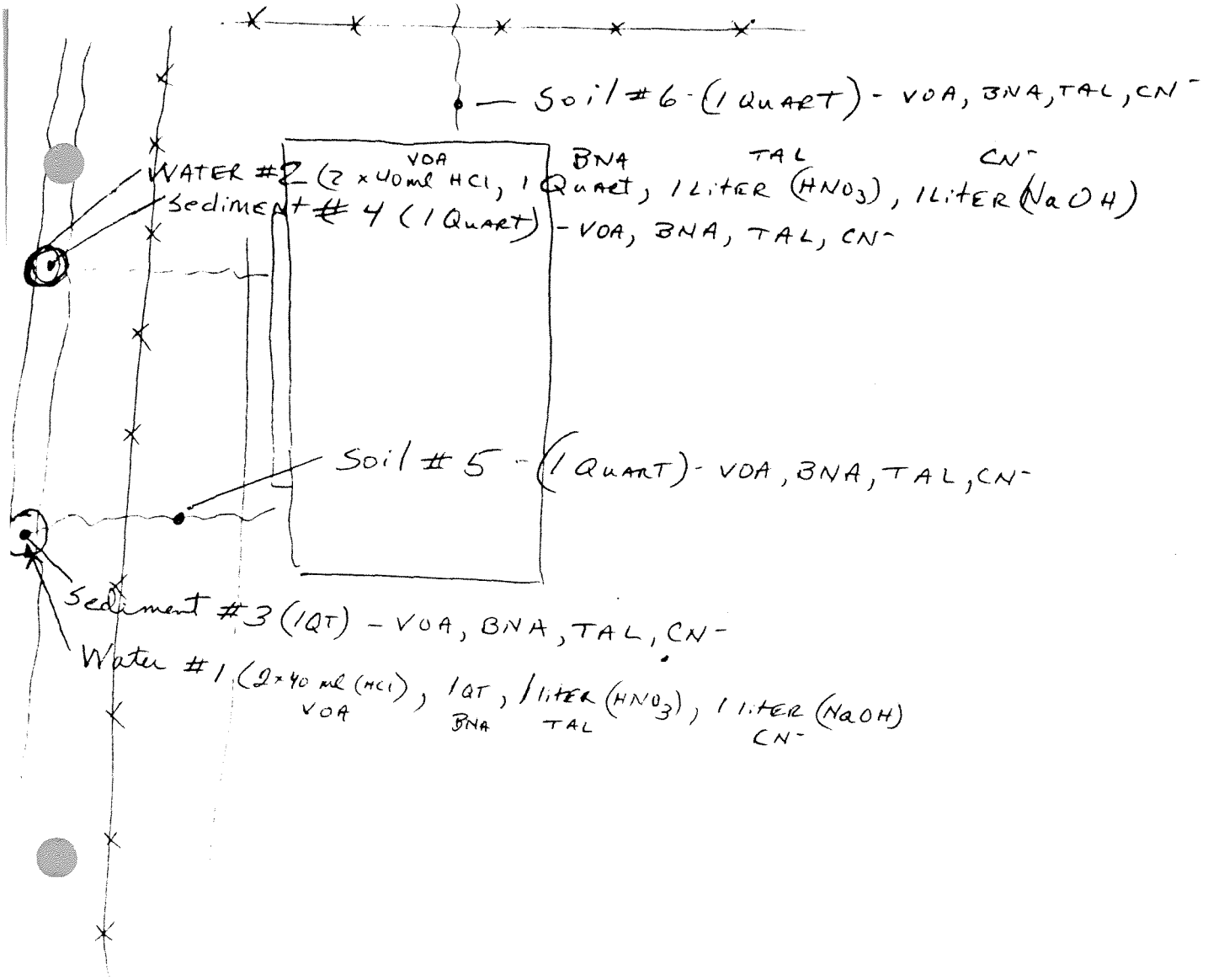
VOA's
BNA's

HEAVY metals
CN⁻

QAI

Fed Ex   Shipping Material





MAXIM SOUTHARD

100103

Scientific Specialties Service Inc.

Certificate of Analysis

Analysis of: *Scientific Specialties*

Lot Number- J-2082-01

The above lot number has been analyzed by GC/MS for the following organic compounds which were either not found or were found in concentrations less than 5 µg/L unless noted .

Acenaphthene	Acenaphthylene	Anthracene
Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene
Benzo(k)fluoranthene	Benzo(ghi)perylene	Benzoic Acid
Benzyl alcohol	4-Bromophenyl-phenylether	Butylbenzylphthalate
Di-n-butylphthalate	4-Chloroaniline	4-Chloro-3-methylphenol
bis-(2-Chloroethoxy)methane	bis-(2-Chloroethyl)ether	2,2-oxybis-(1-Chloropropane)
2-Chloronapthalene	2-Chlorophenol	4-Chlorophenyl-phenylether
Chyrsene	Dibenz(a.h)anthracene	Dibenzofuran
1,4-Dichlorobenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene
3,3-Dichlorobenzidine	2,4-Dichlorophenol	Diethlyphthalate
2,4-Dimethylphenol	Dimethylphthalate	*4,6-Dinitro-2-methylphenol
*2,4-Dinitrophenol	2,4-Dinitrotoluene	2,6-Dinitrotoluene
bis-(2Ethylhexyl)phthalate	Fluoranthene	Fluorene
Hexachlorobenzene	Hexachlorobutadiene	Hexachlorocyclopentadiene
Hexachloroethane	Indeno(1,2,3-cd)pyrene	Isophorone
2-Methylnaphthalene	2-Methylphenol	4-Methylphenol
Napthalene	*2-Nitroaniline	*3-Nitroaniline
*4-Nitroaniline	Nitrobenzene	2-Nitrophenol
*4-Nitrophenol	N-Nitrosodiphenylamine	N-Nitroso-di-n-propylamine
Di-n-octylphthalate	*Pentachlorophenol	Phenanthrene
Phenol	Pyrene	1,2,4-Trichlorobenzene
*2,4,5-Trichlorophenol	2,4,6-Tricholorphenol	

* less than 20 ug/L

The above lot number has also been analyzed by GC/ECD for the following pesticide compounds which were either not found or were found in concentrations less than the quantation limits listed below [ug/L]:

Alpha BHC 0.01	Beta BHC 0.01	Delta BHC 0.01
Aldrin 0.01	Gamma Chlordane 0.01	Alpha Chlordane 0.01
4,4'-DDE 0.02	Endrin 0.02	4,4'-DDD 0.02
Endosulfan Sulfate 0.02	Gamma BHC[Lindane] 0.01	Heptachlor 0.01
Heptachlor Epoxide 0.01	Endosulfan I 0.01	Dieldrin 0.02
Endosulfan II 0.02	4,4'-DDT 0.02	Endrin Aldehyde 0.02
Toxaphene 1.0	Methoxychlor 0.10	Endrin Ketone 0.02
Aroclor 1016 0.20	Aroclor 1221 0.20	Aroclor 1232 0.40
Aroclor 1242 0.20	Aroclor 1248 0.20	Aroclor 1254 0.20
Aroclor 1260 0.20		

The above lot number has also been analyzed by Furnace Atomic Absorption, Flame Atomic Absorption, Cold-Vapor Atomic Absorption, or ICP/MS and the elements below were either not found or found in concentrations less than those listed below.

Element	Concentration (ugL)	Element	Concentration (ugL)
Aluminum	100	Antimony	5
Arsenic	2	Barium	20
Beryllium	1	Cadmium	1
Calcium	500	Chromium	10
Cobalt	10	Copper	10
Iron	500	Lead	2
Magnesuim	500	Manganese	10
Mercury	0.2	Nickel	20
Potassium	750	Selenium	3
Silver	10	Sodium (Plastic)	500
Sodium (Glass)	5000	Thallium	10
Vanadium	10	Zinc	20

Please keep this certificate for your records.

100104

M. Grebow, VP

K23 9201

Milford, NH 03
(603) 673-5440
FAX (603) 673-

CHAIN OF CUSTODY

(A) [CUST]OMER INFORMATION

[Guar]dian Environmental
[ ] Parker Rd Bear, DE 19701
302-834-1000
[ATT]N: Tracy Walker

(B) PROJECT INFORMATION

JOB NAME: Zschienger Refining
JOB NUMBER: 1153 8-E
LOCATION: Howell Township, NJ
TELEPHONE: 908-905-8304 (F) 908-905-0579
CONTACT PERSON: (PRINT) 0279 Tracy Walker / Steve Davis

(C) SAMPLE INFORMATION

TURNAROUND TIME: (CIRCLE ONE)
STANDARD RUSH (circled)
RUSH T.A.T. 5day (Check with lab)

(K) CONTAINER & PRESERVATIVE: VOA-624, ~~8 RCRA~~ metals (Priority pollutant), Cyanide-T, ~~BTG~~ (G) TPH/GC

(L) ANALYSIS

100105

(E) SAMPLE IDENTIFICATION & LOCATION	(F) DATE COLLECTED	(G) TIME COLLECTED	(H) SAMPLE TYPE GRAB	COMP	(I) MATRIX SOLID (S) LIQUID (L) COMBINED (C) HAZARD (H)	(J) # OF CONTAINERS										(L) ANALYSIS
[Wel]l # 01	11/20/92	1100			L	5	2	1	1							VOA 624, Semi-~~voa 625~~ 13 PP, T-CN⁻, ~~8 RCRA~~ metals
[Well] # 02	11/20/92	1100			L	5	2	1	1							VOA 624, Semi-Voa 625, 13 PP, T-CN⁻, ~~8 RCRA~~ metals
[Samp]le # 03	11/20/92	1100			S	1				1						VOA 8240, Semi-Voa 8270, 13 PP, T-CN⁻, ~~8 RCRA~~ metals
[Samp]le # 04	11/20/92	1100			S	1				1						" "
[Samp]le # 05	11/20/92	1100			S	1				1						" "
[Sam]ple # 06	11/20/92	1100			S	1				1						" "

CUSTODY

[RELINQUISHED BY]: Desmond Devine SIGNATURE: See orig. COC	MILITARY DATE/TIME: 1100 11/21/92
[RECEIV]ED: Fed EX	MILITARY DATE/TIME:
	MILITARY DATE/TIME:
[RECEIV]ED:	MILITARY DATE/TIME:
[RECEIVED] FOR LABORATORY: [signature]	MILITARY DATE/TIME: 1123 11/23/92

LAB USE ONLY

Send Two copies of Report to Guardian

A B C D E F G H I J K

MR TRACY WALKER
GUARDIAN ENVIRONMENTAL
1280 PORTER ROAD
BEAR DE 19701

LABORATORY # : K23-92-01
DATE SAMPLED : 11/20/92
DATE RECEIVED : 11/23/92
DATE COMPLETED : 12/02/92
PICK UP : NO
SAMPLER : D.DEVINE
PURCHASE ORDER # : 20343
CONTROL # : 5932
JOB # : 11538-E

SAMPLE LOCATION: Z.SCHIENGER REFINING
HOWELL TOWNSHIP, NJ

TEST PARAMETER	*RESULTS*	*DATE COMPLETED*	*EPA METHOD*	*DETECTION LIMIT*	*ANALYST*
SAMPLE IDENTITY: SAMPLE #01					
CYANIDE-T	<0.03	11/25/92	335.2	0.03	CL
ANTIMONY	<1.0	12/02/91	204.1	1.0	CC
ARSENIC	<0.010	12/01/92	206.2	0.010	JC/CC
BERYLLIUM	<0.03	11/30/92	210.1	0.03	FL
CADMIUM	<0.03	11/30/92	213.1	0.03	CC
CHROMIUM	<0.07	11/30/92	218.1	0.07	CC
COPPER	<0.07	11/30/92	220.1	0.07	CC
LEAD	<0.20	11/30/92	239.1	0.20	CC
MERCURY	0.0007	11/30/92	245.1	0.0005	CC
NICKEL	0.11	12/01/92	249.1	0.10	CC
* SELENIUM	<0.010	12/02/92	270.2	0.010	JC/CC
SILVER	<0.05	12/01/92	272.1	0.05	CC
THALLIUM	<0.7	11/30/92	279.1	0.7	FL
ZINC	0.07	11/30/92	289.1	0.03	CC

* SELENIUM SPIKE RECOVERY WAS 47%

NOTE: SAMPLE #01 - ALL RESULTS ARE IN mg/L.

ChemServe

SEMIVOLATILE ORGANIC ANALYSIS
EPA METHOD 625

CUSTOMER: GUARDIAN ENVIRONMENTAL

LAB#: K23-92-01

SAMPLE LOCATION: ZSCHIENGER REFINING

JOB#: 11538-E

SAMPLE IDENTITY: SAMPLE #01

CONTROL #: 5932

DATE SAMPLED: 11/20/92

REC'D: 11/23/92

DATE ANALYZED: 12/02/92

DATE EXTRACTED: 11/25/92

MATRIX: LIQUID

COMPOUND	CONCENTRATION (UG/L)	DETECTION LIMIT MULTIPLIER: (UG/L) X 1
PHENOL	BDL	10
2-CHLOROPHENOL	BDL	10
1,4-DICHLOROPHENOL	BDL	10
1,3-DICHLOROPHENOL	BDL	10
1,2-DICHLOROPHENOL	BDL	10
BIS(2-CHLOROISOPROPYL)ETHER	BDL	10
N-NITROSO-DI-N-PROPYLAMINE	BDL	10
NAPTHALENE	BDL	10
,4-DIMETHYLPHENOL	BDL	10
2,4-DICHLOROPHENOL	BDL	10
4-CHLOROANILINE	BDL	10
4-CHLORO-3-METHYLPHENOL	BDL	10
HEXACHLOROCYCLOBUTADIENE	BDL	10
2,4,5-TRICHLOROPHENOL	BDL	10
2-NITROANILINE	BDL	10
ACENAPHTHYLENE	BDL	10
3-NITROANILINE	BDL	10
ACENAPTHENE	BDL	10
4-NITROPHENOL	BDL	10
2,4-DINITROTOLUENE	BDL	10
4-NITROANILINE	BDL	10
4,6-DINITRO-2-METHYLPHENOL	BDL	10
N-NITROSODIPHENYLAMINE	BDL	10
HEXACHLOROBENZENE	BDL	10
PENTACHLOROPHENOL	BDL	10
PHENANTHRENE	BDL	10
ANTHRACENE	BDL	10
DI-N BUTYLPHTHALATE	BDL	10
FLUORANTHENE	BDL	10
PYRENE	BDL	10
BUTYLBENZYLPHTHALATE	BDL	10
ENZO(A)ANTHRACENE	BDL	10
3'-DICHLOROBENZIDINE	BDL	10
CHYRSENE	BDL	10
BIS(2-ETHYLHEXYL)PHTHALATE	BDL	10
4-BROMOPHENYL-PHENYLETHER		

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CONTINUED: 1 OF 2 PAGES

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VOLATILE ORGANIC ANALYSIS
EPA METHOD 624

CUSTOMER: GUARDIAN ENVIRONMENTAL — LAB#: K23-92-01

SAMPLE LOCATION: ZSCHIENGER REFINING — JOB#: 11538-E

SAMPLE IDENTITY: 01 — CONTROL #: 5932

DATE SAMPLED: 11/20/92 — REC'D: 11/23/92 — DATE ANALYZED: 12/04/92

COMPOUND	CONCENTRATION (UG/L)	DETECTION LIMIT MULTIPLIER: (UG/L) X 1
CHLOROMETHANE	BDL	5
BROMOMETHANE	BDL	5
VINYL CHLORIDE	BDL	5
CHLOROETHANE	BDL	5
METYHLENE CHLORIDE	BDL	5
ACETONE	BDL	15
CARBON DISULFIDE	BDL	5
TRICHLOROFLUOROMETHANE	BDL	5
1,1-DICHLOROETHENE	BDL	5
1,1-DICHLOROETHANE	BDL	5
TOTAL-1,2-DICHLOROETHENE	BDL	5
CHLOROFORM	BDL	5
1,2-DICHLOROETHANE	BDL	5
2-BUTANONE	BDL	5
1,1,1-TRICHLOROETHANE	BDL	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	5
BROMODICHLOROMETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
METHYL-TERTIARY-BUTYL ETHER	BDL	5
BROMOFORM	BDL	5
2-HEXANONE	BDL	5
4-METHYL-2-PENTANONE	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	BDL	5
CHLOROBENZENE	BDL	5
STYRENE	BDL	5
ETHYLBENZENE	15	5
TOTAL XYLENES	46	5

BDL=BELOW DETECTION LIMIT

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CUSTOMER: GUARDIAN ENVIRONMENTAL

SAMPLE LOCATION: ZSCHIENGER REFINING

SAMPLE IDENTITY: SAMPLE #01

DATE SAMPLED: 11/20/92

REC'D: 11/23/92

DATE EXTRACTED: 11/25/92

MATRIX: LIQUID

LAD#: K23-92-01

JOD#: 11538-E

CONTROL #: 5932

DATE ANALYZED: 12/02/92

COMPOUND	CONCENTRATION (UG/L)	DETECTION LIMIT MULTIPLIER: (UG/L) X 1
DI-N-OCTYLPHTHALATE	BDL	10
DIMETHYLPHTHALATE	BDL	10
FLOURENE	BDL	10
BENZO(B)FLUORANTHENE	BDL	10
BENZO(K)FLUORANTHENE	BDL	10
BENZO(A)PYRENE	BDL	10
INDENO(1,2,3-CD)PYRENE	BDL	10
DIBENZ(A,H)ANTHRACENE	BDL	10
BENZO(G,H,I)PERYLENE	BDL	10

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GUARDIAN ENVIRONMENTAL
PAGE 2 OF 2

LABORATORY : K23-92-01
CONTROL : 5932

TEST PARAMETER	RESULTS	DATE COMPLETED	EPA METHOD	DETECTION LIMIT	ANALYST
SAMPLE IDENTITY: SAMPLE #02					
CYANIDE T	<0.03	11/25/92	335.2	0.03	CL
ANTIMONY	<1.0	12/02/92	204.1	1.0	CC
ARSENIC	<0.010	12/01/92	206.2	0.010	JC/CC
BERYLLIUM	<0.03	11/30/92	210.1	0.03	FL
CADMIUM	<0.03	11/30/92	213.1	0.03	CC
CHROMIUM	<0.07	11/30/92	218.1	0.07	CC
COPPER	<0.07	11/30/92	220.1	0.07	CC
LEAD	<0.20	11/30/92	239.1	0.20	CC
MERCURY	0.0013	11/30/92	245.1	0.0005	CL
NICKEL	0.13	12/01/92	249.1	0.10	CC
SELENIUM	<0.010	12/02/92	270.2	0.010	JC/CC
SILVER	<0.05	12/01/92	272.1	0.25	CC
THALLIUM	<0.7	11/30/92	279.1	0.7	FL
ZINC	0.08	11/30/92	289.1	0.03	CC

NOTE: SAMPLE #02 - ALL RESULTS ARE IN mg/L.

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SEMIVOLATILE ORGANIC ANALYSIS
EPA METHOD 625

CUSTOMER: GUARDIAN ENVIRONMENTAL — LAB#: K23-92-01

SAMPLE LOCATION: ZSCHIENGER REFINING — JOB#: 11538-E

SAMPLE IDENTITY: SAMPLE #02 — CONTROL #: 6932

DATE SAMPLED: 11/20/92 — REC'D: 11/23/92 — DATE ANALYZED: 12/02/92

DATE EXTRACTED: 11/25/92 — MATRIX: LIQUID

COMPOUND	CONCENTRATION (UG/L)	DETECTION LIMIT MULTIPLIER: (UG/L) X 1
PHENOL	BDL	10
2-CHLOROPHENOL	BDL	10
1,4-DICHLOROPHENOL	BDL	10
1,3-DICHLOROPHENOL	BDL	10
1,2-DICHLOROPHENOL	BDL	10
BIS(2-CHLOROISOPROPYL)ETHER	BDL	10
N-NITROSO-DI-N-PROPYLAMINE	BDL	10
NAPTHALENE	BDL	10
2,4-DIMETHYLPHENOL	BDL	10
2,4-DICHLOROPHENOL	BDL	10
4-CHLOROANILINE	BDL	10
4-CHLORO-3-METHYLPHENOL	BDL	10
HEXACHLOROCYCLOBUTADIENE	BDL	10
2,4,5-TRICHLOROPHENOL	BDL	10
2-NITROANILINE	BDL	10
ACENAPHTHYLENE	BDL	10
3-NITROANILINE	BDL	10
ACENAPTHENE	BDL	10
4-NITROPHENOL	BDL	10
2,4-DINITROTOLUENE	BDL	10
4-NITROANILINE	BDL	10
4,6-DINITRO-2-METHYLPHENOL	BDL	10
N-NITROSODIPHENYLAMINE	BDL	10
HEXACHLOROBENZENE	BDL	10
PENTACHLOROPHENOL	BDL	10
PHENANTHRENE	BDL	10
ANTHRACENE	BDL	10
DI-N-BUTYLPHTHALATE	BDL	10
FLUORANTHENE	BDL	10
PYRENE	BDL	10
BUTYLBENZYLPHTHALATE	BDL	10
BENZO(A)ANTHRACENE	BDL	10
3,3'-DICHLOROBENZIDINE	BDL	10
CHYRSENE	BDL	10
BIS(2-ETHYLHEXYL)PHTHALATE	BDL	10
4-BROMOPHENYL-PHENYLETHER		

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VOLATILE ORGANIC ANALYSIS
EPA METHOD 624

CUSTOMER: GUARDIAN ENVIRONMENTAL — LAB#: K23-92-01

SAMPLE LOCATION: ZSCHIENGER REFINING — JOB#: 11538-E

SAMPLE IDENTITY: 02 — CONTROL #: 5932

DATE SAMPLED: 11/20/92 — REC'D: 11/23/92 — DATE ANALYZED: 12/04/92

COMPOUND	CONCENTRATION (UG/L)	DETECTION LIMIT MULTIPLIER: (UG/L) X 1
CHLOROMETHANE	BDL	5
BROMOMETHANE	BDL	5
VINYL CHLORIDE	BDL	5
CHLOROETHANE	BDL	5
METYHLENE CHLORIDE	BDL	5
ACETONE	BDL	15
CARBON DISULFIDE	BDL	5
TRICHLOROFLUOROMETHANE	BDL	5
1,1-DICHLOROETHENE	BDL	5
1,1-DICHLOROETHANE	BDL	5
TOTAL-1,2-DICHLOROETHENE	BDL	5
CHLOROFORM	BDL	5
1,2-DICHLOROETHANE	43	5
2-BUTANONE	BDL	5
1,1,1-TRICHLOROETHANE	39	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	5
BROMODICHLOROMETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	13	5
DIBROMOCHLOROMETHANE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
METHYL-TERTIARY-BUTYL ETHER	BDL	5
BROMOFORM	BDL	5
2-HEXANONE	BDL	5
4-METHYL-2-PENTANONE	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	12	5
CHLOROBENZENE	BDL	5
STYRENE	BDL	5
ETHYLBENZENE	BDL	5
TOTAL XYLENES	BDL	5

BDL=BELOW DETECTION LIMIT

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CUSTOMER: GUARDIAN ENVIRONMENTAL

LAB#: K23-92-01

SAMPLE LOCATION: ZSCHIENGER REFINING

JOB#: 11538-E

SAMPLE IDENTITY: SAMPLE #02

CONTROL #: 5932

DATE SAMPLED: 11/20/92 REC'D: 11/23/92 DATE ANALYZED: 12/07/92

DATE EXTRACTED: 11/25/92 MATRIX: LIQUID

COMPOUND	CONCENTRATION (UG/L)	DETECTION LIMIT MULTIPLIER: (UG/L) X 1
DI-N-OCTYLPHTHALATE	BDL	10
DIMETHYLPHTHALATE	BDL	10
FLOURENE	BDL	10
BENZO(B)FLUORANTHENE	BDL	10
BENZO(K)FLUORANTHENE	BDL	10
BENZO(A)PYRENE	BDL	10
INDENO(1,2,3-CD)PYRENE	BDL	10
DIBENZ(A,H)ANTHRACENE	BDL	10
BENZO(G,H,I)PERYLENE	BDL	10

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100113

PARAMETER	RESULTS	DATE COMPLETED	EPA METHOD	DETECTION LIMIT	ANALYST
SAMPLE IDENTITY: SAMPLE #03					
CYANIDE-T	<0.75	11/25/92	9010	0.75	CL
ANTIMONY	<50.0	12/02/92	7040	50.0	CC
ARSENIC	<0.5	12/01/92	7060	0.5	JC/CC
BERYLLIUM	<1.5	11/30/92	7090	1.5	FL
CADMIUM	<1.5	11/30/92	7130	1.5	CC
CHROMIUM	<3.5	11/30/92	7190	3.5	CC
** COPPER	5.0	11/30/92	7210	3.5	CC
LEAD	<10.0	11/30/92	7420	10.0	CC
MERCURY	<0.100	11/30/92	7471	0.100	CL
NICKEL	7.0	12/01/92	7520	5.0	CC
* SELENIUM	<0.5	12/02/92	7740	0.5	JC/CC
SILVER	<2.5	12/01/92	7760	2.5	CC
THALLIUM	<35.0	11/30/92	7840	35.0	FL
ZINC	6.7	11/30/92	7950	1.5	CC

** DUPLICATE SAMPLE RESULT WASNOT WITHIN +/- 50% DUE TO SAMPLE MATRIX.
* SELENIUM SPIKE RECOVERY WAS 33%.

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SEMIVOLATILE ORGANIC ANALYSIS
EPA METHOD 8270

CUSTOMER: GUARDIAN ENVIRONMENTAL

LAB#: K23-92-01

SAMPLE LOCATION: ZSCHIENGER REFINING

JOB#: 11538-E

SAMPLE IDENTITY: SAMPLE #03

CONTROL #: 5932

DATE SAMPLED: 11/20/92 REC'D: 11/23/92 DATE ANALYZED: 12/02/92

DATE EXTRACTED: 11/25/92 MATRIX: SOLID PERCENT MOISTURE: 18.46%

COMPOUND	CONCENTRATION -(UG/KG)	DETECTION LIMIT MULTIPLIER: (UG/KG) X 100
PHENOL	BDL	10
2 CHLOROPHENOL	BDL	10
1,4 DICHLOROPHENOL	BDL	10
1,3 DICHLOROPHENOL	BDL	10
1,2-DICHLOROPHENOL	BDL	10
BIS(2-CHLOROISOPROPYL)ETHER	BDL	10
N-NITROSO-DI-N-PROPYLAMINE	BDL	10
NAPTHALENE	BDL	10
2,4-DIMETHYLPHENOL	BDL	10
2,4-DICHLOROPHENOL	BDL	10
4-CHLOROANILINE	BDL	10
4-CHLORO-3-METHYLPHENOL	BDL	10
HEXACHLOROCYCLOBUTADIENE	BDL	10
2,4,6-TRICHLOROPHENOL	BDL	10
2-NITROANILINE	BDL	10
ACENAPHTHYLENE	BDL	10
3-NITROANILINE	BDL	10
ACENAPTHENE	BDL	10
4-NITROPHENOL	BDL	10
2,4 DINITROTOLUENE	BDL	10
4-NITROANILINE	BDL	10
4,6-DINITRO-2-METHYLPHENOL	BDL	10
N-NITROSODIPHENYLAMINE	BDL	10
HEXACHLOROBENZENE	BDL	10
PENTACHLOROPHENOL	BDL	10
PHENANTHRENE	BDL	10
ANTHRACENE	BDL	10
DI-N-BUTYLPHTHALATE	BDL	10
FLUORANTHENE	BDL	10
PYRENE	BDL	10
BUTYLBENZYLPHTHALATE	BDL	10
BENZO(A)ANTHRACENE	BDL	10
3,3'-DICHLOROBENZIDINE	BDL	10
CHRYSENE	BDL	10
BIS(2-ETHYLHEXYL)PHTHALATE	BDL	10
4-BROMOPHENYL-PHENYLETHER		

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VOLATILE ORGANIC ANALYSIS
EPA METHOD 8240

CUSTOMER: GUARDIAN ENVIRONMENTAL — LAB#: K23-92-01

SAMPLE LOCATION: ZSCHIENGER REFINING — JOB#: 11530-C

SAMPLE IDENTITY: 03 — CONTROL #: 5932

DATE SAMPLED: 11/20/92 — RECD: 11/23/92 — DATE ANALYZED: 12/04/92

MATRIX: SOLID — PERCENT MOISTURE: 16.46%

COMPOUND	CONCENTRATION (UG/KG)	DETECTION LIMIT MULTIPLIER: (UG/KG) X 50
CHLOROMETHANE	BDL	5
BROMOMETHANE	BDL	5
VINYL CHLORIDE	BDL	5
CHLOROETHANE	BDL	5
METYHLENE CHLORIDE	BDL	5
ACETONE	BDL	15
CARBON DISULFIDE	BDL	5
TRICHLOROFLUOROMETHANE	BDL	5
1,1-DICHLOROETHENE	BDL	5
1,1-DICHLOROETHANE	BDL	5
TOTAL-1,2-DICHLOROETHENE	BDL	5
CHLOROFORM	BDL	5
1,2-DICHLOROETHANE	BDL	5
2-BUTANONE	BDL	5
1,1,1-TRICHLOROETHANE	BDL	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	5
BROMODICHLOROMETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
METHYL-TERTIARY-BUTYL ETHER	BDL	5
BROMOFORM	BDL	5
2-HEXANONE	BDL	5
4-METHYL-2-PENTANONE	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	BDL	5
CHLOROBENZENE	BDL	5
STYRENE	BDL	5
ETHYLBENZENE	BDL	5
TOTAL XYLENES	BDL	5

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CUSTOMER: GUARDIAN ENVIRONMENTAL   LAB#: K23-92-01

SAMPLE LOCATION: ZSCHIENGER REFINING   JOB#: 11538-E

SAMPLE IDENTITY: SAMPLE #03   CONTROL #: 5932

DATE SAMPLED: 11/20/92   REC'D: 11/23/92   DATE ANALYZED: 12/02/92

DATE EXTRACTED: 11/25/92   MATRIX: SOLID   PERCENT MOISTURE: 18.46%

COMPOUND	CONCENTRATION (UG/KG)	DETECTION LIMIT MULTIPLIER: (UG/KG) X 100
DI-N-OCTYLPHTHALATE	BDL	10
DIMETHYLPHTHALATE	BDL	10
FLOURENE	BDL	10
BENZO[B]FLUORANTHENE	BDL	10
BENZO[K]FLUORANTHENE	BDL	10
BENZO[A]PYRENE	BDL	10
INDENO[1,2,3-CD]PYRENE	BDL	10
DIBENZ[A,H]ANTHRACENE	BDL	10
BENZO[G,H,I]PERYLENE	BDL	10

CERTIFIED BY: [signature]

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GUARDIAN ENVIRONMENTAL
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LABORATORY : K23-92-01
CONTROL : 5932

TEST PARAMETER	RESULTS	DATE COMPLETED	EPA METHOD	DETECTION LIMIT	ANALYST
SAMPLE IDENTITY: SAMPLE #04					
CYANIDE-T	<0.75	11/25/92	9010	0.75	CL
ANTIMONY	<50.0	12/02/92	7040	50.0	CC
ARSENIC	<0.5	12/01/92	7060	0.5	JC/CC
BERYLLIUM	<1.5	11/30/92	7090	1.5	FL
CADMIUM	<1.5	11/30/92	7130	1.5	CC
CHROMIUM	125.8	11/30/92	7190	3.5	CC
COPPER	1097.7	11/30/92	7210	3.5	CC
LEAD	11.8	11/30/92	7420	10.0	CC
MERCURY	0.142	11/30/92	7471	0.100	CL
NICKEL	194.1	12/01/92	7520	5.0	CC
SELENIUM	<0.5	12/02/92	7740	0.5	JC/CC
SILVER	<2.5	12/01/92	7760	2.5	CC
THALLIUM	<35.0	11/30/92	7840	35.0	FL
ZINC	10.7	11/30/92	7950	1.5	CC

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SEMIVOLATILE ORGANIC ANALYSIS
EPA METHOD 8270

CUSTOMER: GUARDIAN ENVIRONMENTAL — LAB#: K23-92-01

SAMPLE LOCATION: ZSCHIENGER REFINING — JOB#: 11538-E

SAMPLE IDENTITY: SAMPLE #04 — CONTROL #: 5932

DATE SAMPLED: 11/20/92 — REC'D: 11/23/92 — DATE ANALYZED: 12/02/92

DATE EXTRACTED: 11/25/92 — MATRIX: SOLID — PERCENT MOISTURE: 64.89%

COMPOUND	CONCENTRATION (UG/KG)	DETECTION LIMIT MULTIPLIER: (UG/KG) X 100
PHENOL	BDL	10
2-CHLOROPHENOL	BDL	10
1,4-DICHLOROPHENOL	BDL	10
1,3-DICHLOROPHENOL	BDL	10
1,2-DICHLOROPHENOL	BDL	10
BIS(2-CHLOROISOPROPYL)ETHER	BDL	10
N-NITROSO-DI-N-PROPYLAMINE	BDL	10
NAPTHALENE	BDL	10
2,4-DIMETHYLPHENOL	BDL	10
2,4-DICHLOROPHENOL	BDL	10
4-CHLOROANILINE	BDL	10
4-CHLORO-3-METHYLPHENOL	BDL	10
HEXACHLOROCYCLOBUTADIENE	BDL	10
2,4,5-TRICHLOROPHENOL	BDL	10
2-NITROANILINE	BDL	10
ACENAPHTHYLENE	BDL	10
3-NITROANILINE	BDL	10
ACENAPTHENE	BDL	10
4-NITROPHENOL	BDL	10
2,4-DINITROTOLUENE	BDL	10
4-NITROANILINE	BDL	10
4,6-DINITRO-2-METHYLPHENOL	BDL	10
N-NITROSODIPHENYLAMINE	BDL	10
HEXACHLOROBENZENE	BDL	10
PENTACHLOROPHENOL	BDL	10
PHENANTHRENE	BDL	10
ANTHRACENE	BDL	10
DI-N-BUTYLPHTHALATE	BDL	10
FLUORANTHENE	BDL	10
PYRENE	BDL	10
BUTYLBENZYLPHTHALATE	BDL	10
BENZO(A)ANTHRACENE	BDL	10
3,3'-DICHLOROBENZIDINE	BDL	10
CHYRSENE	BDL	10
BIS(2-ETHYLHEXYL)PHTHALATE	BDL	10
4-BROMOPHENYL-PHENYLETHER		

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VOLATILE ORGANIC ANALYSIS
EPA METHOD 8240

CUSTOMER: GUARDIAN ENVIRONMENTAL — LAB#: K23-92-01

SAMPLE LOCATION: ZSCHIENGER REFINING — JOB#: 11538-F

SAMPLE IDENTITY: 04 — CONTROL #: 5932

DATE SAMPLED: 11/20/92 — REC'D: 11/23/92 — DATE ANALYZED: 12/04/92

MATRIX: SOLID — PERCENT MOISTURE: 64.89%

COMPOUND	CONCENTRATION (UG/KG)	DETECTION LIMIT MULTIPLIER: (UG/KG) X 50
CHLOROMETHANE	BDL	5
BROMOMETHANE	BDL	5
VINYL CHLORIDE	BDL	5
CHLOROETHANE	BDL	5
METYHLENE CHLORIDE	BDL	5
ACETONE	BDL	15
CARBON DISULFIDE	BDL	5
TRICHLOROFLUOROMETHANE	BDL	5
1,1-DICHLOROETHENE	BDL	5
1,1-DICHLOROETHANE	BDL	5
TOTAL-1,2 DICHLOROETHENE	BDL	5
CHLOROFORM	BDL	5
1,2-DICHLOROETHANE	BDL	5
2-BUTANONE	BDL	5
1,1,1-TRICHLOROETHANE	BDL	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	5
BROMODICHLOROMETHANE	BDL	5
1,2 DICHLOROPROPANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
TRANS-1,3 DICHLOROPROPENE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
METHYL-TERTIARY-BUTYL ETHER	BDL	5
BROMOFORM	BDL	5
2-HEXANONE	BDL	5
4-METHYL-2 PENTANONE	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	BDL	5
CHLOROBENZENE	BDL	5
STYRENE	BDL	5
ETHYLBENZENE	BDL	5
TOTAL XYLENES	BDL	5

BDL=BELOW DETECTION LIMIT

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CUSTOMER: GUARDIAN ENVIRONMENTAL

LAB#: K23-92-01

SAMPLE LOCATION: ZSCHIENGER REFINING

JOD#: 11538-E

SAMPLE IDENTITY: SAMPLE #04

CONTROL #: 5032

DATE SAMPLED: 11/20/92 REC'D: 11/23/92 DATE ANALYZED: 12/02/92

DATE EXTRACTED: 11/25/92 MATRIX: SOLID PERCENT MOISTURE: 64.89%

COMPOUND	CONCENTRATION (UG/KG)	DETECTION LIMIT MULTIPLIER: (UG/KG) X 100
DI-N-OCTYLPHTHALATE	BDL	10
DIMETHYLPHTHALATE	BDL	10
FLOURENE	BDL	10
BENZO[B]FLUORANTHENE	BDL	10
BENZO[K]FLUORANTHENE	BDL	10
BENZO[A]PYRENE	BDL	10
INDENO[1,2,3-CD]PYRENE	BDL	10
DIBENZ[A,H]ANTHRACENE	BDL	10
BENZO[G,H,I]PERYLENE	BDL	10

CERTIFIED BY: _____

100121

ChemServe

GUARDIAN ENVIRONMENTAL
PAGE 5 OF 5

LABORATORY : K23-92-01
CONTROL : 5932

TEST PARAMETER	RESULTS	DATE COMPLETED	EPA METHOD	DETECTION LIMIT	ANALYST
SAMPLE IDENTITY: SAMPLE #05					
CYANIDE-T	3.69	11/25/92	9010	0.75	CL
ANTIMONY	<50.0	12/02/92	7040	50.0	CC
ARSENIC	<0.5	12/01/92	7060	0.5	JC/CC
BERYLLIUM	<1.5	11/30/92	7090	1.5	FL
CADMIUM	<1.5	11/30/92	7130	1.5	CC
CHROMIUM	419.6	11/30/92	7190	3.5	CC
COPPER	190.3	11/30/92	7210	3.5	CC
LEAD	12.0	11/30/92	7420	10.0	CC
MERCURY	<0.100	11/30/92	7471	0.100	CL
NICKEL	99.4	12/01/92	7520	5.0	CC
SELENIUM	<0.5	12/02/92	7740	0.5	JC/CC
SILVER	100.4	12/01/92	7760	2.5	CC
THALLIUM	<35.0	11/30/92	7840	35.0	FL
ZINC	18.2	11/30/92	7950	1.5	CC

100122

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SEMIVOLATILE ORGANIC ANALYSIS
EPA METHOD 8270

CUSTOMER: GUARDIAN ENVIRONMENTAL

LAB#: K23-92-01

SAMPLE LOCATION: ZSCHIENGER REFINING

JOB#: 11538-E

SAMPLE IDENTITY: SAMPLE #05

CONTROL #: 5932

DATE SAMPLED: 11/20/92 REC'D: 11/23/92 DATE ANALYZED: 12/02/92

DATE EXTRACTED: 11/25/92 MATRIX: SOLID PERCENT MOISTURE: 24.06%

COMPOUND	CONCENTRATION (UG/KG)	DETECTION LIMIT MULTIPLIER: (UG/KG) X 100
PHENOL	BDL	10
2-CHLOROPHENOL	BDL	10
1,4-DICHLOROPHENOL	BDL	10
1,3-DICHLOROPHENOL	BDL	10
1,2-DICHLOROPHENOL	BDL	10
BIS(2-CHLOROISOPROPYL)ETHER	BDL	10
N-NITROSO-DI-N-PROPYLAMINE	BDL	10
NAPTHALENE	BDL	10
2,4 DIMETHYLPHENOL	BDL	10
2,4-DICHLOROPHENOL	BDL	10
4-CHLOROANILINE	BDL	10
4-CHLORO-3-METHYLPHENOL	BDL	10
HEXACHLOROCYCLOBUTADIENE	BDL	10
2,4,5-TRICHLOROPHENOL	BDL	10
2-NITROANILINE	BDL	10
ACENAPHTHYLENE	BDL	10
3-NITROANILINE	BDL	10
ACENAPTHENE	BDL	10
4-NITROPHENOL	BDL	10
2,4-DINITROTOLUENE	BDL	10
4-NITROANILINE	BDL	10
4,6-DINITRO-2-METHYLPHENOL	BDL	10
N-NITROSODIPHENYLAMINE	BDL	10
HEXACHLOROBENZENE	BDL	10
PENTACHLOROPHENOL	BDL	10
PHENANTHRENE	BDL	10
ANTHRACENE	BDL	10
DI-N-BUTYLPHTHALATE	BDL	10
FLUORANTHENE	BDL	10
PYRENE	BDL	10
BUTYLBENZYLPHTHALATE	BDL	10
BENZO(A)ANTHRACENE	BDL	10
3,3'-DICHLOROBENZIDINE	BDL	10
CHYRSENE	BDL	10
BIS(2-ETHYLHEXYL)PHTHALATE	BDL	10
4-BROMOPHENYL-PHENYLETHER		

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CONTINUED: 1 OF 2 PAGES

ChemServe

VOLATILE ORGANIC ANALYSIS
EPA METHOD 8240

CUSTOMER: GUARDIAN ENVIRONMENTAL — LAB#: K23-92-01

SAMPLE LOCATION: ZSCHIENGER REFINING — JOB#: 11538-E

SAMPLE IDENTITY: 05 — CONTROL #: 5932

DATE SAMPLED: 11/20/92 — REC'D: 11/23/92 — DATE ANALYZED: 12/04/92

MATRIX: SOLID — PERCENT MOISTURE: 24.06%

COMPOUND	CONCENTRATION (UG/KG)	DETECTION LIMIT MULTIPLIER: (UG/KG) X 50
CHLOROMETHANE	BDL	5
BROMOMETHANE	BDL	5
VINYL CHLORIDE	BDL	5
CHLOROETHANE	BDL	5
METYHLENE CHLORIDE	BDL	5
ACETONE	BDL	15
CARBON DISULFIDE	BDL	5
TRICHLOROFLUOROMETHANE	BDL	5
1,1-DICHLOROETHENE	BDL	5
1,1-DICHLOROETHANE	BDL	5
TOTAL-1,2-DICHLOROETHENE	BDL	5
CHLOROFORM	BDL	5
1,2-DICHLOROETHANE	BDL	5
2-BUTANONE	BDL	5
1,1,1-TRICHLOROETHANE	BDL	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	5
BROMODICHLOROMETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
METHYL-TERTIARY-BUTYL ETHER	BDL	5
BROMOFORM	BDL	5
2-HEXANONE	BDL	5
4-METHYL-2-PENTANONE	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	BDL	5
CHLOROBENZENE	BDL	5
STYRENE	BDL	5
ETHYLBENZENE	BDL	5
TOTAL XYLENES	BDL	5

BDL=BELOW DETECTION LIMIT

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CERTIFIED BY: _____

ChemServe

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CUSTOMER: GUARDIAN ENVIRONMENTAL

LAB#: K23-92-01

SAMPLE LOCATION: ZSCHIENGER REFINING

JOB#: 11538-E

SAMPLE IDENTITY: SAMPLE #05

CONTROL #: 5932

DATE SAMPLED: 11/20/92 REC'D: 11/23/92 DATE ANALYZED: 12/02/92

DATE EXTRACTED: 11/25/92 MATRIX: SOLID PERCENT MOISTURE: 24.06%

COMPOUND	CONCENTRATION (UG/KG)	DETECTION LIMIT MULTIPLIER: (UG/KG) X 100
DI-N-OCTYLPHTHALATE	BDL	10
DIMETHYLPHTHALATE	BDL	10
FLOURENE	BDL	10
BENZO[B]FLUORANTHENE	BDL	10
BENZO[K]FLUORANTHENE	BDL	10
BENZO[A]PYRENE	BDL	10
INDENO[1,2,3-CD]PYRENE	BDL	10
DIBENZ[A,H]ANTHRACENE	BDL	10
BENZO[G,H,I]PERYLENE	BDL	10

CERTIFIED BY: _____

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GUARDIAN ENVIRONMENTAL
PAGE 6 OF 6

LABORATORY : K23-92-01
CONTROL : 5932

TEST PARAMETER	RESULTS	DATE COMPLETED	EPA METHOD	DETECTION LIMIT	ANALYST
SAMPLE IDENTITY: SAMPLE #06					
CYANIDE-T	<0.75	11/25/92	9010	0.75	CL
ANTIMONY	<50.0	12/02/92	7040	50.0	CC
ARSENIC	1.5	12/01/92	7060	0.5	JC/CC
BERYLLIUM	<1.5	11/30/92	7080	1.5	FL
CADMIUM	<1.5	11/30/92	7130	1.5	CC
CHROMIUM	10.9	11/30/92	7190	3.5	CC
COPPER	1033.3	11/30/92	7210	3.5	CC
LEAD	32.1	11/30/92	7420	10.0	CC
MERCURY	0.109	11/30/92	7471	0.100	CL
NICKEL	30.7	12/01/92	7520	5.0	CC
SELENIUM	<0.5	12/02/92	7740	0.5	JC/CC
SILVER	115.7	12/01/92	7760	2.5	CC
THALLIUM	<35.0	11/30/92	7840	35.0	FL
ZINC	32.3	11/30/92	7950	1.5	CL

ALL ANALYSES PERFORMED IN ACCORDANCE WITH U.S.E.P.A./STANDARD METHODS FOR THE EXAMINATION OF WATER & WASTE WATER. ALL RESULTS ARE IN (mg/Kg) EXCEPT AS NOTED.

CERTIFIED BY: _____
JAY W. CRYSTAL
LABORATORY DIRECTOR

CHEMSERVE COMPANY OFFICIAL SEAL STATE CERTIFIED

100126

ChemServe

SEMIVOLATILE ORGANIC ANALYSIS
EPA METHOD 8270

CUSTOMER: GUARDIAN ENVIRONMENTAL — LAB#: K23-92-01

SAMPLE LOCATION: ZSCHIENGER REFINING — JOB#: 11538-E

SAMPLE IDENTITY: SAMPLE #06 — CONTROL #: 5932

DATE SAMPLED: 11/20/92 — REC'D: 11/23/92 — DATE ANALYZED: 12/02/92

DATE EXTRACTED: 11/25/92 — MATRIX: SOLID — PERCENT MOISTURE: 36.74%

COMPOUND	CONCENTRATION (UG/KG)	DETECTION LIMIT MULTIPLIER: (UG/KG) X 100
PHENOL	BDL	10
2-CHLOROPHENOL	BDL	10
1,4-DICHLOROPHENOL	BDL	10
1,3-DICHLOROPHENOL	BDL	10
1,2-DICHLOROPHENOL	BDL	10
BIS(2-CHLOROISOPROPYL)ETHER	BDL	10
N-NITROSO-DI-N-PROPYLAMINE	BDL	10
NAPTHALENE	BDL	10
2,4-DIMETHYLPHENOL	BDL	10
2,4-DICHLOROPHENOL	BDL	10
4-CHLOROANILINE	BDL	10
4-CHLORO-3-METHYLPHENOL	BDL	10
HEXACHLOROCYCLOBUTADIENE	BDL	10
2,4,6-TRICHLOROPHENOL	BDL	10
2-NITROANILINE	BDL	10
ACENAPHTHYLENE	BDL	10
3-NITROANILINE	BDL	10
ACENAPTHENE	BDL	10
4-NITROPHENOL	BDL	10
2,4-DINITROTOLUENE	BDL	10
4-NITROANILINE	BDL	10
4,6-DINITRO-2-METHYLPHENOL	BDL	10
N-NITROSODIPHENYLAMINE	BDL	10
HEXACHLOROBENZENE	BDL	10
PENTACHLOROPHENOL	BDL	10
PHENANTHRENE	BDL	10
ANTHRACENE	BDL	10
DI-N-BUTYLPHTHALATE	BDL	10
FLUORANTHENE	BDL	10
PYRENE	BDL	10
BUTYLBENZYLPHTHALATE	BDL	10
BENZO(A)ANTHRACENE	BDL	10
3,3'-DICHLOROBENZIDINE	BDL	10
CHYRSENE	BDL	10
BIS(2-ETHYLHEXYL)PHTHALATE	BDL	10
4-BROMOPHENYL-PHENYLETHER		

CONTINUED. 1 OF 2 PAGES

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VOLATILE ORGANIC ANALYSIS
EPA METHOD 8240

CUSTOMER: GUARDIAN ENVIRONMENTAL — LAB#: K23-92-01

SAMPLE LOCATION: ZSCHIENGER REFINING — JOB#: 11538-E

SAMPLE IDENTITY: 06 — CONTROL #: 5932

DATE SAMPLED: 11/20/92 — RECD: 11/23/92 — DATE ANALYZED: 12/04/92

MATRIX: SOLID — PERCENT MOISTURE: 36.74%

COMPOUND	CONCENTRATION (UG/KG)	DETECTION LIMIT MULTIPLIER: (UG/KG) X 50
CHLOROMETHANE	BDL	5
BROMOMETHANE	BDL	5
VINYL CHLORIDE	BDL	5
CHLOROETHANE	BDL	5
METYHLENE CHLORIDE	BDL	5
ACETONE	BDL	15
CARBON DISULFIDE	BDL	5
TRICHLOROFLUOROMETHANE	BDL	5
1,1-DICHLOROETHENE	BDL	5
1,1-DICHLOROETHANE	BDL	5
TOTAL-1,2-DICHLOROETHENE	BDL	5
CHLOROFORM	BDL	5
1,2-DICHLOROETHANE	BDL	5
2-BUTANONE	BDL	5
1,1,1 TRICHLOROETHANE	BDL	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	5
BROMODICHLOROMETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
CIS 1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
TRANS 1,3-DICHLOROPROPENE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
METHYL-TERTIARY-BUTYL ETHER	BDL	5
BROMOFORM	BDL	5
2-HEXANONE	BDL	5
4-METHYL-2-PENTANONE	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	BDL	5
CHLOROBENZENE	BDL	5
STYRENE	BDL	5
ETHYLBENZENE	BDL	5
TOTAL XYLENES	BDL	5

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BDL=BELOW DETECTION LIMIT

CERTIFIED BY:

ChemServe

CUSTOMER: GUARDIAN ENVIRONMENTAL

LAB#: K23-92-01

SAMPLE LOCATION: ZSCHIENGER REFINING

JOB#: 11538-E

SAMPLE IDENTITY: SAMPLE #06

CONTROL #: 5932

DATE SAMPLED: 11/20/92 REC'D: 11/23/92 DATE ANALYZED: 12/02/92

DATE EXTRACTED: 11/25/92 MATRIX: SOLID PERCENT MOISTURE: 36.74%

COMPOUND	CONCENTRATION (UG/KG)	DETECTION LIMIT MULTIPLIER: (UG/KG) X 100
DI-N-OCTYLPHTHALATE	BDL	10
DIMETHYLPHTHALATE	BDL	10
FLOURENE	BDL	10
BENZO[B]FLUORANTHENE	BDL	10
BENZO[K]FLUORANTHENE	BDL	10
BENZO[A]PYRENE	BDL	10
INDENO[1,2,3-CD]PYRENE	BDL	10
DIBENZ[A,H]ANTHRACENE	BDL	10
BENZO[G,H,I]PERYLENE	BDL	10

CERTIFIED BY: Carl

100129

Compound	Sample Number: WATER upstream 1	WATER DOWNSTREAM 2	sediment upstream 3	Sediment downstream 4	soil on site 5	soil onsite 6	Detection Limit
CYANIDE					3.69		0.03 mg/L
ARSENIC						1.5	0.010 mg/L
Chromium				125.8	419.6	10.9	0.07 mg/L
Copper			5.0	1097.7	190.3	10339	0.07 mg/L
Lead				11.8	12.0	32.1	0.20 mg/L
Mercury	0.0007	0.0013		0.142		0.109	0.0005 mg/L
Nickel	0.11	0.13	7.0	194.1	99.4	30.7	0.10 mg/L
Silver					100.4	115.7	0.05 mg/L
Zinc	0.07	0.08	6.7	10.7	18.2	32.3	0.03 mg/L
Ethylbenzene	15						5 ug/L
Total xylene	46						5 ug/L
Chloroform							5 ug/L
1,1,1 Trichloroethane		39					5 ug/L
Ethene							
Toluene		12					5 ug/L
1,2 Dichloroethane		43					5 ug/L
Benzene		13					5 ug/L

100130

Confirmation of Verbal Authorization for the Zschiegner Refining Co. Site, Howell Township, Monmouth County, New Jersey

Dilshad J. Perera, On-Scene Coordinator
Response and Prevention Branch

Kathleen C. Callahan, Director
Emergency and Remedial Response Division

Richard C. Salkie, Associate Director for
Removal and Emergency Preparedness Programs

I. PURPOSE

This memorandum is written to confirm the verbal approval given by Kathleen C. Callahan, Director of ERRD on November 02, 1992, authorizing a $250,000 project ceiling to initiate site stabilization activities. From the project ceiling, $200,000 is for mitigating contracts.

The site came to the attention of the environmental regulatory agencies as a result of a drug raid conducted by the US Drug Enforcement Agency on October 31, 1992. The U.S. Environmental Protection Agency (EPA) responded to the site on November 02, 1992. Upon evaluation of the conditions at the site, the OSC deemed it necessary to take immediate actions. During that time, the State of New Jersey Department of Environmental Protection and Energy (NJDEPE) requested that EPA conduct a removal action under the provisions of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) as amended by the Superfund Reauthorization Act (SARA).

II. BACKGROUND

A. Site Description

Zschiegner Refining Company was an active precious metal recovery operation, until the arrest of the owner/operator. According to local/state officials, the facility has been operating since the early 60's. The principal precious metals recovered were gold, silver, platinum and nickel. According to local and state officials the raw materials were received on consignment.

The site consists of a 230 ft. by 30 ft. metal building. A chainlink fence with barbed-wire surrounds the building. There are two distinct wooded areas that appear to be stressed due to surface discharge. Potable water for the site was obtained from an on-site well. The facility utilized a septic tank rather than a municipal sewer line.

The facility is located in a residential area. The nearest residence is within 100 ft. of the building; two additional residences are located within 100 yds., these three homes receive their potable water from private wells. There is a large subdivision directly across the street from the site.

The site is situated between two brooks, the Ground Hog and Haystack. Both brooks drain into the Metedeconk River, approximately 4 miles. The Metedeconk serves as a source of potable for Brick Township. The Haystack Brook flows through the facility property.

B. Quantities and Types of Known Hazardous Materials

Approximately 1,400 containers of lab chemicals have been identified as being present; included are cans of anhydrous ether, sodium peroxide and chloroform.

There are approximately 2,000 gallons of acids, bases and cyanide solutions in open vats.

C. Threat of Public Exposure

There is threat of a fire/explosion due to the presence sodium peroxide (reacts violently with water) and anhydrous ether (could potentially be shock sensitive if crystallized). Threat of cyanide exposure also exists due to the presence of acids and cyanide solutions; furthermore, a drum of sodium cyanide has been identified.

IV. PROPOSED ACTIONS

A. Proposed Actions

24-hr site security has been established. Immediate actions will be to stabilize the site. All free standing liquids will be transferred into stable containers. All lab chemicals and small containers will be lab-packed. All containers will be staged in such a way as to minimize a threat of incompatible materials coming into contact.

V. RECOMMENDATIONS

Conditions at the Zschiegner Ref. Co. site meet the criteria for a removal action consistent with 40 CFR 300.415(b) of the National Oil and Hazardous Substances Contingency Plan.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION II

JACOB K. JAVITS FEDERAL BUILDING

NEW YORK, NEW YORK 10278

DATE: DEC 23 1992

SUBJECT: Request for Ceiling Increase and Confirmation of Verbal Approval for the Zschiegner Refining Company Site, Howell Township, Monmouth County, New Jersey - **ACTION MEMORANDUM**

FROM: Dilshad J. Perera, On-Scene Coordinator
Response and Prevention Branch

TO: Constantine Sidamon-Eristoff
Regional Administrator

THRU: Kathleen C. Callahan, Director
Emergency and Remedial Response Division

Site ID No.: 8E

I. PURPOSE

The purpose of this action memorandum is to request a ceiling increase and confirmation of the verbal approval granted on November 2, 1992, to conduct a removal action at the Zschiegner Refining Company located at 1442 Maxim-Southard Road, Howell Twp., Monmouth Co., New Jersey. On November 2, 1992, the Removal and Emergency Preparedness Programs received a verbal request from the State of New Jersey Department of Environmental Protection and Energy (NJDEPE) to conduct a removal action under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) as Amended, 42 U.S.C. 9604(a) at the Zschiegner site.

This Action Memorandum recommends that a removal action be conducted pursuant to CERCLA to secure and stabilize the site by conducting such activities as inventorying, sampling for disposal and securing all containers on-site. A second removal action will be requested to dispose of the hazardous substances found on-site.

This Action Memorandum will also serve to document the verbal authorization given by Kathleen Callahan, Director, Emergency and Remedial Response Division on November 2, 1992. The total project ceiling currently authorized is $250,000, with a mitigation ceiling of $200,000.

II. SITE CONDITIONS AND BACKGROUND

The Federal Drug Enforcement Agency (DEA) conducted a drug raid at the facility on suspicions of the illegal manufacture of methamphetamine on October 31, 1992 and arrested the owner/operator. During the removal of drug related chemicals, DEA's clean-up contractor improperly bulked chemicals, causing a reaction. The Howell Twp. Environmental Task Force (ETF) was called to the scene. ETF noted that in addition to the methamphetamine manufacture, the owner operated a precious metal recovery business. ETF found numerous refining related chemicals on-site, many in deteriorated condition, and notified NJDEPE. EPA became aware of the situation when DEA's contractor requested a temporary EPA Resource Conservation Recovery Act (RCRA) hazardous waste generators identification number.

On November 2, 1992, EPA responded to the site. EPA found numerous containers of chemicals stored in extremely unsafe conditions. EPA observed many open vats and containers of liquids and numerous lab-pack size containers of chemicals in deteriorating condition. A container labeled sodium peroxide, a water-reactive chemical, had exuded its contents. Water from a recent rain storm was observed to be leaking from a hole in the roof onto the floor in close proximity to open containers of liquids. EPA noted erosion and crystalline formation on the floor under open vats of liquids. Many liquids were stored in household-type plastic garbage cans. EPA also observed many containers of liquids on an outside loading dock and evidence of erosion of the loading dock under some of the containers. EPA also identified several suspected surface discharge areas outside of the building.

A NJDEPE official on site on November 2, 1992, verbally requested that EPA conduct a removal action. Due to the amount of suspected hazardous substances stored in such unsafe conditions and the evidence of what appeared to be past releases at the site, the EPA Response and Prevention Branch requested verbal authorization on November 2, 1992 to conduct site stabilization through a removal action.

A. Site Description

1. Removal Site Evaluation

Zschiegner Refining Co. is a 6.1 acre property with a single

metal building. Zschiegner Refining Co. was an operating precious metal recovery facility until the arrest of the owner/operator on suspicion of illegal manufacture of methamphetamine at the site.

Inside the building, there are numerous open vats and garbage bins containing approximately 2,200 gallons of liquids. Approximately 2,000 gallons of these materials have a pH of 2.0 or less, as checked with a pH meter.

In addition, there are approximately 1,400 lab-pack size containers. Many of these containers exhibit crystal growth around the lids. One in particular, a container of sodium peroxide has exuded its content; it appears that it may have been slowly reacting with moisture in the atmosphere. Sodium peroxide reacts violently with water. In general, peroxides tend to become highly unstable and shock sensitive as it ages. Two rusty containers, labeled anhydrous ether, have been identified. Furthermore, there are numerous intermediate sized containers, flasks and beakers containing chemicals.

Most of the containers are unlabeled. Many of those that do have labels, are not legible. There are numerous plastic drums, both 55 and 35 gallons, containing nitric acid, acetic acid, hydrochloric acid and ammonium hydroxide. A drum labeled sodium cyanide has been identified, and is in close proximity to the acids. Several compressed gas cylinders are also located in the building.

The building floor, particularly around the vats, show evidence of erosion. Crystal formations beneath some of the vats were noted. There is also evidence of fire damage to the building.

The building has a loading platform that is open to the environment. There are large quantities of glass carboys containing dark orange liquid, along with several large fiber-glass holding tanks and plastic drums on the platform. The plastic drums contain corrosives as indicated by drum labels. Severe erosion is evident throughout the wall of the loading platform.

The building's basement contains numerous glass containers and plastic drums. Crystal formation on the neck of many of the glass containers was noted.

Three suspected surface discharge areas have been identified. One of the discharge areas emanates from a collapsed cesspool. When the collapsed cesspool was uncovered, areas of green discoloration of soil were revealed.

2. <u>Physical Location</u>

The site is located in a residential area. Three homes are located to the southwest of the site, two of whom share property boundaries. The nearest residence is within 50 yards of the building. These homes, as with the site, obtain their water from private wells. Monmouth County Health Department sampled all four wells on November 5, 1992. EPA has received the organic data from the on-site well, no organic contaminants were detected above the method detection limit.

Directly across from Maxim-Southard Road, there is a large subdivision that extends to US Highway 9. The nearest home in this subdivision is within 200 yards. Another large subdivision is located approximately within 0.25 miles, on Maxim-Southard Road. Both subdivisions are on municipal water. According to municipal utilities authorities, no abnormalities have been discovered with the water supply.

Haystack Brook flows through the property and comes within 100 yards of the building. A second brook, Ground Hog, is within 0.25 miles. The site is situated between the two brooks. Both brooks flow into the Metedeconk River, approximately 4 miles from the site. Metedeconk River serves as a drinking water supply for Brick Township.

3. Site Characteristics

The Zschiegner Refining Company, a 6.1 acre property located at 1442 Maxim-Southard Road, Howell Twp., Monmouth County, New Jersey 07731, was involved in recovery of precious metals such as gold, silver, platinum and nickel. The site consists of a metal building, approximately 230 feet by 30 feet surrounded by a chain-link fence. The area within the fence encompasses approximately 2.5 acres.

The precious metal recovery operations at this site were established in the early sixties, according to local officials. The cessation, if any, of the operation before the arrest of the owner on drug charges, is unknown. EPA has some information, however, that the owner received at the site certain precious metal recovery materials on consignment a few weeks prior to his arrest.

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

There are numerous chemicals stored in open vats and plastic garbage bins, which are not labeled. Testing with a pH meter indicated approximately 2,000 gallons with a pH of 2.0 or less. There are approximately 1,600 gallons of liquid that are basic. The plastic garbage bins do not qualify as proper chemical storage containers. The floor around the open vats show signs of corrosion and the integrity of these containers is questionable.

There are approximately 1,400 lab-pack size containers on-site. In many cases, the labeling on these containers is not legible. Furthermore, many of these containers exhibit crystal formation around the lids. One case in particular is a container of sodium peroxide, approximately a 12 ounce tin, that has exuded its contents. Sodium peroxide reacts violently with water, acids and metal fines, peroxides in general are highly unstable if not properly stored and handled. During the initial site entry, rain water was noted falling within 2 feet of this area, due to a leaky roof. Two containers of anhydrous ether have thus far been identified during the initial site stabilization action.

The loading platform has vast quantities of glass carboys staged upon it. A significant number have a dark orange to brown liquid. There are numerous fiberglass holding tanks, the contents of which have yet to be determined. Since the loading platform is exposed to the environment, a failure of any of these containers will lead to a direct release of hazardous material into the environment.

There is evidence of past releases having occurred at the site. The loading platform has areas of severe corrosion. Two such areas are located directly beneath two fiberglass holding tanks. There are also three distinct areas in which surface discharge is suspected of having taken place. Two such areas lead to the Haystack Brook, which flows through the property. These areas are generally delineated by a band of stressed vegetation, darkened foliage on the ground and bleached soil.

A collapsed cesspool, a pit lined with cinder blocks and concrete lid, has been identified within the fenced area and between the building and the Haystack Brook. Greenish material was noted inside the collapsed area. One of the suspected surface discharge areas emanates from the collapsed cesspool.

The threat of fire and explosion is likely due to the deteriorating conditions of potentially explosive materials present on site, such as ether and sodium peroxide. In addition, due to the presence of cyanides and acids, the potential for incompatible materials coming into contact is possible, especially in light of the fact that vast quantities of acids being stored in plastic garbage bins. These conditions present an imminent threat of a release of hazardous substances.

The following hazardous substances have been identified at the site:

Hazardous Substance	Statutory Source of Designation as a Hazardous Substance

Sodium peroxide	RCRA[1] Section 3001
Anhydrous ether	RCRA[1] Section 3001
Acidic wastes	RCRA[1] Section 3001
Sodium hydroxide	CWA[2] Section 311 (b) (4)
Sodium cyanide	CWA[2] Section 311 (b) (4) RCRA[1] Section 3001
Chloroform	CWA[2] Section 311 (b) (4) CAA[3] Section 112 RCRA[1] Section 3001

[1] Resource Conservation and Recovery Act
[2] Clean Water Act
[3] Clean Air Act

These hazardous substances are acutely toxic, chronically toxic, corrosive, reactive and/or flammable.

Although most containers on-site are clearly identified, markings and labels on some containers have either been removed or are illegible due to residues on the sides of the containers. These containers will be treated as unknown substances.

The potential health effects from the compounds are identified in the following chart:

SUMMARY OF POTENTIAL TOXICOLOGICAL EFFECTS OF SELECTED IDENTIFIED COMPOUNDS

	Carcinogenicity	Teratogenic	Mutagenic	Toxic by Inhalation, Ingestion, or Dermal Contact	Central Nervous System Effects	Eye, Skin, Respiratory or Mucous Membrane Irritant
Sodium Peroxide						X
Acidic Wastes						X
Sodium Hydroxide						X
Sodium Cyanide						X
Chloroform	X	X	X	X	X	X

5. National Priorities List Status

The site is currently not listed on the National Priorities List (NPL).

B. Other Actions to Date

1. Previous Actions

The DEA conducted a drug raid at the subject facility on October 31, 1992. DEA's clean-up contractor overpacked and sampled for disposal the chemicals related to the methamphetamine manufacture. DEA will dispose of these drums upon receiving approval from a disposal facility.

ETF was called to the scene when DEA's contractor improperly bulked chemicals resulting in an uncontrolled reaction.

2. Current Actions

There are no private removal actions currently being performed at this site.

C. State and Local Authorities' Roles

1. State and Local Actions to Date

There have apparently been no state or local mitigation activities conducted at this site. However, the Monmouth County Health Department collected four well-water samples from the immediate area. One of these samples was taken from the on-site well. The samples were analyzed for organics, heavy metals and cyanides. EPA received copies of the raw data of all sampling results on December 18, 1992. EPA is currently reviewing the data and is awaiting the sampling plan and Quality Assurance/Quality Control validation of the results. EPA has received organic data from the on-site well; no organics were detected above the method detection level.

2. Potential for Continued State/Local Response

Neither NJDEPE or local government have the resources available to do the necessary removal action at this site. Thus, these organizations will act in a support role throughout the proposed removal. EPA organized the formation of a committee consisting of NJDEPE, Monmouth County Health Department, ETF, Howell Twp. First Aid Squad, Howell Twp. Administrator and Howell Twp. Office of Emergency Management. The primary task of this committee is the development and implementation of a site-specific community emergency response plan. Secondly, the committee is tasked with addressing community concerns. The committee will convene at the

site command post once a week or as site conditions merit.

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

A. Threats To Public Health or Welfare

The most imminent threat posed to public health and welfare by this site is the release of toxic cyanide gas as a result of acids coming into contact with sodium cyanide and other cyanides present on-site.

A second potential threat is that of fire and explosion due to the presence of highly unstable chemicals such as sodium peroxide, anhydrous ether and chloroform. The building roof was noted to be leaking, one such area was within two feet of sodium peroxide, a water-reactive chemical.

A third possible threat is posed by direct human contact, particularly from the vast quantities of strong acids and cyanides, which are easily absorbed through the skin.

A further possible exposure route is from potential groundwater contamination. Residences south and east of the site obtain their potable water from private wells.

The nearest home is within 50 yards and shares a property line. Within a quarter mile radius there are approximately 500 hundred homes with two to three thousand people; within one mile radius there are approximately 1,500 homes with approximately 4,500 people. Within this mile radius lie two major highways in the State of New Jersey, Interstate 195 and US Highway 9.

B. Threats to the Environment

Due to the storage of strong acids in inappropriate containers, plastic garbage bins, the threat of release into the environment is likely from the failure of these containers.

The deteriorating condition of other containers found on site could also contribute to the release of chemicals into the environment.

There is evidence that release of chemicals has already taken place. The loading dock has areas of severe erosion, two such areas lie beneath two fiberglass tanks. There are also three distinct areas of stressed vegetation and bleached soil, two such areas lead to the Haystack Brook, which flows through the property.

The facility was not tied to the public sewerage system. Instead, a cesspool was utilized, which is composed of a pit

lined with cinder blocks and concrete lid. Upon location of the cesspool, it was discovered that the cesspool had collapsed; areas of green staining was noted within the collapsed cesspool. One of the areas, exhibiting stressed vegetation that leads to the Haystack Brook, emanates from the collapsed cesspool.

IV. ENDANGERMENT DETERMINATION

Actual or threatened releases of hazardous substances from this site, if not addressed by implementing the response action selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, or welfare, or the environment.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

1. Proposed Action Description

The purpose of this action memorandum is to afford site stabilization activities and to determine the extent and types of hazardous substances present on-site.

Site stabilization efforts will include the transferring of hazardous materials into proper containers, lab-packing of the laboratory chemicals, disposal sampling, determination of the extent of possible soil contamination and 24-hr site security.

A second Action Memorandum will be written for transportation and disposal of hazardous substances found on-site and the excavation and disposal of contaminated soil, if found to be present in defined areas.

2. Contribution to Remedial Performance

Although this site is not on the NPL, and no long term remedial action is currently planned, the action taken to date and those planned in this Action Memorandum are consistent with the requirements of Section 104(a)(2) of CERCLA.

3. Description of Alternative Technologies

The proposed actions in this Action Memorandum is to afford site stabilization activities. Alternative technologies are not being considered at the present time. Results of the container sampling will indicate the practicability of considering alternative technologies.

4. Applicable or Relevant and Appropriate Requirements (ARARs)

ARARs within the scope of the project, including RCRA and CERCLA regulations that pertain to the disposal of hazardous wastes, will be met to the extent practicable.

5. Project Schedule

The transferring of hazardous materials into appropriate containers and lab-packing operations should take approximately 3-5 months. Soil contamination will be evaluated in conjunction with site stabilization activities.

B. Estimated Costs

1. Extramural Costs:

Regional Allowance Costs: (Total Clean-up contractor Costs include labor, equipment, materials, and laboratory disposal analyses)	$ 750,000
Other Extramural Costs not Funded From the Regional Allowance:	
Total; TAT, including multiplier costs	$50,000
Subtotal, extramural costs	$800,000
Extramural Costs Contingency (20% of subtotal, extramural Costs)	$160,000
TOTAL, EXTRAMURAL COSTS (rounded to nearest $1,000)	$960,000
Intramural Costs:	
Intramural direct Costs	$80,000
Intramural Indirect Costs	$40,000
TOTAL, INTRAMURAL COSTS	$120,000
TOTAL, REMOVAL PROJECT CEILING	$1,080,000

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

Delayed action or no action could result in the release of hazardous substances into the environment, thereby exposing nearby residents to hazardous substances. Furthermore, unrestricted access onto the property could expose individuals by direct contact.

VII. OUTSTANDING POLICY ISSUES

There are no outstanding policy issues associated with this site.

VIII. ENFORCEMENT

An EPA Potentially Responsible Party (PRP) search has been requested for this site. (See attached confidential addendum).

IX. RECOMMENDATION

This decision document represents the selected Removal Action for the Zschiegner Ref. Co. Site in Howell Twp., New Jersey. This document was developed in accordance with CERCLA as amended, and not inconsistent with the NCP. This decision is based on the Administrative Record for the site. Conditions at the site meet the criteria for a removal action pursuant to Section 300.415(b)(2) of the NCP. The total project ceiling if approved will be $1,080,000 and includes funds verbally authorized on November 2, 1992. Of this total project ceiling, an estimated $550,000 comes from the Regional Advice of Allowance for FY-93. It is therefore recommended that you approve of this CERCLA removal funding request.

Please indicate your approval and authorization of funding for the Zschiegner site, pursuant to your authority delegated by Assistant Administrator J. Winston Porter, May 25, 1988, Redelegation Memorandum, Delegation Number R-14-1-A.

Approval: _____ Date: 12/30/92
Constantine Sidamon-Eristoff
Regional Administrator

Disapproval: _____ Date: _____
Constantine Sidamon-Eristoff
Regional Administrator

cc: (after approval is obtained)

W. Muszynski, 2DRA
K. Callahan, 2ERRD-DIR
R. Salkie, 2ERR-ADREPP
B. Sprague, 2ERR-RPB
G. Zachos, 2ERR-RAB
J. Frisco, 2ERR-DDNJP
J. Daloia, 2ERR-RPB-B
V. Pitruzzello, 2ERR-PS
W. Mugdan, 2ORC
D. Karlen, 2ORC
D. Schwenk, 2ORC
J. Marshall, 2EPD
R. Gherardi, 2OPM-FIN

P. Cutts, 2OPM-FAM
D. Deitrich, OS-210
T. Grier, OS-210
P. McKechnie, 2IG
C. Kelly, 2TATL
C. Moyik, 2ERR-PS
D. Triggs, NJDEPE

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION II

JACOB K. JAVITS FEDERAL BUILDING

NEW YORK, NEW YORK 10278

DATE: MAR 19 1993

SUBJECT: Request for Removal Action Phase II for the Zschiegner Refining Company Site, Howell Township, Monmouth County, New Jersey - **ACTION MEMORANDUM**

FROM: Dilshad J. Perera, On-Scene Coordinator
Response and Prevention Branch

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

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

Site ID No.: 8E

I. PURPOSE

The purpose of this action memorandum is to request and document the approval for the disposal of hazardous materials stabilized under the authority of the initial Action Memorandum signed on December 30, 1992, for the Zschiegner Refining Company Site located at 1442 Maxim-Southard Road, Howell Township, Monmouth County, New Jersey.

On November 2, 1992, the Removal and Emergency Preparedness Programs received a verbal request from the State of New Jersey Department of Environmental Protection and Energy (NJDEPE) to conduct a removal action under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) as Amended, 42 U.S.C. 9601 et seq. at the Zschiegner site.

The initial Action Memorandum approved on December 30, 1992, granted the authority to undertake site stabilization activities at the Zschiegner Ref. Co. site. This Action Memorandum recommends that a removal action be conducted to dispose of hazardous substances previously secured under the initial removal action and the disposal of contaminated soil.

II. SITE CONDITIONS AND BACKGROUND

The Federal Drug Enforcement Agency (DEA) conducted a drug raid at the facility on suspicions of the illegal manufacture of methamphetamine on October 31, 1992, and arrested the owner/operator. During the removal of drug related chemicals, DEA's clean-up contractor improperly bulked chemicals, causing a reaction. The Howell Twp. Environmental Task Force (ETF) was called to the scene. ETF noted that in addition to the methamphetamine manufacture, the owner operated a precious metal recovery business. Numerous refining related chemicals were found on-site, many in a deteriorated condition. Through ETF's involvement, NJDEPE was notified. The U.S. Environmental Protection Agency (EPA) became aware of the situation when DEA's contractor requested a temporary EPA Resource Conservation Recovery Act (RCRA) hazardous waste generators identification number. On November 2, 1992, EPA responded to the site. The NJDEPE official on-site verbally requested that EPA conduct a removal action.

Under the authority of the first action memorandum, all bulk hazardous substances were transferred into U.S. Department of Transportation (DOT) approved containers. The labpacking operation for small containers of hazardous substances found on-site was initiated on February 22, 1993.

A. Site Description

1. Removal Site Evaluation

Under the authority of the first action memorandum, approximately 2,000 gallons of acidic solutions having a pH of less than 2.0 and 1,600 gallons of basic solutions were transferred into approved containers. Approximately 1,400 small containers of hazardous substances have been lab-packed.

Three suspected surface areas where hazardous substances were believed to have been released, were identified. Six samples have been taken in this area, with high levels of silver, chromium and nickel detected.

2. Physical Location

The site is located in a residential area. Three homes are located southwest of the site, two of which share property boundaries. The nearest residence is within 50 yards of the building. These homes, as with the site, obtain their water from private wells. Monmouth County Health Department sampled all four wells on November 5, 1992. EPA has received the organic data from the on-site well and no organic contaminants were detected above the method detection limit.

Directly across from Maxim-Southard Road, there is a large subdivision that extends to US Highway 9. The nearest home in this subdivision is within 200 yards. Another large subdivision

is located approximately within 0.25 miles, on Maxim-Southard Road. Both subdivisions utilize municipal water. According to municipal utilities authorities, no abnormalities have been discovered in the water supply.

Haystack Brook flows through the property and comes within 100 yards of the building. A second brook, Ground Hog, is within 0.25 miles. The site is situated between the two brooks. Both brooks flow into the Metedeconk River, approximately 4 miles from the site. Metedeconk River serves as a drinking water supply for Brick Township.

3. Site Characteristics

Zschiegner Refining Inc. is a 6.1 acre property with a single metal building. The building is approximately 230 feet by 30 feet. Zschiegner Refining Inc. was an operating precious metal recovery facility until the arrest of the owner/operator on suspicion of illegal manufacture of methamphetamine at the site.

The precious metal recovery operations were established in the early sixties, according to local officials. According to the legal counsel representing the owner, precious metal recovery materials were received on consignment at the site a few weeks prior to the arrest of the owner.

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

Initially there were numerous chemicals stored in open vats and plastic garbage bins, which were not labeled. Testing with a pH meter indicated approximately 2,000 gallons with a pH of 2.0 or less and approximately 1,600 gallons of liquid with a pH in the basic range. The original plastic garbage bins did not qualify as proper chemical storage containers. The bulk liquids were transferred into DOT approved containers as part of the site stabilization activities. The concrete floor around the open vats showed signs of corrosion.

There were also approximately 1,400 small quantity hazardous substances containers (i.e., lab-packs) on-site. In many cases, the labeling on these containers were not legible. Furthermore, many of these containers exhibited crystal formation around the lids. The labpacking operation of these containers was initiated on February 22, 1993.

The assistance of the New Jersey State Police Bomb Squad was requested for the disposal of the potentially explosive and high reactivity items. Plans are being developed for the detonation.

The building's loading platform had approximately 140 glass carboys containing corrosive liquids staged upon it. As part of the site stabilization efforts, these containers were staged inside the building. There were two fiberglass holding tanks containing corrosive liquids. As part of the first removal

action, the contents from these tanks were also transferred into DOT approved drums.

There is evidence of past illegal releases of hazardous substances having occurred at the site. The loading platform has areas of severe corrosion. Two such areas are located directly beneath two fiberglass holding tanks. There are also three distinct areas in which discharge to the ground is suspected of having taken place. Two such areas lead to the Haystack Brook, which flows through the property. These areas are generally delineated by a band of stressed vegetation, darkened foliage on the ground and bleached soil.

A collapsed cesspool, a pit lined with cinder blocks and a concrete lid, has been identified within the fenced area and between the building and the Haystack Brook. Greenish material was noted inside the collapsed area. One of the suspected surface discharge areas emanates from the collapsed cesspool.

Fire and explosion is considered likely due to the deteriorating conditions of potentially explosive materials present on-site, such as ether and sodium peroxide. Due to the presence of cyanides and acids, a fire could lead to a serious threat of a release of these hazardous substances into the two brooks and surrounding soil.

The following hazardous substances have been identified at the site:

Hazardous Substance	Statutory Source of Designation as a Hazardous Substance
Sodium peroxide	RCRA[1] Section 3001
Anhydrous ether	RCRA[1] Section 3001
Acidic wastes	RCRA[1] Section 3001
Sodium hydroxide	CWA[2] Section 311 (b)(4)
Sodium cyanide	CWA[2] Section 311 (b)(4) RCRA[1] Section 3001
Chloroform	CWA[2] Section 311 (b)(4) CAA[3] Section 112 RCRA[1] Section 3001

[1] Resource Conservation and Recovery Act
[2] Clean Water Act
[3] Clean Air Act

These hazardous substances are acutely toxic, chronically toxic, corrosive, reactive and/or flammable.

Although most containers on-site are clearly identified, markings and labels on some containers have either been removed or are illegible due to residues on the sides of the containers. These containers will be treated as unknown substances.

The potential health effects from the compounds are identified in the following chart:

SUMMARY OF POTENTIAL TOXICOLOGICAL EFFECTS OF SELECTED IDENTIFIED COMPOUNDS

	Carcinogenicity	Teratogenic	Toxic by Inhalation, Ingestion, or Dermal Contact	Central Nervous System Effects	Eye, Skin, Respiratory or Mucous Membrane Irritant
Sodium Peroxide					X
Acidic Wastes					X
Sodium Hydroxide					X
Sodium Cyanide					X
Chloroform	X	X	X	X	X

5. National Priorities List Status

The site is currently not listed on the National Priorities List (NPL).

B. Other Actions to Date

1. Previous Actions

The DEA conducted a drug raid at the subject facility on October 31, 1992. DEA's clean-up contractor overpacked and sampled the chemicals related to the methamphetamine manufacture. DEA will dispose of these drums upon receiving approval from a disposal facility.

ETF was called to the scene when DEA's contractor improperly bulked chemicals resulting in an uncontrolled reaction.

EPA initiated a removal action on November 2, 1992, on verbal authorization from Kathleen C. Callahan, Director, Emergency and Remedial Response Division. The initial removal action approved was for site stabilization activities.

2. Current Actions

EPA is currently completing the site stabilization activities. The stabilization activities include the transfer of approximately 2,200 gallons of acidic solutions and 1,600 gallons of basic solutions and labpacking approximately 1,400 lab-size chemicals.

C. State and Local Authorities' Roles

1. State and Local Actions to Date

There apparently have not been any state or local mitigation activities undertaken at this site. However, the Monmouth County Health Department collected four well-water samples from the immediate area. One of these samples was taken from the on-site well. The samples were analyzed for organics, heavy metal and cyanides. In January 1993, EPA was furnished with copies of the analytical results for the four wells tested. Based on this analysis, no contaminants were currently at levels that would require remediation or well closure.

2. Potential for Continued State/Local Response

Neither NJDEPE or local government have the resources available to do the necessary removal action at this site. Thus, these organizations will continue to act in a support role throughout the proposed removal. EPA organized the formation of a committee consisting of NJDEPE, Monmouth County Health Department, ETF, Howell Twp. First Aid Squad, Howell Twp. Administrator and Howell Twp. Office of Emergency Management. The primary task of this committee is the development and implementation of a site-specific community emergency response plan. The committee is also tasked with addressing community concerns. The committee convenes at the site command post once a week or as site conditions merit.

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

A. Threats To Public Health or Welfare

The activity already completed under the authority granted by the first action memorandum was that of securing and site stabilization and not the removal of the hazardous substances present. Should the EPA conclude the removal action without the removal of the hazardous materials, the following threats still exists:

- The most imminent threat posed to public health and welfare by this site is the release of toxic cyanide gas as a result of acids coming into contact with sodium cyanide and other cyanides present on-site.

- That of fire and explosion due to the presence of highly unstable chemicals such as sodium peroxide, anhydrous ether and chloroform.

- By direct human contact, particularly from the vast quantities of strong acids and cyanides remaining on-site, which are easily absorbed through the skin.

An additional exposure route is from potential direct human contact with the soil and potential groundwater contamination. Residences south and east of the site obtain their potable water from private wells.

The nearest home is within 50 yards and shares a common property line. Within a quarter mile radius there are approximately 500 homes with 2,000-3,000 people; within one mile radius there are approximately 1,500 homes with approximately 4,500 people. Within this mile radius lie two major highways in the State of New Jersey, Interstate 195 and US Highway 9.

B. Threats to the Environment

The stabilization activities already completed offer only short term abatement of the threat of a release, since the hazardous substances still remain on-site. The volume and exact locations of contaminated soil by the illegal discharges is still unknown. As a result, this contaminated soil is still present and subject to erosion and runoff.

There is evidence that releases of chemicals have already taken place. The loading dock has areas of severe corrosion, two such areas lie beneath two fiberglass tanks. There are also three distinct areas of stressed vegetation and bleached soil, two such areas lead to the Haystack Brook, which flows through the property.

The facility was not connected to the public sewerage system. Instead, a cesspool was utilized, and consists of a pit lined with cinder blocks and a concrete lid. Upon location of the cesspool, it was discovered that the cesspool had collapsed; areas of green staining were noted within the collapsed cesspool. One of the areas, exhibiting stressed vegetation that leads to the Haystack Brook, emanates from the collapsed cesspool.

The building roof was initially noted to be leaking and was repaired. One interior area exposed to the elements from this leaking roof was within two feet of sodium peroxide, a water reactive chemical. This hazardous substance still remains on-site.

IV. ENDANGERMENT DETERMINATION

Actual or threatened releases of hazardous substances from this site, if not addressed by implementing the response action selected in this Action Memorandum, may present an imminent and

substantial endangerment to public health, or welfare, or the environment.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

1. Proposed Action Description

The proposed activity is that of the disposal of hazardous materials secured under the authority of the previous removal action including: The 2,200 gallons of acidic solutions, 1,600 gallons of basic solutions, 1,400 lab-packed containers and the potentially contaminated soil. In addition, some contaminated soil identified under this removal action will be treated on-site or properly disposed of at a RCRA approved disposal facility.

Due to time constraints under the initial removal action, the extent of soil contamination was not addressed. Therefore, additional soil sampling will be undertaken under phase II of the removal action.

2. Contribution to Remedial Performance

Although this site is not on the NPL, and no long term remedial action is currently planned, the action taken to date and those planned in this Action Memorandum are consistent with the requirements of Section 104(a)(2) of CERCLA.

3. Description of Alternative Technologies

Alternative technologies, such as the on-site neutralization of hazardous substances and soil washing will be considered if proved to be cost effective and efficient.

4. Applicable or Relevant and Appropriate Requirements (ARARs)

ARARs within the scope of the project, including RCRA and CERCLA regulations that pertain to the disposal of hazardous wastes, will be met to the extent practicable.

5. Project Schedule

The transportation and disposal of hazardous substances, previously secured, on-site hazardous substance treatment, soil sampling and disposal of contaminated soil is anticipated to take seven months.

B. Estimated Costs

Extramural Costs	Current Ceiling	Proposed Ceiling
Regional Allowance Costs: (Total Clean-up contractor Costs include labor, equipment, materials, and laboratory disposal analyses)	$750,000	$1,320,000
Other Extramural Costs not Funded From the Regional Allowance:		
Total; TAT/USCG, including multiplier costs	$50,000	$63,000
Subtotal, extramural costs	$800,000	$1,383,000
Extramural Costs Contingency (20% of subtotal, extramural Costs)	$160,000	$277,000
TOTAL, EXTRAMURAL COSTS (rounded to nearest $1,000)	$960,000	$1,660,000
Intramural Costs:		
Intramural direct Costs	$80,000	$160,000
Intramural Indirect Costs	$40,000	$80,000
TOTAL, INTRAMURAL COSTS	$120,000	$240,000
TOTAL, REMOVAL PROJECT CEILING	$1,080,000	$1,900,000

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

Delayed action or no action could result in the release of hazardous substances into the environment, thereby exposing nearby residents to hazardous substances. Furthermore, unrestricted access onto the property could expose individuals by direct contact.

VII. OUTSTANDING POLICY ISSUES

There are no outstanding policy issues associated with this site.

VIII. ENFORCEMENT

An EPA Potentially Responsible Party search has been requested for this site.

IX. RECOMMENDATION

This decision document represents the selected Removal Action for Phase II for the Zschiegner Ref. Co. Site in Howell Twp., New Jersey. This document was developed in accordance with CERCLA as amended, and not inconsistent with the NCP. This decision is based on the Administrative Record for the site. Conditions at the site meet the criteria for a removal action pursuant to Section 300.415(b)(2) of the NCP. The total project ceiling if approved will be $1,900,000 and includes funds authorized as of December 30, 1992. Of this total project ceiling, an estimated $550,000 comes from the Regional Advice of Allowance for FY-93. It is recommended that you approve of this CERCLA removal funding request.

Please indicate your approval and authorization of funding for the Zschiegner site, pursuant to your authority delegated by Assistant Administrator J. Winston Porter, May 25, 1988, Redelegation Memorandum, Delegation Number R-14-1-A.

Approval: _____ Date: 3/23/93
William J. Muszynski, P.E.
Acting Regional Administrator

Disapproval: _____ Date: _____
William J. Muszynski, P.E.
Acting Regional Administrator

cc: (after approval is obtained)

K. Callahan, 2DRA
G. Pavlou, 2ERRD-DIR
R. Salkie, 2ERR-ADREPP
B. Sprague, 2ERR-RPB
G. Zachos, 2ERR-RAB
J. Frisco, 2ERR-DDNJP
J. Daloia, 2ERR-RPB-B
W. Mugdan, 2ORC
D. Karlen, 2ORC-NJSUP
J. Marshall, 2EPD
R. Gherardi, 2OPM-FIN
P. Cutts, 2OPM-FAM
D. Deitrich, OS-210
T. Grier, OS-210
P. Mc Kechnie, 2IG
C. Kelly, 2TATL
C. Moyik, 2ERR-PS
D. Triggs, NJDEPE

HUDSON COUNTY SHERIFF'S OFFICE
LEGAL ADVERTISEMENT
SUPERIOR COURT OF NEW JERSEY
CHANCERY DIVISION/HUDSON COUNTY
FILE NO S-92-470
DOCKET NO F-2833-91
EXECUTION FOR SALE
OF MORTGAGED PREMISES

THE DIME SAVINGS BANK OF NEW YORK, F.S.B., A BANKING CORPORATION OF NEW YORK,
VS
MANUEL MARRERO, CONSUELA MARRERO,

By virtue of the above stated Writ of Execution to me directed and delivered, the following described premises will be exposed for sale by public auction at the Office of the Hudson County Sheriff, 595 Newark Avenue, Jersey City, NJ, at 2 P.M. on THURSDAY, 1/28/93

MUNICIPALITY: GUTTENBERG, NJ
ADDRESS: 123 70TH STREET
TAX LOT NUMBER 9 BLOCK NO. 30
NEAREST CROSS STREET: SITUATE APPROXIMATELY 275 FT FROM THE INTERSECTION OF 70TH ST AND PARK AVENUE

Manuel Marrero, Consuela Marrero, husband and wife, Raphael Yanez, Majorie Yanez, husband and wife, their heirs, devisees and personal representatives and his, their, or any of their successors in right, title & interest; Derrar Suleiman, Deceased, his heirs, devisees and personal representatives and his, their or any of their successors in right, title and interest; Mrs. Derrar S. Suleiman, wife of Derrar S. Suleiman, her heirs, devisees and personal represen

or made known to the Sheriff, will
the time of the Sale. This Notic
Conditions of Sale as set forth b
reserves the right to adjourn thi
further notice by publication

EDW
HUDSON (

ATTORNEY FOR PLAINTIFF
IRVING & CHARLES H. SACHS
TEL. (201) 339-6600
Advertised in THE JERSEY JOU
STAR LEDGER on the following da
1/5/93, 1/11/93, 1/18/93, 1/25/93

SHERIFF'S SALE
HUDSON COUNTY SHERIF
LEGAL ADVERTISE
SUPERIOR COURT OF NE
CHANCERY DIVISION/HUDS
FILE NO S-92-46
DOCKET NO F-394
EXECUTION FOR S
OF MORTGAGED PRE

THE DIME SAVINGS BANK OF NE
VS
SOLIMAN H. SOLIMAN, ET AL.,

By virtue of the above stated Writ
directed and delivered, the foll
premises will be exposed for sale b
the Office of the Hudson County Sh
Avenue, Jersey City, NJ, at 2 P.M
1/28/93

MUNICIPALITY: WEEHAWKEN, N
ADDRESS: 683 BOULEVARD EAST
TAX LOT NUMBER 24 BLOCK NO
APPROX. DIMENSIONS: 229 86 FT
NEAREST CROSS STREET: HIGHWOOD TERRACE

(This concise description does not constitute a legal description. A copy of the full legal description can be found at the Office of the Sheriff.)

The approximate amount due on this Writ of Execution is $247,553.07 PLUS the Sheriff's Execution Fees. The successful bidder must present the deposit immediately after the successful bid is made. The deposit paid will be in cash or certified check for at least 10% of the amount bid, from which the Sheriff's Execution Fees will be deducted. The balance of the bid amount must be paid THIRTY days from the sale date in cash or certified check. The bidder is responsible for the payment of the Realty Transfer Tax.

The following liens and encumbrances have been filed with the Sheriff: NONE

Any additional liens and encumbrances or any defects or clouds upon the title of this property, supplied or made known to the Sheriff, will be made known at the time of the Sale. This Notice is subject to the Conditions of Sale as set forth by the Sheriff, who reserves the right to adjourn this sale without any further notice by publication.

EDWARD J. WEBSTER
HUDSON COUNTY SHERIFF
TEL. (201) 795-6322

ATTORNEY FOR PLAINTIFF
NORRIS, MCLAUGHLIN & MARCUS
TEL. (908) 722-0700
Advertised in THE JERSEY JOURNAL and in THE STAR LEDGER on the following dates
1/5/93, 1/11/93, 1/18/93, 1/25/93 $378.00

SHERIFF'S SALE
HUDSON COUNTY SHERIFF'S OFFICE
LEGAL ADVERTISEMENT
SUPERIOR COURT OF NEW JERSEY
CHANCERY DIVISION/HUDSON COUNTY
FILE NO. S-92-462
DOCKET NO. F-12654-91
EXECUTION FOR SALE
OF MORTGAGED PREMISES

CITICORP MORTGAGE, INC.
A DELAWARE CORPORATION,
VS
JACINTO DIAZ, MINERVA DIAZ,
LOCAL 8-149 F.C.U.

By virtue of the above stated Writ of Execution to me directed and delivered, the following described premises will be exposed for sale by public auction at the Office of the Hudson County Sheriff, 595 Newark Avenue, Jersey City, NJ, at 2 P.M. on THURSDAY, 1/28/93

MUNICIPALITY: WEST NEW YORK, NJ

HUDSON COUNTY SHERIFF'S OFFICE
LEGAL ADVERTISEMENT
SUPERIOR COURT OF NEW JERSEY
CHANCERY DIVISION/HUDSON COUNTY
FILE NO. S-92-468
DOCKET NO. F-17764-91
EXECUTION FOR SALE
OF MORTGAGED PREMISES

FIRST FEDERAL SAVINGS AND LOAN ASSOCIATION OF ROCHESTER, A USA CORPORATION
VS
MATTHEW H. LAWRENCE, ET AL

By virtue of the above stated Writ of Execution to me directed and delivered, the following described premises will be exposed for sale by public auction at the Office of the Hudson County Sheriff, 595 Newark Avenue, Jersey City, NJ, at 2 P.M. on THURSDAY, 1/28/93

MUNICIPALITY: JERSEY CITY, NJ
ADDRESS: 2271 KENNEDY BOULEVARD
TAX LOT NO. 5A - BLOCK NO. 1794
Unit No. 205 situate in KENNEDY COMMONS CONDOMINIUMS together with an undivided 3.37 percentage interest in the Common Elements of said Condominium appurtenant to the aforesaid Unit, in accordance with and subject to the terms, limitations, conditions, covenants, restrictions, easements, agreements and other provisions set forth in that certain Master Deed for KENNEDY COMMONS CONDOMINIUMS, dated September 15, 1987 and recorded on September 17, 1987 in the Hudson County Register's Office in Deed Book 3800 at Page 135 et seq. and any amendments recorded thereafter

FOR Admin File

At

Library

VH41C5R357302, 1983 Toy JT2AL32H3D0056190
1979 Pont 2D27A9151464, 1979 Toy TE36125835
1980 Honda SLC1034032, 1965 Ply 5356267162
1980 Honda SMJ2130908
8 am PULEIO'S SVS CTR, 1515 Livingston Ave, North Brunswick, NJ
1981 Pont 1G2AM089XBY204566
8:30 AM DOM'S RT 18 EXXON, 371 Highway 18, E Brunswick, NJ
1979 Chevy 1N69G9S237090
9 AM P & J AUTO BODY, 280 St. Stevens St, Keasbey, NJ
1984 Dodge 1B3BA44D7EG338117, 1982 Chevy 1G1AW35K3C4190061
9:30 AM KING HIGH GARAGE, 273 High St, Perth Amboy, NJ
1975 Buick 4B27C5K102145, 1979 Cad 6D47S99153090
1977 Buick 4Z37J7H500478
10 AM B&L TOWING SVS, 2500 Blair Road, Carteret, NJ
1980 Toy RA42334485, 1982 Dod 1B3BD49DZCF21383
1985 Ren 1XMDM9308FK127170, 1979 Pont 2D35A9B147578
11 AM HIGHWAY SVS, 548 Trumbell St, Elizabeth, NJ
1976 Pont 2D37F6A274011
11:30 AM DENTE BROTHERS TOWING, INC., 27 Raymond Blvd., Newark, NJ 1986 Ford 1FABP3496GW115729
12 PM HIGHPOINT GARAGE, 612 22nd St, Union City, NJ
1979 Ford 9F03Y139467, 1970 Cad H0239974
1981 Dod 1B3BK49B1BF309413, 1980 Ford OT10A192480
1976 Chevy 1H5716B579738, 1980 Olds 3R69AA2411586
12:30 PM MANHATTAN TOWING CO., 239-55 Bergen Tpk., Ridgefield Park, NJ 1981 Ply 1P3BL28B7BD199575
1983 Cad 1G6AD4782D9124125
1980 Buick 4C377AT162332, 1977 Ply HL45G7F308113
1981 Buick 1G4AL69AXBG149094, 1973 Chevy 1L39H3T258068
1977 Jeep J7A18MN000865, 1978 Honda SJG3052733
1977 Chevy 1N69D7J150860, 1979 Pont 2M07A97500400
1980 Buick 4W69XAH439626
1 PM POLIZZI TOWING CORP., 99 Route 3 Clifton, NJ
1984 Ford 2FABP19R0EB226398
1:30 PM ROADMASTER TOWING, 111 Union Ave, East Rutherford, NJ
1975 Chevy 1X69D5T177653
NEW JERSEY TURNPIKE AUTHORITY,
JEFFREY A. LYON
Jan. 25, 1993 $115.50

PUBLIC NOTICE

Take notice that pursuant to N.J.A.C. 7:14A-3.9(b)2

The Essex County Board of Chosen Freeholders has awarded a contract without competitive bidding as insurance consultant Services pursuant to N.J.S.A. 40A:11-5 (1) (a) (m). This contract and the resolution authorizing it are available for public inspection in the Office of the Clerk of the Essex County Board of Chosen Freeholders.

Awarded to: Public Entity Risk Management Administration (PERMA)
Time Period: The term of Contract shall be one year effective from time services are first rendered in this matter.
Cost: Not to Exceed $10,000.00
Services: To Provide Consulting Services in Helping to Establish, Administer and Manage the Essex County Insurance Fund

Adrianne Davis
Clerk of the Board
of Chosen Freeholders
Jan. 25, 1993 $37.50

NOTICE OF CONTRACT AWARDED

The Essex County Board of Chosen Freeholders has awarded a contract without competitive bidding as insurance consultant Services pursuant to N.J.S.A. 40A:11-5 (1) (a) (m). This contract and the resolution authorizing it are available for public inspection in the Office of the Clerk of the Essex County Board of Chosen Freeholders.

Awarded to: Leonard H. Berkeley, Esq.
Time Period: The term of Contract shall be one year effective from time services are first rendered in this matter.

The Essex County Board of Chosen Freeholders has awarded a contract without competitive bidding pursuant to N.J.S.A. 40A:11-5 (1) (a). This contract and the resolution authorizing it are available for public inspection in the Office of the Clerk of the Essex County Board of Chosen Freeholders.

Awarded to: Kemper Insurance
Time Period: January 1, 1992 through January 1, 1993
Cost: Annual Premium of $11,814.00
Services: For Boiler and Machinery Insurance

Adrianne Davis
Clerk of the Board of Chosen Freeholders
January 25, 1993 $25.50

Notice of Public Availability
Announces the Availability of the
Administrative Record
Zschiegner Refining Site

Howell Township, Monmouth County, New Jersey

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 Zschiegner Refining Site, Howell Township, Monmouth County, New Jersey. EPA seeks to inform the public of the availability of the record at this repository and to encourage the public to comment on the documents comprising this administrative record.

The administrative record includes documents which form the basis for the selection of a removal action at this site. Documents now in the record include site identification, removal response, health assessment, public participation, technical sources and guidance documents. Other documents may be added to the record as site work progresses. These additional documents may include but are not limited to, sampling data, comments and new data submitted by interested persons, and EPA responses to significant comments.

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

Howell Township Public Library
Old Tavern Road
Howell Township, N.J.
07731

U.S. EPA-Region II
Removal Programs Office
Woodbridge Avenue, Edison, N.J.
08837

Additional information is available at the following locations:

Guidance documents and technical literature:
Control Library
U.S. EPA Region II
Removal Program Office
Woodbridge Avenue
Edison, NJ 08837

Written comments on the Administrative Record should be sent to:

Dilshad Perera
On-Scene Coordinator
Response and Prevention Branch
USEPA Region II
2890 Woodbridge Avenue
Edison, NJ 08837

Jan. 25, 1993 $94.50

NOTICE
UNION COUNTY IMPROVEMENT AUTHORITY
REGULAR MEETING SCHEDULE
FOR 1993

Please be advised that the Union County Improvement Authority has scheduled regular meetings for each second and fourth Wednesday of each month through June 1993. All meetings will begin at 7:00 p.m. at County Administration Building, 6th Floor, Elizabeth Town Plaza, Elizabeth, N.J. 07207.

OFFICIAL ACTION MAY BE TAKEN

The following is a list of dates for each respective meeting: $42.00

January 27, 1993
February 10, 1993
February 24, 1993
March 10, 1993
March 24, 1993
April 14, 1993
April 28, 1993
May 12, 1993
May 26, 1993

3000

SUPERFUND

RESPONSE ALERT

ZSCHIEGNER REFINING SITE
EMERGENCY REMOVAL ACTION START
HOWELL, NEW JERSEY

Thursday, November 5, 1992

- On November 3, 1992, EPA's Region II Superfund program initiated an emergency removal action at the Zschiegner Refining Company site, Howell, New Jersey, in response to a request from the State of New Jersey. EPA has established 24-hour site security and will stabilize, remove and dispose of hazardous substances found on-site.

- A drug raid conducted on October 31, 1992 by the U. S. Drug Enforcement Agency (DEA) disclosed numerous drums, cylinders, and large quantities of unknown chemicals in deteriorating condition. One drum of suspected wastes was giving off a vapor cloud that was impacting off-site areas. There were also indications that illegal discharges might be impacting an adjacent stream. The Zschiegner Company had conducted precious metals recovery operations since the early 1960s, and the illegal drug manufacturing is suspected of having started in 1989.

- The DEA removed all drug-related chemicals from the site, and turned the site over to EPA. Superfund will stabilize the site, overpack the drums, bulk and containerize loose materials, and arrange for disposal in accordance with approved procedures. The removal action is expected to require from six months to one year to complete and cost approximately $250,000.

- If you have any questions regarding this incident, please contact Kevin Matthews of the Office of Emergency and Remedial Response at (703) 603-9097.

United States
Environmental Protection Agency
Region 2: NJ, NY, PR, VI
26 Federal Plaza
New York, New York 10278

FACTS

November 20, 1992

EPA SUPERFUND ACTION AT ZSCHIEGNER REFINING COMPANY IN HOWELL TOWNSHIP, NEW JERSEY

The U.S. Environmental Protection Agency (EPA) is at the Zschiegner Refining Co. located at 1442 Maxim-Suthard Road, Howell, New Jersey to stabilize and sample hazardous materials prior to its removal to appropriate off-site disposal facilities. The facility operated a precious metal recovery operation starting in the early 60's.

On October 31, 1992, the US Drug Enforcement Agency (DEA) conducted a drug raid at the facility. As a result of the DEA's raid, the site was brought to the attention of environmental regulatory agencies because of the numerous chemicals found on-site. On November 2, 1992, EPA officials from the Emergency Response and Prevention Branch met on site with an agent of the DEA, local hazard response units and officials from the New Jersey Department of Environmental Protection and Energy (NJDEPE). At that time, NJDEPE verbally requested EPA assistance to conduct an emergency removal action at the site using federal Superfund authority. Superfund is the federal program to address hazardous waste sites.

The DEA is arranging for the off-site disposal of the drug-related chemicals remaining at the site which will conclude DEA's site-related activities.

CURRENT ACTIVITIES

Upon evaluating the situation, EPA officials recommended immediate steps be taken to stabilize the site and $250,000 in Superfund monies has been budgeted for the initial stages of the action. The agency established 24-hour security at the site on November 3rd to prevent unauthorized access. EPA is concentrating its initial efforts on stabilizing the site and dealing with the most acutely hazardous materials at the property. EPA crews have completed needed repairs of the roof of the building in which most of the chemicals are housed. The Agency's initial surveillance of the materials on the site indicate the presence of the following: sodium peroxide, ether anhydride, drums containing caustic liquid, cyanide salts, spent acids, electro-plating solutions, numerous unidentifiable compressed gas cylinders and large quantities of unknown chemicals found in deteriorating condition on site. There also appears to be indications of illegal discharges from the site into the surrounding environment. As a precaution, EPA has collected water, sediment and soil samples in and around the stream adjacent to the site, called Haystack Brook, for chemical analyses.

- more -

EPA has formed a committee of government officials which will meet with the Agency on a regular basis to discuss site cleanup activities and progress. The committee consists of the Town Administrator Thomas Wafkovich and representatives from the Township Environmental Task Force, the local Office of Emergency Management, the County Health Department, NJDEPE, and the federal Agency for Toxic and Disease Registry.

EPA expects that the cleanup of the site will take 8 months to a year to complete.

For further information about EPA activities at the site, contact the Agency's External Programs Division at (212) 264-2515.

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PROCLAMATION

TO ALL DEPARTMENTS, DIVISIONS, EMERGENCY SERVICES AND OFFICES OF THE TOWNSHIP OF HOWELL, NEW JERSEY AND TO ALL CITIZENS OF THE TOWNSHIP AND PERSONS WITHIN ITS BOUNDARIES.

WHEREAS, Pursuant to the powers vested in us by Chapter 251 of the laws of 1942, as amended and supplemented, NJSA APP A:9-30 ET SEQ; NJSA 40:48-1 (6) and ordinances pursuant thereto; R.S. 40-87-31 ET SEQ, NJSA 2C:33-1 ET SEQ; and all sections and subsections, WE HAVE DECLARED THAT A LIMITED STATE OF OF EMERGENCY /DISASTER EXISTS WITHIN THE TOWNSHIP OF HOWELL, and ,

WHEREAS, the aforesaid laws authorize the promulgation of such orders, rules and regulations as are necessary to meet the various problems which have or may be presented by such emergency, and,

WHEREAS, by reason of the serious conditions which presently exist in certain areas of the Township of Howell which may affect the Health, Safety and Welfare of the residents, and,

WHEREAS, it has been determined that certain areas of the Township of Howell should be declared LIMITED EMERGENCY / DISASTER AREAS, AND FURTHER, that certain measures must be taken in order to insure that the authorities will be unhampered in their efforts to maintain law and order as well as an orderly flow of traffic, and FURTHER, in order to protect the persons and property affected by said conditions, BE IT THEREFORE RESOLVED THAT, the following areas are designated "Limited Emergency / Disaster areas: The area known as the ZSCHIEGNER SUPERFUND SITE and A ONE MILE RADIUS SURROUNDING SAID SITE, and,

FURTHER, be it resolved that the Howell Township of Emergency Management co-ordinate with all Federal, State, County and Municipal agencies an " EMERGECY ACTION RESPONSE PLAN " for this site, and,

FURTHER, be it resolved that this PROCLAMATION shall remain in affect until such time the Municipality is advised by the appropriate Federal, State or County agency that the danger no longer exists at this site.

NOW THEREFORE, in accordance with the aforesaid laws, we do hereby promulgate and declare that the above cited applicable regulations shall be in addition to all other laws of the State of New Jersey, the County of Monmouth and its Municipalities.

300005

THIS PROCLAMATION SHALL BE EFFECTIVE IMMEDIATELY UPON ITS READING AT A PUBLIC MEETING AND THE AFFIXING OF THE NECESSARY AUTHORIZED SIGNATURES.

COMMUNITY SAFETY MEETING BULLETS FOR:

Friday, November 13, 1992

EPA — Plans for the on-site underground Septic System wer requested. However, a historical search on the site records did not find any information.

MCHD — The on-site water well had been sampled, following al EPA sampling guidelines. A verbal report of the la results for this water sampling event was requested fo the committee. These results will be made available a soon as possible, and will be used as a water qualit baseline for the residents nearest to the site. A copy o all Field Notes made during the sampling event will b available to the committee with the lab results.

MCHD — These samples will be analyzed for VOA, Total Metals, an Cyanide. There is no high probability for hits on Semi Volatiles or pesticides.

EPA — A flashing traffic signal was requested to slow vehicle on Maxim-Southard Rd.

OEM — A backhoe, vac truck, and dozer, along with other heav equipment, will be made available in the event of a emergency. A water holding tank will also be mad available. The town will need a list to make sur requested items are available.

EPA — No-parking signs were requested.

EPA — There was a request to use the neighbor's property as a access area with locks and keys available on-site.

EPA — Stabilization of containers and debris removal fro within the hotzone will take time. Labpack operation will begin after all safety measures are in place. chemist is due on-site on November 30, meanwhil cautionary measures and space is needed.

ETF — EPA can access the 'Fire Department's computer with phone number.

AST — SeaLand containers will be utilized for drum storage on- site. Fire suppressant hookups will be attached to th walls of the containers.

AST — There is an estimated 2200 gallons of caustic solution on-site. Also, there are an estimated 1,400 labpacks on- site, with a number of midsize containers.

EPA — EPA will download chemical information to the fir departments computer.

FIRST AID Minor injuries should be taken to Kimball Hospital.

FIRST AID There will be a ten minute delay before the ambulance arrives on-site. Victim will be deconned before First Aid Squad arrives, First Aid Squad will transport the victim to the proper hospital. If it is a trauma victim, then a Medivac helicopter will be called in. The First Aid Squad would be best aided if they know what chemical the victim was in contact with.

EPA There are mostly plating solutions on-site, as in acids and sodium cyanide solutions.

ATSDR ATSDR is available 24 hours and can assist with information on treatment of chemical injuries. There is doctors available, along with a staff that can immediately send information via fax lines to the hospital emergency room.

FIRST AID EMT would like to be kept notified as to what chemicals are being handled during the phases of the operation. EMT would like radio contact to the site.

EPA Information on the chemicals being handled will be transferred to the fire department. During labpacking, with the many unknowns, delay time will be expected in the transfer of data.

AST Orange fence will delineate the "warm zone" and end of the support zone.

ERCS There will be two teams of two in the hot zone.

FIRST AID EMT will need to know the number of people who are hurt to bring the proper amount of equipment. Police will have their own protocol. First aid kits are available on site. However, oxygen is not available. There are personnel trained in CPR and first aid. Backups will decon people on-site.

FIRST AID EMT will be notified if the site is in operation on the weekends.

FIRST AID EMT will be given disposable PPE.

ETF/CODES The fire department will recharge high pressure SCBA bottles.

EPA Slide review.

EPA The Safety Plan will be signed by all entering the site.

EPA Safety lights will be set up.

ATSDR Ether may have been spilled onto the ground near the shed area.

ESD The on site well may be sampled by ESD, depending on the protocol previously followed.

ATSDR Historical findings show that the building used to be a chicken house.

EPA There will be a trench laid along the building as a catch basin for fire fighting water runoff.

EPA The major threats will be during labpacking.

EPA Tick spraying will take place after sampling.

MCHD Health department provides tick analysis as a check on if the tick carries the bacteria for lymes disease. The tick spray will help.

EPA Security guards should be checked at night.

EPA EPA will be the spokesperson for the site. The committee should be informed before divulging information.

EPA/NJDEPE/OEM HAZMAT The public meeting should be setup ASAP.

EPA TELEPHONE #908-905-2708
FAX #908-905-4519

OEM Local officials will not be available the night of the meeting due to a conference.

EPA Direct involvement by Police (Environmental Rep) will be needed in the future.

Steve Hale	US EPA / ESD	(908) 321-4362
Bob Morrell	U.S. EPA / ESD	908-906-6804
DAVID DUGAN	EPA/ESD/SMB	908-906-6995
Matthew D. Kunz	Howell Twp First Aid & Rescue Squad #1	Home 908 364-6496
		Pager 908 206-6542
	#For any First Aid Office ⇒	via H.P.D. 908 938-4111
		NY (212) 264-9255
STEVE JONES	ATSDR	Edison (908) 906-6931
Tim Manuel	N.J.D.E.P.E.	609-584-4130
Ted Shostak	HTETF	908-938-4500-219
Donald Leone	HTCEM	(office) 908-938-5533
[illegible]	Howell Admin	908 938 4500
MARCEL FRANCISCO	HOWELL O.E.M.-HAZ-MAT	(offices) 908-938-2400
Tracy Walker	Guardian Environmental	908-905-0257
STEVE DAVIS	" "	" "
[illegible]	US EPA-2ERRD-RPB-B	908-905-2708
[illegible] ZERNICK	USCG ATLANTIC STRIKE TEAM	" "
[illegible]	NCTH	908 431-7456

300009

COMMUNITY SAFETY MEETING BULLETS FOR:

Friday, November 20, 1992

EPA — Lab Packing will begin Monday, November 30, all things permitting.

First Aid: — Staging area for ambulances will be needed and should be ready for the ambulance as it arrives.

AST — CAMEO was run for Cyanide. The CAMEO was run for quantities higher than those present on site. This gave a plume of 400 yards downwind.

EPA — Spill containment will be set up throughout the hotzone. Neutralizing agents will be used in the event of an acid spill.

There will be two exits per room. The building will be marked with even numbers on the right and odd numbers on the left, when looking at the building from Maxim Southard Rd. The Command Post will be the meeting place in the event of an emergency. All keys will be made available in the ignition of the cars, with the doors unlocked.

The building layout was reviewed. All fires will be reported with the location number system. This mapping system can be used by the fire department in the event of an emergency. There will be a radio system set up to have the location of all personnel at all times.

Emergency Code Review:
Code 1 - Evacuate
Code 2 - Spills
Code 3 - Fire/Explosion
Code 4 - Medical Emergency
Code 5 - Break

Federal Officials will suit up for Level A entries, TAT will provide, backup in Level A.

In Emergency situations, the EPA or their designate will coordinate all resources available.

Fire Depart. — The available resources should coordinate with the one person in command. That way, the commander can turn to the proper personnel to ask for equipment and resources. When EPA arrives on-site, they are briefed and take control from then on.

Police — Police will allow for a total of eight officers, during an emergency.

EPA	The contingency plan for the town should include all resources available.
First Aid	First aid has radios.
Fire Depart.	During emergency's there will be a need for different frequencies between the different agencies for a smooth operation. The personnel inside the hotzone should be on a different frequency. Otherwise, there may be communication problems.
EPA	EPA would like a core of dedicated individuals available.
Fire Dept.	The HAZMAT team will be broken into two sections.
NJDEPE	The press should be kept in a safe area that allows for equipment arrival.
Fire Depart.	Phone jacks will be made available from the fire department. Ted Shostak will be commanding the fire department operations on-site.
First Aid	Newark and Cooper Life Flights will be available. Flow charts will be available to on-call personnel. The pager number will be made available. All patients will be decontaminated as much as possible before transfer.
EPA	Six to eight injured people would be the worst scenario. Eight to five are the normal working hours in the hotzone Monday through Friday. The site will demobe Nov.23 for the Thanksgiving holidays. The site will be demobed for the Christmas holidays from Dec.23 to Jan.3. A Chemical list will be made available on a routine basis. This will be downloaded to the fire department's database and will be sent to the First Aid Squad. The First Aid Squad will know all the chemicals that the personnel have been working with in the past two hours.
First Aid	A Fax Number check off sheet will be made available. EPA will be provided with a sheet of what the First Aid Squad needs to know.
NJDEPE	MAXIM SOUTHARD should be the specific name for the site.
EPA	Long duration compound specific tubes will be used for six outside locations if there are any hits on personnel in the hotzone.

NJDEPE	Will have a second set of air monitoring instruments available in Lakewood. Tenex, carbon, and other tubes will be made available.
ATSDR	ATSDR's 24 hour office should also be contacted in the event of an emergency.
EPA	The Health and Safety Plan will be available to read and sign. A local LEPC has to be signed and in place before a $25,000 pool fund can be made available.
NJDEPE	NJDEPE will approve funds up to the third of November under Spill Fund Recovery.
EPA	The next meeting will convene on the Monday following Thanksgiving. The on-site septic tank was uncovered. It was composed of a dual tank that had previously collapsed.

11-20-97 (3PM)
Committee Meeting

1 Donna Ruigel	EPA · CPM · FAMB		
Steve Jones	ATSDR	(908) 906-6931 Edison (212) 264-9255 NY	(404) 639-0615 24 hr emerg
MARCEL FRANCISCO	HTOEM HAZ-MAT	(908) 938-2400 wk	
Matt Kunz	Howell Twp First Aid & Rescue Squad #1 (19-50)		(H) 364-6996 via HPD 938-4 517-1950 PA
JAY STEPHENS	MONOC MICU PARAMEDICS VIA MON COUNTY EMS-I		919-758
[illegible]	Howell Task Force	938-4[illegible]-2016	[illegible] 506-4051
[illegible]	Howell Twp Clerk	938-4[illegible]-256	
[illegible]	Howell Twp Task Force	" " -219	
Jim Manuel	NJ DEPE	office 609-584-4130	pager 1-800-202-125[illegible]
DEBORAH SCHWENK	US EPA-ORC	212-264-8926	
Bill Simmons	MC Health	908 431 7456	
DILSHAD J. PERERA	US EPA-ZERRD	site: 908-905-2708	

300013

COMMUNITY SAFETY MEETING BULLETS FOR:

Monday, November 30, 1992

OEM Basic format is completed for the emergency plan. The basic plan is reviewed. Guidelines for an emergencies, medical emergencies, explosions, fire and vapor releases were discussed.

Police guidelines are needed.

Fire preplan is needed.

A secondary decon should be setup.

Evacuation offsite was discussed.

The initial evacuation area is 400 yards from the site.

The plan also includes a chart setup for the incident command system.

EPA The structure of the command system should be kept the same whether it is a large or small incident.

OEM Every evacuation will be costly.

EPA Ted will be in command in the event of a fire. The other individuals will be in the command post, knowing exactly what the other is doing.

EPA Our immediate concern is to secure the site, with overpacking and then transport.

There will be a weekly chemical inventory update made available with volumes and locations.

ATSDR The evacuation should be based on a worst case scenario.

EPA Cyanides and acids are the worst case scenario. Labpacks are the next level of problems.

Information will be down loaded to the fire department. The hazard classes will be listed with the info along with standard firefighting procedures.

EPA Medical transport offsite is the last thing to happen. Material will be staged in an area with similar hazards.

Worst case scenario for the number of people in the hotzone is six people. There may be a need for another staging area for ambulances and equipment.

TED Staging area at fire department with one person in

charge, but this could cause problems later on.

EPA How many homes would be evacuated?

OEM 200 homes in the immediate area

Fire Dep Necessary to have information of how many people necessary to evacuate. Including number of disabled and latch key kids.

OEM Public broadcast system can be notified, but this shouldn't be publicized.

Someone may be lost if something comes off the site and the person wasn't notified.

Fire Dep. This should really be a door to door contact system.

OEM This may require Police to be available in force, to make sure the people evacuate.

Fire Should notify police to prevent liability.

NJDEPE This type of notice will bring in a lot of phone calls.

EPA Does not want anyone to get hurt.

OEM Will consult with both mayors for their reaction.

ATSDR It is always best to have public meetings with the information upfront.

EPA EPA wants to do what is safest for the general public.

OEM The plan should go into effect during a medical event or a fire/explosion.

EPA Fire Department should be added to the flow chart.

Fire Dep. Fire SOP's will have a plan with all the necessary calls to be made.

First Aid Helicopters can be called up by First Aid. Hospital can be advised of the situation before leaving the site.

Fire Dep. All firemen are covered for onsite injuries.

ATSDR Can help coordinate

Fire Dep. Evacuation of the people is a worst case scenario. The people should be told to stay inside. There is no use in evacuating when the wind is from the Northeast.

An evacuation will need manpower, which will be putting

men into a bad situation. A break down in communication would be the worst thing that can happen. OEM is limited to manpower. Police are limited.

OEM — A temp decon is presently being tested and will be brought out to the site.

Fire Dep. — All have to be deconned before they are picked up by First Aid.

EPA — A tax map of the site is needed, to see if Zschiegner is actually the owner. This should be in place by next week.

COMMUNITY SAFETY MEETING BULLETS FOR:

Friday, January 8, 1993

EPA Please refer all questions to EPA/OSC. The reason being that the PRP law firm is presenting defense for PRP. The Private Investigator is being sent out to the site along with Zschiegner's sister. All forms in the hotzone were boxed up. We will have ORC deal with their lawyers. More towards the criminal charges.

We had one fuming drum in hotzone during the week. Draeggar tubes that had hits were HCl, Nitric, and HFl. The liquid was in a poly lined steel drum, which was "shot". Upon opening drum the liquid started fuming. This had occured on Tuesday. These fumes may have been caused by humidity due to the rainy day. There are severe reactions when HF makes bodily contact, any recommendations on drum staging should be stated.

Second Topic of discussion is that it is necessary for the proper work plan to be in place before accepting any bid offer. The rebidding was reopened up. The other two subcontractor's also stated what they would do. Hopefully, they put this in their report. Labpacking has not been finalized.

ERCS Section B is cleaned out of drums. Section C is alomst completely cleaned out of drums. Labpacking will begin at the end of January and beginning of February.

COMMUNITY SAFETY MEETING BULLETS FOR:

Monday, November 30, 1992

OEM — Basic format is completed for the emergency plan. The basic plan is reviewed. Guidelines for an emergencies, medical emergencies, explosions, fire and vapor releases were discussed.

Police guidelines are needed.

Fire preplan is needed.

A secondary decon should be setup.

Evacuation offsite was discussed.

The initial evacuation area is 400 yards from the site.

The plan also includes a chart setup for the incident command system.

EPA — The structure of the command system should be kept the same whether it is a large or small incident.

OEM — Every evacuation will be costly.

EPA — Ted will be in command in the event of a fire. The other individuals will be in the command post, knowing exactly what the other is doing.

EPA — Our immediate concern is to secure the site, with overpacking and then transport.

There will be a weekly chemical inventory update made available with volumes and locations.

ATSDR — The evacuation should be based on a worst case scenario.

EPA — Cyanides and acids are the worst case scenario. Labpacks are the next level of problems.

Information will be down loaded to the fire department. The hazard classes will be listed with the info along with standard firefighting procedures.

EPA — Medical transport offsite is the last thing to happen. Material will be staged in an area with similar hazards.

Worst case scenario for the number of people in the hotzone is six people. There may be a need for another staging area for ambulances and equipment.

TED — Staging area at fire department with one person in

charge, but this could cause problems later on.

EPA How many homes would be evacuated?

OEM 200 homes in the immediate area

Fire Dep Necessary to have information of how many people necessary to evacuate. Including number of disabled and latch key kids.

OEM Public broadcast system can be notified, but this shouldn't be publicized.

Someone may be lost if something comes off the site and the person wasn't notified.

Fire Dep. This should really be a door to door contact system.

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COMMUNITY SAFETY MEETING BULLETS FOR:

Friday, November 20, 1992

EPA — Lab Packing will begin Monday, November 30, all things permitting.

First Aid: — Staging area for ambulances will be needed and should be ready for the ambulance as it arrives.

AST — CAMEO was run for Cyanide. The CAMEO was run for quantities higher than those present on site. This gave a plume of 400 yards downwind.

EPA — Spill containment will be set up throughout the hotzone. Neutralizing agents will be used in the event of an acid spill.

There will be two exits per room. The building will be marked with even numbers on the right and odd numbers on the left, when looking at the building from Maxim Southard Rd. The Command Post will be the meeting place in the event of an emergency. All keys will be made available in the ignition of the cars, with the doors unlocked.

The building layout was reviewed. All fires will be reported with the location number system. This mapping system can be used by the fire department in the event of an emergency. There will be a radio system set up to have the location of all personnel at all times.

Emergency Code Review:
Code 1 - Evacuate
Code 2 - Spills
Code 3 - Fire/Explosion
Code 4 - Medical Emergency
Code 5 - Break

Federal Officials will suit up for Level A entries, TAT will provide backup in Level A.

In Emergency situations, the EPA or their designate will coordinate all resources available.

Fire Depart. — The available resources should coordinate with the one person in command. That way, the commander can turn to the proper personnel to ask for equipment and resources. When EPA arrives on-site, they are briefed and take control from then on.

Police — Police will allow for a total of eight officers, during an emergency.

EPA	The contingency plan for the town should include all resources available.
First Aid	First aid has radios.
Fire Depart.	During emergency's there will be a need for different frequencies between the different agencies for a smooth operation. The personnel inside the hotzone should be on a different frequency. Otherwise, there may be communication problems.
EPA	EPA would like a core of dedicated individuals available.
Fire Dept.	The HAZMAT team will be broken into two sections.
NJDEPE	The press should be kept in a safe area that allows for equipment arrival.
Fire Depart.	Phone jacks will be made available from the fire department. Ted Shostak will be commanding the fire department operations on-site.
First Aid	Newark and Cooper Life Flights will be available. Flow charts will be available to on-call personnel. The pager number will be made available. All patients will be decontaminated as much as possible before transfer.
EPA	Six to eight injured people would be the worst scenario. Eight to five are the normal working hours in the hotzone Monday through Friday. The site will demobe Nov.23 for the Thanksgiving holidays. The site will be demobed for the Christmas holidays from Dec.23 to Jan.3. A Chemical list will be made available on a routine basis. This will be downloaded to the fire department's database and will be sent to the First Aid Squad. The First Aid Squad will know all the chemicals that the personnel have been working with in the past two hours.
First Aid	A Fax Number check off sheet will be made available. EPA will be provided with a sheet of what the First Aid Squad needs to know.
NJDEPE	MAXIM SOUTHARD should be the specific name for the site.
EPA	Long duration compound specific tubes will be used for six outside locations if there are any hits on personnel in the hotzone.

NJDEPE	Will have a second set of air monitoring instruments available in Lakewood. Tenex, carbon, and other tubes will be made available.
ATSDR	ATSDR's 24 hour office should also be contacted in the event of an emergency.
EPA	The Health and Safety Plan will be available to read and sign.
	A local LEPC has to be signed and in place before a $25,000 pool fund can be made available.
NJDEPE	NJDEPE will approve funds up to the third of November under Spill Fund Recovery.
EPA	The next meeting will convene on the Monday following Thanksgiving.
	The on-site septic tank was uncovered. It was composed of a dual tank that had previously collapsed.

COMMUNITY SAFETY MEETING BULLETS FOR:

Friday, November 13, 1992

EPA — Plans for the on-site underground Septic System were requested. However, a historical search on the sites records did not find any information.

MCHD — The on-site water well had been sampled, following all EPA sampling guidelines. A verbal report of the lab results for this water sampling event was requested for the committee. These results will be made available as soon as possible, and will be used as a water quality baseline for the residents nearest to the site. A copy of all Field Notes made during the sampling event will be available to the committee with the lab results.

MCHD — These samples will be analyzed for VOA, Total Metals, and Cyanide. There is no high probability for hits on Semi-Volatiles or pesticides.

EPA — A flashing traffic signal was requested to slow vehicles on Maxim-Southard Rd.

OEM — A backhoe, vac truck, and dozer, along with other heavy equipment, will be made available in the event of an emergency. A water holding tank will also be made available. The town will need a list to make sure requested items are available.

EPA — No-parking signs were requested.

EPA — There was a request to use the neighbor's property as an access area with locks and keys available on-site.

EPA — Stabilization of containers and debris removal from within the hotzone will take time. Labpack operations will begin after all safety measures are in place. A chemist is due on-site on November 30, meanwhile cautionary measures and space is needed.

ETF — EPA can access the Fire Department's computer with a phone number.

AST — SeaLand containers will be utilized for drum storage on-site. Fire suppressant hookups will be attached to the walls of the containers.

AST — There is an estimated 2200 gallons of caustic solutions on-site. Also, there are an estimated 1,400 labpacks on-site, with a number of midsize containers.

EPA — EPA will download chemical information to the fire departments computer

FIRST AID Minor injuries should be taken to Kimball Hospital.

FIRST AID There will be a ten minute delay before the ambulance arrives on-site. Victim will be deconned before First Aid Squad arrives, First Aid Squad will transport the victim to the proper hospital. If it is a trauma victim, then a Medivac helicopter will be called in. The First Aid Squad would be best aided if they know what chemical the victim was in contact with.

EPA There are mostly plating solutions on-site, as in acids and sodium cyanide solutions.

ATSDR ATSDR is available 24 hours and can assist with information on treatment of chemical injuries. There is doctors available, along with a staff that can immediately send information via fax lines to the hospital emergency room.

FIRST AID EMT would like to be kept notified as to what chemicals are being handled during the phases of the operation. EMT would like radio contact to the site.

EPA Information on the chemicals being handled will be transferred to the fire department. During labpacking, with the many unknowns, delay time will be expected in the transfer of data.

AST Orange fence will delineate the "warm zone" and end of the support zone.

ERCS There will be two teams of two in the hot zone.

FIRST AID EMT will need to know the number of people who are hurt to bring the proper amount of equipment. Police will have their own protocol. First aid kits are available on site. However, oxygen is not available. There are personnel trained in CPR and first aid. Backups will decon people on-site.

FIRST AID EMT will be notified if the site is in operation on the weekends.

FIRST AID EMT will be given disposable PPE.

ETF/CODES The fire department will recharge high pressure SCBA bottles.

EPA Slide review.

EPA The Safety Plan will be signed by all entering the site.

EPA Safety lights will be set up.

ATSDR Ether may have been spilled onto the ground near the shed area.

ESD The on site well may be sampled by ESD, depending on the protocol previously followed.

ATSDR Historical findings show that the building used to be a chicken house.

EPA There will be a trench laid along the building as a catch basin for fire fighting water runoff.

EPA The major threats will be during labpacking.

EPA Tick spraying will take place after sampling.

MCHD Health department provides tick analysis as a check on if the tick carries the bacteria for lymes disease. The tick spray will help.

EPA Security guards should be checked at night.

EPA EPA will be the spokesperson for the site. The committee should be informed before divulging information.

EPA/NJDEPE/OEM HAZMAT The public meeting should be setup ASAP.

EPA TELEPHONE #908-905-2708
FAX #908-905-4519

OEM Local officials will not be available the night of the meeting due to a conference.

EPA Direct involvement by Police (Environmental Rep) will be needed in the future.

DEA: 'Lab' owner was illicit-drug maker

NEWARK — A 63-year-old Monmouth County man has been arrested on charges that he made more than 300 pounds of methamphetamine under the guise of a gold-refining laboratory.

The federal Drug Enforcement Administration said yesterday that Herbert Zschienger of Manasquan was arrested at his Howell

HOME NEWS 11/3/92

STATE NEWS

Township laboratory known as Zschienger Refining.

The raid Friday caught Zschienger making 30 pounds of the illegal drug, the DEA said. Authorities valued the 300 pounds he has allegedly made since last year at $3 million.

The arrest followed an 18-month investigation that produced the arrest last week of two Missouri men on charges of possessing 17 pounds of methamphetamine and a shotgun.

The DEA estimated it will cost more than $250,000 to clean up the lab, which officials said is loaded with hundreds of gallons of toxic chemical agents.

Zschienger is charged with conspiracy to make narcotics and faces a life sentence and a $4 million fine if convicted. He also could face state environmental charges, the DEA said.

000027

11/3/92 STAR LEDGER

Monmouth man, 63, is charged with making drugs

A 63-year-old Monmouth County man has been arrested on charges that he made more than 300 pounds of methamphetamine under the guise of a gold refining laboratory.

The federal Drug Enforcement Administration said yesterday that Herbert Zschienger, of Manasquan, was arrested at his Howell Township laboratory known as Zschienger Refining.

The raid Friday caught Zschienger making 30 pounds of the illegal drug, the DEA said. Authorities valued the 300 pounds he has allegedly made since last year at $3 million.

The arrest followed an 18-month investigation that produced the arrest last week of two Missouri men on charges of possessing 17 pounds of methamphetamine and a shotgun.

A third man, William A. Sprouse, of Webster, Mo., also was arrested on charges that he was Zschienger's partner.

The DEA estimated it will cost more than $250,000 to clean up the lab, which officials said is loaded with hundreds of gallons of toxic chemical agents.

Zschienger is charged with conspiracy to make narcotics, and faces a life sentence and a $4 million fine, if convicted. He also could face state environmental charges, the DEA said.

There was no telephone listing for Zschienger, and nobody answered the telephone at the listing for the laboratory.

300028

Cleanup begins at Howell refinery also suspected as illegal drug lab

By SUE EPSTEIN

The federal Environmental Protection Agency (EPA) has begun emergency cleanup operations at a metal refinery and suspected illegal drug laboratory in Howell Township where "vast" amounts of hazardous chemicals were found during a raid by the Drug Enforcement Administration (DEA) last week.

Rich Cahill, a spokesman for the EPA, said $250,000 in emergency funds have been earmarked to "stabilize" and begin cleanup at the Zschiegner Refining Co. on Maxim-Suthard Road, across from two residential neighborhoods in the Candlewood section of the township.

Cahill released an EPA statement yesterday that said, "A preliminary inventory of the vast quantities of materials on site indicated the presence of ... sodium peroxide, ether anhydride, drums containing caustic liquid, cyanide salts, spent acids, electroplating solutions, numerous unidentifiable compressed gas cylinders and large quantities of unknown chemicals found in deteriorating condition.

"There also appear to be indications of illegal discharges from the site into the surrounding environment, potentially impacting a stream adjacent to the facility," the statement said.

The EPA has taken samples of the unidentified chemicals and of the water on the property. Monmouth County Health Officer Lester Jargowsky said he has also ordered tests.

"Samples of the water on the property were secured, and we plan to take samples from the wells that supply the houses in the area with their water," Jargowsky said.

"We have also tested the septic system. Our goal is to safeguard the public health and safety. The tests we've taken and the scan I've ordered of the wells should give us a good idea if the water supply is threatened."

Both Jargowsky and Cahill were cautious in their comments because the site and the operation are part of an ongoing criminal investigation.

Jargowsky said an open search warrant still exists for the site, and criminal charges stemming from the discovery of the hazardous chemicals may be filed.

"There was material fuming, reacting, in some of those drums," Jargowsky said. "That has to be further investigated. All of the drums have unknown chemicals. There were at least 20 32-gallon pails.

"This is a matter for our environmental crimes unit. This was very sloppy housekeeping."

Herbert H. Zschiegner, 63, of Wall Township was arrested Friday by the Clandestine Laboratory Enforcement Team of the DEA and charged with conspiracy to manufacture an illegal substance.

Authorities charged Zschiegner ran one of the largest drug labs in the nation from his one-story wood-frame refinery, which had been in his family for many years as a precious metals refinery.

Authorities have said Zschiegner was part of a manufacturing ring that included three individuals from Missouri, who regularly met Zschiegner at a diner in Howell Township on Route 9. The trio would pick up drugs from Zschiegner's refinery and return to Missouri where the drugs would be distributed.

DEA officials said the three Missouri men were arrested earlier this year. Their arrests led to the investigation into Zschiegner.

Officials said the DEA agents approached Zschiegner as he left his refinery, arrested him and confiscated records, chemicals and at least 30 gallons of liquid methamphetamines – the final stage before the drug is converted into powder and pills for distribution.

If convicted of the drug charge, Zschiegner faces life in prison and a $4 million fine, officials said.

Cahill said EPA officials from the agency's emergency response and prevention branch met on the site Monday with an agent from the DEA, local hazard response units and officials from the state Department of Environmental Protection and Energy (DEPE).

"At that time, DEPE verbally requested EPA assistance to conduct an emergency removal action at the site," he explained. "The DEA concluded its operations by having the remaining drug-related chemicals removed from the site. Upon evaluating the situation, EPA officials recommended immediate steps be taken to stabilize the site and $250,000 in superfund monies be earmarked to initiate the action."

Cahill said the EPA "expects that the cleanup of the site will take eight months to a year to complete."

He said 24-hour site security was instituted Tuesday to prevent unauthorized access and will continue through the cleanup.

Asbury Park Press Tues., Nov. 10, 1992

WESTERN MONMOUTH

Suspect in drug lab case is denied bail

By MELANIE E. EVERSLEY
PRESS FREEHOLD BUREAU

TRENTON — A metal refiner charged last week with using his Maxim-Southard Road plant in Howell Township to make illegal drugs will be held without bail pending a trial, a federal judge ruled here yesterday.

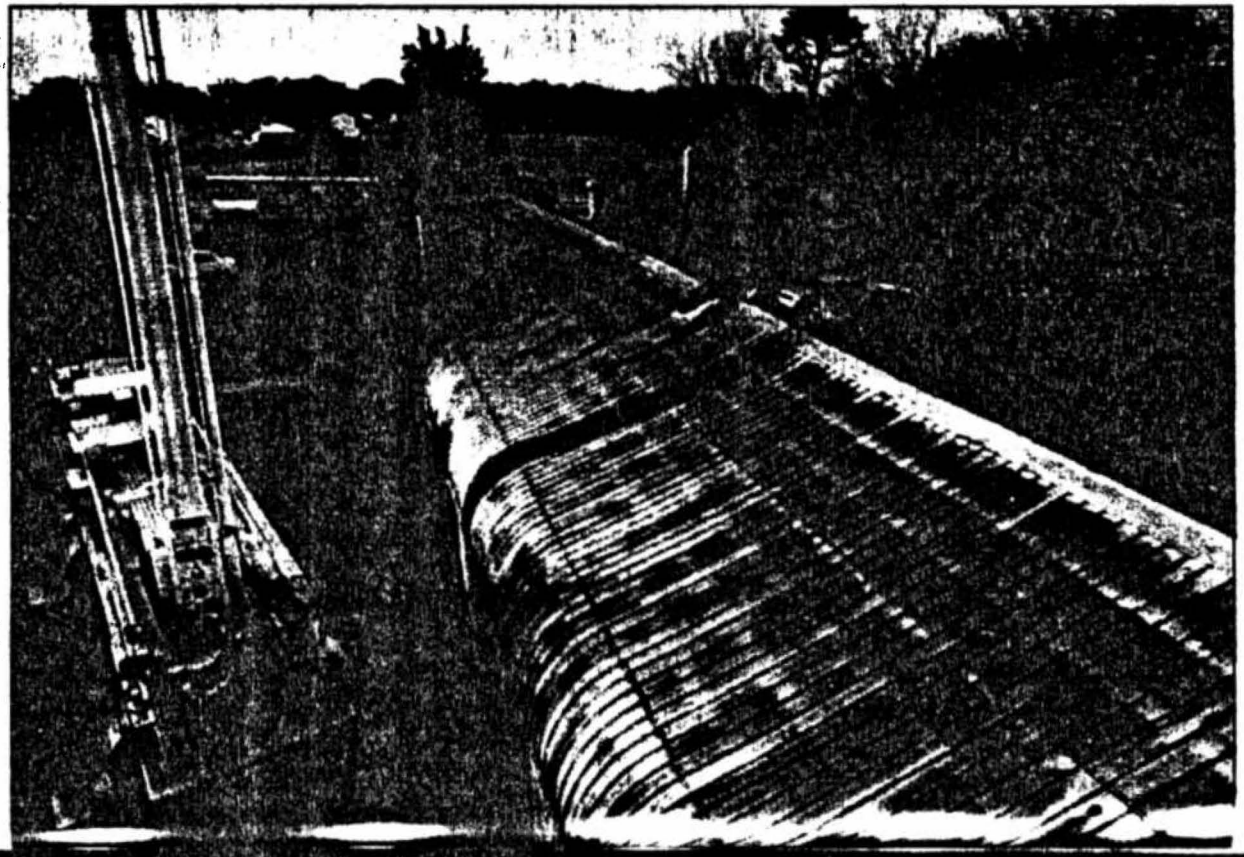
Herbert H. Zschiegner, 63, of Wall Township will continue to be held in the Union County Jail, Elizabeth, based on yesterday's ruling by U.S. District Court Judge John J. Hughes.

An emotionless Zschiegner, wearing an olive patterned sweater and khaki pants, stared as the judge apparently sided with federal prosecutor Mary Futcher.

She had argued there was too great a risk that Zschiegner would flee because if he is convicted on the federal charges of manufacturing methamphetamine, or speed, and possession with intent to distribute, he could spend the rest of his life in prison.

Futcher said federal investigators had been unable to uncover $1 million in profits that Zschiegner reportedly made from manufacturing speed in a back room of Zschiegner

Please see Bail, page C4



The federal Environmental Protection Agency yesterday began a cleanup of the Zschiegner Refining building (left) in Howell Township. Herbert H. Zschiegner, 63, Wall Township, the operator of the Maxim-Southard Road business has been charged with manufacturing methamphetamine. Zschiegner is being held without bail in the Union County Jail until his trial.

T RAINEY
Asbury Park Press

Suspect in drug lab case is denied bail

From page C1

Refining. Zschiegner also owns an island in Nova Scotia, lawyers said during the hearing.

"Under the circumstances, I think the judge's decision was appropriate," Futcher said yesterday.

But defense lawyers for Zschiegner, who has owned and operated Zschiegner Refining for about 30 years, did not agree with Hughes' ruling. "We're going to discuss appealing it," Joseph Rodgers, a lawyer with offices in North Wildwood, said yesterday.

He and defense lawyer Jack Kooreman, who is based in Midland Park, said they would likely seek the appeal through the U.S. 3rd Circuit Court of Appeals, Philadelphia.

In rebutting that Zschiegner would flee, Rodgers maintained that Zschiegner has close ties in this country with his family, which includes his wife, Frances, two daughters, a brother-in-law and two grandchildren. Rodgers said that neither Zschiegner nor his wife own valid passports. Rodgers maintained the couple was willing to bond their $350,000 riverfront home in the Manasquan Shores section of Wall, as well as the refinery site, to ensure Zschiegner would appear for his trial, which has not be scheduled.

Zschiegner was arrested during an Oct. 30 raid by federal agents from the Drug Enforcement Administration, who reportedly caught Zschiegner finishing up a 30-pound batch of the drug.

MATT RAINEY/Asbury Park Press

Employees of Guardian Co. of Delaware seal vents on roof of Zschiegner Refining building in Howell Township during cleanup yesterday.

Zschiegner's arrest was the culmination of an investigation that began in January 1991, and also led to the arrest of three other men in Missouri earlier this year.

Zschiegner could also face federal environmental charges, because of acids, ether, and other toxins that were carelessly stored at the site, DEA agents have said. A cleanup of the site by the federal Environmental Protection Agency and the state Department of Environmental Protection and Energy, began yesterday and is expected to take at least a year, state and federal officials have said.

During yesterday's hearing, Futcher said investigators found about 100 pounds of methamphetamine sludge dumped behind the one-story refinery, as well as two 30-gallon drums of thionyl chloride outside. The chemical is on the state's hazardous substance list, and can cause tissue burns, or other injuries if the vapors are breathed, said James D. Manuel, emergency response specialist for the DEPE.

The next step in the federal process for Zschiegner will be an arraignment, but no date was set as of yesterday. Futcher said she expects that to take place within about a week.

GLOUCESTER COUNTY TIMES

STATE & REGION

Drug raid unearths 'environmental nightmare'

By The Associated Press

HOWELL TOWNSHIP — A 63-year-old man was indicted on federal drug charges Wednesday, but officials are left with an "environmental nightmare" of more than 3,000 chemicals that may threaten water and soil.

It will take three months just to identify the substances, some of which were stored for more than 30 years in a chemical stripping company later used as a methamphetamine lab, officials said Wednesday.

"The worst problem I would envision is if there was a fire or a violent reaction inside that would create a cloud that would carry offsite and threaten residential areas," said James Daloia, an officer with the U.S. Environmental Protection Agency.

The EPA identified some of the chemicals as sodium peroxide, cyanide salts, drums containing caustic liquids, acids and various gases. Officials said it should take more than a year to clean up the lab.

Ground water and soil samples are being taken. EPA officials said some of the chemicals were illegally dumped into a nearby stream that feeds into the Metedeconk River and eventually into the Atlantic Ocean.

Ronald Brogan, an agent with the federal Drug Enforcement Administration, said the $3 million drug lab, owned by Herbert Zschiegner, was one of the biggest in the country. Brogan said Zschiegner also was involved with an illegal drug lab operating in Kansas City, Mo.

Officials raided the New Jersey drug lab Friday. Environmental officials were called in over the weekend to spearhead the cleanup.

The lab was housed inside Zschiegner's business, Platinum Chemicals Inc., where Zschiegner chemically stripped precious metals from watch bands, film, electrical components and other items.

Zschiegner was indicted Wednesday on one count each of conspiracy to manufacture methamphetamine and manufacturing the drug. He faces life in prison and a $4 million fine.

A stimulant, methamphetamine is known colloquially as crank or speed.

The environmental problems were created by both the chemical stripping business and the drug lab, Daloia said.

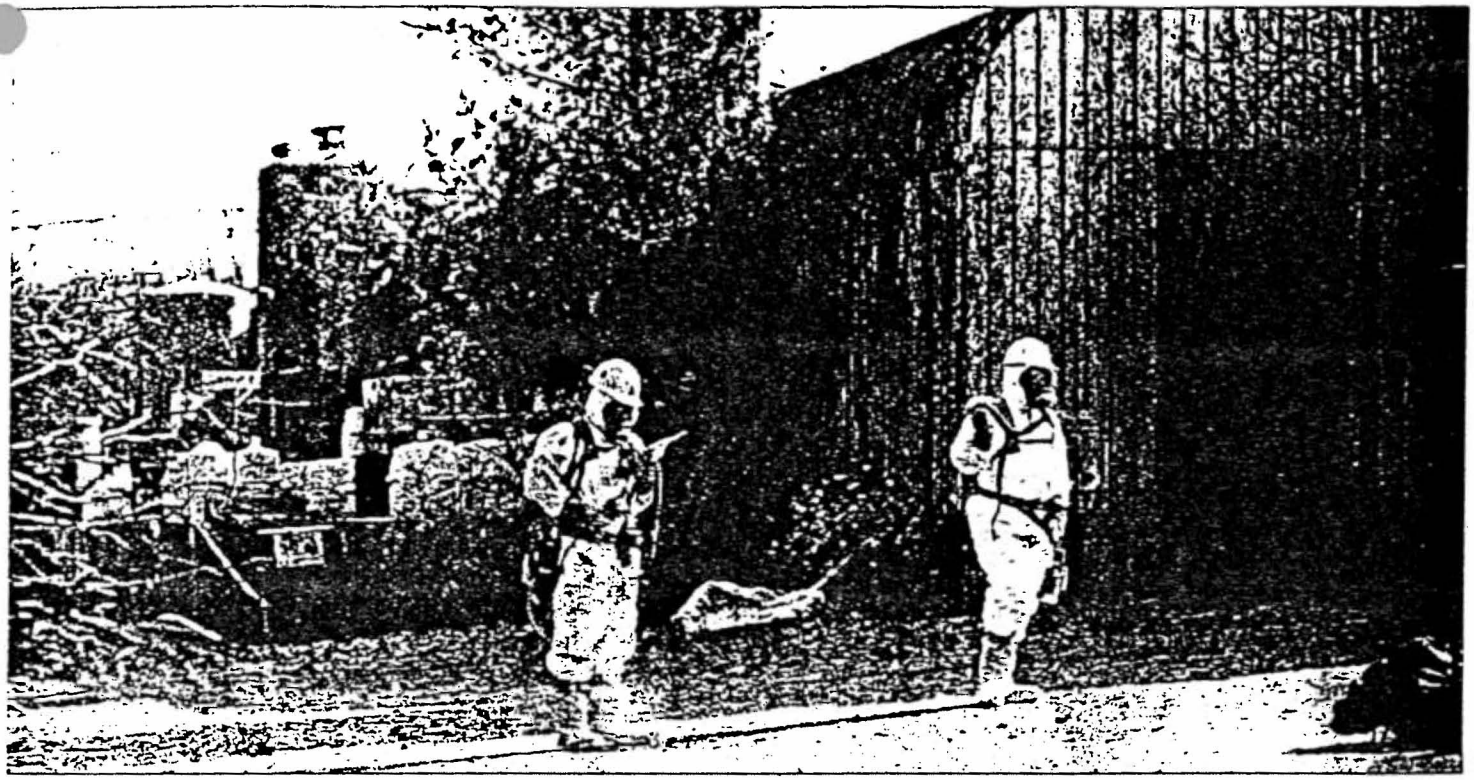
"We do suspect there may be some amount of contamination, but we really don't know the extent or type of contamination," said James Manuel of the state Department of Environmental Protection and Energy.

On Wednesday, workers dressed in white jump suits, yellow boots, masks and gloves to clean up the 300-foot white garage. Dozens of plastic barrels were sitting outside the garage, which was fenced in.

A neighbor, Lillian Knoblock, said she complained to the DEPE a decade ago. She said large clouds of a smelly yellow substance could be seen billowing from Zschiegner's building.

Knoblock, a dog breeder, said florescent liquids also were visible near her pond, which borders Zschiegner's property.

She said DEPE never responded to her complaints, but during that time, a litter of eight Labrador retriever puppies was born deformed. All died prematurely, some with tumors and others with intestinal problems, she said.



By Dan Hulshizer, Associated Press

'Environmental nightmare:' Wearing protective clothing, Environmental Protection Agency workers prepare to inspect a Monmouth County chemical stripping company raided last week as a drug lab.

Owner of tainted land indicted

By TERRY MUTCHLER
Associated Press

HOWELL TOWNSHIP — A 63-year-old man was indicted on federal drug charges Wednesday, but officials are left with an "environmental nightmare" of more than 3,000 chemicals that may threaten water and soil.

It will take three months just to identify the substances, some of which were stored for more than 30 years in a Monmouth County chemical stripping company later used as a methamphetamine lab, officials said Wednesday.

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Zschiegner was indicted Wednesday on one count each of conspiracy to manufacture methamphetamine and manufacturing the drug. He faces life in prison and a $4 million fine. It was unclear where Zschiegner was being held Wednesday.

A stimulant, methamphetamine is known colloquially as crank or speed.

300033

Howell Twp. refinery owner admits guilt in methamphetamine operation

By JUDY PEET

A 63-year-old Monmouth County refinery owner, whose factory doubled duty as one of the largest illegal drug labs in the country, pleaded guilty in federal court to charges in connection with making 66 pounds of methamphetamine, authorities announced yesterday.

Herbert Zschiegner, owner of Zschiegner Refining Co. on Route 9 in Howell Township, admitted before U.S. District Court Judge Garrett Brown in Trenton to conspiring to manufacture and distribute methamphetamine. Authorities said he used his family-owned precious metals refinery as the processing plant for a massive, Missouri-based drug distribution ring.

The guilty plea was part of an agreement in which the U.S. Attorney's Office agreed to drop more serious charges against the defendant. He faces a maximum of life imprisonment and $2 million in fines. Brown did not set a sentencing date.

Meanwhile, environmental officials are continuing their cleanup of the factory site. Investigators who raided the plant last October found such vast amounts of hazardous chemicals that the site was immediately designated for Environmental Protection Agency (EPA) superfund emergency cleanup.

"We're still trying to clean up the mess," EPA spokesman Richard Cahill said yesterday. "It hasn't been an easy job."

Cahill said toxic, volatile chemicals involved in both metal plating and drug manufacture were sloppily stored in deteriorating vats on the property. Authorities are also concerned about illegal discharges from the site, which is across from two residential neighborhoods.

The EPA has not filed criminal charges against Zschiegner, but Cahill noted that the investigation and cleanup have not been completed. Zschiegner also faces possible prosecution from state and local environmental agencies.

Assistant U.S. Attorney Mary Futcher said the government agreed to drop more serious charges of manufacturing and distributing methamphetamines in favor of Zschiegner pleading guilty to lesser conspiracy charges. She refused to comment further on the agreement or whether Zschiegner would testify in cases pending against two Missouri men also charged in the distribution ring.

Zschiegner was arrested Oct. 30 in a raid on his one-story wood-frame factory by the Clandestine Laboratory Enforcement Team of the Drug Enforcement Agency (DEA). DEA officials said the Missouri men were arrested earlier this year. That investigation led authorities to Zschiegner.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION II

IN THE MATTER OF Zschiegner Refining, Inc. Herbert H. Zschiegner Frances B. Zschiegner Respondents Proceeding Pursuant to Section 104(e)(5) of the Comprehensive Environmental, Response, Compensation and Liability Act of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986, 42 U.S.C. §9604(e)(5).	ADMINISTRATIVE ORDER DIRECTING COMPLIANCE WITH REQUEST FOR ACCESS INDEX NO. II CERCLA-104-93-0101

JURISDICTION

1. THIS ADMINISTRATIVE ORDER ("Order") is issued to Zschiegner Refining, Inc., Herbert H. Zschiegner and Frances B. Zschiegner ("Respondents"), by the United States Environmental Protection Agency ("EPA") pursuant to the authority vested in the President of the United States by Section 104(e)(5) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986, ("CERCLA"), 42 U.S.C. §9604(e)(5), which authority was delegated to the Administrator of the EPA by Executive Order 12580, dated January 23, 1987, and duly redelegated to the Regional Administrator of EPA, Region II on April 17, 1987.

PARTIES BOUND

2. This Order shall apply to and be binding upon Respondents and each and every agent of Respondents and upon all other persons and entities who are under the direct or indirect control of the Respondents.

FINDINGS OF FACT AND CONCLUSIONS OF LAW

3. The Zschiegner Refining, Inc. property ("Site") is a 6.1 acre property with a single one-story metal building located at 1442 Maxim Southard Road, Howell Township, Monmouth County, New Jersey.

4. The Site consists of one parcel of land which is designated as Block 36, Lot 23 by the Monmouth County Board of Taxation.

5. Herbert H. & Frances B. Zschiegner are the current owners of the Site. They purchased the Site from Herbert E. and Rena Mayer in December 1964.

6. According to local officials, Herbert H. Zschiegner established a precious metal recovery operation at the Site in the 1960s. Operations involved reducing metals such as gold, silver, platinum and nickel to their pure state. On October 31, 1992, Mr. Zschiegner was arrested at the Site by agents from the federal Drug Enforcement Administration (DEA) on drug charges. According to federal officials, Mr. Zschiegner set up a drug manufacturing laboratory at the Site in September 1991. DEA removed drug-related chemicals from the portion of the Site used for drug manufacturing in November 1992. It is unknown at this time whether precious metal refining operations were being conducted at the time of the arrest. According to a Dun & Bradstreet report, the New Jersey Secretary of State Department of Corporation indicates that the corporation, Zschiegner Refining, Inc., was voided by proclamation on March 8, 1985. The Site was brought to EPA's attention as a result of the DEA raid and numerous chemicals found at the Site.

7. On November 2, 1992 EPA inspected the Site. EPA found dangerous and potentially shock-sensitive chemical compounds existing in an unsecured state and visual evidence past releases of suspected hazardous substances. As a result of the inspection, EPA determined that an imminent and substantial threat to the public health and welfare and to the environment by the release or threat of release of hazardous substances. The site is located in a residential area; the closest residence is within 100 feet of the Site building. On November 2, 1992, the EPA Response and Prevention Branch requested and received verbal authorization by the EPA Emergency and Remedial Response Division for funding to conduct a removal action pursuant to section 104(e) of CERCLA at the Site. On December 30, 1992, EPA issued an Action Memorandum documenting the prior verbal authorization. The Action Memorandum identified certain response measures that needed to be taken in order to effectively mitigate and minimize damage to, and provide adequate protection of, public health, welfare, and the environment.

8. During the November 2, 1992 inspection of Respondents' facility, EPA found many containers of unknown and hazardous

substances in extremely unsafe conditions. EPA observed many open vats and free-standing containers of liquids. Approximately 2,000 gallons of these liquids were found to have a pH of 2.0 or less; 1,600 gallons of liquids were found to be basic. Many liquids were stored in household type plastic garbage cans. EPA found numerous plastic 55 and 35 gallon drums containing nitric acid, acetic acid, hydrochloric acid and ammonium hydroxide. A drum labeled silver cyanide was identified and was in close proximity to the open vats of acids. Some cyanide compounds react with acids to release hydrogen cyanide gas, a highly toxic substance. Acidic wastes are CERCLA hazardous substances. EPA also noted erosion and crystalline formation on the floor under open vats of liquids.

9. EPA also observed approximately 1,400 lab-pack sized containers of chemicals, many of which exhibited crystal growth around the lids, a sign of shock-sensitive chemicals. A container of sodium peroxide, which reacts violently with water, acids, and metal fines, had exuded its contents. EPA noted that rainwater was falling within 2 feet of this area due to a leaky roof. Peroxides in general tend to become highly unstable and shock sensitive as they age. Two rusty containers labeled anhydrous ether were identified. Sodium peroxide and anhydrous ether are CERCLA hazardous substances.

10. In addition, on a open loading platform outside the building, EPA found numerous glass carboys containing a dark orange liquid, numerous fiberglass holding tanks with unknown contents and plastic drums containing corrosives as indicated by drum labels. All of these containers were exposed to the environment. Therefore, a failure of any of the containers would lead to a direct release into the environment. The cement wall of the loading platform is severely eroded throughout, evidence of suspected past releases.

11. EPA's observations of Respondents' facility support EPA's determination to commence in November 1992 time-critical removal activities at the Site pursuant to section 104(e) of CERCLA in order to mitigate the threat of further release of hazardous substances from Respondents' facility.

12. In November 1992, federal officials informed EPA that Mr. Zschiegner was being held in jail pending his trial on federal drug charges. In November and December 1992, EPA's Office of Regional Counsel attempted to obtain Mr. Zschiegner's consent to EPA access to the Site by sending an Access Agreement to Mr. Zschiegner's counsel. In January 1993, EPA learned that Mr. Zschiegner had retained new counsel. EPA again requested consent to access re-sending the Access Agreement by letter to Mr. and Mrs. Zschiegner through Mr. Zschiegner's new counsel. In February 1993, Mr. Zschiegner's counsel informed EPA that another law firm was being consulted regarding the Access Agreement. In

response to EPA's request that Mr. Zschiegner execute the Access Agreement, the consulting law firm instead put forth numerous conditions, found unacceptable by EPA, to Mr. Zschiegner's consent to access.

13. A substantial threat of new and continued releases of CERCLA hazardous substances into the environment exists at the Site. Thus, Respondent's property is, for the purposes of § 104(e)(1), (3), and (4) of CERCLA, 42 U.S.C. § 9604(e)(1), (3), and (4), a place where entry by and on behalf of EPA is necessary to determine the need for further response action or the appropriate response action and to effectuate a response action under CERCLA. Specifically, EPA needs full and unrestricted access to the Respondent's property, including but not limited to, the building at the Site and areas outside the building for the purpose of conducting response activities that EPA deems necessary to address the threat to the public health, welfare or the environment posed by releases or threatened releases of hazardous substances at the Site for such time as is reasonably necessary to complete such activities.

14. Respondents Herbert H. and Frances B. Zschiegner are the present "owners" of the Site as that term is defined in Section 101(20)(A), 42 U.S.C. §9601(20)(A).

15. Respondents are each "persons" as that term is defined in Section 101(21) of CERCLA, 42 U.S.C. §9601(21).

16. Respondents are each "potentially liable parties" pursuant to Section 107(a) of CERCLA, 42 U.S.C. §9607(a) for response costs at the Site.

17. The Site is a "facility" within the meaning of Section 101(9) of CERCLA, 42 U.S.C. §9601(9).

DETERMINATIONS

18. Based on the FINDINGS and CONCLUSIONS set forth above and the entire administrative record, EPA has determined that there is a reasonable basis to believe (i) that there may be a release or threat of release of a hazardous substance or pollutant or contaminant at the Site; ii) that full and unrestricted access to the property is needed in order for EPA to take response actions necessary to address the threat to public health, welfare or the environment posed by the releases or threatened releases of hazardous substances at the Site fcr such time as is reasonably necessary to complete such activities; and iii) that EPA is authorized to enter the Site pursuant the statutory provisions in §104(e) of CERCLA, 42 U.S.C. §9604(e).

19. EPA has determined that entry to the Site is needed by EPA officers, employees, agents, and contractors to perform response activities necessary for the removal action. EPA has been and will carry out removal activities at the Site to protect public health, welfare and the environment.

20. Pursuant to Sections 104(e)(5) of CERCLA, 42 U.S.C. §9604(e)(5), EPA is authorized to issue this Administrative Order directing compliance with its access request.

ORDER

21. Based upon the foregoing FINDINGS, CONCLUSIONS, AND DETERMINATIONS, IT IS HEREBY ORDERED that Respondents shall afford EPA and its officers, employees, agents and contractors, including but not limited to contractors and subcontractors and representatives of NJDEPE (hereinafter collectively referred to as "EPA and NJDEPE"), full and unrestricted access to the Site from the effective date of this Order and for such time as is reasonably necessary to complete the following removal activities: Site stabilization efforts, including the transferring of hazardous materials into proper containers; lab-packing of the laboratory chemicals; disposal sampling; determination of the extent of possible soil contamination; and 24-hour site security.

22. Respondents and any and all employees, agents, contractors and all other persons under the direct or indirect control of the Respondents shall refrain from each and every one of the following:

a. Interfering with or preventing in any manner EPA and NJDEPE from entering onto the Site to perform the response activities specified above; and

b. Disrupting, impeding or delaying in any manner the activities of EPA and NJDEPE who enter the Site or who are present on the Site at any time to perform the removal action; and

c. Disrupting, impeding or delaying in any manner work on the removal action.

23. In the event of any conveyance by Respondents, or Respondents' agents, heirs, successors and assigns, of an interest in the Site, Respondents or Respondents' agents, heirs, successors and assigns shall convey the interest so as to insure continued access by EPA and NJDEPE for the purpose of carrying out the activities pursuant to this Order. Any such conveyance shall restrict the use of the Site so that the use will not interfere with activities undertaken pursuant to this Order.

Respondents, or Respondents' agents, heirs, successors and assigns shall notify EPA by certified mail, return receipt requested, at least thirty (30) days before any conveyance of an interest in the Site and prior to the transfer shall notify the other parties involved in the conveyance of the provisions of this Order.

GENERAL PROVISIONS

24. This Order and all of its terms and provisions shall remain in effect until such time that Respondents are so notified in writing by the Director of the Emergency and Remedial Response Division, EPA - Region II that all removal activities at the Site have been completed.

25. Nothing in this Order shall affect in any manner the right of EPA to issue any other Administrative Orders to Respondents or to any other parties under CERCLA which relate to the Site.

26. Nothing in this Order constitutes a decision on pre-authorization of funds under Section 111(a)(2) of CERCLA, 42 U.S.C. §9611(a)(2).

27. The failure of Respondents to comply with any provision of this Order may be considered a violation of the Order. This violation may give rise to an enforcement action pursuant to Section 104(e)(5) of CERCLA, 42 U.S.C. §§9604(e)(5), thereby subjecting Respondents to possible civil penalties of up to $25,000 per day and other civil damages.

28. Nothing herein shall preclude EPA from taking any additional enforcement actions, and/or other actions as it may deem necessary for any purpose, including the prevention or abatement of an imminent and substantial danger to the public health, welfare, or the environment arising from conditions at the Site, and recovery of costs thereof.

29. Nothing in this Order shall constitute or be construed as a satisfaction or release from liability with respect to any conditions or claims arising as a result of past, current or future operations, ownership or use of the Site by Respondents, Respondents' agents, contractors, successors or assigns.

30. Nothing in this Order shall affect any right, claim, interest, defense or cause of action of EPA with respect to Respondents or any other parties.

OPPORTUNITY TO CONFER

31. Respondents shall have an opportunity to meet with officials of EPA - Region II to discuss the terms and provisions of this Order within fourteen (14) calendar days after the date the Order is signed by the Regional Administrator of EPA - Region II. The Administrative Record supporting the above findings is available in the EPA - Region II office at the 2890 Woodbridge Avenue, Edison, New Jersey and at the Howell Township Library located on Old Tavern Road, Howell Township, New Jersey. EPA officials are willing to discuss the applicability of the Order to Respondents, the factual determinations upon which it is based, the appropriateness of any actions Respondents are being ordered to take, and any other relevant issues or contentions which Respondents may have regarding this Order.

32. If Respondents choose to confer with EPA, Respondent must request a conference by contacting Deborah Schwenk, Office of Regional Counsel, EPA - Region II, 26 Federal Plaza, Room 309, New York, New York 10278, at (212) 264-3148. Any request for this conference may be made by telephone, but all requests for a conference must be confirmed in a writing received by the Office of Regional Counsel, EPA - Region II at the above address on or before fourteen (14) calendar days after the date this Order is signed by the Regional Administrator, EPA - Region II as noted below.

INTENTION TO COMPLY

33. On or before the effective date of this Order, Respondents shall provide, and EPA must receive by certified mail, return receipt requested notice stating whether Respondents intend to comply with this Order. Such written notice should be sent to Ms. Schwenk at the address specified in Paragraph 32. Respondents shall be deemed in violation of the terms of this Order if Respondents fail to provide written notice of intent not to comply or fail to provide any notice of intent with regard to compliance with this Order.

EFFECTIVE DATE OF ORDER

34. This Order and all of its terms and provisions shall become effective on the fourteenth (14th) calendar day after the date the Order is signed by the Acting Regional Administrator of EPA Region II.

IT IS SO ORDERED:

FOR: U.S. ENVIRONMENTAL PROTECTION AGENCY

William J. Muszynski, P.E.
Acting Regional Administrator
U.S. E.P.A. Region II

Date