UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION II

REMOVAL ACTION BRANCH

ADMINISTRATIVE RECORD FILE
ONONDAGA NATION DRUM SITE
ONONDAGA INDIAN NATION,
ONONDAGA COUNTY, NEW YORK

Prepared by:
U.S. EPA Technical Assistance Team
Roy F. Weston, Inc.
Major Programs Division
Edison, New Jersey

Prepared for:
J. Daniel Harkay
U.S. EPA Region II
Removal Action Branch
Edison, New Jersey

Revision I
October 1991

ONONDAGA NATION DRUM SITE

ADMINISTRATIVE RECORD FILE

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ONONDAGA NATION DRUM SITE

ADMINISTRATIVE RECORD FILE

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ADMINISTRATIVE RECORD FILE
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Document #: ON-1001
Title: Initial Notification of Site - Memorandum of telephone conversation.
Category: Site Identification
Author: D. Abbott, Onondaga County Department of Health
Recipient: S. Burdick, Onondaga County Department of Health
Date: May 13, 1983

Document #: ON-1002
Title: Site Inspection Memorandum
Category: Site Identification
Author: David J. Curtis, Federal Remedial Project Section, NYSDEC
Recipient: Frank T. Ricotta, Supervisor
Central Remedial Projects Section,
NYSDEC
Date: October 3, 1983

Document #: ON-1003
Title: Notice of Drum Removal On Site
Category: Site Identification
Author: David Curtis, New York State Department of Environmental Conservation
Recipient: Chief William Lazore, Onondaga Nation
Date: January 23, 1984

Document #: ON-1004
Title: Notification of Field Investigation
Category: Site Identification
Author: Charles N. Goddard, Director, Bureau of Hazardous Site Control, New York State Department of Conservation
Recipient: Chief Cook, Onondaga Nation
Date: April 30, 1987

Document #: ON-1005
Title: Letter Requesting Superfund Consideration
Category: Site Identification
Author: Michael O'Toole Jr., Director, Division of Hazardous Waste Remediation, New York State Department of Environmental Conservation
Recipient: Stephen Luftig, Director, Emergency and Remedial Response Division, U.S. EPA - Region II
Date: April 22, 1988

Document #: ON-1006
Title: Preliminary Site Assessment Notice
Category: Site Identification
Author: Stephen Luftig, Director, Emergency and Remedial Response Division, U.S. EPA - Region II
Recipient: Michael O'Toole, Jr., Director, Division of Hazardous Waste Remediation, New York State Department of Environmental Conservation
Date: June 13, 1988

Document #: ON-1007
Title: Site Activity Status Report
Category: Site Identification
Author: Michael O'Toole Jr., Director, Division of Hazardous Waste Remediation, New York State Department of Environmental Conservation
Recipient: Chief Cook, Onondaga Nation
Date: October 14, 1988

Document #: ON-1008
Title: Removal Action Request
Category: Site Identification
Author: Michael O'Toole Jr., Director, Division of Hazardous Waste Remediation, New York State Department of Environmental Conservation
Recipient: Richard Caspe, Director, Emergency and Remedial Response Division, U.S. EPA - Region II
Date: August 15, 1990

Document #: ON-2001
Title: Site Map-Areas of Disposal in 1967
Category: Site Identification
Author: Bureau of Hazardous Site Control
New York State Department of Environmental Conservation
Recipient: Joseph D. Rotola, On-Scene Coordinator, U.S. EPA - Region II
Date:

Document #: ON-2002
Title: Site Map-Present Areas of Disposal
Category: Site Identification
Author: Bureau of Hazardous Site Control
New York State Department of Environmental Conservation
Recipient: Joseph D. Rotola, On-Scene Coordinator, U.S. EPA - Region II
Date:

Document #: ON-2003
Title: Phase I Investigation
Category: Site Identification
Author: U.R.S. Company, Inc.
Recipient: New York State Department of Environmental Conservation
Date: June 1989

Document #: ON-3001
Title: Expedited Action Memorandum
Category: Removal Response
Author: Joseph D. Rotola, On-Scene Coordinator, Removal Action Branch, U.S. EPA - Region 2
Recipient: Richard Caspe, Director, Emergency and Remedial Response Division, U.S. EPA - Region 2
Date: September 5, 1990

Document #: ON-3002
Title: Request for Removal Action Restart and 12-Month Exemption for the Onondaga Nation Drum Site, Onondaga Indian Nation, Town of Nedrow, Onondaga County, New York
Category: Removal Response
Author: Joseph D. Rotola, On-Scene Coordinator, and James Daniel Harkay, On-Scene Coordinator Removal Action Branch, U.S. EPA - Region 2
Recipient: Constantine Sidamon-Eristoff, Regional Administrator U.S. EPA, Region 2
Date: August 30, 1991

Document #: ON-4001
Title: Telephone Conversation Memorandum
Category: Enforcement
Author: David Munro, New York State Department of Law Action Branch, U.S. EPA - Region 2
Recipient: File
Date: November 16, 1983

Document #: ON-5001
Title: Fact Sheet
Category: Public Participation
Author: J. Daniel Harkay On-Scene Coordinator Removal Action Branch, U.S. EPA - Region 2
Recipient: Public
Date: October 1991

Document #: ON-5002
Title: Community Relations Plan
Category: Public Participation
Author: Eric Wilson
U.S. EPA Technical Assistance Team
Recipient: J. Daniel Harkay, On-Scene Coordinator, Removal Action Branch, U.S. EPA Region 2
Date: October 1991

Document #: ON-6001
Title: EPA Regional Guidance Documents
Category: Guidance Documents
Author: N/A
Recipient: N/A
Date: N/A

ONONDAGA COUNTY DEPARTMENT OF HEALTH
DIVISION OF ENVIRONMENTAL SANITATION

ON-1001

Peter Guala, P.E., Director

TO: S. Burdick

DATE: May 13, 1983

FROM: D. Abbott

SUBJECT: Onondaga Indian Reservation Barrel Site, Route 11, Nedrow

I made a telephone call to Ms. Ronnie Patineau, Route 11, Nedrow, 492-4212, concerning the complaint call referred to us (# SW-1-10) that she made to the New York State Department of Environmental Conservation (DEC) Region 7 office about barrels. Ronnie Patineau was not in so I left my name and number and a message for Ronnie Patineau to call me.

Ronnie Patineau called me back and told me about six barrels at the Salina Drive-In, Route 11, Nedrow. I told her we would have to get permission from the Chief to come on the Reservation. She said she would call Chief Bill Lazore. I then received a call from Chief Bill Lazore and he said besides the six barrels at the Drive-In they have an area where they allowed someone to dump material several years ago that may have radioactive waste in it. The Chief wanted to know if we could bring a geiger counter down to take some readings. I told him I would have to clear this with our Commissioner of Health and I would call him back. He gave me his telephone number (492-2573).

I then met with Bob Burdick, Joe Plano, and Dr. Harris and described the above. Dr. Harris said we would have to contact the State Health Department about it.

Joe Plano placed a call to Joseph Barry, Area Public Health Director, Syracuse Area Office, New York State State Health Department and explained the situation to him. Joe Barry said to call the Chief back and tell him that we would represent the State in checking out the suspicous material and to have the Chief accompany us.

We then made arrangements to have Ross Devendorf and Terry Norris go to the Reservation with me.

I telephoned Chief Bill Lazore and arranged to meet him at the entrance to the Salina Drive-In at 2 pm today.

1:54-3:00 pm - At the Salina Drive-In with Ross Devendorf and Terry Norris. We met with Chief Bill Lazore and Ronnie Patineau. I looked at the barrels closest to the Drive-In Smoke Shop and I found four barrels with a liquid material in them. I was able to get a stopper plug out of one of the barrels. It had a sweet aromatic detergent type odor. Only one of the drums had a label which I could read "1,-1,-1, Trichloroethane". I telephoned the office and spoke to S. Burdick. He checked out the toxicity of the above and according to the charts it is a mild toxic. I explained to Chief Lazore and Ronnie Patineau that they should leave the material alone at the present time for labels on discarded barrels don't normally indicate the true material that is in them.

Chief Lazore and some other men accompanied Ross, Terry and I to a second barrel site. This site is off to the south of the Drive-In and is located in an old dump site.

The rusty barrels observed there were scattered about the site. Ross and Terry checked out the area with geiger counters and found no readings higher than normal background.

I went around looking at various barrels trying to find any readable labels. I found a few labels with "Cowles Chemicals Company" and "ADA Chemical Company" on them. There were approximately two hundred barrels in this area with most of them empty, but a few still had some material in them. This material for the most part had a sweet odor to it. I found one barrel with an odor similar to iodine. This dump had what appeared to be discarded hospital material in it also. A small stream runs through this site.

At this time I told Chief Lazore that I would be contacting the DEC Region 7 office toxics man to see what action they would want to take and the possitility of testing the barrels' contents. I gave Chief Lazore my card and told him I or someone from the DEC might contact him on Monday.

At this time Ross, Terry and I returned to the office.

Upon returning I first met with Bob Burdick and Sterling Burdick. I informed them on what we found at the Reservation. I then met with Joe Plano and informed him also. I telephoned the DEC but Tom Suozzo was not available so I talked to Charles Branagh. I told him all that had transpired since we received the complaint from his office. I gave him Chief Lazore's phone number. Charlie said he would discuss what took place with Tom Suozzo and other DEC officials to see what course of action they would take.

DCA/ck

copy: Dr. W. Harris
copy: Joe Plano
copy: Pete Guala
copy: Steve Lackey, Solid Waste, Region 7, DEC
copy: Tom Suozzo, Toxics, Region 7, DEC

ON-1002

New York State Department of Environmental Conservation

MEMORANDUM

TO: Frank T. Ricotta, Supervisor, Central Remedial Projects Section
FROM: David J. Curtis, Senior Sanitary Engineer, Central Remedial Projects Section
SUBJECT: Site Inspection (Barrel Cleanup Program)
Onondaga Indian Reservation - Onondaga (T), Onondaga County
DATE: October 3, 1983

On Wednesday, September 28, 1983, I inspected the inactive drum disposal site on the Onondaga Indian Reservation near Nedrow (V), Onondaga County. This site was listed as a possible drum removal site requested by William Hicks, Regional Director (Region 7). The inspection involved meeting with the head of the Indian Reservation, NYSDEC Region 7 personnel and Onondaga County Health Department staff to verify the existence of the site and to sample representative drums to ensure that the wastes are hazardous. A list of those field representatives present at the site during the site inspection were as follows:

David J. Curtis	-	NYSDEC, Bureau of Remedial Action
Kevin Hanifin	-	NYSDEC, Region 7
Dan Abbott	-	Onondaga County Health Department
Bill Lazore	-	Chief, Onondaga Indian Reservation

Two separate sites were noted during the inspection. Site A was located at the Indian Trading Post shown on the attached rough sketch (Attachment A). There were four full and partially full drums sampled at this site. The drums were labelled and the description of the drums were as follows:

Label No.	Container Quantity	Description
S1	55 Gallon	Drum labelled as 1-1-1 Trichloroethane - approximately 8 inches of liquid in barrel
S2	55 Gallon	Drum not labelled - approximately 5 inches of liquid in barrel
S3	55 Gallon	Drum not labelled - drum full
S4	55 Gallon	Drum not labelled - drum full

Two other drums at Site A were present. However, these drums were empty.

Site B was found off a back road directly adjacent to Exit 16 of Interstate 81. Approximately 400-500 barrels were found at this site. An actual count was not provided during this inspection. The inspection revealed that approximately 80-90 percent of the barrels found were empty. The remaining 10-20 percent contained a black viscous tar substance which had a sweet smell associated with the waste.

Two representative samples were collected from this second site.

Bill Lazore, Indian Chief, requested that these barrels be cleaned up, if hazardous. A representative of the Indian Reservation must be present on the site when working at the site. All samples were taken to the Avon Mobile Laboratory during the afternoon of the inspection.

If samples analyzed are found hazardous under 6 NYCRR Part 360, I would recommend cleaning Site A with the barrel cleanup program. Site B needs more investigation before complete cleanup, if samples from Site B are found to be hazardous.

DJC:msr

January 20, 1984

Mr. William Lazore, Chief
Onondaga Nation
Route 11A
Hemlock
13120

Dear Mr. Lazore:

Re: Small Quantity Cleanup
Round 3 - Drum Removal Program
Onondaga Indian Reservation

On Tuesday, January 17, 1984, the four (4) abandoned barrels of hazardous waste disposed at the Indian Trading Post located off Exit 16 of U.S. I-81 were properly hauled away to a secured disposal facility by Inland Pollution Control, Inc. Removal of these four (4) drums were accomplished under my direction.

This removal finalized the work to be accomplished under the New York State Department of Environmental Conservation's (NYSDEC) Drum Removal Program at the Trading Post.

The second site located at the Reservation involves numerous abandoned drums scattered at a site found off a back road directly adjacent to Exit 16 of I-81. While a preliminary inspection has been done at the site, further investigation will be needed prior to site remediation. This second site has been referred to the Bureau of Hazardous Site Control for possible inclusion on the Hazardous Waste Site Registry and for a Phase I investigation through the State Superfund Program. The completion of the investigation will determine whether this site qualifies for cleanup under the Federal or State Superfund. If you have any indications on who may have contributed to the disposal of drums at this second site, the additional information will expedite the investigation.

Questions relative to this site should be directed to Mr. Steven Lackey, Regional Solid Waste Engineer, of our Region 7 Office.

Sincerely,

/S

David J. Curtis, P.E.
Senior Sanitary Engineer
Central Remedial Projects Section
Bureau of Remedial Action
Division of Solid and Hazardous Waste

cc: Steven Lackey, NYSDEC Region 7

ON-1004

bcc: w/o enc. - U. Engel
N. Nosenchuck
M. O'Toole
W. Krichbaum, Reg. 7
T. Male, Reg. 7
L. Gross, Reg. 7
C. Goddard
W. Demick
M. Chen
file

New York State Department of Environmental Conservation
Albany Road, Albany, New York 12233-0001

APR 30 1987

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

WED/sab

Chief Cook
Onondaga Nation
c/o Box 85
Nedrow, NY 13120

Dear Chief Cook:

Re: Preliminary Field Investigations at Inactive Hazardous Waste Disposal Sites - New York State Superfund Chapter 857, Laws of 1982

The New York State Department of Environmental Conservation (NYSDEC), as required by Chapter 857 of the Laws of 1982 (commonly known as the "New York State Superfund Law"), is conducting preliminary field investigations of inactive hazardous waste disposal sites throughout the State.

Our present records indicate that there is an inactive hazardous waste disposal site within the boundaries of the Onondaga Nation.

Site Name: Onondaga Nation - Site B, ID #734027
Site Address: Nedrow/Onondaga County

This site will be scheduled for investigation in our next contract about to commence, with your approval.

The first phase of our program (Phase I) is to collect all available information and prepare a work plan to collect the additional data needed to rank the site using the United States Environmental Protection Agency's Hazard Ranking System for inactive hazardous waste disposal sites. This work will be performed by our consultants.

We would appreciate your assistance in providing us any information you may have available regarding this property. This can be information on past ownership or operation, period the site was in use, description of wastes deposited, whether any analytical data exists, etc.

Please retain any site information until such time as our consultants contact you. In the meantime, if any questions arise, please refer them to Mr. Walter E. Demick, of my staff, at (518) 457-9538.

Sincerely,

Charles N. Goddard

Charles N. Goddard, P.E.
Director
Bureau of Hazardous Site Control

New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233 - 7010

ON1005

APR 22 1988

Thomas C. Jorling
Commissioner

Mr. Stephen Luftig
Director
Emergency and Remedial Response Division
U.S. Enviromental Protection Agency
Region II
26 Federal Plaza
New York, NY 10278

Re: Removal Action at Onondaga Nation
Site B (734027)
Onondaga County, New York

Dear Mr. Luftig:

The New York State Department of Environmental Conservation requests that the United States Environmental Protection Agency take any appropriate response allowable under the removal action program at the referenced inactive hazardous waste site. As further support and clarification of the reason for this request, we realize under Section 104 of CERCLA as amended by SARA that the President of the United States may respond to any release or threat of release of a hazardous substance, if in the President's discretion it constitutes a public health or environmental emergency and no other person with the authority and capability to respond to the emergency will do so in a timely manner.

The parties responsible for the disposal of the waste are reportedly deceased. The Onondaga Nation also does not possess the required resources to accomplish a remedial action. As this site falls within the jurisdiction of the Onondaga Nation (and perhaps technically outside the jurisdiction of New York State), it would be most appropriate for the Federal Government, through the USEPA, to conduct a removal action at this site.

Even if the State has authority to act, it does not at the present time have emergency contract authority or anv standing agreement with contractors that would allow a response to be implemented and completed in a timely manner. The New York State Department of Environmental Conservation would have to prepare plans and specifications, publicly bid the work and follow through with the normal contract award process. This procedure would take six to eight months just to get a contract awarded. Therefore, we are requesting that the USEPA respond under your removal action program.

The site consists of approximately 800 55-gallon drums lying exposed to the environment on property within the Onondaga Indian Nation near Syracuse, New York. A location map and detailed site maps have been provided for your reference. Approximately 200 of the drums contain sludge or liquids that may be hazardous in nature. The remaining drums (600) are either empty or contain remnants of roofing tar. The drums are in generally poor condition and in several areas have leaked their contents onto the ground.

Staff from the Bureau of Hazardous Site Control and Region 7 sampled several of the drums on November 24, 1987. Analytical results indicate the presence of volatile and semi-volatile compounds in the mg/kg (parts per million) range of concentration. Specifically, ethylbenzene (16 mg/kg), xylene (2,441 mg/kg), acetic acid (methyl ester) (0.800 mg/kg), and benzoic acid (3-methyl) (2,390 mg/kg) have been detected as well as a number of unknown or tentatively identified compounds (total concentration 22,928 mg/kg). Analysis of drum samples taken by NYSDEC in 1983 also detected benzyl alcohol. A summary sheet showing these results, as well as the analytical data sheets, are enclosed.

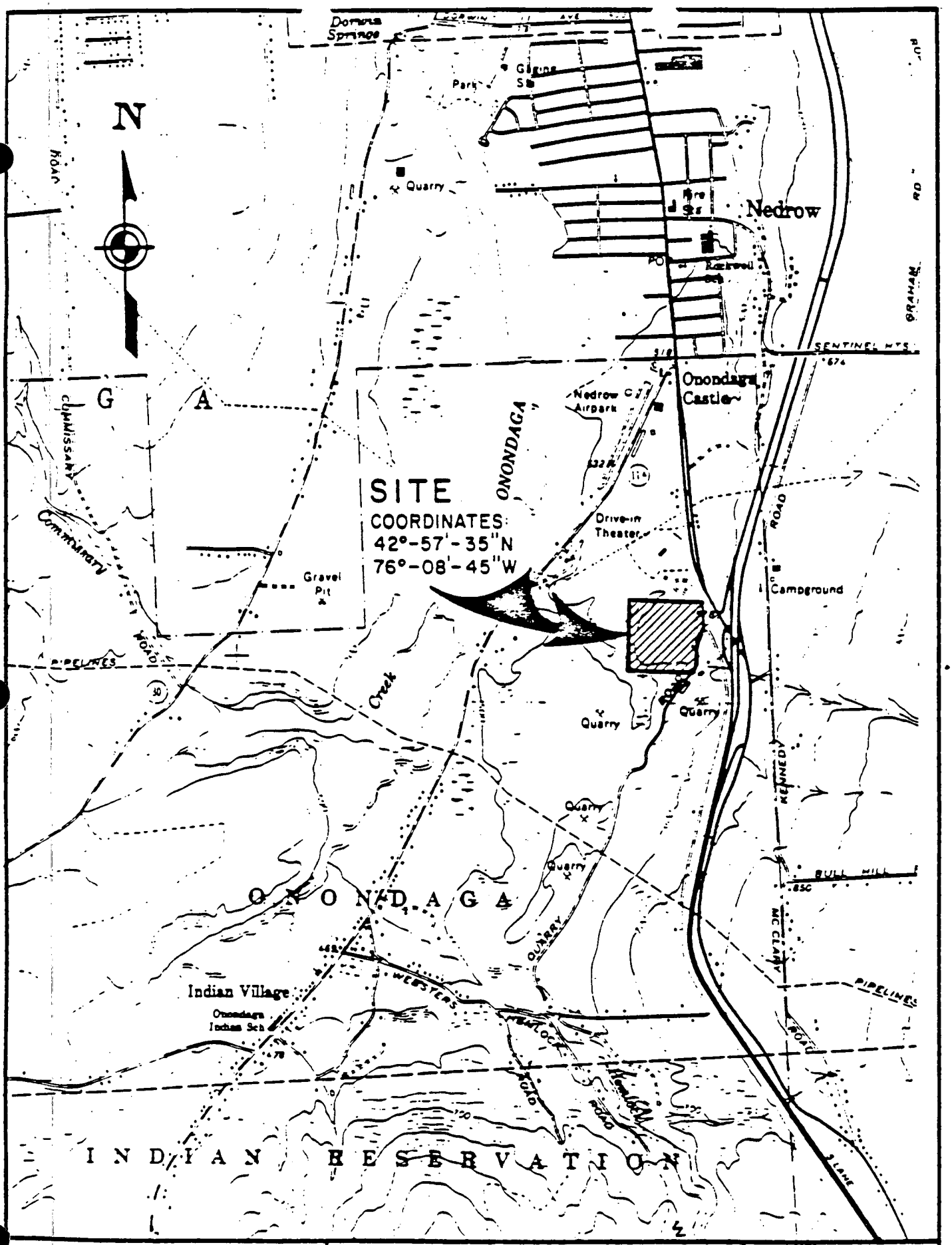
If you have any questions, please contact Mr. Alan Rockmore of my staff at (518) 457-9280.

Sincerely,

Michael J. O'Toole, Jr., P.E.
Acting Director
Division of Hazardous Waste Remediation

Enclosures

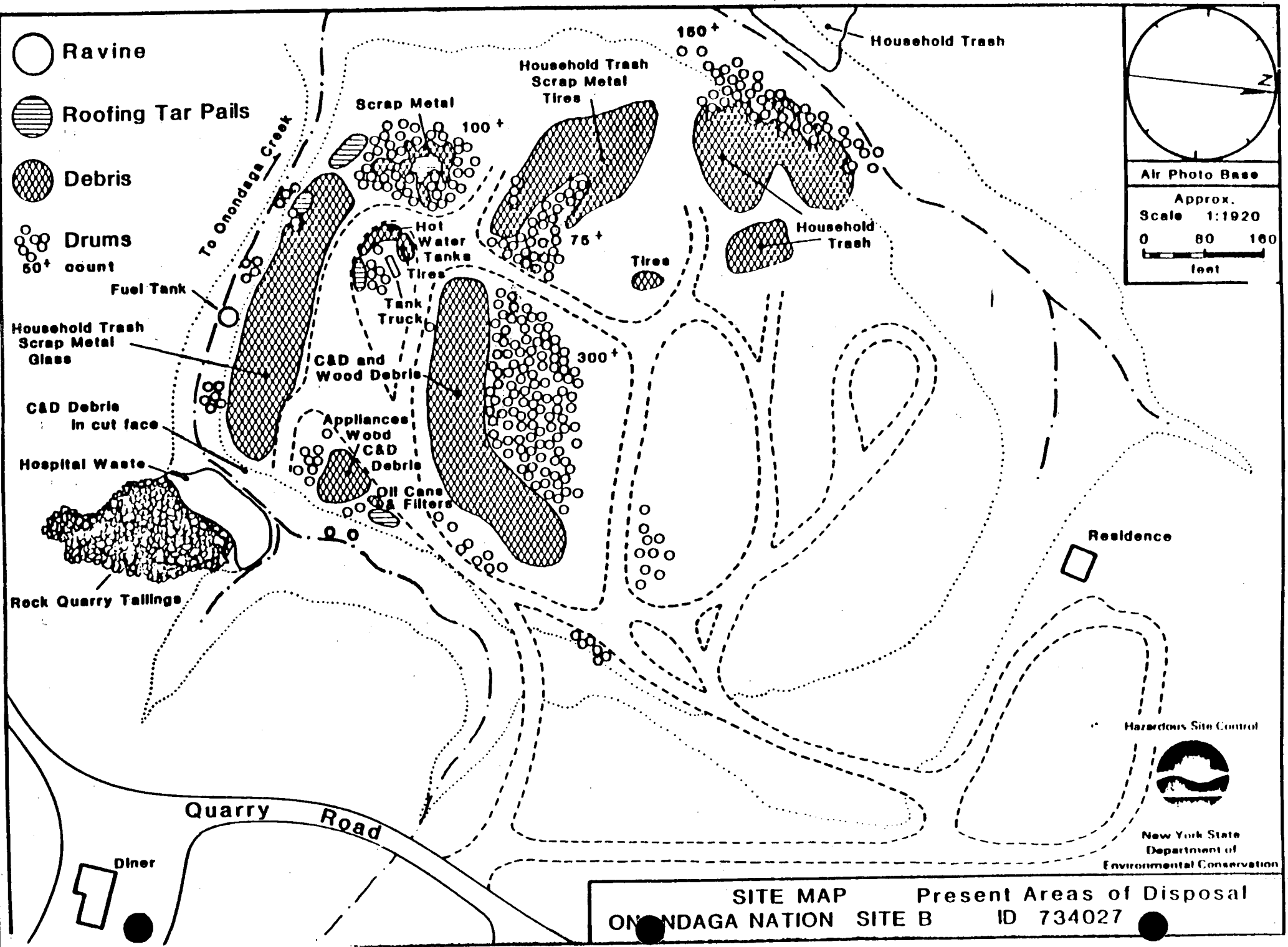
cc, w/Enclosures: Mr. B. Sprague - USEPA Edison, NJ
Mr. G. Pavlou, USEPA Region II
Mr. R. Tramontano - NYSDOH
Dr. N. Kim - NYSDOH
Mr. R.Burdick - Onondaga County D.O.H.

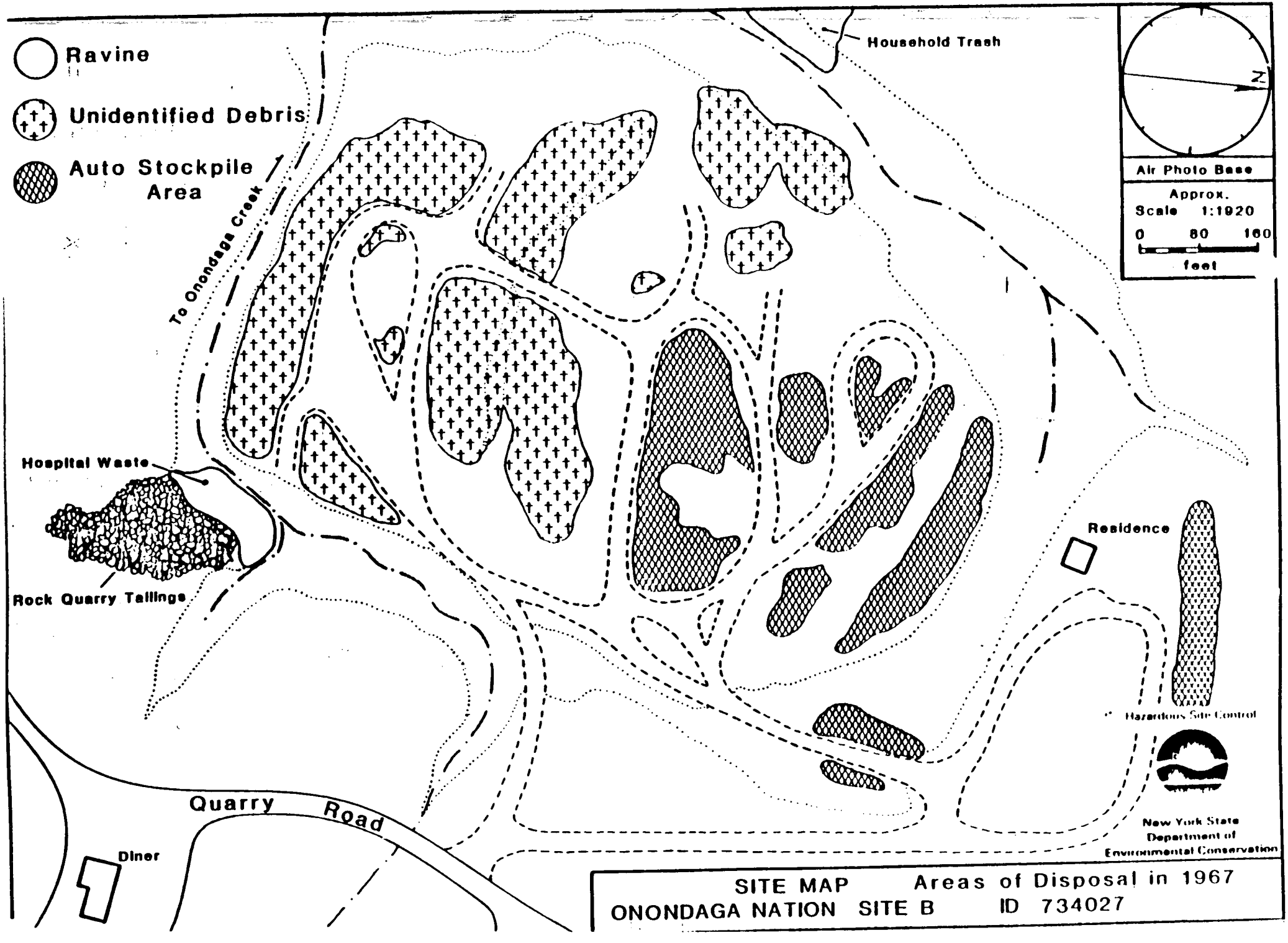


URS Company, Inc.
CONSULTING ENGINEERS
NEW YORK NEW JERSEY

SITE LOCATION MAP
ONONDAGA NATION-SITE B

FIGURE 1


Ravine
Roofing Tar Pails
Debris
Drums
50+ count
To Onondaga Creek
Fuel Tank
Household Trash
Scrap Metal
Glass
C&D Debris
in cut face
Hospital Waste
Rock Quarry Tailings
Scrap Metal
100+
Household Trash
Scrap Metal
Tires
Hot
Water
Tanks
Tires
Tank
Truck
75+
Tires
150+
Household Trash
Household
Trash
C&D and
Wood Debris
300+
Appliances
Wood
C&D
Debris
Oil Cans
& Filters
Residence
Quarry Road
Diner
N
Air Photo Base
Approx.
Scale 1:1920
0 80 160
feet
Hazardous Site Control
New York State
Department of
Environmental Conservation
SITE MAP Present Areas of Disposal
ONONDAGA NATION SITE B ID 734027


Ravine
Unidentified Debris
Auto Stockpile Area
To Onondaga Creek
Household Trash
N
Air Photo Base
Approx.
Scale 1:1920
0 80 160
feet
Hospital Waste
Rock Quarry Tailings
Residence
Hazardous Site Control
New York State Department of Environmental Conservation
Quarry Road
Diner
SITE MAP Areas of Disposal in 1967
ONONDAGA NATION SITE B ID 734027

Onondaga Nation - Site B (734027)

Drum Sampling Results - November 24, 1987

Sample I.D.	Analysis
SH87734027-01	EP-Tox,Haz. Waste Char.,VOA
SH87734027-02	EP-Tox,Haz. Waste Char.,VOA
SH87734027-03	EP-Tox,Haz. Waste Char.,VOA
SH87734027-04	EP-Tox,Haz. Waste Char.,VOA
SH87734027-05	EP-Tox,Haz. Waste Char.,VOA,BNA,Pest/PCBs

SH87734027-01 (No VOA data - sample broken)

SH87734027-02 (ug/kg)

Acetone	15000(J)
Xylenes(total)	193000

SH87734027-03 (ug/kg)

Acetone	420(J)
Xylenes(total)	8200

SH87734027-04 (ug/kg)

Ethylbenzene	16000
Xylenes(total)	81000
methyl benzaldehyde(unk)	860000

SH87734027-04 (Reanalysis) (ug/kg)

Xylenes(total)	2441000

SH87734027-05 (ug/kg)

Acetone	350(J)
Xylenes(total)	1500
Acetic acid(methyl ester)	800(J)
Benzoic acid(3-methyl)	2390000
Unk VOA	290(J)
Unk VOA	130(J)
Numerous Unks(total BNA)	22928000

EP-Tox

No sample exceeded regulated limits

Hazardous Waste Characteristics

No sample exhibited characteristics

Nedrow, N.Y.

Mr. Michael J. O'Toole, Jr., P.E., Director
Division of Solid and Hazardous Waste
New York State Department of Environmental
Conservation
50 Wolf Road
Albany, NY 12233

Dear Mr. O'Toole:

On June 13, 1988, we conducted a preliminary site assessment at the Onondaga Indian Nation with representatives from the New York State Department of Environmental Conservation (NYSDEC) and the New York State Department of Health (NYSDOH).

At this time, the presence of drums and debris at this site do not meet the criteria for a CERCLA removal action. Analytical data from samples collected by NYSDEC personnel indicated that no sample exhibited hazardous waste characteristics. The site assessment was unable to identify threats to the public health nor to the environment. However, further characterization of the hospital related waste should be undertaken to insure the non-existance of any related health/environmental threats.

Any questions regarding this site should be directed to Mr. Jack D. Harmon, of my staff, at (201) 321-6789.

Sincerely yours,

Stephen D. Luttig, Director
Emergency and Remedial Response Division

cc: R. Salkie, 2ERR-DD
A. Rockmore, NYSDEC

bcc: G. Zachos, 2ERR-RP
J. Harmon, 2ERR-RP

File: Zachos
2ERR:RP:HARMON:321-6789:ss:8-3-88:H#1

2ERR:RP	2ERR:RP	2ERR:RP	2ERR-DD	2ERR
Harmon	Witkowski	Zachos	Salkie	Luttig
JDH 8/8/88	GH Zachos for 8/3/88	GH. Zachos 8/3/88		

New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233

ON1007

Thomas C. Jorling
Commissioner

OCT 14 1988

Chief Cook
Onondaga Nation
c/o Box 85
Nedrow, New York 13120

Dear Chief Cook:

Re: Onondaga Nation - Site B (#734027)

This letter is to inform you of actions taken by the New York State Department of Environmental Conservation (NYSDEC) and the United States Environmental Protection Agency (USEPA) concerning the above-referenced barrel disposal site.

As you know, staff of the NYSDEC sampled several barrels on November 24, 1987. Chemical analysis of these samples revealed the presence of several chemical compounds that are of environmental concern. None of the samples, however, exhibited the characteristics of a hazardous waste as defined by State and Federal regulations. A summary of the analytical results is enclosed for your information.

This site was referred by NYSDEC in April 1988 to the USEPA for a Federally-funded removal action. The intent of this action was to have the barrels removed using funds from the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Superfund program. In response, staff from USEPA conducted a site visit in June 1988. USEPA informed NYSDEC on August 11, 1988 that a CERCLA removal action would not be performed because the drum samples did not exhibit hazardous waste characteristics. The ability of the State of New York to remove the barrels is likewise dependent on the presence of hazardous wastes.

Because of the number of drums on the property and the detected presence of chemical compounds, the NYSDEC would like to further evaluate the site. The NYSDEC is proposing to take additional samples from a number of drums and from the soil on the property in an attempt to detect the presence of hazardous wastes. If hazardous wastes are found, the site will again be referred to USEPA for action. In the near future, members of my staff will be contacting you to coordinate access and develop a sampling schedule.

On the matter of the hospital waste adjacent to the barrel site, the New York State Department of Health also visited the site in June 1988. Their determination is that the waste does not pose an infectious hazard due to its age, but does pose a physical hazard due to the glass containers and syringes present. Unfortunately, hospital waste does not fit into a category for which this Division's program is responsible. As a non-hazardous solid waste, the materials could be removed and disposed of in a permitted sanitary landfill. Please be advised, however, that this office has no authority to undertake such a removal.

I hope this brings you up to date on the past and proposed actions of the Department in regards to your site. Please feel free to call Walter Demick, P.E. or Martin Brand, of my staff, at (518) 457-9538 if you have any questions.

Sincerely,

Michael J. O'Toole, Jr.
Director
Division of Hazardous Waste Remediation

Enclosure

cc: E. Sullivan
M. O'Toole (2)
C. Goddard
F. Ricotta
A. Rockmore
A. DeBarbieri
R. Heerkens, DOH
T. Male, Reg. 7
W. Demick (File)
M. Brand
W. Shaw

B:kr

ON1008

New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233

7010

Thomas C. Jorling
Commissioner

AUG 10 1990

Mr. Richard Caspe
Director
Emergency and Remedial Response Division
U.S. Environmental Protection Agency
Region II
26 Federal Plaza
New York, New York 10278

Dear Mr. Caspe:

Re: Site No. 7-34-027
Onondaga Nation - Site B
Onondaga County, New York

The New York State Department of Environmental Conservation (NYSDEC) requests that the United States Environmental Protection Agency (USEPA) take any appropriate response allowable under the removal action program at the above referenced inactive hazardous waste site. As you are aware, this site was originally referred by NYSDEC in April 1988 to the USEPA for a federally funded removal action. However, at that time a preliminary site assessment was unable to identify threats to the public health or the environment and failed to show that the presence of drums and debris met the criteria for a CERCLA removal action.

On March 8, 1990 NYSDEC sampled twelve (12) additional drums to further evaluate the site and attempt to detect the presence of hazardous wastes. Analyses for volatile compounds, metals, EP-Toxicity, ignitability, corrosivity and reactivity were completed. A TCL scan was requested, but due to the nature of the waste, the laboratory was unable to complete the full analysis.

The enclosed analytical results show that phenol and xylene were detected in most of the samples in the part per million range. The levels of phenol ranged from 69 to 374 ppm and xylene ranged from 65 to 8900 ppm. All sampled drums were labelled with spray paint using a number that corresponds to the location number shown on the laboratory analysis report.

However, the waste did not fail RCRA characteristics for hazardous waste and, therefore, we are unable to act. Furthermore, the Onondaga Indian Nation has grown increasingly frustrated with the State and Federal regulatory agencies inability to act and, consequently, additional sampling is not possible at this time. The Department believes the waste is similar to hazardous waste found at other remedial sites and believes there is the potential for finding drums with enough xylene remaining to fail the characteristic of ignitability.

Therefore, it is felt that it is necessary to take immediate steps towards a site cleanup. The site is bordered on one edge by a creek that feeds into the Onondaga Creek and this poses a potential for the spread of contamination. Also, there are an undetermined number of buried drums at the site. Finally, the drums are in generally poor condition and in several areas have leaked their contents onto the ground.

As further support and clarification of the reason for this request, we realize under Section 104 of CERCLA, as amended by SARA, that the President of the United States may respond to any release or threat of release of a hazardous substance, if in the President's discretion it constitutes a public health or environmental emergency and no other person with the authority and capability to respond to the emergency will do so in a timely manner.

The NYSDEC cannot respond in as timely a manner as can EPA. Also, it may not have authority to respond since the site is located on the land of the Onondaga Indian Nation.

If you have any questions, please contact Mr. James Van Hoesen, of my staff, at (518) 457-9279.

Sincerely,

Michael J. O'Toole, Jr., P.E.
Director
Div. of Hazardous Waste Remediation

Enclosure
cc: w/Enc.: R. Salkie - USEPA - Region II

NATIONAL ENVIRONMENTAL TESTING, INC.

NET Atlantic, Inc.
Syracuse Division
5854 Butternut Drive
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Tel: (315) 446-8795
Fax: (315) 449-1611

Formerly NET Northeast Inc.

To: STATE OF NEW YORK D.E.C.
615 ERIE BOULEVARD WEST
SYRACUSE, NY 13204

Date: Jun 08 1990

Attention: MR. ERIC KNAPP

SAMPLE #11830

LABORATORY ANALYSIS REPORT

SAMPLE SUMMARY

CLIENT	: STATE OF NEW YORK D.E.C.	DATE RECEIVED	: 06/06/90
JOB #	: 405.030.00	DATE COLLECTED	: 03/08/90
LOCATION	: 012A	TIME COLLECTED	: 1250
METHOD	:GRAB		

PARAMETER	RESULTS	UNITS
BENZENE	<10.	mg/kg
TOLUENE	<20.	mg/kg
ETHYLBENZENE	<10.	mg/kg
PARA-XYLENE	<10.	mg/kg
META-XYLENE	<10.	mg/kg
ORTHO-XYLENE	160.	mg/kg
1,4 DICHLOROBENZENE	<10.	mg/kg
1,3 DICHLOROBENZENE	<10.	mg/kg
1,2 DICHLOROBENZENE	<10.	mg/kg

NOTE:
All analyses performed and reported on a mg/kg wet weight basis.

NYSDOH - ELAP #10067

APPROVED BY: _____ DATE: JUN 8, 1990

NATIONAL ENVIRONMENTAL TESTING, INC.

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To: STATE OF NEW YORK D.E.C.
615 ERIE BOULEVARD WEST
SYRACUSE, NY 13204

Date: Jun 08 1990

Attention: MR. ERIC KNAPP

****

SAMPLE #11833

LABORATORY ANALYSIS REPORT

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SAMPLE SUMMARY

CLIENT : STATE OF NEW YORK D.E.C.

JOB # : 405.030.00

LOCATION : 016A

METHOD :GRAB

DATE RECEIVED : 06/06/90

DATE COLLECTED : 03/08/90

TIME COLLECTED : 1340

PARAMETER	RESULTS	UNITS
BENZENE	<100.	mg/kg
TOLUENE	<100.	mg/kg
ETHYLBENZENE	<100.	mg/kg
PARA-XYLENE	<100.	mg/kg
META-XYLENE	<100.	mg/kg
ORTHO-XYLENE	2100.	mg/kg
1,4 DICHLOROBENZENE	<100.	mg/kg
1,3 DICHLOROBENZENE	<100.	mg/kg
1,2 DICHLOROBENZENE	<100.	mg/kg

NOTE:
All analyses performed and reported on a mg/kg wet weight basis.

NYSDOH - ELAP #10067

APPROVED BY: _____ DATE: JUN 8, 1990

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To: STATE OF NEW YORK D.E.C.
615 ERIE BOULEVARD WEST
SYRACUSE, NY 13204

Date: Jun 08 1990

Attention: MR. ERIC KNAPP

****

SAMPLE #11834

LABORATORY ANALYSIS REPORT

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SAMPLE SUMMARY

CLIENT : STATE OF NEW YORK D.E.C.

DATE RECEIVED : 06/06/90

JOB # : 405.030.00

DATE COLLECTED : 03/08/90

LOCATION : 017A

TIME COLLECTED : 1400

METHOD :GRAB

PARAMETER	RESULTS	UNITS
BENZENE	<200.	mg/kg
TOLUENE	<200.	mg/kg
ETHYLBENZENE	<200.	mg/kg
PARA-XYLENE	<200.	mg/kg
META-XYLENE	<200.	mg/kg
ORTHO-XYLENE	8900.	mg/kg
1,4 DICHLOROBENZENE	<200.	mg/kg
1,3 DICHLOROBENZENE	<200.	mg/kg
1,2 DICHLOROBENZENE	<200.	mg/kg

NOTE:
All analyses performed and reported on a mg/kg wet weight basis.

NYSDOH - ELAP #10067

APPROVED BY: _____ DATE: JUN 8, 1990

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SYRACUSE, NY 13204

Date: Jun 08 1990

Attention: MR. ERIC KNAPP

SAMPLE #11828

LABORATORY ANALYSIS REPORT

SAMPLE SUMMARY

CLIENT : STATE OF NEW YORK D.E.C.
JOB # : 405.030.00
LOCATION : 010A
METHOD :GRAB

DATE RECEIVED : 06/06/90
DATE COLLECTED : 03/08/90
TIME COLLECTED : 1220

PARAMETER	RESULTS	UNITS
BENZENE	<10.	mg/kg
TOLUENE	<10.	mg/kg
ETHYLBENZENE	<10.	mg/kg
PARA-XYLENE	<10.	mg/kg
META-XYLENE	<10.	mg/kg
ORTHO-XYLENE	150.	mg/kg
1,4 DICHLOROBENZENE	<10.	mg/kg
1,3 DICHLOROBENZENE	<10.	mg/kg
1,2 DICHLOROBENZENE	<10.	mg/kg

NOTE:
All analyses performed and reported on a mg/kg wet weight basis.

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Date: Jun 08 1990

Attention: MR. ERIC KNAPP

SAMPLE #11629

LABORATORY ANALYSIS REPORT

SAMPLE SUMMARY

CLIENT : STATE OF NEW YORK D.E.C.

JOB # : 405.230.00

LOCATION : 011A

METHOD :GRAB

DATE RECEIVED : 06/06/90

DATE COLLECTED : 03/08/90

TIME COLLECTED : 1235

PARAMETER	RESULTS	UNITS
BENZENE	<10.	mg/kg
TOLUENE	<20.	mg/kg
ETHYLBENZENE	<10.	mg/kg
PARA-XYLENE	<10.	mg/kg
META-XYLENE	<10.	mg/kg
ORTHO-XYLENE	175.	mg/kg
1,4 DICHLOROBENZENE	<10.	mg/kg
1,3 DICHLOROBENZENE	<10.	mg/kg
1,2 DICHLOROBENZENE	<10.	mg/kg

NOTE:
All analyses performed and reported on a mg/kg wet weight basis.

NYSDOH - ELAP #10067

APPROVED BY: _____ DATE: JUN 8, 1990

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615 ERIE BOULEVARD WEST
SYRACUSE, NY 13204

Date: JUN 08 1990

Attention: MR. ERIC KNAPP

SAMPLE #11A25

LABORATORY ANALYSIS REPORT

SAMPLE SUMMARY

CLIENT : STATE OF NEW YORK D.E.C.

DATE RECEIVED : 06/06/90

JOB # : 405.030.00

DATE COLLECTED : 03/08/90

LOCATION : 0070

TIME COLLECTED : 1120

METHOD :GRAB

PARAMETER	RESULTS	UNITS
BENZENE	<50.	mg/kg
TOLUENE	<50.	mg/kg
ETHYLBENZENE	<50.	mg/kg
PARA-XYLENE	<50	mg/kg
META XYLENE	<50.	mg/kg
ORTHO-XYLENE	370.	mg/kg
1,4 DICHLOROBENZENE	<50.	mg/kg
1,3 DICHLOROBENZENE	<50.	mg/kg
1,2 DICHLOROBENZENE	<50.	mg/kg

NOTE

All analyses performed and reported on a mg/kg wet weight basis.

NET warrants that any sampling and analyses conducted as part of this report are performed in accordance with the analytical industries recognized methodologies and professional standards. NET will not [illegible] [illegible] [illegible] as a result of data interpretation by the client.

NYSDOH - ELAP #10067

APPROVED BY: Conrad Teufel Jr. DATE: JUN 8, 1990

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TO: STATE OF NEW YORK D.E.C.
615 ERIE BOULEVARD WEST
SYRACUSE, NY 13204

Date: Jun 08 1990

Attention: MR. ERIC KNAPP

****

SAMPLE #11020

LABORATORY ANALYSIS REPORT

SAMPLE SUMMARY

CLIENT : STATE OF NEW YORK D.E.C.

JOB # : 405.030.00

LOCATION : 008A

METHOD :GRAB

DATE RECEIVED : 06/06/90

DATE COLLECTED : 03/08/90

TIME COLLECTED : 1145

PARAMETER	RESULTS	UNITS
BENZENE	<50.	mg/kg
TOLUENE	<50.	mg/kg
ETHYLBENZENE	<50.	mg/kg
PARA XYLENE	<50.	mg/kg
META-XYLENE	<50.	mg/kg
ORTHO XYLENE	470.	mg/kg
1,4 DICHLOROBENZENE	<50.	mg/kg
1,3 DICHLOROBENZENE	<50.	mg/kg
1,2 DICHLOROBENZENE	<50.	mg/kg

NOTE:
All analyses performed and reported on a mg/kg wet weight basis.

NYSDOH ELAP #10067 APPROVED BY: [signature] DATE: JUN 8 1990

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To: STATE OF NEW YORK D.E.C.
615 ERIE BOULEVARD WEST
SYRACUSE, NY 13204

Date: Jun 08 1990

Attention: MR. ERIC KNAPP

SAMPLE #11067

LABORATORY ANALYSIS REPORT

SAMPLE SUMMARY

CLIENT : STATE OF NEW YORK D.E.C.
JOB # : 405.020.00
LOCATION : 009A
METHOD : GRAB

DATE RECEIVED : 06/06/90
DATE COLLECTED : 06/06/90
TIME COLLECTED : 1200

PARAMETER	RESULTS	UNITS
BENZENE	<10.	mg/kg
TOLUENE	<10.	mg/kg
ETHYLBENZENE	<10.	mg/kg
PARA-XYLENE	<10.	mg/kg
META-XYLENE	<10.	mg/kg
ORTHO-XYLENE	65.	mg/kg
1,4 DICHLOROBENZENE	<10.	mg/kg
1,3 DICHLOROBENZENE	<10.	mg/kg
1,2 DICHLOROBENZENE	<10.	mg/kg

NOTE:
All analyses performed and reported on a mg/kg wet weight basis.

NET warrants that any sampling and analyses conducted as part of this report are performed in accordance with the analytical industries recognized methodologies and professional standards. NET will not assume liability for any damages resulting from deficient work other than reperformance or cost of said work and will not accept any liability as a result of data interpretation by the client.

NYSDOH - ELAP #10067

APPROVED BY: _____ DATE: JUN 8 . 1990

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Formerly: NET Northeast, Inc.

To: STATE OF NEW YORK D.E.C.
615 ERIE BOULEVARD WEST
SYRACUSE, NY 13204

Date: Apr 18 1990

Attention: MR. ERIC KNAPP

SAMPLE #5392

LABORATORY ANALYSIS REPORT

SAMPLE SUMMARY

CLIENT	: STATE OF NEW YORK D.E.C.	DATE RECEIVED	: 03/13/90
JOB #	: 405.030.00	DATE COLLECTED	: 03/08/90
LOCATION	: 007A	TIME COLLECTED	: 1120
METHOD	:GRAB		

PARAMETER	RESULTS	UNITS
CYANIDE REACTIVITY	<25.	mg/kg
FLASH POINT	>80.	Degrees C
CORROSIVITY	Negative	
PHENOL	125.	mg/kg
SULFIDE REACTIVITY	<50.	mg/kg
ALUMINUM	<10.	mg/kg
ANTIMONY	<25.	mg/kg
ARSENIC	<0.5	mg/kg
BARIUM	<10.	mg/kg
BERYLLIUM	<0.5	mg/kg
CADMIUM	<0.5	mg/kg
CALCIUM	58.	mg/kg
CHROMIUM-T	2.6	mg/kg
COBALT	210.	mg/kg

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Formerly: NET Northeast, Inc.

SAMPLE #5392

LABORATORY ANALYSIS REPORT

PARAMETER	RESULTS	UNITS
COPPER	<2.5	mg/kg
IRON	800.	mg/kg
LEAD	<15.	mg/kg
MAGNESIUM	<5.0	mg/kg
MANGANESE	3.8	mg/kg
MERCURY	<0.20	mg/kg
NICKEL	<5.0	mg/kg
POTASSIUM	<250.	mg/kg
SELENIUM	<0.5	mg/kg
SILVER	<2.5	mg/kg
SODIUM	<50.	mg/kg
THALLIUM	<25.	mg/kg
VANADIUM	<2.5	mg/kg
ZINC	12.	mg/kg

NOTE:
All analyses performed and reported on a mg/kg wet weight basis.

NYSDOH - ELAP #10067

APPROVED BY: Ronald Tewksbury DATE: 4/22/90

NATIONAL ENVIRONMENTAL TESTING, INC.

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Formerly: NET Northeast, Inc.

To: STATE OF NEW YORK D.E.C.
615 ERIE BOULEVARD WEST
SYRACUSE, NY 13204

Date: Apr 18 1990

Attention: MR. ERIC KNAPP

SAMPLE #5393

LABORATORY ANALYSIS REPORT

SAMPLE SUMMARY

CLIENT	: STATE OF NEW YORK D.E.C.	DATE RECEIVED	: 03/13/90
JOB #	: 405.030.00	DATE COLLECTED	: 03/08/90
LOCATION	: 008A	TIME COLLECTED	: 1145
METHOD	:GRAB		

PARAMETER	RESULTS	UNITS
CYANIDE REACTIVITY	<25.	mg/kg
FLASH POINT	>80.	Degrees C
CORROSIVITY	Negative	
PHENOL	69.0	mg/kg
SULFIDE REACTIVITY	<50.	mg/kg
ALUMINUM	<10.	mg/kg
ANTIMONY	<25.	mg/kg
ARSENIC	<0.5	mg/kg
BARIUM	<10.	mg/kg
BERYLLIUM	<0.5	mg/kg
CADMIUM	<0.5	mg/kg
CALCIUM	73.	mg/kg
CHROMIUM-T	<1.5	mg/kg
COBALT	240.	mg/kg

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Formerly: NET Northeast, Inc.

SAMPLE #5393

LABORATORY ANALYSIS REPORT

PARAMETER	RESULTS	UNITS
COPPER	<2.5	mg/kg
IRON	730.	mg/kg
LEAD	<15.	mg/kg
MAGNESIUM	14.	mg/kg
MANGANESE	2.3	mg/kg
MERCURY	<0.20	mg/kg
NICKEL	<5.0	mg/kg
POTASSIUM	<250.	mg/kg
SELENIUM	<0.5	mg/kg
SILVER	<2.5	mg/kg
SODIUM	57.	mg/kg
THALLIUM	<25.	mg/kg
VANADIUM	<2.5	mg/kg
ZINC	16.	mg/kg

NOTE:
All analyses performed and reported on a mg/kg wet weight basis.

NYSDOH - ELAP #10067

APPROVED BY: Conrad Fenfelt DATE: 4/22/90

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615 ERIE BOULEVARD WEST
SYRACUSE, NY 13204

Date: Apr 18 1990

Attention: MR. ERIC KNAPP

SAMPLE #5394

LABORATORY ANALYSIS REPORT

SAMPLE SUMMARY

CLIENT	: STATE OF NEW YORK D.E.C.	DATE RECEIVED	: 03/13/90
JOB #	: 405.030.00	DATE COLLECTED	: 03/08/90
LOCATION	: 009A	TIME COLLECTED	: 1200
METHOD	:GRAB		

PARAMETER	RESULTS	UNITS
CYANIDE REACTIVITY	<25.	mg/kg
FLASH POINT	>80.	Degrees C
CORROSIVITY	Negative	
PHENOL	374.	mg/kg
SULFIDE REACTIVITY	<50.	mg/kg
ALUMINUM	<10.	mg/kg
ANTIMONY	<25.	mg/kg
ARSENIC	<0.5	mg/kg
BARIUM	<10.	mg/kg
BERYLLIUM	<0.5	mg/kg
CADMIUM	<0.5	mg/kg
CALCIUM	56.	mg/kg
CHROMIUM-T	3.3	mg/kg
COBALT	12.	mg/kg

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SAMPLE #5394

LABORATORY ANALYSIS REPORT

PARAMETER	RESULTS	UNITS
COPPER	5.6	mg/kg
IRON	8900.	mg/kg
LEAD	<15.	mg/kg
MAGNESIUM	15.	mg/kg
MANGANESE	39.	mg/kg
MERCURY	0.22	mg/kg
NICKEL	9.0	mg/kg
POTASSIUM	<250.	mg/kg
SELENIUM	<0.5	mg/kg
SILVER	<2.5	mg/kg
SODIUM	55.	mg/kg
THALLIUM	<25.	mg/kg
VANADIUM	<2.5	mg/kg
ZINC	5.8	mg/kg

NOTE:
All analyses performed and reported on a mg/kg wet weight basis.

NYSDOH - ELAP #10067

APPROVED BY: Ronald Faufel Jr. DATE: 4/22/90

NATIONAL ENVIRONMENTAL TESTING, INC.

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SYRACUSE, NY 13204

Date: Apr 18 1990

Attention: MR. ERIC KNAPP

SAMPLE #5395

LABORATORY ANALYSIS REPORT

SAMPLE SUMMARY

CLIENT : STATE OF NEW YORK D.E.C.

JOB # : 405.030.00

LOCATION : 010A

METHOD : GRAB

DATE RECEIVED : 03/13/90

DATE COLLECTED : 03/08/90

TIME COLLECTED : 1220

PARAMETER	RESULTS	UNITS
CYANIDE REACTIVITY	<25.	mg/kg
FLASH POINT	>80.	Degrees C
CORROSIVITY	Negative	
PHENOL	148.	mg/kg
SULFIDE REACTIVITY	<50.	mg/kg
ALUMINUM	<10.	mg/kg
ANTIMONY	<25.	mg/kg
ARSENIC	<0.5	mg/kg
BARIUM	<10.	mg/kg
BERYLLIUM	<0.5	mg/kg
CADMIUM	<0.5	mg/kg
CALCIUM	70.	mg/kg
CHROMIUM-T	<1.5	mg/kg
COBALT	21.	mg/kg

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SAMPLE #5395

LABORATORY ANALYSIS REPORT

PARAMETER	RESULTS	UNITS
COPPER	5.0	mg/kg
IRON	81.	mg/kg
LEAD	<15.	mg/kg
MAGNESIUM	14.	mg/kg
MANGANESE	0.85	mg/kg
MERCURY	0.20	mg/kg
NICKEL	<5.0	mg/kg
POTASSIUM	<250.	mg/kg
SELENIUM	<0.5	mg/kg
SILVER	<2.5	mg/kg
SODIUM	64.	mg/kg
THALLIUM	<25.	mg/kg
VANADIUM	<2.5	mg/kg
ZINC	19.	mg/kg

NOTE:
All analyses performed and reported on a mg/kg wet weight basis.

APPROVED BY: Brad Tuttle DATE: 4/2/90

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615 ERIE BOULEVARD WEST
SYRACUSE, NY 13204

Date: Apr 18 1990

Attention: MR. ERIC KNAPP

SAMPLE #5396

LABORATORY ANALYSIS REPORT

SAMPLE SUMMARY

CLIENT	: STATE OF NEW YORK D.E.C.	DATE RECEIVED	: 03/13/90
JOB #	: 405.030.00	DATE COLLECTED	: 03/08/90
LOCATION	: 011A	TIME COLLECTED	: 1235
METHOD	:GRAB		

PARAMETER	RESULTS	UNITS
CYANIDE REACTIVITY	<25.	mg/kg
FLASH POINT	>80.	Degrees C
CORROSIVITY	Negative	
PHENOL	140.	mg/kg
SULFIDE REACTIVITY	<50.	mg/kg
ALUMINUM	5500.	mg/kg
ANTIMONY	<25.	mg/kg
ARSENIC	<0.5	mg/kg
BARIUM	<10.	mg/kg
BERYLLIUM	<0.5	mg/kg
CADMIUM	<0.5	mg/kg
CALCIUM	2000.	mg/kg
CHROMIUM-T	8.8	mg/kg
COBALT	66.	mg/kg

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SAMPLE #5396

LABORATORY ANALYSIS REPORT

PARAMETER	RESULTS	UNITS
COPPER	7.6	mg/kg
IRON	4600.	mg/kg
LEAD	<15.	mg/kg
MAGNESIUM	1300.	mg/kg
MANGANESE	45.	mg/kg
MERCURY	<0.20	mg/kg
NICKEL	26.	mg/kg
POTASSIUM	2300.	mg/kg
SELENIUM	<0.5	mg/kg
SILVER	<2.5	mg/kg
SODIUM	190.	mg/kg
THALLIUM	<25.	mg/kg
VANADIUM	13.	mg/kg
ZINC	86.	mg/kg

NOTE:
All analyses performed and reported on a mg/kg wet weight basis.

NYSDOH - ELAP #10067

APPROVED BY: Conrad Fuglistaller DATE: 4/22/90

NATIONAL ENVIRONMENTAL TESTING, INC.

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Fax: (315) 449-1611

Formerly: NET Northeast, Inc.

To: STATE OF NEW YORK D.E.C.
615 ERIE BOULEVARD WEST
SYRACUSE, NY. 13204

Date: Apr 18 1990

Attention: MR. ERIC KNAPP

SAMPLE #5397

LABORATORY ANALYSIS REPORT

SAMPLE SUMMARY

CLIENT	: STATE OF NEW YORK D.E.C.	DATE RECEIVED	: 03/13/90
JOB #	: 405.030.00	DATE COLLECTED	: 03/08/90
LOCATION	: 012A	TIME COLLECTED	: 1250
METHOD	:GRAB		

PARAMETER	RESULTS	UNITS
CYANIDE REACTIVITY	<25.	mg/kg
FLASH POINT	>80.	Degrees C
CORROSIVITY	Negative	
PHENOL	175.	mg/kg
SULFIDE REACTIVITY	<50.	mg/kg
ALUMINUM	60.	mg/kg
ANTIMONY	<25.	mg/kg
ARSENIC	<0.5	mg/kg
BARIUM	<10.	mg/kg
BERYLLIUM	<0.5	mg/kg
CADMIUM	<0.5	mg/kg
CALCIUM	500.	mg/kg
CHROMIUM-T	<1.5	mg/kg
COBALT	<2.5	mg/kg

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LABORATORY ANALYSIS REPORT

PARAMETER	RESULTS	UNITS
COPPER	<2.5	mg/kg
IRON	420.	mg/kg
LEAD	<15.	mg/kg
MAGNESIUM	43.	mg/kg
MANGANESE	2.6	mg/kg
MERCURY	<0.20	mg/kg
NICKEL	<5.0	mg/kg
POTASSIUM	<250.	mg/kg
SELENIUM	<0.5	mg/kg
SILVER	<2.5	mg/kg
SODIUM	<50.	mg/kg
THALLIUM	<25.	mg/kg
VANADIUM	<2.5	mg/kg
ZINC	28.	mg/kg
ENDRIN KETONE	<0.55	mg/kg
ALDRIN	<0.30	mg/kg
A-BHC	<0.30	mg/kg
B-BHC	<0.30	mg/kg
D-BHC	<0.30	mg/kg
G-BHC	<0.30	mg/kg
CHLORDANE	<5.2	mg/kg
4,4'-DDD	<0.55	mg/kg
4,4'-DDE	<0.30	mg/kg
4,4'-DDT	<0.55	mg/kg
DIELDRIN	<0.30	mg/kg
A-ENDOSULFAN	<0.30	mg/kg
B-ENDOSULFAN	<0.30	mg/kg
ENDOSULFAN SULFATE	<2.0	mg/kg
ENDRIN	<0.55	mg/kg
HEPTACHLOR	<0.30	mg/kg
HEPTACHLOR EPOXIDE	<0.30	mg/kg
TOXAPHENE	<10.	mg/kg
PCB-1016	<5.2	mg/kg

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LABORATORY ANALYSIS REPORT

PARAMETER	RESULTS	UNITS
PCB-1221	<5.2	mg/kg
PCB-1232	<5.2	mg/kg
PCB-1242	<5.2	mg/kg
PCB-1248	<5.2	mg/kg
PCB-1254	<10.	mg/kg
PCB-1260	<10.	mg/kg
METHOXYCHLOR	<2.0	mg/kg

NOTE:
All analyses performed and reported on a mg/kg wet weight basis.

NYSDOH - ELAP #10067

APPROVED BY: Conrad Teufel DATE: _____

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Formerly: NET Northeast Inc.

To: STATE OF NEW YORK D.E.C.
615 ERIE BOULEVARD WEST
SYRACUSE, NY 13204

Date: Apr 18 1990

Attention: MR. ERIC KNAPP

SAMPLE #5398

LABORATORY ANALYSIS REPORT

SAMPLE SUMMARY

CLIENT	: STATE OF NEW YORK D.E.C.	DATE RECEIVED	: 03/13/90
JOB #	: 405.030.00	DATE COLLECTED	: 03/08/90
LOCATION	: 013A	TIME COLLECTED	: 1310
METHOD	:GRAB		

PARAMETER	RESULTS	UNITS
CYANIDE REACTIVITY	<25.	mg/kg
FLASH POINT	>80.	Degrees C
CORROSIVITY	Negative	
PHENOL	<1.0	mg/kg
SULFIDE REACTIVITY	<50.	mg/kg
ALUMINUM	13000.	mg/kg
ANTIMONY	<25.	mg/kg
ARSENIC	3.0	mg/kg
BARIUM	300.	mg/kg
BERYLLIUM	<0.5	mg/kg
CADMIUM	<0.5	mg/kg
CALCIUM	32000.	mg/kg
CHROMIUM-T	26.	mg/kg
COBALT	150.	mg/kg

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SAMPLE #5398

LABORATORY ANALYSIS REPORT

PARAMETER	RESULTS	UNITS
COPPER	50.	mg/kg
IRON	64000.	mg/kg
LEAD	250.	mg/kg
MAGNESIUM	9000.	mg/kg
MANGANESE	540.	mg/kg
MERCURY	<0.20	mg/kg
NICKEL	36.	mg/kg
POTASSIUM	3000.	mg/kg
SELENIUM	<0.5	mg/kg
SILVER	<2.5	mg/kg
SODIUM	280.	mg/kg
THALLIUM	<25.	mg/kg
VANADIUM	<25.	mg/kg
ZINC	300.	mg/kg
ENDRIN KETONE	<0.50	mg/kg
ALDRIN	<0.50	mg/kg
A-BHC	<0.50	mg/kg
B-BHC	<0.50	mg/kg
D-BHC	<0.50	mg/kg
G-BHC	<0.50	mg/kg
CHLORDANE	<5.0	mg/kg
4,4'-DDD	<0.50	mg/kg
4,4'-DDE	<0.50	mg/kg
4,4'-DDT	<0.50	mg/kg
DIELDRIN	<0.50	mg/kg
A-ENDOSULFAN	<0.50	mg/kg
B-ENDOSULFAN	<0.50	mg/kg
ENDOSULFAN SULFATE	<2.0	mg/kg
ENDRIN	<1.0	mg/kg
HEPTACHLOR	<0.50	mg/kg
HEPTACHLOR EPOXIDE	<0.50	mg/kg
TOXAPHENE	<20.	mg/kg
PCB-1016	<5.0	mg/kg

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SAMPLE #5398

LABORATORY ANALYSIS REPORT

PARAMETER	RESULTS	UNITS
PCB-1221	<5.0	mg/kg
PCB-1232	<5.0	mg/kg
PCB-1242	<5.0	mg/kg
PCB-1248	<10.	mg/kg
PCB-1254	<10.	mg/kg
PCB-1260	<10.	mg/kg
METHOXYCHLOR	<2.0	mg/kg

NOTE:
All analyses performed and reported on a mg/kg wet weight basis.

NYSDOH - ELAP #10067

APPROVED BY: Conrad Terfloth DATE: 4/22/90

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To: STATE OF NEW YORK D.E.C.
615 ERIE BOULEVARD WEST
SYRACUSE, NY 13204

Date: Apr 18 1990

Attention: MR. ERIC KNAPP

SAMPLE #5399

LABORATORY ANALYSIS REPORT

SAMPLE SUMMARY

CLIENT	: STATE OF NEW YORK D.E.C.	DATE RECEIVED	: 03/13/90
JOB #	: 405.030.00	DATE COLLECTED	: 03/08/90
LOCATION	: 014A	TIME COLLECTED	: 1325
METHOD	:GRAB		

PARAMETER	RESULTS	UNITS
CYANIDE REACTIVITY	<25.	mg/kg
FLASH POINT	>80.	Degrees C
CORROSIVITY	Negative	
PHENOL	<1.0	mg/kg
SULFIDE REACTIVITY	*	Not Available
ALUMINUM	6300.	mg/kg
ANTIMONY	<25.	mg/kg
ARSENIC	3.2	mg/kg
BARIUM	140.	mg/kg
BERYLLIUM	<0.5	mg/kg
CADMIUM	<0.5	mg/kg
CALCIUM	24000.	mg/kg
CHROMIUM-T	16.	mg/kg
COBALT	2200.	mg/kg

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SAMPLE #5399

LABORATORY ANALYSIS REPORT

PARAMETER	RESULTS	UNITS
COPPER	36.	mg/kg
IRON	43000.	mg/kg
LEAD	83.	mg/kg
MAGNESIUM	6200.	mg/kg
MANGANESE	390.	mg/kg
MERCURY	*	Not Available
NICKEL	23.	mg/kg
POTASSIUM	1600.	mg/kg
SELENIUM	<0.5	mg/kg
SILVER	<2.5	mg/kg
SODIUM	1600.	mg/kg
THALLIUM	<25.	mg/kg
VANADIUM	15.	mg/kg
ZINC	120.	mg/kg

NOTE:
Sulfide Reactivity and Mercury not available due to insufficient sample.
All analyses performed and reported on a mg/kg wet weight basis.

NYSDOH - ELAP #10067

APPROVED BY: Conrad Tyrell DATE: 4/20/96

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SYRACUSE, NY 13204

Date: Apr 18 1990

Attention: MR. ERIC KNAPP

SAMPLE #5400

LABORATORY ANALYSIS REPORT

SAMPLE SUMMARY

CLIENT : STATE OF NEW YORK D.E.C.

JOB # : 405.030.00

LOCATION : 016A

METHOD : GRAB

DATE RECEIVED : 03/13/90

DATE COLLECTED : 03/08/90

TIME COLLECTED : 1340

PARAMETER	RESULTS	UNITS
CYANIDE REACTIVITY	<25.	mg/kg
FLASH POINT	>80.	Degrees C
CORROSIVITY	Negative	
PHENOL	217.	mg/kg
SULFIDE REACTIVITY	<50.	mg/kg
ALUMINUM	<10.	mg/kg
ANTIMONY	<25.	mg/kg
ARSENIC	<0.5	mg/kg
BARIUM	<10.	mg/kg
BERYLLIUM	<0.5	mg/kg
CADMIUM	<0.5	mg/kg
CALCIUM	90.	mg/kg
CHROMIUM-T	<1.5	mg/kg
COBALT	1300.	mg/kg

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SAMPLE #5400

LABORATORY ANALYSIS REPORT

PARAMETER	RESULTS	UNITS
COPPER	2.8	mg/kg
IRON	5000.	mg/kg
LEAD	<15.	mg/kg
MAGNESIUM	22.	mg/kg
MANGANESE	42.	mg/kg
MERCURY	0.20	mg/kg
NICKEL	6.0	mg/kg
POTASSIUM	<250.	mg/kg
SELENIUM	<0.5	mg/kg
SILVER	<2.5	mg/kg
SODIUM	86.	mg/kg
THALLIUM	<25.	mg/kg
VANADIUM	<2.5	mg/kg
ZINC	32.	mg/kg

NOTE:
All analyses performed and reported on a mg/kg wet weight basis.

NYSDOH - ELAP #10067

APPROVED BY: Conrad Teufel DATE: 4/22/90

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To: STATE OF NEW YORK D.E.C.
615 ERIE BOULEVARD WEST
SYRACUSE, NY 13204

Date: Apr 18 1990

Attention: MR. ERIC_KNAPP

SAMPLE #5401

LABORATORY ANALYSIS REPORT

SAMPLE SUMMARY

CLIENT : STATE OF NEW YORK D.E.C.

JOB # : 405.030.00

LOCATION : 017A

METHOD : GRAB

DATE RECEIVED : 03/13/90

DATE COLLECTED : 03/08/90

TIME COLLECTED : 1400

PARAMETER	RESULTS	UNITS
CYANIDE REACTIVITY	<25.	mg/kg
FLASH POINT	>80.	Degrees C
CORROSIVITY	Negative	
PHENOL	227.	mg/kg
SULFIDE REACTIVITY	<50.	mg/kg
ALUMINUM	<10.	mg/kg
ANTIMONY	<25.	mg/kg
ARSENIC	<0.5	mg/kg
BARIUM	10.	mg/kg
BERYLLIUM	<0.5	mg/kg
CADMIUM	9.4	mg/kg
CALCIUM	<50.	mg/kg
CHROMIUM-T	<1.5	mg/kg
COBALT	110.	mg/kg

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SAMPLE #5401

LABORATORY ANALYSIS REPORT

PARAMETER	RESULTS	UNITS
COPPER	7.9	mg/kg
IRON	3600.	mg/kg
LEAD	59.	mg/kg
MAGNESIUM	8.7	mg/kg
MANGANESE	9.0	mg/kg
MERCURY	*	Not Available
NICKEL	<5.0	mg/kg
POTASSIUM	<250.	mg/kg
SELENIUM	<0.5	mg/kg
SILVER	<2.5	mg/kg
SODIUM	<50.	mg/kg
THALLIUM	<25.	mg/kg
VANADIUM	<2.5	mg/kg
ZINC	4100.	mg/kg

NOTE:
* Mercury not available due to insufficient sample.
All analyses performed and reported on a mg/kg wet weight basis.

APPROVED BY: Ronald Tuttle DATE: 4/22/90

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Date: Apr 18 1990

To: STATE OF NEW YORK D.E.C.
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SYRACUSE, NY 13204

Attention: MR. ERIC KNAPP

SAMPLE #5402

LABORATORY ANALYSIS REPORT

SAMPLE SUMMARY

CLIENT : STATE OF NEW YORK D.E.C.
JOB # : 405.030.00
LOCATION : 018A
METHOD : GRAB

DATE RECEIVED : 03/13/90
DATE COLLECTED : 03/08/90
TIME COLLECTED : 1410

PARAMETER	RESULTS	UNITS
CYANIDE REACTIVITY	<25.	mg/kg
FLASH POINT	79.	Degrees C
CORROSIVITY	Negative	
PHENOL	76.0	mg/kg
SULFIDE REACTIVITY	<50.	mg/kg
ALUMINUM	<10.	mg/kg
ANTIMONY	<25.	mg/kg
ARSENIC	<0.5	mg/kg
BARIUM	<10.	mg/kg
BERYLLIUM	<0.5	mg/kg
CADMIUM	<0.5	mg/kg
CALCIUM	4000.	mg/kg
CHROMIUM-T	<1.5	mg/kg
COBALT	12000.	mg/kg

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SAMPLE #5402

LABORATORY ANALYSIS REPORT

PARAMETER	RESULTS	UNITS
COPPER	<2.5	mg/kg
IRON	420.	mg/kg
LEAD	<15.	mg/kg
MAGNESIUM	360.	mg/kg
MANGANESE	12.	mg/kg
MERCURY	1.4 ✓	mg/kg
NICKEL	<5.0	mg/kg
POTASSIUM	<250.	mg/kg
SELENIUM	<0.5	mg/kg
SILVER	<2.5	mg/kg
SODIUM	16000.	mg/kg
THALLIUM	89.	mg/kg
VANADIUM	<2.5	mg/kg
ZINC	6.6	mg/kg

NOTE:
All analyses performed and reported on a mg/kg wet weight basis.

NYSDOH - ELAP #10067

APPROVED BY: Conrad Tenfelde DATE: 4/23/90

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615 ERIE BOULEVARD WEST
SYRACUSE, NY 13204

Date: Mar 30 1990

Attention: MR. ERIC KNAPP

SAMPLE #5370

LABORATORY ANALYSIS REPORT

SAMPLE SUMMARY

CLIENT	: STATE OF NEW YORK D.E.C.	DATE RECEIVED	: 03/13/90
JOB #	: 405.030.00	DATE COLLECTED	: 03/08/90
LOCATION	: 007A	TIME COLLECTED	: 1120
METHOD	: GRAB		

RCRA Extraction Procedure and Analysis as givin in "Test Methods for Evaluating Solid Waste-Physical Chemical Methods". USEPA, 1982, SW-846

Parameter	Maximum Extraction Level		Analyzed Level	
Arsenic	5.0	mg/l	<0.5	mg/l
Barium	100.0	mg/l	<10.	mg/l
Cadmium	1.0	mg/l	<0.5	mg/l
Chromium-Total	5.0	mg/l	<0.5	mg/l
Lead	5.0	mg/l	<0.5	mg/l
Mercury	0.2	mg/l	<0.01	mg/l
Selenium	1.0	mg/l	<0.5	mg/l
Silver	5.0	mg/l	<0.5	mg/l
2,4D	10.	mg/l	<0.95	mg/l
2,4,5TP	1.	mg/l	<0.20	mg/l
Lindane	0.4	mg/l	<0.05	mg/l
Endrin	0.02	mg/l	<0.11 *	mg/l
Methoxychlor	10.0	mg/l	<0.50	mg/l
Toxaphene	0.5	mg/l	<1.1 *	mg/l

*High detection limit due to sample matrix interference.
To determine whether sample is to be considered Hazardous, please compare reported values to maximum allowable levels.

NYSDOH - ELAP #10067

APPROVED BY: Conrad Trufoli DATE: APR 02 1990

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615 ERIE BOULEVARD WEST
SYRACUSE, NY 13204

Date: Mar 30 1990

Attention: MR. ERIC KNAPP

****

SAMPLE #5371

LABORATORY ANALYSIS REPORT

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SAMPLE SUMMARY

CLIENT : STATE OF NEW YORK D.E.C.

JOB # : 405.030.00

LOCATION : 008A

METHOD : GRAB

DATE RECEIVED : 03/13/90

DATE COLLECTED : 03/08/90

TIME COLLECTED : 1145

RCRA Extraction Procedure and Analysis as givin in "Test Methods for Evaluating Solid Waste-Physical Chemical Methods". USEPA, 1982, SW-846

Parameter	Maximum Extraction Level		Analyzed Level	
Arsenic	5.0	mg/l	<1.0	mg/l
Barium	100.0	mg/l	<10.	mg/l
Cadmium	1.0	mg/l	<0.5	mg/l
Chromium-Total	5.0	mg/l	<0.5	mg/l
Lead	5.0	mg/l	<0.5	mg/l
Mercury	0.2	mg/l	<0.01	mg/l
Selenium	1.0	mg/l	<0.5	mg/l
Silver	5.0	mg/l	<0.5	mg/l
2,4D	10.	mg/l	<0.95	mg/l
2,4,5TP	1.	mg/l	<0.20	mg/l
Lindane	0.4	mg/l	<0.05	mg/l
Endrin	0.02	mg/l	<0.12 *	mg/l
Methoxychlor	10.0	mg/l	<0.50	mg/l
Toxaphene	0.5	mg/l	<1.1 *	mg/l

*High detection limit due to sample matrix interference.
To determine whether sample is to be considered Hazardous, please compare reported values to maximum allowable levels.

NYSDOH - ELAP #10067

APPROVED BY: Conrad Tenfelf DATE: APR 02 1990

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To: STATE OF NEW YORK D.E.C.
615 ERIE BOULEVARD WEST
SYRACUSE, NY 13204

Date: Mar 30 1990

Attention: MR. ERIC KNAPP

SAMPLE #5372

LABORATORY ANALYSIS REPORT

SAMPLE SUMMARY

CLIENT : STATE OF NEW YORK D.E.C.

JOB # : 405.030.00

LOCATION : 009A

METHOD : GRAB

DATE RECEIVED : 03/13/90

DATE COLLECTED : 03/08/90

TIME COLLECTED : 1200

RCRA Extraction Procedure and Analysis as givin in "Test Methods for Evaluating Solid Waste-Physical Chemical Methods". USEPA, 1982, SW-846

Parameter	Maximum Extraction Level		Analyzed Level	
Arsenic	5.0	mg/l	<0.5	mg/l
Barium	100.0	mg/l	<10.	mg/l
Cadmium	1.0	mg/l	<0.5	mg/l
Chromium-Total	5.0	mg/l	<0.5	mg/l
Lead	5.0	mg/l	<0.5	mg/l
Mercury	0.2	mg/l	<0.01	mg/l
Selenium	1.0	mg/l	<0.5	mg/l
Silver	5.0	mg/l	<0.5	mg/l
2,4D	10.	mg/l	<0.95	mg/l
2,4,5TP	1.	mg/l	<0.20	mg/l
Lindane	0.4	mg/l	<0.05	mg/l
Endrin	0.02	mg/l	<0.11 *	mg/l
Methoxychlor	10.0	mg/l	<0.50	mg/l
Toxaphene	0.5	mg/l	<2.2 *	mg/l

*High detection limit due to sample matrix interference.
To determine whether sample is to be considered Hazardous, please compare reported values to maximum allowable levels.

NYSDOH - ELAP #10067

APPROVED BY: Conrad Seifert Jr. DATE: APR 02 1990

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To: STATE OF NEW YORK D.E.C.
615 ERIE BOULEVARD WEST
SYRACUSE, NY 13204

Date: Mar 30 1990

Attention: MR. ERIC KNAPP

SAMPLE #5373

LABORATORY ANALYSIS REPORT

SAMPLE SUMMARY

CLIENT	: STATE OF NEW YORK D.E.C.	DATE RECEIVED	: 03/13/90
JOB #	: 405.030.00	DATE COLLECTED	: 03/08/90
LOCATION	: 010A	TIME COLLECTED	: 1220
METHOD	: GRAB		

RCRA Extraction Procedure and Analysis as givin in "Test Methods for Evaluating Solid Waste-Physical Chemical Methods". USEPA, 1982, SW-846

Parameter	Maximum Extraction Level		Analyzed Level	
Arsenic	5.0	mg/l	<0.5	mg/l
Barium	100.0	mg/l	<10.	mg/l
Cadmium	1.0	mg/l	<0.5	mg/l
Chromium-Total	5.0	mg/l	<0.5	mg/l
Lead	5.0	mg/l	<0.5	mg/l
Mercury	0.2	mg/l	<0.01	mg/l
Selenium	1.0	mg/l	<0.5	mg/l
Silver	5.0	mg/l	<0.5	mg/l
2,4D	10.	mg/l	<0.95	mg/l
2,4,5TP	1.	mg/l	<0.20	mg/l
Lindane	0.4	mg/l	<0.05	mg/l
Endrin	0.02	mg/l	<0.10 *	mg/l
Methoxychlor	10.0	mg/l	<0.50	mg/l
Toxaphene	0.5	mg/l	<1.4 *	mg/l

*High detection limit due to sample matrix interference.
To determine whether sample is to be considered Hazardous, please compare reported values to maximum allowable levels.

NYSDOH - ELAP #10067

APPROVED BY: Conrad Seefeldt Jr. DATE: APR 02 1990

NATIONAL ENVIRONMENTAL TESTING, INC.

NET Atlantic Inc.
Syracuse Division
5854 Butternut Drive
East Syracuse NY 13057
Tel: (315) 446-8795
Fax: (315) 449-1611

Formerly NET Northeast Inc

To: STATE OF NEW YORK D.E.C.
615 ERIE BOULEVARD WEST
SYRACUSE, NY 13204

Date: Mar 30 1990

Attention: MR. ERIC KNAPP

****

SAMPLE #5374

LABORATORY ANALYSIS REPORT

****

SAMPLE SUMMARY

CLIENT : STATE OF NEW YORK D.E.C.

JOB # : 405.030.00

LOCATION : 011A

METHOD : GRAB

DATE RECEIVED : 03/13/90

DATE COLLECTED : 03/08/90

TIME COLLECTED : 1235

RCRA Extraction Procedure and Analysis as givin in "Test Methods for Evaluating Solid Waste-Physical Chemical Methods", USEPA, 1982, SW-846

Parameter	Maximum Extraction Level	Analyzed Level
Arsenic	5.0 mg/l	<0.5 mg/l
Barium	100.0 mg/l	<10. mg/l
Cadmium	1.0 mg/l	<0.5 mg/l
Chromium-Total	5.0 mg/l	<0.5 mg/l
Lead	5.0 mg/l	<0.5 mg/l
Mercury	0.2 mg/l	<0.01 mg/l
Selenium	1.0 mg/l	<0.5 mg/l
Silver	5.0 mg/l	<0.5 mg/l
2,4D	10. mg/l	<0.95 mg/l
2,4,5TP	1. mg/l	<0.20 mg/l
Lindane	0.4 mg/l	<0.05 mg/l
Endrin	0.02 mg/l	<0.09 * mg/l
Methoxychlor	10.0 mg/l	<0.50 mg/l
Toxaphene	0.5 mg/l	<1.7 * mg/l

*High detection limit due to sample matrix interference.
To determine whether sample is to be considered Hazardous, please compare reported values to maximum allowable levels.

NYSDOH - ELAP #10067 APPROVED BY: [signature] DATE: APR 02 1990

NATIONAL ENVIRONMENTAL TESTING, INC.

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Syracuse Division
5854 Butternut Drive
East Syracuse, NY 13057
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Fax: (315) 449-1611

Formerly: NET Northeast Inc.

To: STATE OF NEW YORK D.E.C.
615 ERIE BOULEVARD WEST
SYRACUSE, NY 13204

Date: Mar 30 1990

Attention: MR. ERIC KNAPP

SAMPLE #5375

LABORATORY ANALYSIS REPORT

SAMPLE SUMMARY

CLIENT : STATE OF NEW YORK D.E.C.

JOB # : 405.030.00

LOCATION : 012A

METHOD : GRAB

DATE RECEIVED : 03/13/90

DATE COLLECTED : 03/08/90

TIME COLLECTED : 1250

RCRA Extraction Procedure and Analysis as givin in "Test Methods for Evaluating Solid Waste-Physical Chemical Methods". USEPA, 1982, SW-846

Parameter	Maximum Extraction Level		Analyzed Level	
Arsenic	5.0	mg/l	<0.5	mg/l
Barium	100.0	mg/l	<10.	mg/l
Cadmium	1.0	mg/l	<0.5	mg/l
Chromium-Total	5.0	mg/l	<0.5	mg/l
Lead	5.0	mg/l	<0.5	mg/l
Mercury	0.2	mg/l	<0.01	mg/l
Selenium	1.0	mg/l	<0.5	mg/l
Silver	5.0	mg/l	<0.5	mg/l
2,4D	10.	mg/l	<0.95	mg/l
2,4,5TP	1.	mg/l	<0.20	mg/l
Lindane	0.4	mg/l	<0.05	mg/l
Endrin	0.02	mg/l	<0.09 *	mg/l
Methoxychlor	10.0	mg/l	<0.50	mg/l
Toxaphene	0.5	mg/l	<1.3 *	mg/l

*High detection limit due to samnle matrix interference.
To determine whether sample is to be considered Hazardous, please compare reported values to maximum allowable levels.

NYSDOH - ELAP #10067

APPROVED BY: Conrad Teufel Jr DATE: APR 02 1990

NATIONAL ENVIRONMENTAL TESTING, INC.

NET Atlantic, Inc.
Syracuse Division
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Tel: (315) 446-8795
Fax: (315) 449-1611

Formerly NET Northeast Inc

To: STATE OF NEW YORK D.E.C.
615 ERIE BOULEVARD WEST
SYRACUSE, NY 13204

Date: Mar 30 1990

Attention: MR. ERIC KNAPP

****

SAMPLE #5376

LABORATORY ANALYSIS REPORT

****

SAMPLE SUMMARY

CLIENT : STATE OF NEW YORK D.E.C.

JOB # : 405.030.00

LOCATION : 013A

METHOD : GRAB

DATE RECEIVED : 03/13/90

DATE COLLECTED : 03/08/90

TIME COLLECTED : 1310

RCRA Extraction Procedure and Analysis as givin in "Test Methods for Evaluating Solid Waste-Physical Chemical Methods". USEPA, 1982, SW-846

Parameter	Maximum Extraction Level		Analyzed Level	
Arsenic	5.0	mg/l	<0.5	mg/l
Barium	100.0	mg/l	<10.	mg/l
Cadmium	1.0	mg/l	<0.5	mg/l
Chromium-Total	5.0	mg/l	<0.5	mg/l
Lead	5.0	mg/l	<0.5	mg/l
Mercury	0.2	mg/l	<0.01	mg/l
Selenium	1.0	mg/l	<0.5	mg/l
Silver	5.0	mg/l	<0.5	mg/l
2,4D	10.	mg/l	<0.005	mg/l
2,4,5TP	1.	mg/l	<0.002	mg/l
Lindane	0.4	mg/l	<0.0005	mg/l
Endrin	0.02	mg/l	<0.0005	mg/l
Methoxychlor	10.0	mg/l	<0.015	mg/l
Toxaphene	0.5	mg/l	<0.045	mg/l

To determine whether sample is to be considered Hazardous, please compare reported values to maximum allowable levels.

NYSDOH - ELAP #10067

APPROVED BY: Conrad Tufford Jr. DATE: APR 02 1990

NATIONAL ENVIRONMENTAL TESTING, INC.

NET Atlantic, Inc.
Syracuse Division
5854 Butternut Drive
East Syracuse, NY 13057
Tel: (315) 446-9795
Fax: (315) 449-1611

Formerly NET Northeast, Inc.

To: STATE OF NEW YORK D.E.C.
615 ERIE BOULEVARD WEST
SYRACUSE, NY 13204

Date: Mar 30 1990

Attention: MR. ERIC KNAPP

SAMPLE #5377

LABORATORY ANALYSIS REPORT

SAMPLE SUMMARY

CLIENT : STATE OF NEW YORK D.E.C.

JOB # : 405.030.00

LOCATION : 014A

METHOD : GRAB

DATE RECEIVED : 03/13/90

DATE COLLECTED : 03/08/90

TIME COLLECTED : 1325

RCRA Extraction Procedure and Analysis as givin in "Test Methods for Evaluating Solid Waste-Physical Chemical Methods", USEPA, 1982, SW-846

Parameter	Maximum Extraction Level		Analyzed Level	
Arsenic	5.0	mg/l	<0.5	mg/l
Barium	100.0	mg/l	<10.	mg/l
Cadmium	1.0	mg/l	<0.5	mg/l
Chromium-Total	5.0	mg/l	<0.5	mg/l
Lead	5.0	mg/l	<0.5	mg/l
Mercury	0.2	mg/l	<0.01	mg/l
Selenium	1.0	mg/l	<0.5	mg/l
Silver	5.0	mg/l	<0.5	mg/l
2,4D	10.	mg/l	<0.005	mg/l
2,4,5TP	1.	mg/l	<0.002	mg/l
Lindane	0.4	mg/l	<0.0007	mg/l
Endrin	0.02	mg/l	<0.0007	mg/l
Methoxychlor	10.0	mg/l	<0.02	mg/l
Toxaphene	0.5	mg/l	<0.07	mg/l

To determine whether sample is to be considered Hazardous, please compare reported values to maximum allowable levels.

NYSDOH - ELAP #10067

APPROVED BY: Conrad Teufel Jr. DATE: APR 02 1990

NATIONAL ENVIRONMENTAL TESTING, INC.

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Syracuse Division
5854 Buttermut Drive
East Syracuse, NY 13057
Tel. (315) 446-8795
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Formerly NET Northeast, Inc.

To: STATE OF NEW YORK D.E.C.
615 ERIE BOULEVARD WEST
SYRACUSE, NY 13204

Date: Mar 30 1990

Attention: MR. ERIC KNAPP

SAMPLE #5378

LABORATORY ANALYSIS REPORT

SAMPLE SUMMARY

CLIENT : STATE OF NEW YORK D.E.C.

JOB # : 405.030.00

LOCATION : 016A

METHOD : GRAB

DATE RECEIVED : 03/13/90

DATE COLLECTED : 03/08/90

TIME COLLECTED : 1340

RCRA Extraction Procedure and Analysis as givin in "Test Methods for Evaluating Solid Waste-Physical Chemical Methods". USEPA, 1982, SW-846

Parameter	Maximum Extraction Level		Analyzed Level	
Arsenic	5.0	mg/l	<0.5	mg/l
Barium	100.0	mg/l	<10.	mg/l
Cadmium	1.0	mg/l	<0.5	mg/l
Chromium-Total	5.0	mg/l	<0.5	mg/l
Lead	5.0	mg/l	<0.5	mg/l
Mercury	0.2	mg/l	<0.01	mg/l
Selenium	1.0	mg/l	<0.05	mg/l
Silver	5.0	mg/l	<0.5	mg/l
2,4D	10.	mg/l	<0.95	mg/l
2,4,5TP	1.	mg/l	<0.20	mg/l
Lindane	0.4	mg/l	<0.05	mg/l
Endrin	0.02	mg/l	<0.09 *	mg/l
Methoxychlor	10.0	mg/l	<0.50	mg/l
Toxaphene	0.5	mg/l	<1.4 *	mg/l

*High detection limit due to samnle matrix interference.
To determine whether sample is to be considered Hazardous, please compare reported values to maximum allowable levels.

NYSDOH - ELAP #10067

APPROVED BY: Conrad Seyfert Jr. DATE: APR 02 1990

NATIONAL ENVIRONMENTAL TESTING, INC.

NET Atlantic, Inc
Syracuse Division
5854 Butternut Drive
East Syracuse, NY 13057
Tel: (315) 446-9795
Fax: (315) 449-1611

Formerly NET Northeast, Inc

To: STATE OF NEW YORK D.E.C.
615 ERIE BOULEVARD WEST
SYRACUSE, NY 13204

Date: Mar 30 1990

Attention: MR. ERIC KNAPP

SAMPLE #5379

LABORATORY ANALYSIS REPORT

SAMPLE SUMMARY

CLIENT : STATE OF NEW YORK D.E.C.

JOB # : 405.030.00

LOCATION : 017A

METHOD : GRAB

DATE RECEIVED : 03/13/90

DATE COLLECTED : 03/08/90

TIME COLLECTED : 1400

RCRA Extraction Procedure and Analysis as givin in "Test Methods for Evaluating Solid Waste-Physical Chemical Methods". USEPA, 1982, SW-846

Parameter	Maximum Extraction Level		Analyzed Level	
Arsenic	5.0	mg/l	<1.0	mg/l
Barium	100.0	mg/l	<10.	mg/l
Cadmium	1.0	mg/l	<0.5	mg/l
Chromium-Total	5.0	mg/l	<0.5	mg/l
Lead	5.0	mg/l	1.3	mg/l
Mercury	0.2	mg/l	<0.01	mg/l
Selenium	1.0	mg/l	<0.5	mg/l
Silver	5.0	mg/l	<0.5	mg/l
2,4D	10.	mg/l	<0.95	mg/l
2,4,5TP	1.	mg/l	<0.20	mg/l
Lindane	0.4	mg/l	<0.05	mg/l
Endrin	0.02	mg/l	<0.05 *	mg/l
Methoxychlor	10.0	mg/l	<0.50	mg/l
Toxaphene	0.5	mg/l	<0.90 *	mg/l

*High detection limit due to sample matrix interference.

To determine whether sample is to be considered Hazardous, please compare reported values to maximum allowable levels.

NYSDOH - ELAP #10067

APPROVED BY: Conrad Teufel Jr. DATE: APR 02 1990

NATIONAL ENVIRONMENTAL TESTING, INC.

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Syracuse Division
5854 Butternut Drive
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Formerly NET Northeast Inc.

Date: Apr 02 1990

To: STATE OF NEW YORK D.E.C.
615 ERIE BOULEVARD WEST
SYRACUSE, NY,13204

Attention: MR. ERIC KNAPP

SAMPLE #5380

LABORATORY ANALYSIS REPORT

SAMPLE SUMMARY

CLIENT : STATE OF NEW YORK D.E.C.

JOB # : 405.030.00

LOCATION : 018A

METHOD : GRAB

DATE RECEIVED : 03/13/90

DATE COLLECTED : 03/08/90

TIME COLLECTED : 1410

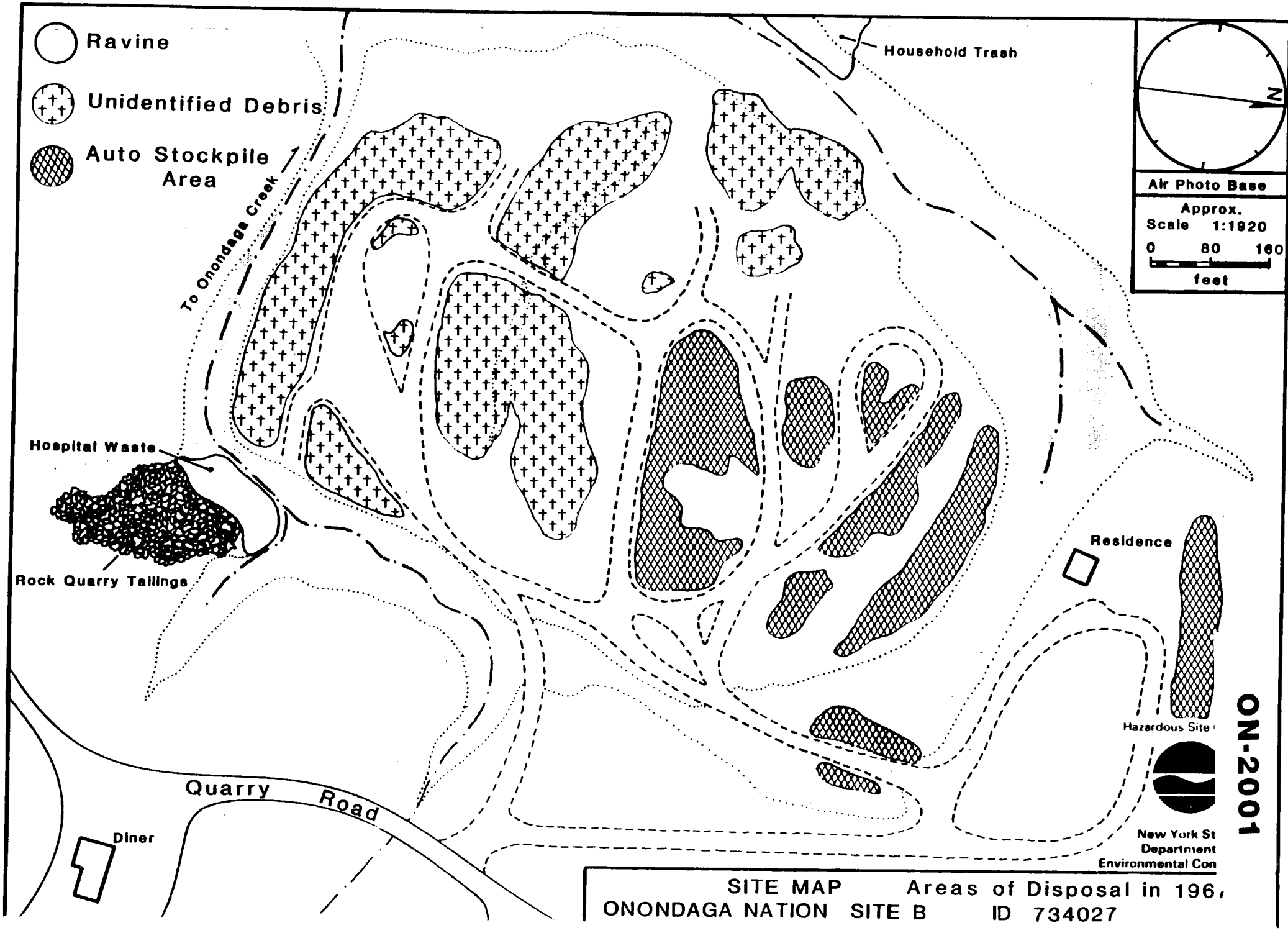
RCRA Extraction Procedure and Analysis as givin in "Test Methods for Evaluating Solid Waste-Physical Chemical Methods". USEPA, 1982, SW-846

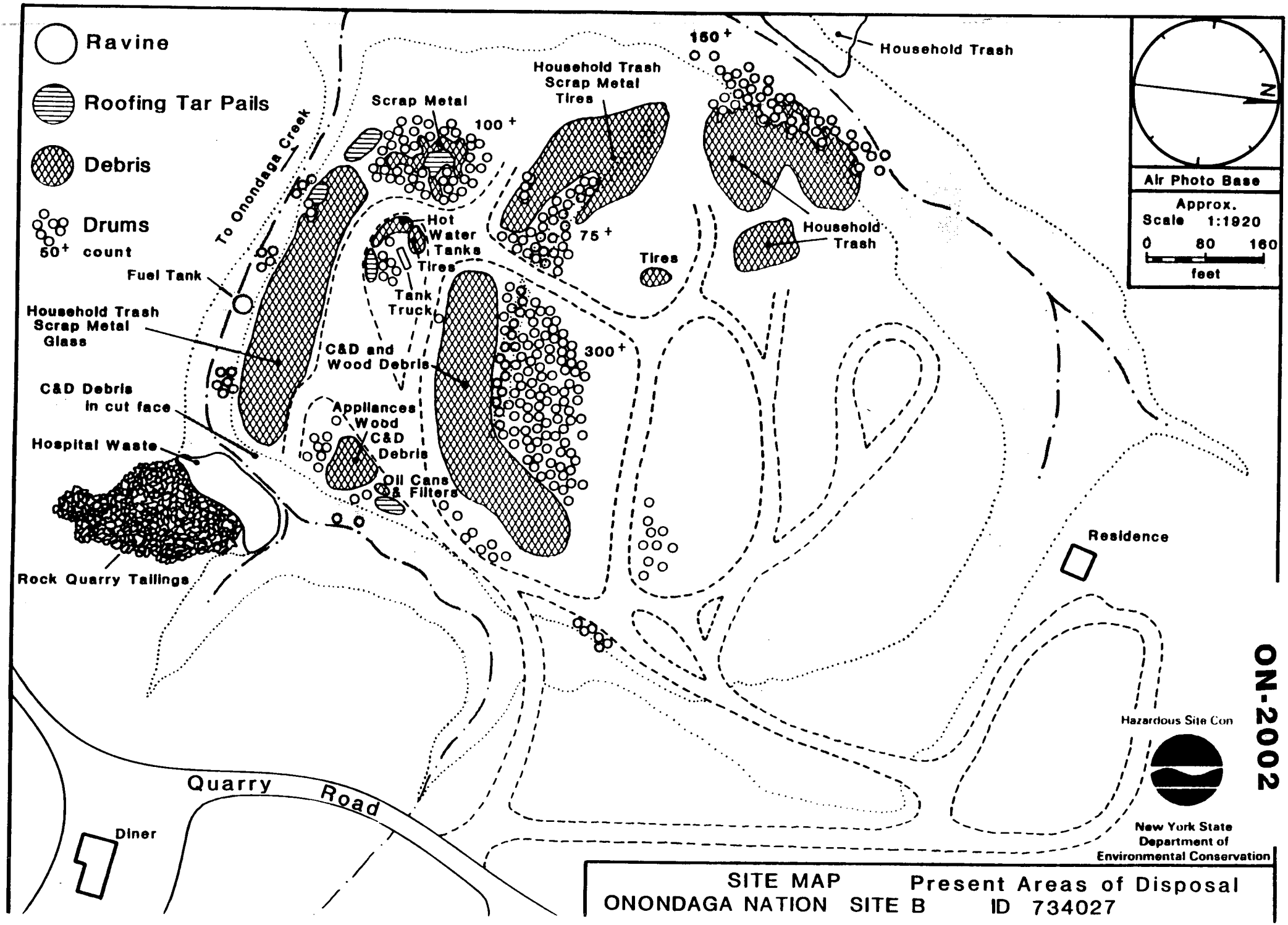
Parameter	Maximum Extraction Level		Analyzed Level	
Arsenic	5.0	mg/l	<0.5	mg/l
Barium	100.0	mg/l	<10.	mg/l
Cadmium	1.0	mg/l	<0.5	mg/l
Chromium-Total	5.0	mg/l	<0.5	mg/l
Lead	5.0	mg/l	<0.5	mg/l
Mercury	0.2	mg/l	<0.01	mg/l
Selenium	1.0	mg/l	<0.5	mg/l
Silver	5.0	mg/l	<0.5	mg/l
2,4D	10.	mg/l	*	Not Available
2,4,5TP	1.	mg/l	*	Not Available
Lindane	0.4	mg/l	*	Not Available
Endrin	0.02	mg/l	*	Not Available
Methoxychlor	10.0	mg/l	*	Not Available
Toxaphene	0.5	mg/l	*	Not Available

*Not Available due to sample matrix interference.
To determine whether sample is to be considered Hazardous, please compare reported values to maximum allowable levels.

NYSDOH - ELAP #10067

APPROVED BY: Conrad Tighe Jr. DATE: APR 02 1990


Ravine
Unidentified Debris
Auto Stockpile Area
To Onondaga Creek
Household Trash
N
Air Photo Base
Approx. Scale 1:1920
0 80 160
feet
Hospital Waste
Rock Quarry Tailings
Residence
Hazardous Site
Quarry Road
Diner
New York St
Department
Environmental Con
ON-2001
SITE MAP Areas of Disposal in 196
ONONDAGA NATION SITE B ID 734027


Ravine
Roofing Tar Pails
Debris
Drums
50+ count
To Onondaga Creek
Fuel Tank
Household Trash
Scrap Metal
Glass
C&D Debris
in cut face
Hospital Waste
Rock Quarry Tailings
Scrap Metal
100+
Household Trash
Scrap Metal
Tires
Hot
Water
Tanks
Tires
Tank
Truck
C&D and
Wood Debris
Appliances
Wood
C&D
Debris
Oil Cans
& Filters
75+
300+
150+
Household Trash
Tires
Household
Trash
Residence
Quarry Road
Diner
N
Air Photo Base
Approx.
Scale 1:1920
0 80 160
feet
Hazardous Site Con
New York State
Department of
Environmental Conservation
ON-2002
SITE MAP Present Areas of Disposal
ONONDAGA NATION SITE B ID 734027

ON-2003

ENGINEERING INVESTIGATIONS AT INACTIVE HAZARDOUS WASTE SITES

PHASE I INVESTIGATION

ONONDAGA NATION-SITE B **SITE No. 734027**

ONONDAGA NATION **ONONDAGA (C)**

DATE: NOVEMBER 1988

Prepared for :

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

50 Wolf Road, Albany, New York 12233

Thomas C. Jorling, Commissioner

DIVISION OF HAZARDOUS WASTE REMEDIATION

Michael J. O'Toole, Jr., P.E. - Director

URS Company, Inc.
570 Delaware Avenue
Buffalo, New York 14202

720

ENGINEERING INVESTIGATIONS AT
INACTIVE HAZARDOUS WASTE SITES
IN THE STATE OF NEW YORK

PHASE I INVESTIGATIONS

ONONDAGA NATION - SITE B

ONONDAGA NATION

ONONDAGA COUNTY

SITE NO. 734027

Prepared for:

DIVISION OF HAZARDOUS WASTE REMEDIATIONK

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

50 WOLF ROAD

ALBANY, NEW YORK 12233-0001

Prepared by:

URS CONSULTANTS, INC.

570 DELAWARE AVENUE

BUFFALO, NEW YORK 14202

JUNE 1989

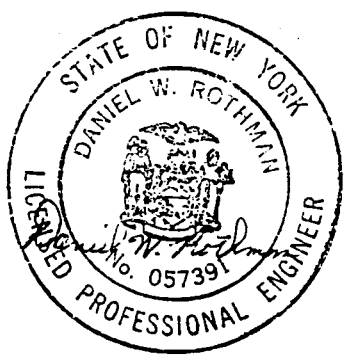


TABLE OF CONTENTS

1.0 EXECUTIVE SUMMARY

The Onondaga Nation - Site B is located on the west side of Quarry Road, just west of Interstate 81 - exit 16 (Nedrow), Onondaga County, New York (Figure 1). The site is within the boundaries of the Onondaga Nation, which is located just south of Syracuse, New York. The estimated 25-acre site is the location of a large dump used for the disposal of several hundred drums, hospital wastes, and other waste materials during the 1960's (Figures 2 and 3).

The site has the potential to impact both public health and the environment. Waste samples collected from onsite drums by the New York State Department of Environmental Conservation (NYSDEC) in 1983 and 1987 indicated contaminants present. Groundwater contamination is of major concern since private and community wells within the area serve a large portion of the population with a potable water supply. Potential surface water contamination of Onondaga Creek, which is used for recreation, is also of concern.

The Phase I effort involved the compilation of information gathered from several sources, including, but not limited to, the following: the New York State Department of Environmental Conservation (NYSDEC) - Central Office and Region 7, the New York State Department of Health (NYSDOH), and a site inspection conducted by URS Company, Inc. personnel on November 4, 1987. Photographs taken during this site inspection are presented on Figure 4.

The intent of the Hazard Ranking System (HRS), as developed by the Mitre Corporation under contract to the U.S. Environmental Protection Agency, is to provide a method by which uncontrolled hazardous waste sites may be systematically evaluated with regard to the potential risk that a site may pose on human health or safety, and/or the environment. The HRS is designed to provide a numerical value through an assessment of technical data and information, and relating that information with respect to the following three hazard modes:

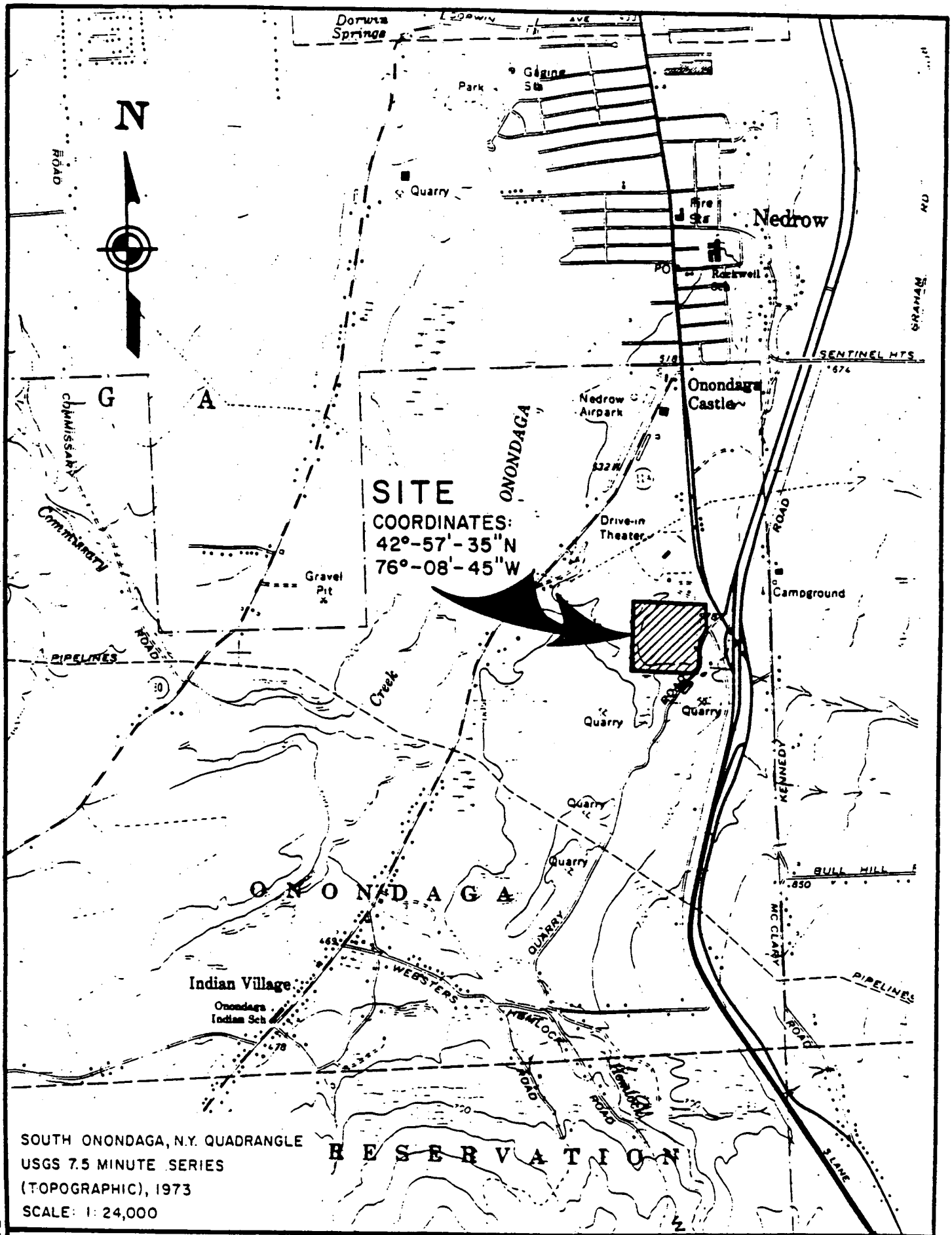
- migration of hazardous substances from the site (S_M)
- the potential for harm from fire and explosion (S_{FE})
- the potential for harm from direct contact (S_{DC})

The migration potential (S_M) is determined through the rating of factors associated with three migration routes: groundwater (S_{gw}), surface water (S_{sw}) and air (S_a). The factor categories include observed release, route and waste characteristics, containment and targets. The scored value for each route is composited to determine the risk to humans and/or the environment from the migration of hazardous substances from the site (S_M). The risks involved with the potential for fire and explosion (S_{FE}) and direct contact (S_{DC}) are evaluated according to site specific information, including: waste characteristics, containment, demographics and proximity to sensitive habitats (wetlands, wildlife, etc.).

Based on information gathered during this investigation of the Onondaga Nation - Site B, the following HRS scores were obtained:

S_M = 29.89 (S_{gw} = 50.65, S_{sw} = 10.44, S_a = 0.00)
S_{FE} = 0.00
S_{DC} = 25.00

The data available in several areas of this Phase I investigation are considered inadequate for a proper site assessment; therefore, additional data gathering and evaluation are suggested. Proposed Phase II investigation activities include subsurface investigation using borings, monitoring well installation, and groundwater, surface water and waste (drums) sampling and analyses.



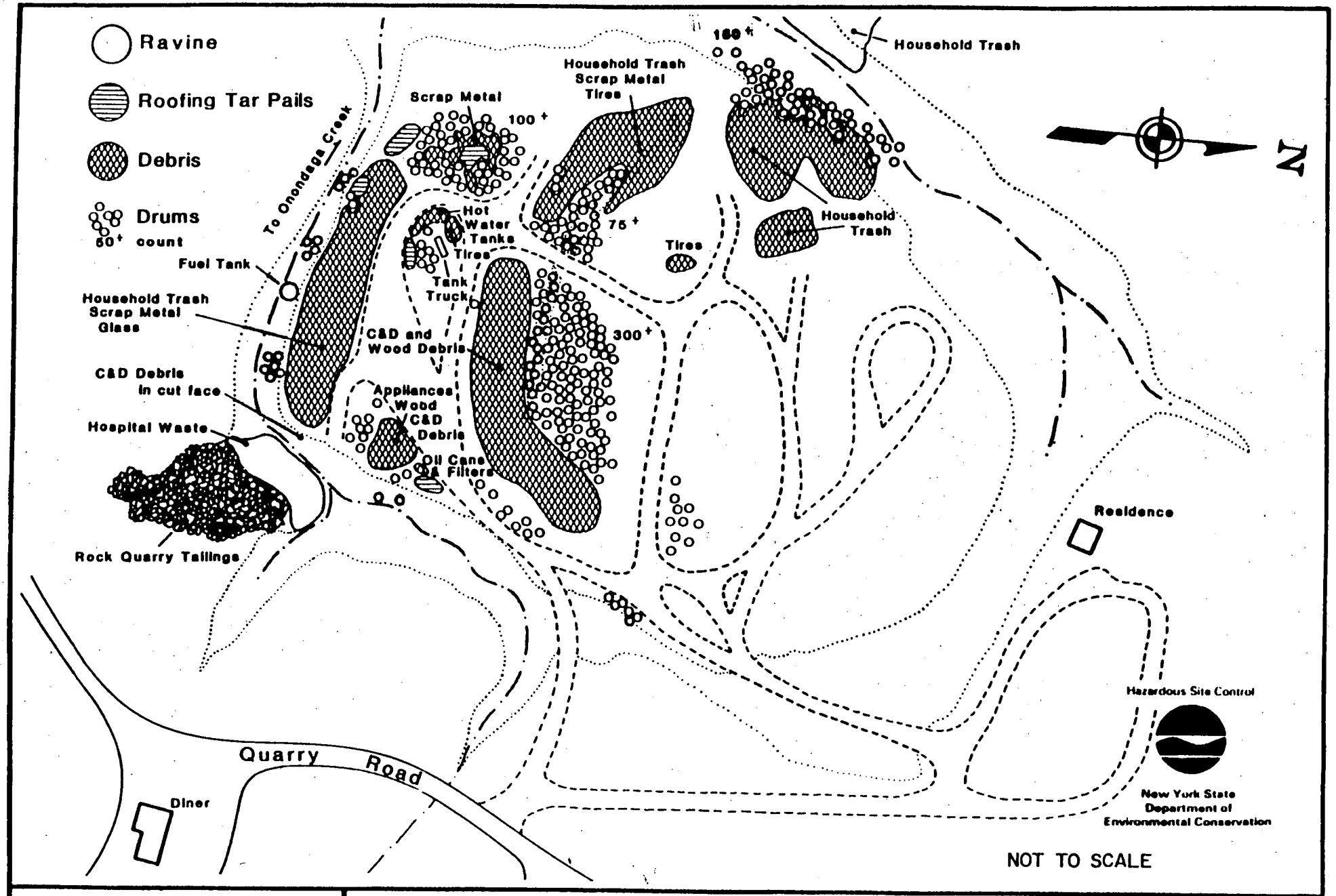
SOUTH ONONDAGA, N.Y. QUADRANGLE
USGS 7.5 MINUTE SERIES
(TOPOGRAPHIC), 1973
SCALE: 1:24,000

A-2542

URS Company, Inc.
CONSULTING ENGINEERS
NEW YORK NEW JERSEY

SITE LOCATION MAP
ONONDAGA NATION-SITE B

FIGURE 1

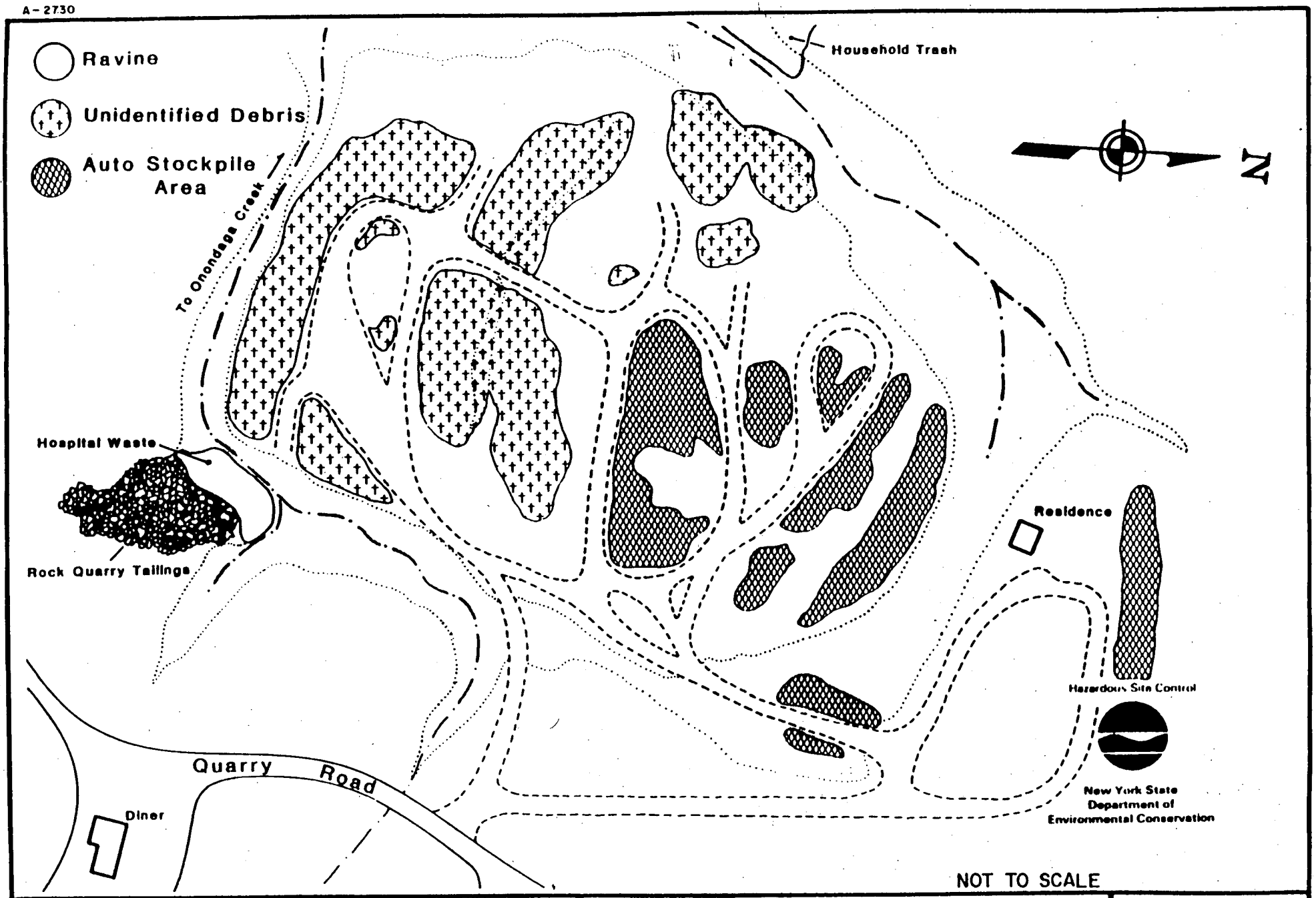


URS Company, Inc.
CONSULTING ENGINEERS
NEW YORK NEW JERSEY

SITE MAP
ONONDAGA NATION-SITE B

FIGURE-2

A-2730



URS Company, Inc.
CONSULTING ENGINEERS
NEW YORK NEW JERSEY

SITE MAP
ONONDAGA NATION-SITE B

FIGURE 3

FIGURE 4 - SITE PHOTOGRAPHS

November 4, 1987 Onondaga Nation - Site B
Large tank located in southwestern portion of site.

November 4, 1987 Onondaga Nation - Site B
Large pile of drums located in southwestern portion of site.

November 4, 1987 Onondaga Nation - Site B
Looking east from western portion of site at drum disposal area in small drainage ditch.

November 4, 1987 Onondaga Nation - Site B
Leaking drum from drum pile located in small drainage ditch. (Photovac TIP reading measured above background.)

2.0 PURPOSE OF THE PHASE I INVESTIGATION

The Phase I investigation of the Onondaga Nation- Site B on Quarry Road was conducted with the following objectives:

- Compile and review site specific information, including the operational history, in order to assess the site with regard to waste characteristics, routes of contaminant migration, and population and/or environment at risk in order to determine a Preliminary Hazard Ranking System (HRS) score for the site.

- Evaluate the adequacy of available information for the completion of a Final HRS score, with recommendations for additional data collection as necessary.

3.0 SCOPE OF WORK

The Phase I investigation of the Onondaga Nation - Site B on Quarry Road comprised several interrelated tasks as follows:

(a) An extensive data search was conducted, utilizing both site-specific and regional sources. This information was compiled from existing data, as well as new sources, and a preliminary characterization of the site was developed after review.

(b) A site inspection was conducted in order to assess the surface characterization of the site and vicinity, observe evidence (if any) of hazardous substances present, photograph the site, conduct preliminary air monitoring using a Photovac TIP instrument, and confirm information obtained from the initial data search. A USEPA Site Inspection Report (EPA Form 2070-13) and the New York State Department of Environmental Conservation Inactive Hazardous Waste Disposal Site Report were completed following the site inspection.

(c) The preliminary HRS documentation records were prepared, using the information obtained in the data search and site inspection, and a value was computed for each hazard mode.

(d) The adequacy of available information was evaluated and recommendations were made for further data necessary to properly develop a final HRS score.

(e) The Phase I investigation report was prepared according to the terms of the contract.

During the investigation, a number of sources were contacted for information, including, but not limited to, the following:

- Science and Engineering Library, University of Buffalo - May 28, 1987, June 1, 1987 and June 24, 1987
  - Geological/hydrogeological information

- Lockwood Library, Government Document Section, University of Buffalo - June 1, 1987
  - 1980 Census information (population data and source of water data)

- Onondaga County Department of Health, Division of Environmental Health - Sterling M. Burdick, P.E., Chief, Air Resources and Solid Waste - June 4, 1987
  - General files

- Buffalo and Erie County Public Library - June 12, 1987
  - Climatalogical data and 1980 Census information

- New York State Department of Health, Syracuse Regional Office - Emmy Thomee - June 19, 1987; Henrietta Hamel - November 18, 1987
  - General files and analytical results for groundwater samples

- New York State Department of Environmental Conservation - Region 7, Division of Hazardous Waste Remediation - Peter Taylor, Sanitary Engineer - June 25, 1987 and July 13, 1987; Larry Gross, Regional Solid Waste Engineer - July 1, 1987
  - General files and site inspection

- New York State Museum and Science Service - July 2, 1987
  - Geological maps

- Onondaga County Soil and Water Conservation District - Paul Webb, District Conservationist - July 31, 1987; David A. Mosher, District Field Manager - August 17, 1987
  - Agricultural lands, irrigation and soils information

- o New York State Department of Environmental Conservation - Central Office, Division of Hazardous Waste Remediation - William Shaw - September 3, 1987, November 4, 1987 and November 18, 1987; Martin D. Brand, Senior Engineering Geologist - October 8, 1987, November 4, 1987 and November 25, 1987
  - General files, site inspection, and waste sampling information

- o NYSDEC Region 7, Division of Regulatory Affairs - A.A. Coburn, Regional Permit Administrator - September 9, 1987
  - Wetlands information

- o Onondaga Nation - Ed Cook, Chief - November 4, 1987
  - Site inspection, source of water, and site history

- o Federal Bureau of Indian Affairs, Syracuse Office - November 18, 1987
  - Population data

- o Village of E. Syracuse - Carl H. Sterling, Clerk Treasurer - November 18, 1987
  - Source of water information

- o City of Syracuse, Water Engineering Department - Lee R. Fordock, Civil Engineer II - November 19, 1987
  - Source of water information

- o Town of Onondaga - Mary Alice Moran, Receiver of Taxes - November 19, 1987
  - Source of water information

- o Town of Lafayette - Sumner Palmer, Town Supervisor - November 20, 1987
  - Source of water information

4.0 SITE ASSESSMENT

4.1 Site History

The Onondaga Nation - Site B is located within the boundaries of the Onondaga Nation, Onondaga County, New York. During the 1960's, Benjamin Shenandoah, of the Onondaga Nation, operated a dump and junk yard at the site, disposing of such wastes as motor vehicles, tires, washing machines, and scrap lumber. Sometime during the mid- to late-1960's, the area was also used for the disposal of hospital waste, as well as hundreds of 55-gallon drums, the contents of which are largely unknown. Shortly thereafter, the Onondaga Nation terminated Shenandoah's operation. Mr. Shenandoah is now deceased (Ref. 12).

The hospital waste is reportedly from Community General Hospital of Syracuse, New York. Whether any of this waste should be regarded as hazardous is not known at this time (Ref. 21).

An estimated 800 55-gallon drums were observed in piles scattered across the site. Although the labels on most of the drums are illegible due to deterioration, a few names identified include Cowles Chemical Company, ADA Chemical Company, Dow, and Trenco Roof Preservative (Ref. 22 and site visit). At least a portion of the drums were allegedly disposed of by haulers from Solvent Savers, Inc., which conducted a chemical reprocessing operation. During the 1960's, Solvent Savers purchased drums of chemicals from several companies, then after redistillation, sold the chemicals either back to the same company or to a third party. Reportedly, chemicals which were not able to be redistilled were commonly buried (Ref. 23). A former partner/hauler of Solvent Savers identified Cowles Chemical Company as a generator of such waste. Furthermore, the Onondaga Nation site was identified as a disposal area for Solvent Savers' wastes.

In May 1983, by request of the Onondaga Nation, the Onondaga County Health Department inspected the site equipped with geiger counters for

suspected radioactive waste material. No readings exceeded normal background (Ref. 22). The site was again inspected, by the New York State Department of Environmental Conservation (NYSDEC), in September 1983. Waste samples were collected from the drums and analyzed by the NYSDEC. Contaminants were detected, but only benzyl alcohol was identified (Ref. 9 and 10).

A subsequent site inspection by the New York State Department of Health (NYSDOH) in June 1987 resulted in the recommendation for further sampling. In July 1987, the NYSDOH collected groundwater samples from four private wells located on the Onondaga Nation. No contaminants were detected in any of the groundwater samples (Ref. 1 and 21). In November 1987, the NYSDEC and NYSDOH collected five (5) waste samples from onsite drums. Analytical results detected several Hazardous Substance List (HSL) compounds. Further discussion of these and other sampling data available for the site is presented in Section 4.4 on site contamination.

4.2 Site Surface Characterization

The Onondaga Nation - Site B is located in the northeast portion of the Onondaga Nation, in central Onondaga County, New York. The estimated 25-acre site is located just west of Interstate 81 - exit 16 (Nedrow), on the west side of New York State Route 11, and north and west of Quarry Road. The site lies at latitude N42°57'35" and longitude W76°08'45" (Ref. 18). The site is situated approximately 1.6 miles south of the City of Syracuse corporate boundary, which in conjunction with the community of Nedrow immediately south of Syracuse, accounts for the vast majority of the population within three miles of the site. Excluding this urbanized area to the north, the site is situated in a rural, residential and agricultural area which is relatively sparsely populated. The site is not fenced, unsecured, and fairly accessible.

The site topography, as well as the surrounding area, are somewhat irregular. A large portion of the site consists of relatively flat-lying areas covered with high grasses, weeds, brush and trees. Steep embankments to the east and south separate the site from adjacent areas of higher elevation. On the western and southwestern edges of the site, relatively steep embankments lead to low-lying drainage areas. These drainage areas are identified as intermittent streams which flow into an unnamed tributary of Onondaga Creek in the extreme southwestern corner of the site. This tributary flows in a northwesterly direction before discharging into Onondaga Creek, which flows to the north.

Large, uncovered piles of hospital waste are present in the low-lying areas in the southern portion of the site. The hospital waste includes assorted bottles, I.V. containers, plastic tubing, syringes, and used dressings. This material lies in contact with the above-mentioned tributaries of Onondaga Creek. An estimated 800 55-gallon drums are present in piles scattered across the site, many of these also occurring in the drainage areas. A large tank, motor vehicles and parts, washing machines, and scrap lumber are also evident on the surface of the site (Ref. 21).

New York State regulated wetlands lie within one mile of the site to the northwest. Both agricultural land and prime agricultural land are found within 1,000 feet of the site (Ref. 13, 16, 20 and 8).

4.3 Site Hydrogeology

The Onondaga Nation site lies within the northern margin of the Appalachian Uplands physiographic province. The area was formed by dissection of the uplifted, but relatively flat-lying, sandstones and shales of the Middle and Upper Devonian Catskill Delta. Regional dip is extremely subtle to the south-southwest (Ref. 24 and 3). Regional geologic mapping indicates that bedrock underlying the site vicinity consists of Lower Devonian age limestones and dolostones of the

Helderberg Group, and the Middle Devonian Onondaga Limestone which is comprised of variable quantities of chert and shale interbeds (Ref. 2).

Surficial geologic mapping in the area indicates deposits of glacial origin predominate. Evidence of meltwater scourways, formed as a result of repeated erosion during stages of retreat and readvancement of the ice sheet, are present in the area. These include the Smoky Hollow area and Clark Reservation, both located a few miles northeast of the site (Ref. 4). Kame deposits are found at the site and consist of coarse to fine gravel and/or sand which were deposited adjacent to the ice sheet. Lateral variability in sorting, coarseness and thickness are common. Overburden sediments in the surrounding area largely consist of glacial till which was deposited beneath the ice. Typically they consist of poorly-sorted sediments of variable thickness and texture. There are also smaller amounts of recent alluvial deposits, consisting of fine sand to gravel, within the floodplains of Onondaga Creek (Ref. 3).

Groundwater largely occurs within the fractures and along the bedding planes of the bedrock units. Wells which penetrate the limestone units generally produce yields up to 230 gallons per minute (gpm) as the result of fracture enlargement by carbonate solution (Ref. 4). Water quality is commonly affected by hydrogen sulfide, as well as hardness, iron and salinity. Groundwater is also present in the pore spaces of the unconsolidated overburden sediments which are largely comprised of till. Supplies are generally adequate for domestic and farm supplies, although shallow wells on hillsides are frequently not sufficient. Based on the variability of the overburden deposits and the probable hydraulic continuity of these units with bedrock within a three miles radius of the site, the bedrock and overburden units are collectively regarded as the aquifer of concern.

4.4 Site Contamination

Large, uncovered piles of hospital waste lie within the stream beds of two small creeks, one of which is intermittent. Although this waste was suspected of containing radioactive material, no levels exceeding normal background were detected by geiger counters during a site inspection conducted by the Onondaga County Health Department in May 1983 (Ref. 22). It is presently not known whether any of the hospital waste should be regarded as hazardous material (Ref. 21).

In addition to the hospital waste, an estimated 800 55-gallon drums, with 150-200 containing wastes or unknown material, are currently at the site. Most of the drums occur in piles scattered across the site. In addition, a number of buried drums are likely as indicated by evidence of drums protruding from the fill in the center of the site (Ref. 9, 12 and site visit). There is also a large number of roofing-tar drums which are generally empty. A sweet-smelling, black, viscous, tar-like substance was observed in several drums. Photovac TIP readings on this waste material measured approximately 20 ppm above background. A brown, unidentified liquid was observed leaking from at least one drum. Photovac TIP readings were slightly higher (30-35 ppm above background) for this substance.

In September 1983, two waste samples from drums were collected by the New York State Department of Environmental Conservation (NYSDEC) and analyzed by the NYSDEC Mobile Laboratory in Avon, New York. GS/MS results indicate that compounds were detected but not identified in one sample; benzyl alcohol was identified in the second sample (Ref. 9 and 10).

In July 1987, the New York State Department of Health (NYSDOH) collected groundwater samples from four private wells located within the Onondaga Nation. The exact well locations are not available; however, they are reportedly downgradient and in the site vicinity (Ref. 21 and

1). All samples were analyzed by the NYSDOH Wadsworth Center for Laboratories and Research for priority pollutants, organochlorine pesticides, acids and base/neutrals. No contaminants were detected in any of the groundwater samples.

In November 1987, the NYSDEC and NYSDOH collected five (5) waste samples. The analytical results indicated the presence of several HSL compounds (Ref. 11A) Total xylenes and ethylbenzene were reported at maximum concentrations of 2,441,000 and 16,000 ug/kg respectively. Acetone, acetic acid and benzoic acid were also identified, but at concentrations less than the specified detection limit. In addition, numerous unknowns (total BNA) were tentatively identified. EP-Toxicity analyses for metals were also conducted on these samples. Analytical results indicated barium at a concentration of 91 ug/l, chromium at 11 ug/l, and lead at 727 ug/l. Inorganic analyses determined these samples are non-reactive, non-corrosive, and non-ignitable. One waste sample was analyzed for pesticides and PCBs; none were detected.

Potential groundwater contamination from the site is of major concern. A large portion of the population in the area is served by the Onondaga County Water Authority (O.C.W.A.) which obtains its water from sources in excess of three miles from the site (surface water intakes from Otisco Lake, Skaneateles Lake, and Lake Ontario). However, an estimated 6,214 persons are served by private or community wells located within a three-mile radius from the site. This figure includes the population of E. Syracuse, New York, which is served by a municipal community well located in the area (Ref. 12, 13, 14, 15, 16, 17, 18 and 19).

Potential surface water contamination is also of concern. Downstream from the site, Onondaga Creek is used for recreation, including fishing. There are, however, no known surface water intakes for potable water or irrigation within three (stream) miles (Ref. 16).

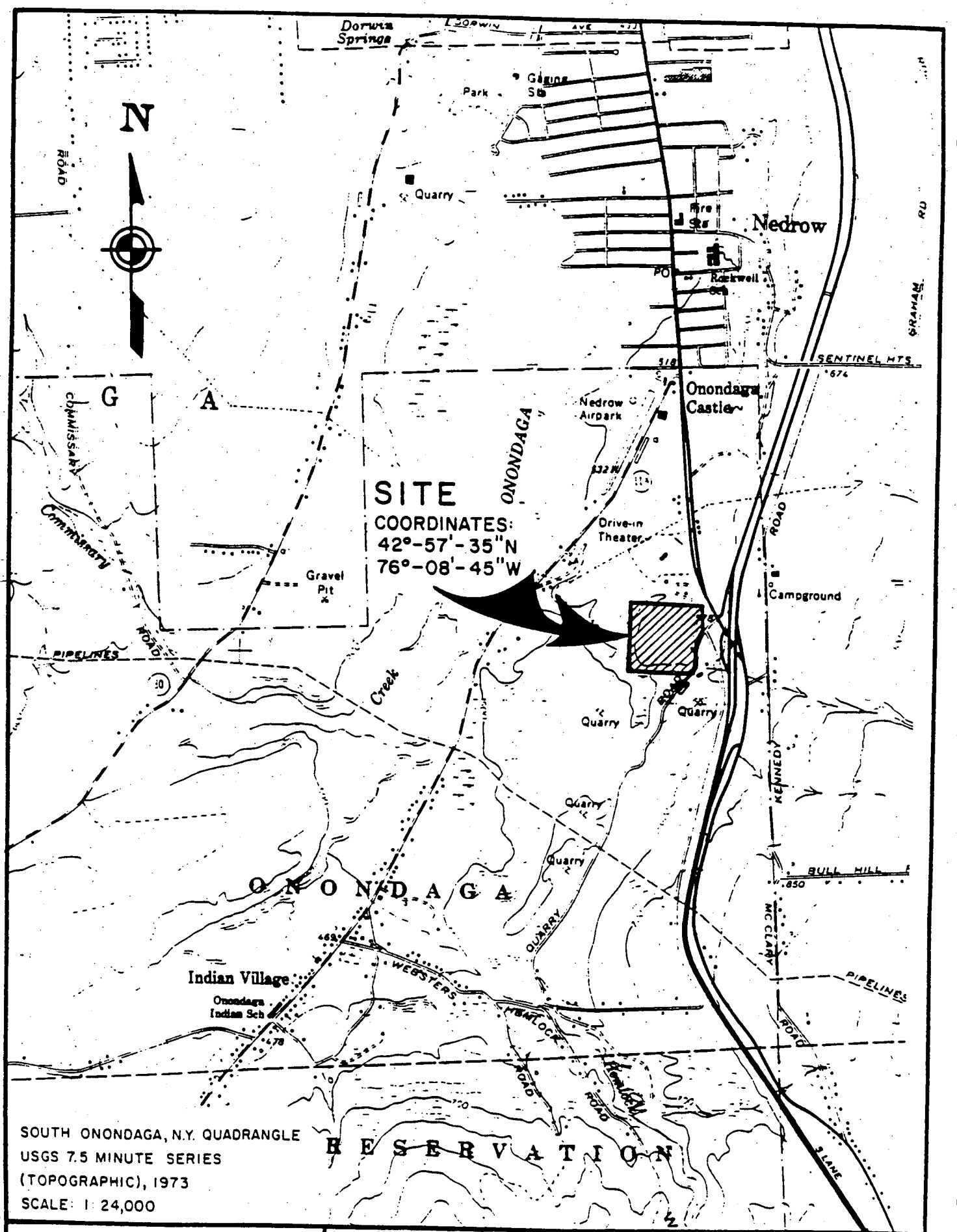
5.0 PRELIMINARY APPLICATION OF THE HAZARD RANKING SYSTEM

5.1 Narrative Summary

Onondaga Nation - Site B
Quarry Road
Onondaga Nation, Onondaga (C), New York

The Onondaga Nation - Site B covers an estimated 25 acres within the boundaries of the Onondaga Nation, located just south of Syracuse, in Onondaga County, New York. Benjamin Shenandoah of the Onondaga Nation operated a dump and junk yard at the site in the 1960's. Sometime during the late 1960's, the Onondaga Nation ceased Mr. Shenandoah's operation.

Materials disposed of at the site include large amounts of hospital waste as well as an estimated 800 55-gallon drums, the majority of which are currently empty. Approximately 150 to 200 drums contain wastes or unknown material. Analytical data available for waste samples, collected from drums by the New York State Department of Environmental Conservation (NYSDEC) in 1983, indicate the presence of benzyl alcohol; in 1987 acetone, ethylbenzene, acetic acid, benzoic acid, xylenes and numerous unknowns were identified. Total xylenes and ethylbenzene were reported at maximum concentrations of 2,441,000 and 16,000 ug/kg respectively. EP-Toxicity analyses for metals indicated the occurrence of barium, chromium and lead. Private and community wells in the area serve an estimated 6,214 persons with a potable water supply; thus, potential groundwater contamination is of major concern. Results of chemical analyses conducted by the New York State Department of Health (NYSDOH) on groundwater samples collected from four private wells in the area in 1987 indicated no contaminants were detected.



SOUTH ONONDAGA, N.Y. QUADRANGLE
USGS 7.5 MINUTE SERIES
(TOPOGRAPHIC), 1973
SCALE: 1:24,000

URS Company, Inc.
CONSULTING ENGINEERS
NEW YORK NEW JERSEY

SITE LOCATION MAP
ONONDAGA NATION–SITE B

FIGURE 1

A-2542

Facility name: Onondaga Nation - Site B

Location: Quarry Road & NYS Route 11, Onondaga Nation, Onondaga Co., N.Y.

EPA Region: II (NYSDEC Region 7)

Person(s) in charge of the facility: Onondaga Nation

Onondaga Nation, New York

Name of Reviewer: URS Corporation Date: 11/30/87

General description of the facility:

(For example: landfill, surface impoundment, pile, container; types of hazardous substances; location of the facility; contamination route of major concern; types of information needed for rating; agency action, etc.)

The estimated 25-acre site is the location of a large dump used for the disposal of hospital waste and 800 55-gallon drums, a large portion of which still contain some unidentified waste material. Groundwater contamination is of major concern since private and community wells within the area serve a large portion of the population with a potable water supply.

Scores: $S_M = 29.89$ ($S_{gw} = 50.65$ $S_{sw} = 10.44$ $S_a = 0.00$)

$S_{FE} = 0.00$

$S_{DC} = 25.00$

HRS COVER SHEET

Ground Water Route Work Sheet					
Rating Factor	Assigned Value (Circle One)	Multi-plier	Score	Max. Score	Ref. (Section)
1 Observed Release	(0) 45	1	0	45	3.1
If observed release is given a score of 45, proceed to line 4. If observed release is given a score of 0, proceed to line 2.					
2 Route Characteristics					3.2
Depth to Aquifer of Concern	0 1 (2) 3	2	4	6	
Net Precipitation	0 1 (2) 3	1	2	3	
Permeability of the Unsaturated Zone	0 1 (2) 3	1	2	3	
Physical State	0 1 2 (3)	1	3	3	
Total Route Characteristics Score			11	15	
3 Containment	0 1 2 (3)	1	3	3	3.3
4 Waste Characteristics					3.4
Toxicity/Persistence	0 3 6 9 12 15 (18)	1	18	18	
Hazardous Waste Quantity	0 1 (2) 3 4 5 6 7 8	1	2	8	
Total Waste Characteristics Score			20	26	
5 Targets					3.5
Ground Water Use	0 1 2 (3)	3	9	9	
Distance to Nearest Well/Population Served	0 4 6 8 10 / 12 16 18 20 / 24 30 32 (35) 40	1	35	40	
Total Targets Score			44	49	
6 If line 1 is 45, multiply 1 x 4 x 5 / If line 1 is 0, multiply 2 x 3 x 4 x 5			29,040	57,330	
7 Divide line 6 by 57,330 and multiply by 100		S_{gw} = 50.65			

GROUND WATER ROUTE WORK SHEET

Surface Water Route Work Sheet						
Rating Factor	Assigned Value (Circle One)		Multi-plier	Score	Max. Score	Ref. (Section)
1 Observed Release	(0)	45	1	0	45	4.1
If observed release is given a value of 45, proceed to line 4. If observed release is given a value of 0, proceed to line 2.						
2 Route Characteristics						4.2
Facility Slope and Intervening Terrain	0 1 2 (3)		1	3	3	
1-yr. 24-hr. Rainfall	0 1 (2) 3		1	2	3	
Distance to Nearest Surface Water	0 1 2 (3)		2	6	6	
Physical State	0 1 2 (3)		1	3	3	
Total Route Characteristics Score				14	15	
3 Containment	0 1 2 (3)		1	3	3	4.3
4 Waste Characteristics						4.4
Toxicity/Persistence	0 3 6 9 12 15 (18)		1	18	18	
Hazardous Waste Quantity	0 1 (2) 3 4 5 6 7 8		1	2	8	
Total Waste Characteristics Score				20	26	
5 Targets						4.5
Surface Water Use	0 1 (2) 3		3	6	9	
Distance to a Sensitive Environment	0 (1) 2 3		2	2	6	
Population Served/Distance to Water Intake Downstream	(0) 4 6 8 10 12 16 18 20 24 30 32 35 40		1	0	40	
Total Targets Score				8	55	
6 If line 1 is 45, multiply 1 x 4 x 5 If line 1 is 0, multiply 2 x 3 x 4 x 5				6,720	64,350	
7 Divide line 6 by 64,350 and multiply by 100			S_{sw} = 10.44			

SURFACE WATER ROUTE WORK SHEET

Air Route Work Sheet					
Rating Factor	Assigned Value (Circle One)	Multi-plier	Score	Max. Score	Ref. (Section)
[1] Observed Release	(0) 45	1	0	45	5.1
Date and Location:					
Sampling Protocol:					
If line [1] is 0, the S_a = 0. Enter on line [5]. If line [1] is 45, then proceed to line [2].					
[2] Waste Characteristics					5.2
Reactivity and Incompatibility	0 1 2 3	1		3	
Toxicity	0 1 2 3	3		9	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1		8	
	Total Waste Characteristics Score			20	
[3] Targets					5.3
Population Within 4-Mile Radius	0 9 12 15 18 21 24 27 30	1		30	
Distance to Sensitive Environment	0 1 2 3	2		6	
Land Use	0 1 2 3	1		3	
	Total Targets Score			39	
[4] Multiply [1] x [2] x [3]				35,100	
[5] Divide line [4] by 35,100 and multiply by 100		S_a = 0.00			

AIR ROUTE WORK SHEET

	S	S^2
Groundwater Route Score (S_{gw})	50.65	2,565.42
Surface Water Route Score (S_{sw})	10.44	109.00
Air Route Score (S_a)	0.00	0.00
$S_{gw}^2 + S_{sw}^2 + S_a^2$		2,674.42
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2}$		51.71
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2} \,/\, 1.73 = S_M =$		29.89

WORKSHEET FOR COMPUTING S_M

NO DOCUMENTED FIRE AND EXPLOSION THREAT

Fire and Explosion Work Sheet					
Rating Factor	Assigned Value (Circle One)	Multi-plier	Score	Max. Score	Ref. (Section)
1 Containment	1 3	1		3	7.1
2 Waste Characteristics					7.2
Direct Evidence	0 3	1		3	
Ignitability	0 1 2 3	1		3	
Reactivity	0 1 2 3	1		3	
Incompatibility	0 1 2 3	1		3	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1		8	
Total Waste Characteristics Score				20	
3 Targets					7.3
Distance to Nearest Population	0 1 2 3 4 5	1		5	
Distance to Nearest Building	0 1 2 3	1		3	
Distance to Sensitive Environment	0 1 2 3	1		3	
Land Use	0 1 2 3	1		3	
Population Within 2-Mile Radius	0 1 2 3 4 5	1		5	
Buildings Within 2-Mile Radius	0 1 2 3 4 5	1		5	
Total Targets Score				24	
4 Multiply 1 x 2 x 3				1,440	
5 Divide line 4 by 1,440 and multiply by 100		S_{FE} = 0.00			

FIRE AND EXPLOSION WORK SHEET

Direct Contact Work Sheet					
Rating Factor	Assigned Value (Circle One)	Multiplier	Score	Max. Score	Ref. (Section)
1 Observed Incident	(0) 45	1	0	45	8.1
If line 1 is 45, proceed to line 4 If line 1 is 0, proceed to line 2					
2 Accessibility	0 1 2 (3)	1	3	3	8.2
3 Containment	0 (15)	1	15	15	8.3
4 Waste Characteristics Toxicity	0 1 2 (3)	5	15	15	8.4
5 Targets					8.5
Population Within a 1-Mile Radius	0 1 (2) 3 4 5	4	8	20	
Distance to a Critical Habitat	(0) 1 2 3	4	0	12	
Total Targets Score			8	32	
6 If line 1 is 45, multiply 1 x 4 x 5 If line 1 is 0, multiply 2 x 3 x 4 x 5			5,400	21,600	
7 Divide line 6 by 21,600 and multiply by 100		S_{DC} = 25.00			

DIRECT CONTACT WORK SHEET

5.4 HRS Documentation Records

FACILITY NAME: Onondaga Nation - Site B

LOCATION: Quarry Road and NYS Route 11
Onondaga Nation, Onondaga County, New York

GROUNDWATER ROUTE

1 OBSERVED RELEASE

o CONTAMINANTS DETECTED (5 MAXIMUM):

No contaminants detected in groundwater sampling conducted in the vicinity of the site (Ref. 1).

o RATIONALE FOR ATTRIBUTING THE CONTAMINANTS TO THE FACILITY:

N/A

Score 0

***

2 ROUTE CHARACTERISTICS

DEPTH TO AQUIFER OF CONCERN

o NAME/DESCRIPTION OF AQUIFER(S) OF CONCERN:

Groundwater largely occurs within the fractures and along bedding planes of the bedrock units (Devonian age carbonates - Onondaga Limestone and Helderberg Group), as well as within the pore spaces of the unconsolidated overburden sediments, which are predominantly till in the area (Ref. 2, 3 and 4).

o DEPTH(S) FROM THE GROUND SURFACE TO THE HIGHEST SEASONAL LEVEL OF THE SATURATED ZONE [WATER TABLE(S)] OF THE AQUIFER OF CONCERN:

Known highest level occurs at a depth of 31 feet (Ref. 1).

o DEPTH FROM THE GROUND SURFACE TO THE LOWEST POINT OF WASTE DISPOSAL/STORAGE:

Wastes were observed on the ground surface. The depth of subsurface wastes are not known; therefore, allowable depth of 6 feet is assumed (Ref. 5 and site visit).

Score 2

NET PRECIPITATION

o MEAN ANNUAL OR SEASONAL PRECIPITATION (LIST MONTHS FOR SEASONAL):

37.5 inches (Ref. 6)

o MEAN ANNUAL LAKE OR SEASONAL EVAPORATION (LIST MONTHS FOR SEASONAL):

26.7 inches (Ref. 7)

o NET PRECIPITATION (SUBTRACT THE ABOVE FIGURES):

10.8 inches

Score 2

PERMEABILITY OF UNSATURATED ZONE

o SOIL TYPE IN UNSATURATED ZONE:

Palmyra gravels (Pg A) - gravelly loam to gravelly sandy clay loam (Ref. 8).

o PERMEABILITY ASSOCIATED WITH SOIL TYPE:

Approximately 10^{-4} to 10^{-5} (Ref. 7).

Score 2

PHYSICAL STATE

o PHYSICAL STATE OF SUBSTANCES AT TIME OF DISPOSAL (OR AT PRESENT TIME FOR GENERATED GASES):

Liquid wastes and viscous, tar-like material (Ref. 9 and site visit).

Score 3

***

3 CONTAINMENT

CONTAINMENT

o METHOD(S) OF WASTE OR LEACHATE CONTAINMENT EVALUATED:

Drums, a large tank and other containers were observed on the unlined ground surface. The majority were not sealed and some were visibly leaking their contents (Ref. 9 and site visit).

o METHOD WITH HIGHEST SCORE:

Containers leaking, no liner.

Score 3

***

4 WASTE CHARACTERISTICS

TOXICITY AND PERSISTENCE

o COMPOUND(S) EVALUATED:

Benzyl alcohol was identified in the waste samples collected in 1983. Laboratory GC/MS analytical results collected from onsite drums indicate other compounds found, but none identified. "Isobenzylfuron" is also listed as detected. No score is available for it, however, as identification of this compound is questionable (Ref. 10 and 11). Laboratory analyses conducted on the waste samples collected in 1987 from onsite drums indicated the presence of acetone, ethylbenzene, acetic acid, benzoic acid, xylenes, numerous unknowns (total BNA), barium, chromium, and lead (Ref. 11A).

o COMPOUND WITH HIGHEST SCORE:

Barium, chromium and lead

(Ref. 7 & 11)

	Toxicity	Persistence	Score
Benzyl Alcohol	3	2	15
Acetone	2	0	6
Ethylbenzene	2	1	9
Acetic Acid	3	0	9
Benzoic Acid	2	0	6
Xylenes	2	1	9
Barium	3	3	18
Chromium	3	3	18
Lead	3	3	18

Score 18

HAZARDOUS WASTE QUANTITY

o TOTAL QUANTITY OF HAZARDOUS SUBSTANCES AT THE FACILITY, EXCLUDING THOSE WITH A CONTAINMENT SCORE OF 0 (GIVE A REASONABLE ESTIMATE EVEN IF QUANTITY IS ABOVE MAXIMUM):

Approximately 800 drums are presently at the site. An estimated 150-200 drums contain wastes or unknown materials (Ref. 9, 12, 12A and site visit).

Score 2

o BASIS OF ESTIMATING AND/OR COMPUTING WASTE QUANTITY:

Estimates on number of drums at the site is 800, with 150-200 containing wastes or unknown material. Score represents a minimum quantity as there may be additional waste material below ground surface as well as material which might have been previously contained in the now-empty drums (Ref. 9, 12, 12A and site visit).

***

5 TARGETS

GROUNDWATER USE

o USE(S) OF AQUIFER(S) OF CONCERN WITHIN A 3-MILE RADIUS OF THE FACILITY:

Drinking water (private and community wells) with no municipal water from an alternate, unthreatened source presently available. The population of the Village of E. Syracuse, although located outside of the 3-mile radius, is served by a community municipal well which is within the 3 miles (Ref. 12, 13, 14, 15, 16 and 17).

Score 3

DISTANCE TO NEAREST WELL

o LOCATION OF NEAREST WELL DRAWING FROM AQUIFER OF CONCERN OR OCCUPIED BUILDING NOT SERVED BY A PUBLIC WATER SUPPLY:

The nearest well serves a residence located just west of U.S. Route 11 and north of the site (Ref. 12, 18 and site visit).

o DISTANCE TO ABOVE WELL OR BUILDING:

Approximately 500 feet to the north (Ref. 18).
(Assigned value = 4)

POPULATION SERVED BY GROUNDWATER WELLS WITHIN A 3-MILE RADIUS

o IDENTIFIED WATER-SUPPLY WELL(S) DRAWING FROM AQUIFER(S) OF CONCERN WITHIN A 3-MILE RADIUS AND POPULATIONS SERVED BY EACH:

Onondaga Nation (private wells) = 1,034 persons.
Town of Lafayette (private wells) = 204 units x 3.8 persons/unit = 775 persons.
Town of Onondaga (private wells) = 133 units x 3.8 persons/unit = 505 persons.
Village of E. Syracuse (municipal community well and springs) = 3,900 persons.
(Ref. 12, 13, 14, 15, 16, 17, 18 and 19)

o COMPUTATION OF LAND AREA IRRIGATED BY SUPPLY WELL(S) DRAWING FROM AQUIFER(S) OF CONCERN WITHIN A 3-MILE RADIUS, AND CONVERSION TO POPULATION (1.5 PEOPLE PER ACRE):

No wells known to be used for irrigation (Ref. 8 and 15).

o TOTAL POPULATION SERVED BY GROUNDWATER WITHIN A 3-MILE RADIUS:

1,034 + 775 + 505 + 3,900 = 6,214 persons
(Assigned value = 4)

Score 35

SURFACE WATER ROUTE

1 OBSERVED RELEASE

o CONTAMINANTS DETECTED IN SURFACE WATER AT THE FACILITY OR DOWNHILL FROM IT (5 MAXIMUM):

No surface water sampling conducted at the site.

o RATIONALE FOR ATTRIBUTING THE CONTAMINANTS TO THE FACILITY:

N/A

Score 0

***

2 ROUTE CHARACTERISTICS

FACILITY SLOPE AND INTERVENING TERRAIN

o AVERAGE SLOPE OF FACILITY IN PERCENT:

Approximately 5-8% slope to the west-southwest (Ref. 18 and site visit).

o NAME/DESCRIPTION OF NEAREST DOWNSLOPE SURFACE WATER:

A small unnamed tributary of Onondaga Creek flows across the extreme southwestern corner of the site in a northwesterly direction. Onondaga Creek is used for recreation, including fishing (Ref. 18 and 16).

o AVERAGE SLOPE OF TERRAIN BETWEEN FACILITY AND ABOVE-CITED SURFACE WATER BODY IN PERCENT:

Approximately 5-8% slope to the southwest (Ref. 18 and site visit).

o IS THE FACILITY LOCATED EITHER TOTALLY OR PARTIALLY IN SURFACE WATER?

Yes, a portion of an unnamed tributary of Onondaga Creek flows across the southwestern corner of the site. Small tributaries of Onondaga Creek flow across the site but are considered intermittent streams and therefore not scored.) Additionally, numerous drums lie in surface water onsite (Ref. 5, 18 and site visit).

Score 3

o IS THE FACILITY COMPLETELY SURROUNDED BY AREAS OF HIGHER ELEVATION?

No; there are areas of higher elevation east of the site, but much of the surrounding topography is lower in elevation than the site (Ref. 18 and site visit).

1-YEAR 24-HOUR RAINFALL IN INCHES

2.3 (Ref. 7).

Score 2

DISTANCE TO NEAREST DOWNSLOPE SURFACE WATER

Distance is zero (0), since a portion of an unnamed tributary of Onondaga Creek flows across the extreme southwestern portion of the site. In addition, numerous drums lie in surface water onsite (Ref. 18 and site visit).

Score 3

PHYSICAL STATE OF WASTE

Liquid wastes and viscous, tar-like material (Ref. 9 and site visit).

Score 3

***

3 CONTAINMENT

CONTAINMENT

o METHOD(S) OF WASTE OR LEACHATE CONTAINMENT EVALUATED:

Drums, a large tank and other containers were observed on the ground surface. The majority were not sealed and some were visibly leaking their contents. No diversion or containment structures present (Ref. 9 and site visit).

o METHOD WITH HIGHEST SCORE:

Containers leaking, no diversion or containment structures.

Score 3

***

4 WASTE CHARACTERISTICS

TOXICITY AND PERSISTENCE

o COMPOUND(S) EVALUATED

Benzyl alcohol was identified in the waste samples collected in 1983. Laboratory GC/MS analytical results collected from onsite drums indicate other compounds found, but none identified. "Isobenzylfuron" is also listed as detected. No score is available for it, however, as identification of this compound is questionable (Ref. 10 and 11). Laboratory analyses conducted on the waste samples collected in 1987 from onsite drums indicated the presence of acetone, ethylbenzene, acetic acid, benzoic acid, xylenes, numerous unknowns (total BNA), barium, chromium and lead (Ref. 11A).

o COMPOUND WITH HIGHEST SCORE:

Barium, chromium and lead

(Ref. 7 & 11)

	Toxicity	Persistence	Score
Benzyl Alcohol	3	2	15
Acetone	2	0	6
Ethylbenzene	2	1	9
Acetic Acid	3	0	9
Benzoic Acid	2	0	6
Xylenes	2	1	9
Barium	3	3	18
Chromium	3	3	18
Lead	3	3	18

Score 18

HAZARDOUS WASTE QUANTITY

o TOTAL QUANTITY OF HAZARDOUS SUBSTANCES AT THE FACILITY EXCLUDING THOSE WITH A CONTAINMENT SCORE OF 0 (GIVE A REASONABLE ESTIMATE EVEN IF QUANTITY IS ABOVE MAXIMUM):

Approximately 800 drums are presently at the site. An estimated 150-200 drums contain wastes or unknown materials (Ref. 9, 12, 12A and site visit).

Score 2

o BASIS OF ESTIMATING AND/OR COMPUTING WASTE QUANTITY:

Estimates on number of drums at the site is 800, with 150-200 containing wastes or unknown material. Score represents a minimum quantity as there may be additional waste material below ground surface as well as material which might have been previously contained in the now-empty drums (Ref. 9, 12, 12A and site visit).

*****

5 TARGETS

SURFACE WATER USE

o USE(S) OF SURFACE WATER WITHIN 3 MILES DOWNSTREAM OF THE HAZARDOUS SUBSTANCE:

Onondaga Creek is used for recreation, primarily fishing (no appreciable boating or swimming). There is reportedly some use for irrigation (within the City of Syracuse), but at a distance in excess of 3 stream miles from the site (Ref. 13, 14, 15, 16 and 18).

Score 2

o IS THERE TIDAL INFLUENCE?

No tidal influence on the site (Ref. 18).

DISTANCE TO A SENSITIVE ENVIRONMENT

o DISTANCE TO 5-ACRE (MINIMUM) COASTAL WETLAND, IF 2 MILES OR LESS:

No coastal wetlands within 2 miles (Ref. 18 and 20).
(Assigned value = 0)

o DISTANCE TO 5-ACRE (MINIMUM) FRESH-WATER WETLAND, IF 1 MILE OR LESS:

Approximately 4,900 feet to the northwest to NYS-regulated wetlands (Ref. 20).
(Assigned value = 1)

o DISTANCE TO CRITICAL HABITAT OF AN ENDANGERED SPECIES OR NATIONAL WILDLIFE REFUGE, IF 1 MILE OR LESS:

No known critical habitats of an endangered species within one mile. A portion of Onondaga Creek (upstream from the site) is designated "protected waters" (Ref. 20).
(Assigned value = 0)

Score 1

POPULATION SERVED BY SURFACE WATER

o LOCATION(S) OF WATER-SUPPLY INTAKE(S) WITHIN 3 MILES (FREE-FLOWING BODIES) OR 1 MILE (STATIC WATER BODIES) DOWNSTREAM OF THE HAZARDOUS SUBSTANCE AND POPULATION SERVED BY EACH INTAKE:

No surface water intakes within the specified distance downstream from the site (Ref. 13 and 14).

o COMPUTATION OF LAND AREA IRRIGATED BY ABOVE-CITED INTAKE(S) AND CONVERSION TO POPULATION (1.5 PEOPLE PER ACRE):

No known irrigation of land by surface water intakes within specified distance. There is reportedly some irrigation from Onondaga Creek within the City of Syracuse, but the intakes are at a distance in excess of 3 stream miles from the site (Ref. 15 and 8).

o TOTAL POPULATION SERVED:

0 (zero)

o NAME/DESCRIPTION OF NEAREST OF ABOVE WATER BODIES:

N/A

o DISTANCE TO ABOVE-CITED INTAKES, MEASURED IN STREAM MILES.

N/A

Score 0

AIR ROUTE

1 OBSERVED RELEASE

o CONTAMINANTS DETECTED:

Limited air monitoring data available. This includes Photovac TIP measurements for organic vapors taken during the site inspection. Above-background levels (maximum 35 ppm) were measured inside some of the drums; however, no significant air release was observed (Ref. site visit).

o DATE AND LOCATION OF DETECTION OF CONTAMINANTS

No observed air release.

o METHODS USED TO DETECT THE CONTAMINANTS:

No observed air release.

o RATIONALE FOR ATTRIBUTING THE CONTAMINANTS TO THE SITE:

No observed air release.

Score 0

***

2 WASTE CHARACTERISTICS

REACTIVITY AND INCOMPATIBILITY

o MOST REACTIVE COMPOUND:

No observed air release.

o MOST INCOMPATIBLE PAIR OF COMPOUNDS:

No observed air release.

Score 0

TOXICITY

o MOST TOXIC COMPOUND:

No observed air release.

Score 0

HAZARDOUS WASTE QUANTITY

o TOTAL QUANTITY OF HAZARDOUS WASTE:

No observed air release.

Score 0

o BASIS OF ESTIMATING AND/OR COMPUTING WASTE QUANTITY:

No observed air release.

***

3 TARGETS

POPULATION WITHIN 4-MILE RADIUS

o UNDERLINE RADIUS USED, GIVE POPULATION, AND INDICATE HOW DETERMINED:

0 to 4 mi 0 to 1 mi 0 to 1/2 mi 0 to 1/4 mi

No observed air release.

Score 0

DISTANCE TO A SENSITIVE ENVIRONMENT

o DISTANCE TO 5-ACRE (MINIMUM) COASTAL WETLAND, IF 2 MILES OR LESS:

No observed air release.

- DISTANCE TO 5-ACRE (MINIMUM) FRESH-WATER WETLAND, IF 1 MILE OR LESS:

No observed air release.

- DISTANCE TO CRITICAL HABITAT OF AN ENDANGERED SPECIES, IF 1 MILE OR LESS:

No observed air release.

Score 0

LAND USE

- DISTANCE TO COMMERCIAL/INDUSTRIAL AREA, IF 1 MILE OR LESS:

No observed air release.

- DISTANCE TO NATIONAL OR STATE PARK, FOREST, OR WILDLIFE RESERVE, IF 2 MILES OR LESS:

No observed air release.

- DISTANCE TO RESIDENTIAL AREA, IF 2 MILES OR LESS:

No observed air release.

- DISTANCE TO AGRICULTURAL LAND IN PRODUCTION WITHIN PAST 5 YEARS, IF 1 MILE OR LESS:

No observed air release.

- DISTANCE TO PRIME AGRICULTURAL LAND IN PRODUCTION WITHIN PAST 5 YEARS, IF 2 MILES OR LESS:

No observed air release.

o IS A HISTORIC OR LANDMARK SITE (NATIONAL REGISTER OR HISTORIC PLACES AND NATIONAL NATURAL LANDMARKS) WITHIN THE VIEW OF THE SITE?

No observed air release.

Score 0

FIRE AND EXPLOSION

1 CONTAINMENT

o HAZARDOUS SUBSTANCES PRESENT:

No documented fire or explosion threat.

o TYPE OF CONTAINMENT, IF APPLICABLE

No documented fire or explosion threat.

Score 0

***

2 WASTE CHARACTERISTICS

DIRECT EVIDENCE

o TYPE OF INSTRUMENT AND MEASUREMENTS:

No documented fire or explosion threat.

Score 0

IGNITABILITY

o COMPOUND USED:

No documented fire or explosion threat.

Score 0

REACTIVITY

o MOST REACTIVE COMPOUND:

No documented fire or explosion threat.

Score 0

INCOMPATIBILITY

o MOST INCOMPATIBLE PAIR OF COMPOUNDS:

No documented fire or explosion threat.

Score 0

HAZARDOUS WASTE QUANTITY

o TOTAL QUANTITY OF HAZARDOUS SUBSTANCES AT THE FACILITY:

No documented fire or explosion threat.

Score 0

o BASIS OF ESTIMATING AND/OR COMPUTING WASTE QUANTITY:

No documented fire or explosion threat.

***

3 TARGETS

DISTANCE TO NEAREST POPULATION

No documented fire or explosion threat.

Score 0

DISTANCE TO NEAREST BUILDING

No documented fire or explosion threat.

Score 0

DISTANCE TO SENSITIVE ENVIRONMENT

o DISTANCE TO WETLANDS:

No documented fire or explosion threat.

o DISTANCE TO CRITICAL HABITAT:

No documented fire or explosion threat.

Score 0

LAND USE

o DISTANCE TO COMMERCIAL/INDUSTRIAL AREA, IF 1 MILE OR LESS:

No documented fire or explosion threat.

o DISTANCE TO NATIONAL OR STATE PARK, FOREST, OR WILDLIFE RESERVE, IF 2 MILES OR LESS:

No documented fire or explosion threat.

o DISTANCE TO RESIDENTIAL AREA, IF 2 MILES OR LESS:

No documented fire or explosion threat.

o DISTANCE TO AGRICULTURAL LAND IN PRODUCTION WITHIN PAST 5 YEARS, IF 1 MILE OR LESS:

No documented fire or explosion threat.

o DISTANCE TO PRIME AGRICULTURAL LAND IN PRODUCTION WITHIN PAST 5 YEARS, IF 2 MILES OR LESS:

No documented fire or explosion threat.

o IS A HISTORIC OR LANDMARK SITE (NATIONAL REGISTER OR HISTORIC PLACES AND NATIONAL NATURAL LANDMARKS) WITHIN THE VIEW OF THE SITE?

No documented fire or explosion threat.

Score 0

POPULATION WITHIN 2-MILE RADIUS

No documented fire or explosion threat.

Score 0

BUILDINGS WITHIN 2-MILE RADIUS

No documented fire or explosion threat.

Score 0

DIRECT CONTACT

1 OBSERVED INCIDENT

o DATE, LOCATION, AND PERTINENT DETAILS OF INCIDENT:

No known incident.

Score 0

***

2 ACCESSIBILITY

o DESCRIBE TYPE OF BARRIER(S):

No fence or artificial or natural barriers which completely surround the facility (Ref. site visit).

Score 3

***

3 CONTAINMENT

o TYPE OF CONTAINMENT, IF APPLICABLE:

Containers unsealed, leaking; wastes on ground surface (Ref. 9 and site visit).

Score 15

***

4 WASTE CHARACTERISTICS

TOXICITY

o COMPOUNDS EVALUATED:

Benzyl alcohol, acetone, ethylbenzene, acetic acid, benzoic acid, xylenes, barium, chromium and lead (Ref. 10, 11 and 11A).

o COMPOUND WITH HIGHEST SCORE:

Barium, chromium and lead (Ref. 7 & 11).

Score 3

***

5 TARGETS

POPULATION WITHIN ONE-MILE RADIUS

Estimated at 794 persons (Ref. 18).

Score 2

DISTANCE TO CRITICAL HABITAT (OF ENDANGERED SPECIES)

No known critical habitats of an endangered species within one mile (Ref. 20).

Score 0

REFERENCES - DOCUMENTATION RECORDS

1. Results of Examination, New York State Department of Health, Wadsworth Center for Laboratories and Research, August 7, 1987.

2. Geologic Map of New York - Finger Lakes Sheet, Lawrence V. Rickard and Donald W. Fisher, 1970.

3. Surficial Geologic Map of New York - Finger Lakes Sheet, Ernest H. Muller and Donald H. Cadwell, 1986.

4. New York State Geological Association Guidebook - 36th Annual Meeting, Syracuse University, Department of Geology, May 8-10, 1964.

5. Superfund National Priorities List Seminar - EPA Region II, The Mitre Corporation, April 2-3, 1986.

6. Climates of the States, New York, Climatography of the United States No. 60-30, U.S. Department of Commerce Weather Bureau, February 1960.

7. Uncontrolled Hazardous Waste Site Ranking System - A Users Manual (HW-10), United States Environmental Protection Agency, 1984.

8. David A. Mosher, District Field Manager - Onondaga County Soil and Water Conservation District letter to Muffett A. Mauche, Staff Engineer - LeRoy Callender, PC, August 24, 1987.

9. David J. Curtis, P.E., Senior Sanitary Engineer - New York State Department of Environmental Conservation (NYSDEC), Central Remedial Projects Section memorandum to Frank T. Ricotta, Supervisor - NYSDEC, Central Remedial Projects Section, October 3, 1987.

10. David J. Curtis, P.E., Senior Sanitary Engineer - New York State Department of Environmental Conservation (NYSDEC), Central Remedial Projects Section letter to William Lazore, Chief - Onondaga Nation, January 20, 1984.

11. Dangerous Properties of Industrial Materials - Sixth Edition, N. Irving Sax, Van Nostrand Reinhold Company, New York, 1984.

11A. Versar, Inc. Analytical Results for NYSDEC Drum Sampling - Onondaga Nation - Site B, November 24, 1987.

12. Site Inspection Notes - Onondaga Nation - Site B, Linda J. Clark, Project Geologist - URS Corporation confirmed by Ed Cook, Chief - Onondaga Nation, November 4, 1987.

12A. Martin D. Brand, Sr. Engineering Geologist - New York State Department of Environmental Conservation (NYSDEC) letter to Daniel W. Rothman, Project Manager, URS Company, Inc., October 1988.

13. New York State Atlas of Community Water System Sources, New York State Department of Health - Division of Environmental Protection, Bureau of Public Water Supply Protection, 1982.

14. Linda J. Clark, Project Geologist - URS Corporation letter to Carl Sterling, Clerk Treasurer - Village of E. Syracuse, November 19, 1987.

15. Linda J. Clark, Project Geologist - URS Corporation letter to Lee Fordock - City of Syracuse, Water Engineering Department, November 19, 1987.

16. Linda J. Clark, Project Geologist - URS Corporation letter to Sumner Palmer, Supervisor - Town of Lafayette, November 20, 1987.

18. USGS Topographic Maps 7.5 Minute Series; South Onondaga, New York Quadrangle, 1973; Jamesville, New York Quadrangle, 1978; Syracuse West, New York Quadrangle, 1978.

19. Linda J. Clark, Project Geologist - URS Corporation telecon to Federal Bureau of Indian Affairs - Syracuse Office, November 18, 1987.

20. A.A. Coburn, Regional Permit Administrator - New York State Department of Environmental Conservation, Region 7, Division of Regulatory Affairs letter to Linda J. Clark, Project Geologist - URS Corporation, October 2, 1987.

5.5 USEPA SITE INSPECTION FORM 2070-13

Site Inspection Report

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 1 - SITE LOCATION AND INSPECTION INFORMATION

EPA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	NYSDEC #734027

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Onondaga Nation - Site B	Quarry Road and NYS Route 11

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Onondaga Nation	NY		Onondaga		

09 COORDINATES	10 TYPE OF OWNERSHIP (Check one)
LATITUDE 42° 57' 35".N / LONGITUDE 76 08' 45".W	☐ A. PRIVATE ☐ B. FEDERAL ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL ☒ F. OTHER Onondaga Nation ☐ G. UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION	02 SITE STATUS	03 YEARS OF OPERATION
11 / 4 / 87 (MONTH DAY YEAR)	☒ ACTIVE ☐ INACTIVE	mid 1960's (BEGINNING YEAR) late 1960's (ENDING YEAR) ☐ UNKNOWN

04 AGENCY PERFORMING INSPECTION (Check all that apply)

☐ A. EPA ☐ B. EPA CONTRACTOR _____ (Name of firm) ☐ C. MUNICIPAL ☐ D. MUNICIPAL CONTRACTOR _____ (Name of firm)
☐ E. STATE ☒ F. STATE CONTRACTOR URS Corporation (Name of firm) ☐ G. OTHER _____ (Specify)

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO.
Linda J. Clark	Project Geologist	URS Corp.	(716) 883-5525
Martin D. Brand	Sr. Engineering Geologist	NYSDEC	(518) 457-9538
William Shaw	Jr. Engineering Geologist	NYSDEC	(518) 457-9538
			( )
			( )
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO
Ed Cook	Chief	Onondaga Nation	( )
			( )
			( )
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
☒ PERMISSION ☐ WARRANT	9:00 a.m.	65°F, Sunny to overcast

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO.
Daniel W. Rothman	URS Corporation	716) 883-5525

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
Linda J. Clark		URS Corp.	(716) 883-5525	11 / 30 / 87 (MONTH DAY YEAR)

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	

NYSDEC #734027

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- ☐ A. SOLID
- ☐ B. POWDER, FINES
- ☒ C. SLUDGE
- ☐ D. OTHER (Specify)
- ☐ E. SLURRY
- ☒ F. LIQUID
- ☐ G. GAS

02 WASTE QUANTITY AT SITE
(Measures of waste quantities must be independent)

- TONS
- CUBIC YARDS 800 ~~800~~
- NO. OF DRUMS est. ~~500~~

03 WASTE CHARACTERISTICS (Check all that apply)

- ☐ A. TOXIC
- ☐ B. CORROSIVE
- ☐ C. RADIOACTIVE
- ☐ D. PERSISTENT
- ☐ E. SOLUBLE
- ☐ F. INFECTIOUS
- ☐ G. FLAMMABLE
- ☐ H. IGNITABLE
- ☐ I. HIGHLY VOLATILE
- ☐ J. EXPLOSIVE
- ☐ K. REACTIVE
- ☐ L. INCOMPATIBLE
- ☐ M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			800 drums on site, 150-200
OLW	OILY WASTE			contain wastes or unknown
SOL	SOLVENTS			material. Possible buried
PSD	PESTICIDES			drums. Black, viscous tar-like
OCC	OTHER ORGANIC CHEMICALS			substance; also, brown liquid
IOC	INORGANIC CHEMICALS			waste.
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS			

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
	benzyl alcohol		drums	unknown	
	acetone		drums	unknown	
	ethlybenzene		drums	2,441,000	ug/kg
	acetic acid		drums	unknown	
	benzoic acid		drums	unknown	
	xylenes		drums	16,000	ug/kg
	numerous unknowns		drums	unknown	
	barium		drums	91	ug/l
	chromium		drums	11	ug/l
	lead		drums	727	ug/l

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

NYSDEC - Region 7

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION	
01 STATE: NY	02 SITE NUMBER: NYSDEC #734027

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) — ☒ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 6,214 — 04 NARRATIVE DESCRIPTION

Private wells and municipal community well in area provide source of potable water supply. Wastes contained in drums (unsound, leaking) on ground surface.

01 ☒ B. SURFACE WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) — ☒ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Onondaga Creek lies west of the site. Wastes contained in drums (unsound, leaking) on ground surface. Numerous drums observed lying in surface water onsite.

01 ☐ C. CONTAMINATION OF AIR — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

None reported

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

None reported

01 ☒ E. DIRECT CONTACT — 02 ☐ OBSERVED (DATE: _____) — ☒ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 794 — 04 NARRATIVE DESCRIPTION

The site is not fenced and fairly accessible. Drums present on ground surface.

01 ☒ F. CONTAMINATION OF SOIL — 02 ☐ OBSERVED (DATE: _____) — ☒ POTENTIAL — ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: 25 (Acres) — 04 NARRATIVE DESCRIPTION

Drums observed leaking their contents on ground surface.

01 ☒ G. DRINKING WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) — ☒ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 6,214 — 04 NARRATIVE DESCRIPTION

Private wells and municipal community well in area provide source of potable water supply.

01 ☐ H. WORKER EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

None reported

01 ☐ I. POPULATION EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: _____) — ☒ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 17,575 — 04 NARRATIVE DESCRIPTION

Population within a 3 mile radius can potentially be affected.

Potential groundwater and surface water contamination.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE: NY | 02 SITE NUMBER: NYSDEC #734027

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA
04 NARRATIVE DESCRIPTION
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED

None reported

01 ☐ K. DAMAGE TO FAUNA
04 NARRATIVE DESCRIPTION (Include names(s) of species)
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED

None reported

01 ☐ L. CONTAMINATION OF FOOD CHAIN
04 NARRATIVE DESCRIPTION
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED

None reported

01 ☒ M. UNSTABLE CONTAINMENT OF WASTES (Spills Runoff Standing liquids Leaking drums)
02 ☒ OBSERVED (DATE: 11-87) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 17,575
04 NARRATIVE DESCRIPTION

(Approximate population within 3 mile radius.) Drums were observed leaking contents onto ground surface.

01 ☐ N. DAMAGE TO OFFSITE PROPERTY
04 NARRATIVE DESCRIPTION
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED

None reported

01 ☐ O CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs
04 NARRATIVE DESCRIPTION
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED

None reported

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING
04 NARRATIVE DESCRIPTION
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED

Unauthorized dumping of approximately 800 drums and hospital waste.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

None known

III. TOTAL POPULATION POTENTIALLY AFFECTED: _____

IV. COMMENTS

Community and private wells serve a large portion of the population in the area. Limited groundwater sampling (private wells) indicate no contaminants detected.

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

NYSDEC - Region 7
NYSDOH - Syracuse Regional Office
Onondaga County Health Dept.
Onondaga Nation
Town of Onondaga, NY
Town of Lafayette, NY
Village of E. Syracuse, NY
City of Syracuse, NY

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	NYSDEC #734027

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
☐ A. NPDES				
☐ B. UIC				
☐ C. AIR				
☐ D. RCRA				
☐ E. RCRA INTERIM STATUS				
☐ F. SPCC PLAN				
☐ G. STATE (Specify)				
☐ H. LOCAL (Specify)				
☐ I. OTHER (Specify)				
☐ J. NONE				

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE
☐ A. SURFACE IMPOUNDMENT		
☐ B. PILES		
☒ C. DRUMS, ABOVE GROUND	est. 800	55 gal.
☒ D. TANK, ABOVE GROUND	1	est. 1500 gal
☐ E. TANK, BELOW GROUND		
☐ F. LANDFILL		
☒ G. LANDFARM		
☐ H. OPEN DUMP		
☐ I. OTHER (Specify)		

04 TREATMENT (Check all that apply)

- ☐ A. INCENERATION
- ☐ B. UNDERGROUND INJECTION
- ☐ C. CHEMICAL/PHYSICAL
- ☐ D. BIOLOGICAL
- ☐ E. WASTE OIL PROCESSING
- ☐ F. SOLVENT RECOVERY
- ☐ G. OTHER RECYCLING/RECOVERY
- ☐ H. OTHER (Specify)

05 OTHER

- ☐ A. BUILDINGS ON SITE

06 AREA OF SITE

approx. 25 (Acres)

07 COMMENTS

The number of drums present at the site is estimated by NYSDEC to be approximately 800, with 150-200 containing wastes or unknown material. There is the possibility of a large number of buried drums.

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)

☐ A. ADEQUATE, SECURE ☐ B. MODERATE ☒ C. INADEQUATE, POOR ☐ D. INSECURE, UNSOUND, DANGEROUS

02 DESCRIPTION OF DRUMS, DIKING, LINERS, BARRIERS, ETC.

Majority of drums are not sealed and some were observed leaking their contents onto the ground surface.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: ☒ YES ☐ NO

02 COMMENTS

There is no fence; wastes are in drums, on ground surface, and fairly accessible.

VI. SOURCES OF INFORMATION (Cite specific references, e.g. state files, sample analysis, reports)

NYSDEC - Region 7
NYSDOH - Syracuse Regional Office
Onondaga County Health Dept.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	NYSDEC #734027

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as applicable)

	SURFACE	WELL
COMMUNITY	A. ☐	B. ☒
NON-COMMUNITY	C. ☐	D. ☒

02 STATUS

ENDANGERED	AFFECTED	MONITORED
A. ☐	B. ☐	C. ☐
D. ☐	E. ☐	F. ☐

03 DISTANCE TO SITE

A. 3 (mi)
B. 0.09 (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)

☒ A. ONLY SOURCE FOR DRINKING ☐ B. DRINKING (Other sources available) COMMERCIAL, INDUSTRIAL, IRRIGATION (No other water sources available) ☐ C. COMMERCIAL, INDUSTRIAL, IRRIGATION (Limited other sources available) ☐ D. NOT USED, UNUSEABLE

02 POPULATION SERVED BY GROUND WATER 6,214

03 DISTANCE TO NEAREST DRINKING WATER WELL 0.09 (mi)

04 DEPTH TO GROUNDWATER	05 DIRECTION OF GROUNDWATER FLOW	06 DEPTH TO AQUIFER OF CONCERN	07 POTENTIAL YIELD OF AQUIFER	08 SOLE SOURCE AQUIFER
est. 31 (ft)		est. 31 (ft)	(gpd)	☐ YES ☐ NO

09 DESCRIPTION OF WELLS (Including useage, depth, and location relative to population and buildings)

Groundwater largely occurs within fractures and along bedding planes of the bedrock units, as well as pore spaces of the unconsolidated overburden sediments which are largely till.

10 RECHARGE AREA		11 DISCHARGE AREA	
☐ YES ☐ NO	COMMENTS	☐ YES ☐ NO	COMMENTS

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

☒ A. RESERVOIR, RECREATION DRINKING WATER SOURCE ☐ B. IRRIGATION, ECONOMICALLY IMPORTANT RESOURCES ☐ C. COMMERCIAL, INDUSTRIAL ☐ D. NOT CURRENTLY USED

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME:	AFFECTED	DISTANCE TO SITE
Onondaga Creek	☐	0.7 (mi)
unnamed tributary to Onondaga Creek	☐	0.0 (mi)
	☐	(mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE
A. 794 NO. OF PERSONS	B. 7,562 NO. OF PERSONS	C. 17,575 NO. OF PERSONS

02 DISTANCE TO NEAREST POPULATION 0.09 (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE 2,053

04 DISTANCE TO NEAREST OFF-SITE BUILDING 0.09 (mi)

05 POPULATION WITHIN VICINITY OF SITE (Provide narrative description of nature of population within vicinity of site, e.g., rural, village, densely populated urban area)

A portion of the City of Syracuse lies within a 3 mile radius of the site, which in conjunction with the community of Nedrow south of Syracuse, accounts for the vast majority of the population in the area. The remaining areas are relatively sparsely populated. A large portion of these are served by private wells for a potable water supply.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION
01 STATE: NY | 02 SITE NUMBER: NYSDEC #734027

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

☐ A. $10^{-6} - 10^{-8}$ cm/sec ☒ B. $10^{-4} - 10^{-6}$ cm/sec ☐ C. $10^{-4} - 10^{-3}$ cm/sec ☐ D. GREATER THAN 10^{-3} cm/sec

02 PERMEABILITY OF BEDROCK (Check one)

☐ A. IMPERMEABLE (Less than 10^{-6} cm/sec) ☒ B. RELATIVELY IMPERMEABLE ($10^{-4} - 10^{-6}$ cm/sec) ☐ C. RELATIVELY PERMEABLE ($10^{-2} - 10^{-4}$ cm/sec) ☐ D. VERY PERMEABLE (Greater than 10^{-2} cm/sec)

03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH	
_____ (ft)	_____ (ft)	_____	

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE: SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
10.8 (in)	2.3 (in)	5-8 %	W-SW	5-8 %

09 FLOOD POTENTIAL

SITE IS IN _____ YEAR FLOODPLAIN

10 ☐ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS (5 acre minimum)

ESTUARINE: A. _____ (mi) OTHER: B. 0.9 (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)

_____ (mi)

ENDANGERED SPECIES: none known

13 LAND USE IN VICINITY

DISTANCE TO:

COMMERCIAL/INDUSTRIAL	RESIDENTIAL AREAS; NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES	AGRICULTURAL LANDS: PRIME AG LAND	AG LAND
A. 0.03 (mi)	B. 0.09 (mi)	C. 0.2 (mi)	D. 0.2 (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

The site topography, as well as the surrounding area, are somewhat irregular. Much of the site is relatively flat-lying; however steep embankments occur at the edge of the site in most directions. Embankments separate the site from areas of higher elevation to the east and south, and low lying drainage areas to the west and southwest.

VII. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

NYSDEC-Region 7
Onondaga County Soil and Water Conservation District
NYS Geological Assoc. Guidebook-36th annual mtg., May 1964.
NYS Museum and Science Service-map & chart series #15 & 40

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 6 - SAMPLE AND FIELD INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	NYSDEC #734027

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER		No additional sampling performed	
SURFACE WATER			
WASTE			
AIR			
RUNOFF			
SPILL			
SOIL			
VEGETATION			
OTHER			

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS

IV. PHOTOGRAPHS AND MAPS

01 TYPE ☒ GROUND ☐ AERIAL

02 IN CUSTODY OF URS Corporation
(Name of organization or individual)

03 MAPS
☒ YES
☐ NO

04 LOCATION OF MAPS
URS Corporation-570 Delaware Avenue-Buffalo, New York 14202

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

Preliminary air monitoring conducted using a Photovac TIP instrument. Contaminants detected (approx.30-35ppm)in proximity to waste only.

VI. SOURCES OF INFORMATION (Cite specific references, e.g. state files, sample analysis, reports)

Site inspection

USGS 7.5 minute series topographic maps (South Onondaga, N.Y., Jamesville, N.Y. and Syracuse West, N.Y. Quadrangles). NYS Museum and Science Service-map and chart series 15 & 40.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 7 - OWNER INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	NYSDEC #734027

II. CURRENT OWNER(S)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE
Onondaga Nation		P. O. Box 85		Nedrow	NY	

PARENT COMPANY (If applicable)

08 NAME	09 D+B NUMBER	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE	12 CITY	13 STATE	14 ZIP CODE

III. PREVIOUS OWNER(S) (List most recent first)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE

IV. REALTY OWNER(S) (If applicable, list most recent first)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

NYSDEC
Onondaga Nation

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - OPERATOR INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	NYSDEC #734027

II. CURRENT OPERATOR (Provide if different from owner)

01 NAME	02 D+B NUMBER
Same as owner info.	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER

OPERATOR'S PARENT COMPANY (If applicable)

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

III. PREVIOUS OPERATOR(S) (List most recent first; provide only if different from owner)

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

PREVIOUS OPERATORS' PARENT COMPANIES (If applicable)

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

IV. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

NYSDEC

Onondaga Nation

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 9 - GENERATOR/TRANSPORTER INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	NYSDEC #734027

II. ON-SITE GENERATOR

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

III. OFF-SITE GENERATOR(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
Cowles Chemical Company (alleged)			
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE

IV. TRANSPORTER(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
Solvent Savers, Inc. (alleged)			
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

NYSDEC
NYSDOH-Syracuse Regional Office
Onondaga County Health Dept.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION

01 STATE: NY | 02 SITE NUMBER: NYSDEC #734027

II. PAST RESPONSE ACTIVITIES

01 ☐ A. WATER SUPPLY CLOSED
04 DESCRIPTION
02 DATE _____ 03 AGENCY _____

01 ☐ B. TEMPORARY WATER SUPPLY PROVIDED
04 DESCRIPTION
02 DATE _____ 03 AGENCY _____

01 ☐ C. PERMANENT WATER SUPPLY PROVIDED
04 DESCRIPTION
02 DATE _____ 03 AGENCY _____

01 ☐ D. SPILLED MATERIAL REMOVED
04 DESCRIPTION
02 DATE _____ 03 AGENCY _____

01 ☐ E. CONTAMINATED SOIL REMOVED
04 DESCRIPTION
02 DATE _____ 03 AGENCY _____

01 ☐ F. WASTE REPACKAGED
04 DESCRIPTION
02 DATE _____ 03 AGENCY _____

01 ☐ G. WASTE DISPOSED ELSEWHERE
04 DESCRIPTION
02 DATE _____ 03 AGENCY _____

01 ☐ H. ON SITE BURIAL
04 DESCRIPTION
02 DATE _____ 03 AGENCY _____

01 ☐ I. IN SITU CHEMICAL TREATMENT
04 DESCRIPTION
02 DATE _____ 03 AGENCY _____

01 ☐ J. IN SITU BIOLOGICAL TREATMENT
04 DESCRIPTION
02 DATE _____ 03 AGENCY _____

01 ☐ K. IN SITU PHYSICAL TREATMENT
04 DESCRIPTION
02 DATE _____ 03 AGENCY _____

01 ☐ L. ENCAPSULATION
04 DESCRIPTION
02 DATE _____ 03 AGENCY _____

01 ☐ M. EMERGENCY WASTE TREATMENT
04 DESCRIPTION
02 DATE _____ 03 AGENCY _____

01 ☐ N. CUTOFF WALLS
04 DESCRIPTION
02 DATE _____ 03 AGENCY _____

01 ☐ O. EMERGENCY DIKING/SURFACE WATER DIVERSION
04 DESCRIPTION
02 DATE _____ 03 AGENCY _____

01 ☐ P. CUTOFF TRENCHES/SUMP
04 DESCRIPTION
02 DATE _____ 03 AGENCY _____

01 ☐ Q. SUBSURFACE CUTOFF WALL
04 DESCRIPTION
02 DATE _____ 03 AGENCY _____

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	NYSDEC #734027

II PAST RESPONSE ACTIVITIES *(Continued)*

01 ☐ R. BARRIER WALLS CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ S. CAPPING/COVERING — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ T. BULK TANKAGE REPAIRED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ U. GROUT CURTAIN CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ V. BOTTOM SEALED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ W. GAS CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ X. FIRE CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ Y. LEACHATE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ Z. AREA EVACUATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 1. ACCESS TO SITE RESTRICTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 2. POPULATION RELOCATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 3. OTHER REMEDIAL ACTIVITIES — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

III. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*

NYSDEC

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 11 - ENFORCEMENT INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	NYSDEC #734027

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION ☐ YES ☒ NO

02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

NYSDEC

EPA FORM 2070-13 (7-81)

6.0 ASSESSMENT OF DATA ADEQUACY AND RECOMMENDATIONS

Data collected during this Phase I investigation of the Onondaga Nation - Site B which were used to develop the Hazard Ranking System (HRS) scores, are considered inadequate in the following areas:

o Observed Releases:

- Groundwater sampling and analyses have been conducted by the New York State Department of Health (NYSDOH) on four private wells in the area, the results of which indicate no contaminants were detected. Additional information is necessary, however, to determine groundwater flow patterns and the extent, if any, of contaminant migration offsite.

- No surface water sampling/analyses have been conducted at the site; therefore, no information is presently available to conclusively assess the impact of the site on this route.

- A complete air monitoring program has not been conducted at the site. As part of this investigation, a preliminary survey was performed using a Photovac TIP instrument. Contaminants measured above background levels only in proximity to some drums which contained wastes.

o Waste Characteristics:

- Limited waste sampling and analytical data have confirmed the presence of some contaminants at the site. However, additional information is necessary to identify all hazardous substances, the outcome of which could increase the final toxicity/persistence scores. (At present the toxicity/persistence score is 15; maximum score possible

is 18.) This could affect both the groundwater and surface water route scores, as well as the composite migration route score. In November 1987, the NYSDEC and NYSDOH collected five (5) waste samples from onsite drums for analyses. The laboratory results indicate the presence of acetone, ethylbenzene, acetic acid, benzoic acid, xylenes, numerous unknowns (total BNA), barium, chromium and lead.

- Additional information is necessary in order to provide an accurate assessment of waste quantity. Scoring was based on estimates of the number of drums present and percentage still containing material. These numbers do not include drums which may have contained hazardous materials at the time of disposal (quantity unknown) and have since leaked their contents. In addition, there may be additional wastes which are below the ground surface, and have not been included in the total quality.

o Targets:

- Information on fresh-water wetlands and critical habitat of endangered species is available only for the area outside the Onondaga Nation, Thus, the actual distance to sensitive environments may in fact be less, which would result in a higher score.

6.1 APPENDIX A - DATA SOURCES AND REFERENCES

DATA SOURCES AND REFERENCES

1. Results of Examination, New York State Department of Health, Wadsworth Center for Laboratories and Research, August 7, 1987.

2. Geologic Map of New York - Finger Lakes Sheet, Lawrence V. Rickard and Donald W. Fisher, 1970.

3. Surficial Geologic Map of New York - Finger Lakes Sheet, Ernest H. Muller and Donald H. Cadwell, 1986.

4. New York State Geological Association Guidebook - 36th Annual Meeting, Syracuse University, Department of Geology, May 8-10, 1964.

5. Superfund National Priorities List Seminar - EPA Region II, The Mitre Corporation, April 2-3, 1986.

6. Climates of the States, New York, Climatography of the United States No. 60-30, U.S. Department of Commerce Weather Bureau, February 1960.

7. Uncontrolled Hazardous Waste Site Ranking System - A Users Manual (HW-10), United States Environmental Protection Agency, 1984.

8. David A. Mosher, District Field Manager - Onondaga County Soil and Water Conservation District letter to Muffett A. Mauche, Staff Engineer - LeRoy Callender, PC, August 24, 1987.

9. David J. Curtis, P.E., Senior Sanitary Engineer - New York State Department of Environmental Conservation (NYSDEC), Central Remedial Projects Section memorandum to Frank T. Ricotta, Supervisor - NYSDEC, Central Remedial Projects Section, October 3, 1987.

10. David J. Curtis, P.E., Senior Sanitary Engineer - New York State Department of Environmental Conservation (NYSDEC), Central Remedial Projects Section letter to William Lazore, Chief - Onondaga Nation, January 20, 1984.

11. Dangerous Properties of Industrial Materials - Sixth Edition, N. Irving Sax, Van Nostrand Reinhold Company, New York, 1984.

11A. Versar, Inc. Analytical Results for NYSDEC Drum Sampling - Onondaga Nation - Site B, November 24, 1987.

12. Site Inspection Notes - Onondaga Nation - Site B, Linda J. Clark, Project Geologist - URS Corporation confirmed by Ed Cook, Chief - Onondaga Nation, November 4, 1987.

12A. Martin D. Brand, Sr. Engineering Geologist - New York State Department of Environmental Conservation (NYSDEC) letter to Daniel W. Rothman, Project Manager, URS Company, Inc., October 1988.

13. New York State Atlas of Community Water System Sources, New York State Department of Health - Division of Environmental Protection, Bureau of Public Water Supply Protection, 1982.

14. Linda J. Clark, Project Geologist - URS Corporation letter to Carl Sterling, Clerk Treasurer - Village of E. Syracuse, November 19, 1987.

15. Linda J. Clark, Project Geologist - URS Corporation letter to Lee Fordock - City of Syracuse, Water Engineering Department, November 19, 1987.

16. Linda J. Clark, Project Geologist - URS Corporation letter to Sumner Palmer, Supervisor - Town of Lafayette, November 20, 1987.

18. USGS Topographic Maps 7.5 Minute Series; South Onondaga, New York Quadrangle, 1973; Jamesville, New York Quadrangle, 1978; Syracuse West, New York Quadrangle, 1978.

19. Linda J. Clark, Project Geologist - URS Corporation telecon to Federal Bureau of Indian Affairs - Syracuse Office, November 18, 1987.

20. A.A. Coburn, Regional Permit Administrator - New York State Department of Environmental Conservation, Region 7, Division of Regulatory Affairs letter to Linda J. Clark, Project Geologist - URS Corporation, October 2, 1987.

21. Mr. Heerkens - New York State Department of Health (NYSDOH) Interoffice Memorandum to Mr. McCarthy - NYSDOH, June 9, 1987.

22. D. Abbott - Onondaga County Department of Health, Division of Environmental Sanitation memo to S. Burdick - Onondaga County Department of Health, May 13, 1983.

23. David H. King, Chief - New York State Department of Environmental Conservation (NYSDEC), Bureau of Remedial Action memorandum to Charles N. Goddard - NYSDEC, Bureau of Hazardous Site Control, December 14, 1983.

24. Geology of New York: A Short Account, Educational Leaflet No. 20, The University of the State of New York - The State Education Department, 1966.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY **ON-3001**

REGION II

DATE: SEP 5 1990

SUBJECT: Removal Funding Request for the Onondaga Nation Drum Site located in the Town of Nedrow, Onondaga County, New York - **EXPEDITED ACTION MEMORANDUM**

FROM: Joseph D. Rotola, On-Scene Coordinator
Removal Action Branch

TO: Richard L. Caspe. P.E., Director
Emergency and Remedial Response Division

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

The purpose of this memorandum is to confirm your verbal authorization of August 17, 1990 to expend up to $15,000 for mitigation contracting for the removal of 12 drums at the Onondaga Nation Drum site. This memorandum also requests the additional funds necessary to complete this portion of the action.

On August 10, 1990, the New York State Department of Environmental Conservation (NYSDEC) formally requested that the Environmental Protection Agency (EPA) conduct a removal action at the site. Although the site has been the subject of previous referrals of this nature, removal assessments conducted by the Removal Action Branch (RAB) did not identify conditions that met the criteria for removal actions as specified by the National Oil and Hazardous Substance Contingency Plan (NCP).

The most recent referral from the NYSDEC included the analysis of samples collected from waste in drums. Analytical results indicate that phenols and xylene were present. A summary of analytical results is included in Table 1. In addition, several drums were noted to be in poor condition which has resulted in the release of their contents onto the ground.

During the week of August 20, 1990, and following meetings with the NYSDEC and a representative of the Onondaga Nation, removal activities were initiated. This portion of the action was limited to sampling and securing of those drums previously sampled by the NYSDEC. As such, a total of twenty drums were retrieved, sampled, overpacked and transferred to a staging area that has been secured with temporary fencing. Warning signs have also been posted and areas containing open or ruptured drums cordoned off. The additional funds that are being requested are the result of the discovery of eight additional drums that were previously sampled but not referenced in the referral by the NYSDEC.

Although samples of all drums are presently being analyzed for disposal parameters, additional analyses will be requested in an effort to obtain data necessary to fully assess the threat posed by the site and the extent of future actions that will be required by EPA. These additional analyses will also result in costs that were not anticipated when verbal authorization of funding was requested.

While conducting the activities mentioned above, additional information on the site was collected. During our assessment of the 25 acre site, numerous drum piles were observed, some of which were mixed in with residential and construction debris. Areas were also noted to contain buried drums. Although dense vegetation prevented an accurate count, it is estimated that up to 800 drums may be present. In addition to drums, medical waste was also observed in the southeastern portion of the site.

Since it is apparent that further action by EPA will be required, RAB is presently planning to conduct a detailed site assessment and begin preparing a full scale Action Memorandum while awaiting receipt of analytical results. A work assignment has also been issued to the Technical Enforcement Support contractor so that a search for potentially responsible parties can be initiated.

I recommend your authorization of this memorandum so that on-going removal activities can continue at the Onondaga Nation Drum site. This action meets the criteria necessary to conduct a removal action as stipulated in 40 CFR 300.415(b) of the NCP. Costs associated with this action are not expected to exceed $69,000 of which $36,000 is for mitigation contracting. A cost summary is presented in Attachment A.

There is sufficient money in our Advice of Allowance to complete this work.

Please indicate your approval per current Delegation of Authority, by signing below.

Approval: _____ Date: 9/5/90
Richard L. Caspe, P.E., Director
Emergency and Remedial Response Division

Disapproval: _____ Date: _____
Richard L. Caspe, P.E., Director
Emergency and Remedial Response Division

cc: (after approval)

C. Sidamon-Eristoff, RA	S. Anderson, PM-214F (EXPRESS MAIL)
R. Salkie, 2ERR-ADREPP	S. Luftig, OS-210
G. Zachos, 2ERR-RAB	M. O'Toole, NYSDEC
G. Pavlou, 2ERR-ADNYCP	C. Moyik, 2ERRD-PS
J. Marshall, 20EP	L. Guarneiri, OS-210
E. Schaaf, 20RC-NYCSUP	J. Rosianski, 20EP
R. Gherardi, 20PM-FIN	D. Henne, TATL

TABLE 1

SUMMARY OF ANALYTICAL RESULT
ONONDAGA NATION DRUM SITE
NEDROW, NEW YORK

COMPOUND NAME	CONCENTRATION (PPM)*
ORTHO-XYLENE	150 - 8900
PHENOL	69 - 375

* ALL SAMPLES COLLECTED FROM DRUMS

Additional Information

Relating to this Section

Can be Found in the

Confidential Files

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION II
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, NEW YORK 10278

MEMORANDUM

DATE: AUG 30 1991

SUBJECT: Request for a Removal Action Restart and 12-Month Exemption for the Onondaga Nation Drum Site, Onondaga Indian Nation, Town of Nedrow, Onondaga County, New York - **ACTION MEMORANDUM**

FROM: Joseph D. Rotola, On-Scene Coordinator
Removal Action Branch

James Daniel Harkay, On-Scene Coordinator
Removal Action Branch

TO: Constantine Sidamon-Eristoff
Regional Administrator

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

Site/Spill-ID: 5T

I. PURPOSE

The purpose of this Action Memorandum is to request and document approval of the proposed removal action restart and to justify an exemption from the 12-month statutory limitation for completion of the removal action, which is described herein, for the Onondaga Indian Nation, Onondaga County, New York.

On verbal authorization from the Director of the Emergency and Remedial Response Division (ERRD) interim emergency measures were initiated at the site on August 22, 1990. Twenty drums previously sampled by the New York State Department of Environmental Conservation (NYSDEC) which were identified as containing hazardous substances were overpacked, staged and secured to prevent further migration of their contents.

An expedited Action Memorandum documenting the verbal authorization and requesting additional funds necessary to conduct such actions was approved on September 5, 1990 and is included as Appendix A, pages 23-27. This removal action was completed when the drums were disposed on April 18, 1991.

II. SITE CONDITIONS AND BACKGROUND

During the 1960's, the site was operated as a junk yard by Benjamin Shenandoah, of the Onondaga Nation. Material accepted included motor vehicles, tires, washing machines, scrap building materials and other municipal wastes. During the mid-to-late 1960's, industrial waste was disposed of at the site and in the early 1980's, medical waste was disposed of at the northeast portion of the site.

At least a portion of the drums were reportedly disposed of by a hauler that was employed by Solvent Savers, Inc., a chemical reprocessor that operated in the area (Pompey and Lincklaen, NY). Sometime in the late 1960's, the Onondaga Nation suspended Mr. Shenandoah's operation. Mr. Shenandoah is now deceased.

The CERCLIS ID number for this site is NYD986883403 and the category of removal is time critical.

A. Site Description

1. Removal site evaluation

On June 13, 1988, a removal site evaluation was completed by the U.S. Environmental Protection Agency's (EPA) Removal Action Branch (RAB) in response to an April 22, 1988 referral from NYSDEC. This investigation was unable to document the existence of any threats to the public health, welfare or the environment, thereby rendering the site ineligible for removal funds under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986.

On August 18, 1990, the NYSDEC submitted a second referral which included analytical results on the contents of drums.This referral and accompanying data prompted the expedited action described previously. The referral letter is included in Appendix B, pages 28-30. During this action, EPA verified the existence of numerous drums and medical waste at the site.

Upon further investigation of the discrepancy in opinions resulting from the two site assessments, it was discovered that only one small portion of the site was visited during the initial assessment. This area consisted of empty drums and is located in a portion of the

site which is isolated and obscured from the major drum disposal area. The presence of dense vegetation also made field observations extremely difficult.

Inspections by EPA have revealed approximately 1200, 55-gallon drums on the site. The drums were identified on the surface and partially buried in four major disposal areas (See Figure 3, page 19.). Many of the drums are in poor condition and appear to have leaked their contents onto the ground. In addition, there are an unknown number of buried drums at the site as indicated by partially buried drums protruding from the ground in the vicinity of the aboveground drum disposal areas. Analysis of samples collected by EPA during the site investigation resulted in the classification of 14 of 20 drums sampled as ignitable, as defined by the Resource Conservation and Recovery Act (RCRA).

An isolated area on the site was used for the disposal of bags of medical waste. These bags are green in color and have deteriorated and broken open. The contents of these bags include syringes, vials, intravenous tubing, bottles and used dressings. The bags and their contents are spread over an area which is approximately 50' by 150' in size. The medical waste extends into the bed of an intermittent stream that flows through the site.

2. Physical location

The site is approximately 25 acres in size and is located within the boundaries of the Onondaga Indian Nation, in Onondaga County, New York. The site is situated in a sparsely populated rural area, primarily used for residential and agricultural purposes. Site location maps are included as Figures 1 and 2, pages 17 and 18. The estimated population located within 1 mile of the site is 794, with the nearest residence being approximately 500 feet to the north. An intermittent stream flows in a northwesterly direction through the extreme southwestern corner of the site before discharging into the Onondaga Creek. A portion of this creek is designated as "protected waters" and is used for fishing and recreation.

Also, an area of wetlands lies less than one mile to the northwest of the site. It is estimated that private and community wells serve 6,214 people within a 3-mile radius of the site. This includes a portion of the City of Syracuse which lies 1.6 miles to the north.

3. Site characteristics

Since cessation of operations in the late 1960's, the site has been left unfenced and unsecured. The drums, many of which are open and deteriorated, have and continue to leak their contents onto the ground.

Considering the condition of the drums, the existence of the intermittent stream that flows through the site, and the possibility of flood conditions in the event of heavy rains, the potential for migration of contaminants into the surface and groundwater is high.

The proposed removal action is a restart. A limited action to stabilize twenty leaking drums was initiated on August 22, 1990 and completed on April 18, 1991. This previous action is described in Section II.B (page 5).

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

In November 1987, a joint NYSDEC and New York State Department of Health (NYSDOH) sampling investigation identified ethylbenzene, 3-methyl benzoic acid and xylene in concentrations up to 160, 2,390 and 2,441 mg/kg (ppm), respectively. Acetone and acetic acid methyl ester were also identified, but below the method detection limit. EP-Toxicity analyses indicated the presence of barium, cadmium, chromium and lead below regulatory limits.

Analysis of additional drum samples collected by NYSDEC in March 1990 identified phenols and xylenes in the waste at concentrations up to 374 and 8,900 mg/kg (ppm), respectively.

Analysis of samples collected by EPA during their 1990 site investigation exhibited the characteristic of ignitability, which classifies them as a RCRA hazardous waste as stipulated in 40 CFR 260.21. Hazardous Substances, as defined in CERCLA Part 101 (14), identified in drummed waste on the site, are presented on Table 1, page 22.

5. NPL status

This site is currently not on the National Priorities List (NPL). The NYSDEC previously attempted to rank the site however, the site did not score high enough to be included on the NPL. Recent conversations with NYSDEC indicate that they will be initiating a Phase II investigation. The results of this investigation will provide additional information on groundwater beneath and downgradient of the site.

B. Other Actions to Date

1. Previous actions

The only previous action undertaken at this site was initiated by the EPA on August 22, 1990. This action was approved via verbal authorization from the Director of the ERRD on August 17, 1990. An Action Memorandum was approved on September 5, 1990 which confirmed the prior verbal authorization. The approved ceiling for this

limited action was $69,000, of which $36,000 was for mitigation contracting.

By August 24, 1990, the EPA RAB had completed identifying, sampling, overpacking, and staging 20 drums previously determined by NYSDEC to contain hazardous materials. Fourteen of the 20 drums were identified to contain ignitable waste. High visibility fencing was erected around the overpacked drums to form a containment area. This area was posted with warning signs to advise the public of the health threat posed by direct contact with drums containing hazardous materials. During this action EPA also conducted a preliminary site assessment to verify the presence of other drums and medical waste at the site as previously mentioned in this Action Memorandum. This action was completed on April 18, 1991.

2. Current Actions

No other government or private actions are currently underway at the site. The only proposed action is the one described in this Action Memorandum which is to remove and dispose of all hazardous substances and medical waste located on or above the ground. This action will be effective in that it will reduce the existing fire and explosion threat and eliminate the threat posed by direct contact.

C. State and local Authorities' Roles

1. State and local actions to date

In May 1983, a member of the Onondaga Nation requested that the Onondaga County Health Department (OCHD) inspect the site and evaluate the threat posed by recently discovered medical waste which had been disposed of. It was suspected that the medical waste contained radioactive materials. However, upon conducting field measurements, no readings above background were detected. During their investigation, OCHD noted several hundred barrels scattered throughout the site. Later that year, NYSDEC sampled the drummed waste but only identified benzyl alcohol. In July 1987, NYSDOH collected samples from 4 private wells down gradient of the site. No hazardous substances were detected.

On November 24, 1987 a joint NYSDEC and NYSDOH drum sampling operation identified acetic acid, methylester, acetone, ethylbenzene, 3-methyl benzoic acid, xylene, barium, cadmium, chromium and lead. Although hazardous substances were identified, the samples collected by the NYSDEC did not exhibit any RCRA characteristic, which is the primary criteria used by the state when evaluating such a site for a removal action.

In November of 1988, a Phase I Engineering Investigation of the site was conducted by URS Corporation for NYSDEC. As a part of this investigation, the site was scored in an attempt to include it on the NPL. These activities did not result in a score high enough to propose the site for inclusion to the NPL.

This site was originally referred by the NYSDEC in April 1988 to the EPA for a Federally funded removal action. However, at the time a preliminary site assessment did not identify threats to the public health or the environment and hence did not meet the criteria for a removal action under CERCLA. On August 18, 1990, the NYSDEC submitted a second request with additional information which led to the removal site evaluation discussed on pages 2 and 3. This in turn prompted the EPA to take prompt action in stabilizing, securing and removing the 20 drums.

2. Potential for continued State/local response

The NYSDEC is planning a Phase II groundwater investigation to determine the presence and extent of groundwater contamination in the area. No other future state or local involvement is expected at the site.

The NYSDEC has stated in their request to the EPA that, as a result of contract limitations, "NYSDEC cannot respond in a timely manner as can EPA". The local government does not posses the financial strength to fund this proposed action.

III. Threats to Public Health or Welfare or the Environment and Statutory and Regulatory Authorities

A. Threats to Public Health and Welfare

The health threats at this site meet the criteria from Section 300.415(b)(2) of the National Contingency Plan (NCP) for the undertaking of a removal action. The appropriate factors from this latter section of the NCP, as they relate to this site for the undertaking of a removal action are discussed in the following paragraphs.

The presence of hazardous substances on site pose a serious health threat to nearby populations that may come into direct contact with these substances. Inhalation or ingestion of these compounds (i) can cause serious health effects including damage to the respiratory system, central nervous system, gastrointestinal tract, skin, eyes, blood, liver and kidneys. A summary of the health effects of the compounds present are summarized on Figure 4, page 20.

Hazardous substances stored in deteriorating drums have leaked or threaten to leak their contents onto the ground (iii). This increases the risk to nearby populations of direct contact with these compounds. The actual or potential threat of drinking water contamination (ii) is also of concern. As previously stated in this Action Memorandum, 6,214 people within three miles of the site rely on groundwater for their sole source of potable water.

Fourteen of the twenty drum samples collected by EPA were determined to be ignitable. This constitutes a significant threat of fire and explosion (vi). In the event of a fire, hazardous substances would be released into the air and could potentially effect a large portion of the nearby population. Two diners are located within 300 feet of the site, and serve as a popular stopping point for motorists traveling Interstate Highway #81.

Medical waste disposed of at the site (viii), including used syringes and dressings, pose a potential threat of infection and or injury to local populations should they come into contact with this material. The area used for disposal of this waste extends into a dry stream bed. In the event of heavy rainfall, flooding conditions (v) would carry this material downstream to the Onondaga Creek and eventually to the Onondaga River which flows through the City of Onondaga.

During a site visit conducted as recently as May 4, 1991, conditions at the site were found to be deteriorating. In addition to encountering strong chemical odors, increased daily temperatures have caused waste in drums to become less viscous, resulting in spillage of waste onto the ground.

The inability of other state or federal agencies to respond to these threats (vii) further justifies the necessity for implementation of the proposed removal action.

B. Threats to the Environment

The threats to the environment meet the criteria stated in factors (i) through (vii) of section 300.415(b)(2). In summary, the Onondaga Creek, of which a portion is designated "protected waters", is in the direct pathway of the potential migration of contaminants from the site. This waterway is used extensively for fishing and recreation in the area and eventually empties into the Onondaga River. The conditions at the site may also threaten a wetland area located less than 1 mile to the northwest.

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. EXEMPTION FROM STATUTORY LIMITS

The initial removal action at the site was conducted on August 22, 1990. Continued removal actions necessary to mitigate the immediate threats posed by the site will extend beyond the 12 month limitation. The following section justifies the necessity to approve a 12-month exemption for the site so that removal activities can continue.

A. Emergency Exemption

1. There is an immediate risk to public health, or welfare, or the environment

Conditions at the site pose an immediate threat to public health and the environment. Volatile and flammable substances have been identified on the site in 14 drums that were previously sampled. These drums represent a significant threat of fire and explosion. In the event of a fire, flames would spread throughout the 25 acre site and engulf the estimated 1,200 drums of unknown substances thereby causing potential explosions and the release of hazardous substances into the atmosphere. The hazardous substances released into the air could potentially affect the majority of the population in the area.

2. Continued response actions are immediately required to prevent, limit or mitigate an emergency.

During the initial response action, 20 drums were overpacked and sampled, of which 14 drums were determined to contain flammable and hazardous chemicals. Preliminary site inspections indicate that as many as 1,200 drums containing unknown wastes are present on the surface of the site and that an unknown number of drums are buried. Drums on the surface are deteriorating and leaking onto the ground. Partially buried drums are also in such a state. The presence of hazardous substances in the drums which are leaking onto the ground pose a serious health threat to the public as well as a wide range of environmental impacts. The public risks exposure to the hazardous substances by direct contact, inhalation of volatile chemical and/or the ingestion of contaminated well water. In addition to the drums of waste on-site, medical waste was discarded on the site. Local populations are at risk of injury or infection through contact with used syringes and dressings.

The removal action proposed is immediately required to alleviate an emergency and to prevent, limit and mitigate the emergency situation at the site.

3. Assistance will not otherwise be provided on a timely basis.

The funds and resources necessary to implement the proposed removal action, to mitigate the public health and environmental threat posed by the hundreds of drums present on the site are not available to the state, county or Onondaga Nation. Furthermore, the fact that this site is located within the legal boundaries of the Onondaga Territory limits the response authority of state and county agencies. Hence, only the EPA can provide assistance on a timely basis.

VI. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

1. Proposed action description

The most effective way to mitigate the threat to the public health and prevent the spread hazardous substances and contaminants to the environment is the removal and off-site disposal of the hazardous substances stored at the site.

This proposed removal action will include the removal and disposal of all hazardous substances, contaminants or pollutants on or above the ground; a geophysical survey to determine the location and extent of buried drums, and a soil boring and soil gas analysis program to determine the nature and extent of subsurface soil contamination. If necessary, a separate Action Memorandum will be prepared requesting the authorization of funds to address buried drums and subsurface contamination.

An abbreviated geophysical survey and soil sampling program will be conducted prior to set-up of site support facilities to insure that the support zone is not located in an area suspected of containing buried drums.

Due to the overgrown nature of the site and its previous usage as a junk yard, an extended period of time will be required to prepare the site for removal operations. It will be necessary to clear the site of vegetation and debris to fully assess the extent of contamination. A temporary road will be constructed to allow motor vehicles and heavy equipment access to the site. Facilities needed to support operations include office, decon and crew trailers, a drum crushing pad, an equipment decontamination pad, a drum staging area and an enclosure to house the transition zone and an equipment storage area. Set-up of support facilities and preparation of the site for removal activities is expected to take 30 days to complete.

Prior to addressing the drums at the site, all efforts will be focused towards the collection and removal of hospital waste. Due to the "unknowns" associated with such material and the potential for pathogenic, radioactive and infectious conditions, all activities related to this material will be conducted by personnel specifically trained to respond to such situations. It is expected that the ERCS contractor will be required to subcontract this portion of the removal action.

Following the removal or securing of all medical waste, all drums will be accessed, recovered and staged. Drums in an advanced state of deterioration will either be overpacked, or their contents transferred to new drums.

Empty drums will be segregated in a specially designated area. Drums containing waste will be individually sampled. Drum samples collected will be analyzed for compatibility. From this data, a bulking scheme will be developed organizing the waste into compatible waste streams. For budgeting purposes, 15 waste streams will be assumed. Compatibility analysis, development of the bulking scheme and disposal analysis is expected to take ten weeks to complete.

Upon receipt of acceptable disposal analysis results, drums of waste from their respective streams will be consolidated in preparation for shipment to disposal facilities. Empty drums will be crushed and landfilled or recycled by a drum reconditioner. All waste generated on-site will be disposed of at RCRA approved facilities. Consolidation/bulking operations are expected to take ten days to complete.

The geophysical survey will be conducted by the EPA Emergency Response Team to determine if buried drums are present. Half buried drums protruding from the ground surface coupled with evidence that large areas of the site may consist of fill material suggests that there may be buried drums.

A soil boring and soil gas program will be conducted to investigate anomalies identified during the geophysical survey. Data obtained from the geophysical survey, soil boring and soil gas program will be used to determine if any additional removal actions are appropriate.

2. Contribution to remedial performance

This site has not been proposed for inclusion to the NPL. The actions proposed in this memorandum are consistent with long term cleanup objectives for the site, since any removal or remedial action would entail the removal and disposal of all surface drums and other material that contains hazardous substances, pollutants and contaminants. Based on available information the proposed action will not impede future responses.

Removal and disposal of drummed waste and waste on soil will mitigate the threat to nearby human and animal populations from contact with hazardous substances present on the site. This action will also reduce the spread of these contaminants via groundwater, surface waters and airborne routes.

3. Description of alternative technologies

Incineration is the disposal option of preference for material contaminated with volatile or semivolatile organics. Incineration meets the two objectives of the alternative technology policy (i.e. timeliness of response and mitigation of the threats to human health and the environment) it also meets the three alternative technology selection criteria (i.e. effectiveness, implementability and cost).

4. Applicable or relevant and appropriate requirements (ARARs)

ARARs deemed to be practicable for the site include the RCRA and pertinent regulations thereunder.

Due to the widespread disturbance of vegetation and soil that is expected to be required in order to access the drums, applicable state and Federal Regulations governing the control of soil erosion and sediment will be followed. Likewise, if an area of the site is confirmed to meet the criteria of a "wetland", all applicable regulations pertaining to such will be met.

5. Project Schedule

The proposed action is expected to take six months to complete. Adverse weather conditions and the off-site disposal of waste could effect the length of time required for this removal. Response activities can be initiated within one week of approval of this Action Memorandum.

B. Estimated Costs

A summary of the estimated costs for the proposed action is presented below. A detailed cost estimate is included in Appendix C, pages 31-37.

Additional Information

Relating to this Section

Can be Found in the

Confidential Files

VIII. OUTSTANDING POLICY ISSUES

None.

IX. ENFORCEMENT

The Technical Enforcement Support contractor has been tasked with researching the existence of viable potentially responsible parties. Staff in the ERRD and Office of Regional Counsel are also engaged in such an effort.

X. RECOMMENDATION

This decision document represents the selected removal activities for the Onondaga Nation Drum site, located within the Onondaga Nation, in Onondaga County, New York. Conditions at the site continue to meet the NCP Section 300.14(b)(2) criteria for a removal, and I recommend your approval of the proposed ceiling increase of $1,628,500, of which $1,121,700 is for mitigation contracting. The total project ceiling if approved will be $1,700,000.

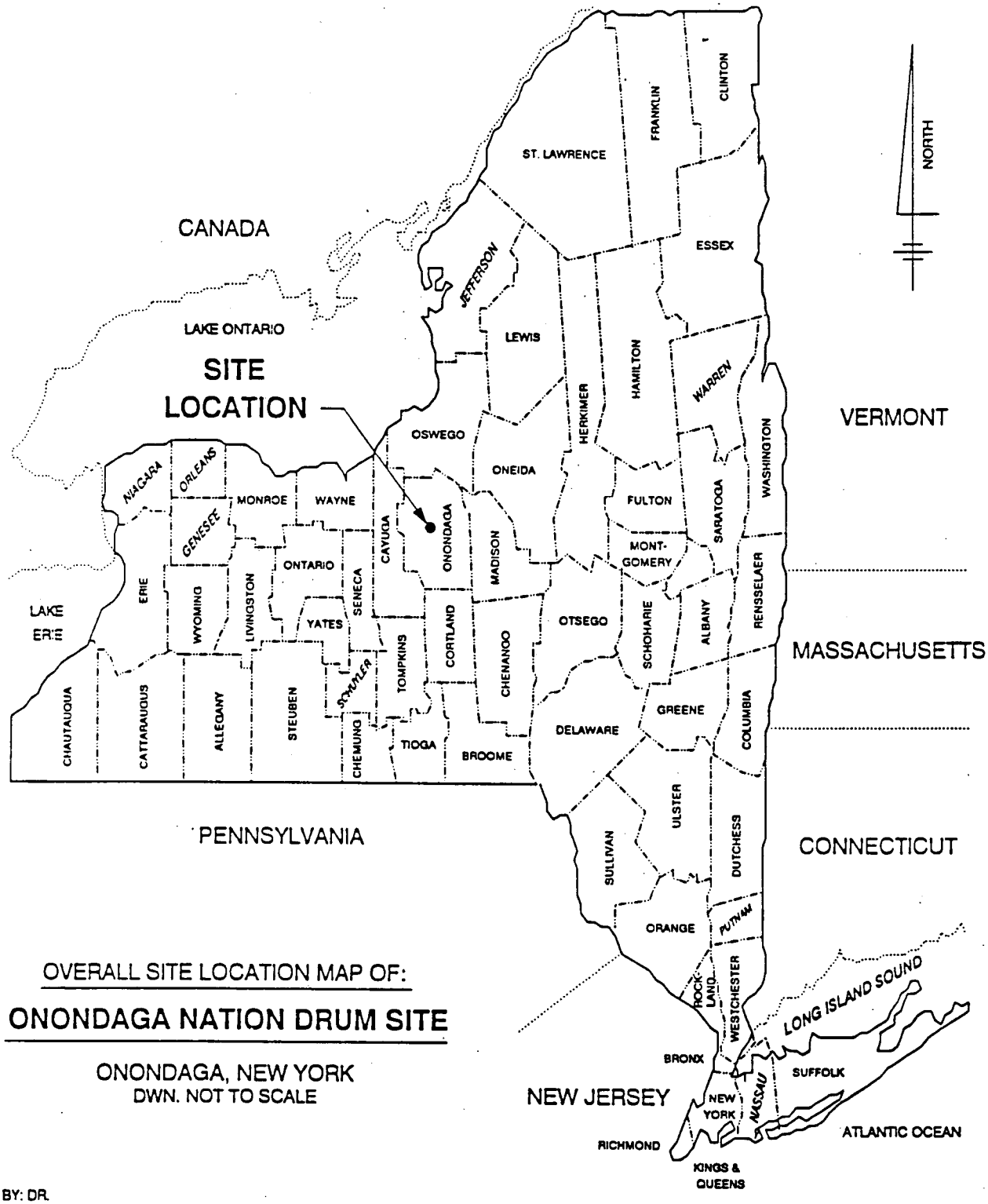
Please indicate your approval and authorization of funding as per the current delegation of authority by signing below.

Approval: _____ Date: 9/4/97
Constantine Sidamon-Eristoff
Regional Administrator

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

cc: (following approval of this memorandum)
C. Sidamon-Eristoff, RA
K. Callahan, ERRD-D
G. Pavlou, ERRD-DDO&PM
R. Salkie, ERRD-ADREPP
W. McCabe, ERRD-DDNY/CP
G. Zachos, ERRD-RAB
V. Pitruzzello, ERRD-PSB
J. Marshall, OEP
E. Schaaf, ORC-NYCSUP
R. Gherardi, OPM-FIN
R. Hargrove, OPM-EI
M. O'Toole, NYSDEC
S. Anderson, PM-214F (Express Mail)
S. Luftig, OS-210
C. Moyik, 2ERR-PS
C. Kelly, TAT

FIGURES



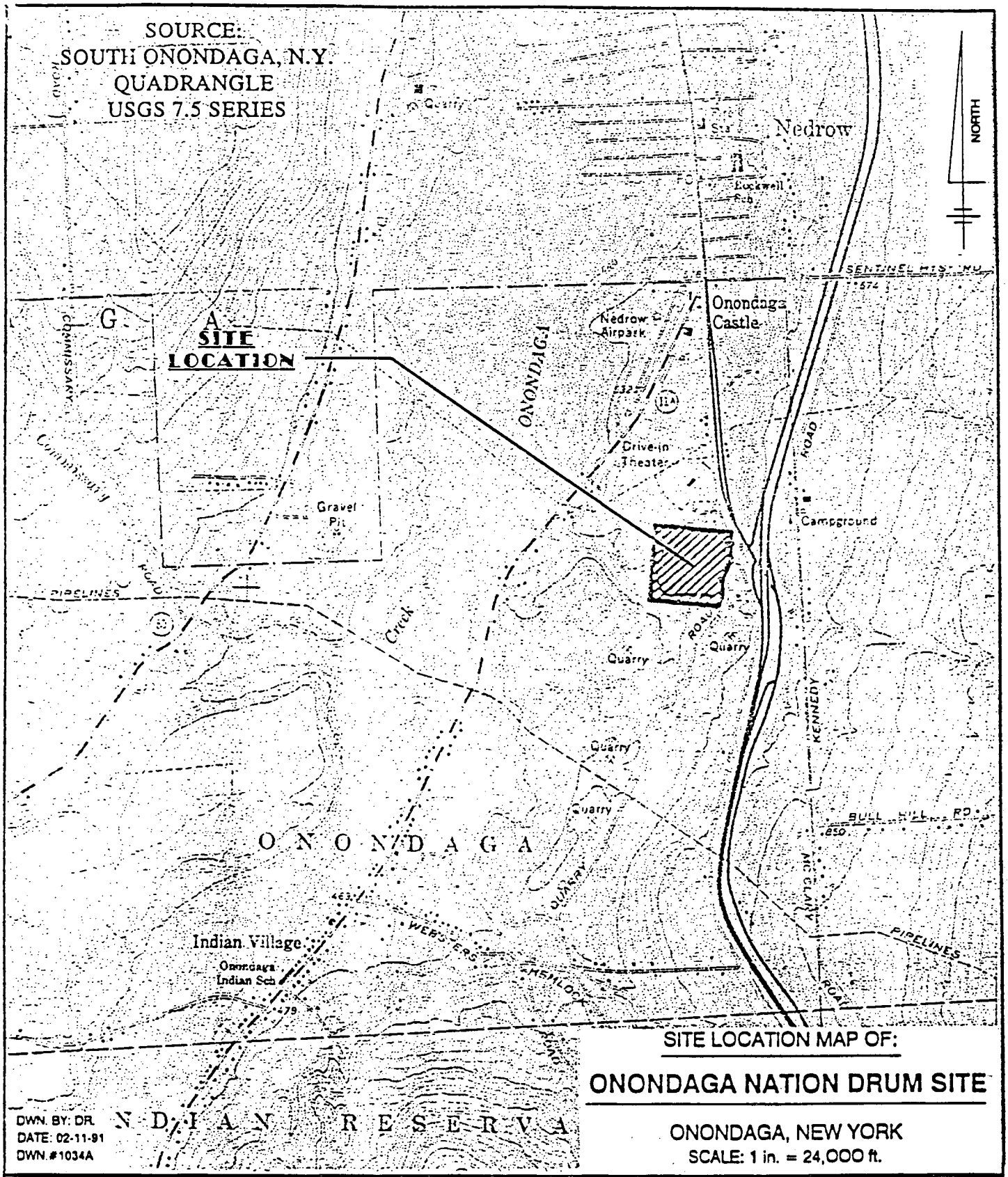
OVERALL SITE LOCATION MAP OF:

ONONDAGA NATION DRUM SITE

ONONDAGA, NEW YORK
DWN. NOT TO SCALE

DWN. BY: DR
REVISED: 02-18-91
DWN.#1034E

WESTON MANAGERS DE SOLUTIONS CONSULTANTS	Roy F. Weston, Inc. MAJOR PROGRAMS DIVISION	EPA PM J. ROTOLA	OVERALL SITE LOCATION MAP
IN ASSOCIATION WITH FOSTER WHEELER CORP., C.C JOHNSON & MALHOTRA, P.C., RESOURCE APPLICATIONS, INC. AND R.E. SARRIERA ASSOCIATES		TAT PM E. WILSON	FIGURE 1



DWN. BY: DR.
DATE: 02-11-91
DWN.#1034A

SITE LOCATION MAP OF:

ONONDAGA NATION DRUM SITE

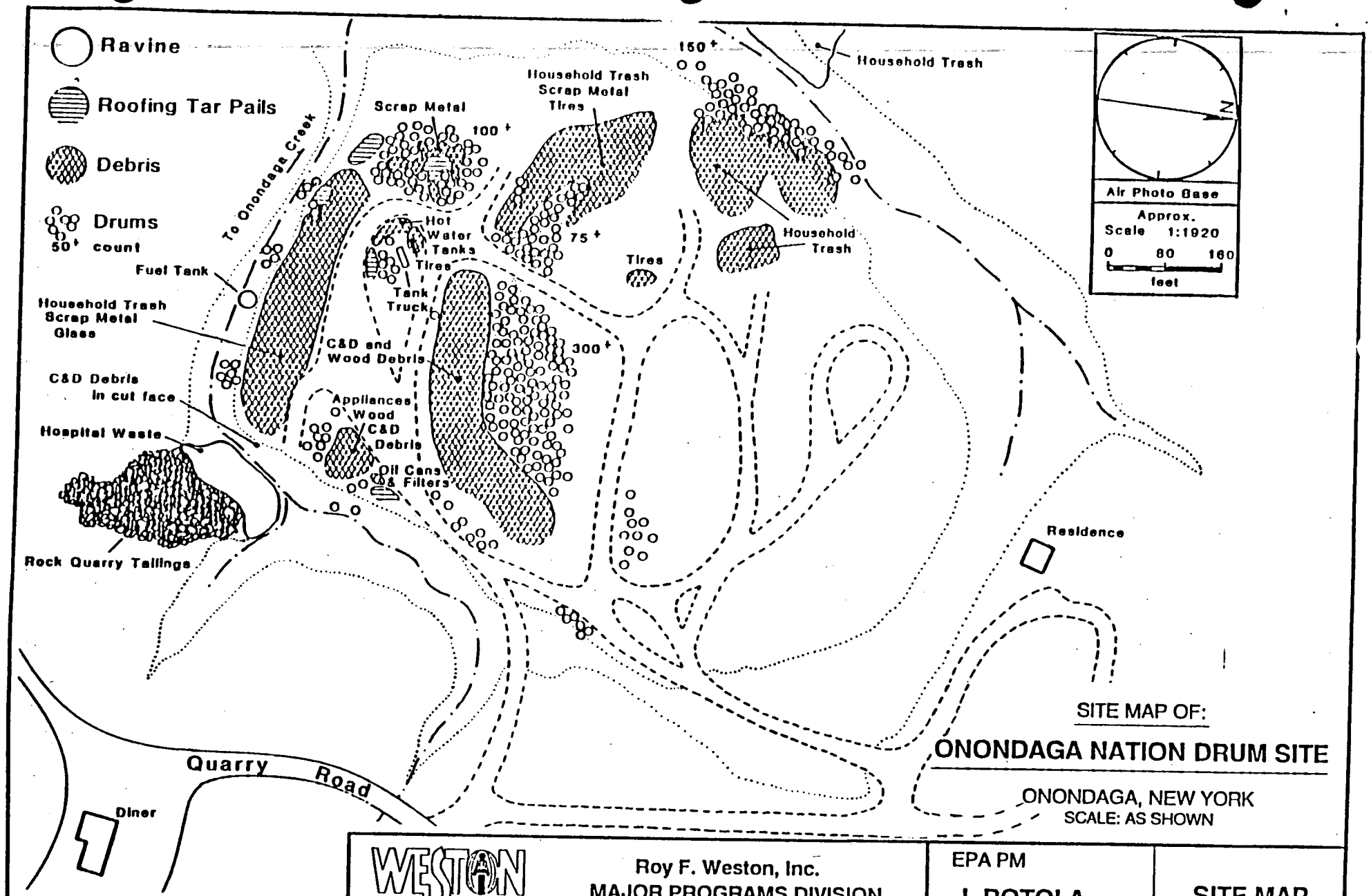
ONONDAGA, NEW YORK

SCALE: 1 in. = 24,000 ft.

WESTON	Roy F. Weston, Inc. MAJOR PROGRAMS DIVISION	EPA PM J. ROTOLA
IN ASSOCIATION WITH FOSTER WHEELER CORP., C.C JOHNSON & MALHOTRA, P.C., RESOURCE APPLICATIONS, INC. AND R.E. SARRIERA ASSOCIATES		TAT PM E. WILSON

SITE LOCATION MAP

FIGURE 2



SITE MAP OF:

ONONDAGA NATION DRUM SITE

ONONDAGA, NEW YORK
SCALE: AS SHOWN

SOURCE:
NEW YORK STATE DEPARTMET OF ENVIRONMENTAL CONSERVATION

WESTON

Roy F. Weston, Inc.
MAJOR PROGRAMS DIVISION

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

EPA PM
J. ROTOLA

TAT PM
E. WILSON

SITE MAP

FIGURE 3

SUMMARY OF POTENTIAL TOXICOLOGICAL EFFECTS OF SELECTED COMPOUNDS FOUND AT THE ONONDAGA NATION DRUM SITE

	Carcinogenic	Toxic by Inhalation, Ingestion, or Dermal Contact	Eye, Skin, Respiratory or Mucous Membrane Irritant	Central Nervous System Damage	Liver Damage	Kidney Damage
Acetone		x	x			
Cadmium	x	x	x			x
Chromium	x	x	x			
Ethylbenzene		x	x	x		
Lead		x		x		x
Phenol		x	x		x	x
Xylene		x	x	x	x	x

DWN. BY: DR
REVISED: 02-18-91
DWN.#1034F

WESTON MANAGERS DE SCIENTIFIC CONSULTANTS	Roy F. Weston, Inc. MAJOR PROGRAMS DIVISION	EPA PM J. ROTOLA	TOXICITY CHART
IN ASSOCIATION WITH FOSTER WHEELER CORP., C.C JOHNSON & MALHOTRA, P.C., RESOURCE APPLICATIONS, INC. AND R.E. SARRIERA ASSOCIATES		TAT PM E. WILSON	FIGURE 4

TABLE 1

List of Hazardous Substances and Statutory Designations

Hazardous Substance	Concentration	Statutory Designation
Acetone	420 ug/kg	3
Cadmium	91 ug/l	2
Chromium	11 ug/l	2
Ethylbenzene	2,390,000 ug/kg	1,2
Lead	727 ug/l	2
Phenol	374,000 ug/kg	1,2,3
Xylene	8,900,000 ug/kg	1,3

1. Section 311(b)(4) of the Clean Water Act (CWA)
2. Section 307(a) of the Clean Water Act (CWA)
3. Section 3001 of the Resource Conservation and Recovery Act (RCRA)

APPENDIX A

EXPEDITED ACTION MEMORANDUM

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DATE: SEP 5 1990 REGION II

SUBJECT: Removal Funding Request for the Onondaga Nation Drum Site located in the Town of Nedrow, Onondaga County, New York - **EXPEDITED ACTION MEMORANDUM**

FROM: Joseph D. Rotola, On-Scene Coordinator
Removal Action Branch

TO: Richard L. Caspe. P.E., Director
Emergency and Remedial Response Division

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

The purpose of this memorandum is to confirm your verbal authorization of August 17, 1990 to expend up to $15,000 for mitigation contracting for the removal of 12 drums at the Onondaga Nation Drum site. This memorandum also requests the additional funds necessary to complete this portion of the action.

On August 10, 1990, the New York State Department of Environmental Conservation (NYSDEC) formally requested that the Environmental Protection Agency (EPA) conduct a removal action at the site. Although the site has been the subject of previous referrals of this nature, removal assessments conducted by the Removal Action Branch (RAB) did not identify conditions that met the criteria for removal actions as specified by the National Oil and Hazardous Substance Contingency Plan (NCP).

The most recent referral from the NYSDEC included the analysis of samples collected from waste in drums. Analytical results indicate that phenols and xylene were present. A summary of analytical results is included in Table 1. In addition, several drums were noted to be in poor condition which has resulted in the release of their contents onto the ground.

During the week of August 20, 1990, and following meetings with the NYSDEC and a representative of the Onondaga Nation, removal activities were initiated. This portion of the action was limited to sampling and securing of those drums previously sampled by the NYSDEC. As such, a total of twenty drums were retrieved, sampled, overpacked and transferred to a staging area that has been secured with temporary fencing. Warning signs have also been posted and areas containing open or ruptured drums cordoned off. The additional funds that are being requested are the result of the discovery of eight additional drums that were previously sampled but not referenced in the referral by the NYSDEC.

Although samples of all drums are presently being analyzed for disposal parameters, additional analyses will be requested in an effort to obtain data necessary to fully assess the threat posed by the site and the extent of future actions that will be required by EPA. These additional analyses will also result in costs that were not anticipated when verbal authorization of funding was requested.

While conducting the activities mentioned above, additional information on the site was collected. During our assessment of the 25 acre site, numerous drum piles were observed, some of which were mixed in with residential and construction debris. Areas were also noted to contain buried drums. Although dense vegetation prevented an accurate count, it is estimated that up to 800 drums may be present. In addition to drums, medical waste was also observed in the southeastern portion of the site.

Since it is apparent that further action by EPA will be required, RAB is presently planning to conduct a detailed site assessment and begin preparing a full scale Action Memorandum while awaiting receipt of analytical results. A work assignment has also been issued to the Technical Enforcement Support contractor so that a search for potentially responsible parties can be initiated.

I recommend your authorization of this memorandum so that on-going removal activities can continue at the Onondaga Nation Drum site. This action meets the criteria necessary to conduct a removal action as stipulated in 40 CFR 300.415(b) of the NCP. Costs associated with this action are not expected to exceed $69,000 of which $36,000 is for mitigation contracting. A cost summary is presented in Attachment A.

There is sufficient money in our Advice of Allowance to complete this work.

Please indicate your approval per current Delegation of Authority, by signing below.

Approval: _____ Date: 9/5/90
Richard L. Caspe, P.E., Director
Emergency and Remedial Response Division

Disapproval: _____ Date: _____
Richard L. Caspe, P.E., Director
Emergency and Remedial Response Division

cc: (after approval)

C. Sidamon-Eristoff, RA
R. Salkie, 2ERR-ADREPP
G. Zachos, 2ERR-RAB
G. Pavlou, 2ERR-ADNYCP
J. Marshall, 20EP
E. Schaaf, 20RC-NYCSUP
R. Gherardi, 20PM-FIN
S. Anderson, PM-214F (EXPRESS MAIL)
S. Luftig, OS-210
M. O'Toole, NYSDEC
C. Moyik, 2ERRD-PS
L. Guarneiri, OS-210
J. Rosianski, 20EP
D. Henne, TATL

TABLE 1

SUMMARY OF ANALYTICAL RESULT
ONONDAGA NATION DRUM SITE
NEDROW, NEW YORK

COMPOUND NAME	CONCENTRATION (PPM)*
ORTHO-XYLENE	150 - 8900
PHENOL	69 - 375

* ALL SAMPLES COLLECTED FROM DRUMS

APPENDIX B

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION REFERRAL LETTER

New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233

7010

Thomas C. Jorling
Commissioner

Mr. Richard Caspe
Director
Emergency and Remedial Response Division
U.S. Environmental Protection Agency
Region II
26 Federal Plaza
New York, New York 10278

Dear Mr. Caspe:

Re: Site No. 7-34-027
Onondaga Nation - Site B
Onondaga County, New York

The New York State Department of Environmental Conservation (NYSDEC) requests that the United States Environmental Protection Agency (USEPA) take any appropriate response allowable under the removal action program at the above referenced inactive hazardous waste site. As you are aware, this site was originally referred by NYSDEC in April 1988 to the USEPA for a federally funded removal action. However, at that time a preliminary site assessment was unable to identify threats to the public health or the environment and failed to show that the presence of drums and debris met the criteria for a CERCLA removal action.

On March 8, 1990 NYSDEC sampled twelve (12) additional drums to further evaluate the site and attempt to detect the presence of hazardous wastes. Analyses for volatile compounds, metals, EP-Toxicity, ignitability, corrosivity and reactivity were completed. A TCL scan was requested, but due to the nature of the waste, the laboratory was unable to complete the full analysis.

The enclosed analytical results show that phenol and xylene were detected in most of the samples in the part per million range. The levels of phenol ranged from 69 to 374 ppm and xylene ranged from 65 to 8900 ppm. All sampled drums were labelled with spray paint using a number that corresponds to the location number shown on the laboratory analysis report.

However, the waste did not fail RCRA characteristics for hazardous waste and, therefore, we are unable to act. Furthermore, the Onondaga Indian Nation has grown increasingly frustrated with the State and Federal regulatory agencies inability to act and, consequently, additional sampling is not possible at this time. The Department believes the waste is similar to hazardous waste found at other remedial sites and believes there is the potential for finding drums with enough xylene remaining to fail the characteristic of ignitability.

Therefore, it is felt that it is necessary to take immediate steps towards a site cleanup. The site is bordered on one edge by a creek that feeds into the Onondaga Creek and this poses a potential for the spread of contamination. Also, there are an undetermined number of buried drums at the site. Finally; the drums are in generally poor condition and in several areas have leaked their contents onto the ground.

As further support and clarification of the reason for this request, we realize under Section 104 of CERCLA, as amended by SARA, that the President of the United States may respond to any release or threat of release of a hazardous substance, if in the President's discretion it constitutes a public health or environmental emergency and no other person with the authority and capability to respond to the emergency will do so in a timely manner.

The NYSDEC cannot respond in as timely a manner as can EPA. Also, it may not have authority to respond since the site is located on the land of the Onondaga Indian Nation.

If you have any questions, please contact Mr. James Van Hoesen, of my staff, at (518) 457-9279.

Sincerely,

Michael J. O'Toole, Jr., P.E.
Director
Div. of Hazardous Waste Remediation

Enclosure
cc: w/Enc.: R. Salkie - USEPA - Region II

ON4001

FILE ONON INDIAN RES SITE B IN-PLACE CONON CO

MEMORANDUM

TO: SOLVENT SAVERS FILE

FROM: DAVID MUNRO "SEE PAGE 2 UNDERLINED"

RE: Telephone Conversation of 11/15/83 with Thomas Galloway

DATE: November 16, 1983

The following is a summary of information obtained from Galloway during a 30 minute phone conversation. Galloway was a neighbor of Dale Hough's in Pompey, and went to work for Hough part-time on a salary basis at the Pompey site. At this time, Galloway was employed full-time nights at Allied Chemical Corporation in Syracuse. Galloway states that he started working for Hough part-time in the early 60's, probably 1962 or 1963. Several years later, Galloway became a full-time "partner" with Hough, soon after Hough bought the parcels of property in Lincklaen and McDonough. Galloway described the partnership as one of being responsible for one half of the trucking expenses, then sharing in one half of the profits of Solvent Savers.

Galloway stated that the Pompey operation consisted wholly of re-distilling and reselling chemicals such as methyl chloride and tricloroethylene. Galloway knew who Harold Freidiani was, since Freidiani was Supervisor of the Town of Pompey, but Galloway is not aware that Freidiani was ever associated with Hough or Solvent Savers. Galloway admitted that Freidiani and Hough could have been involved in a partnership during this period without Galloway's knowledge.

Galloway described his responsibilities, both as a part-time and a full-time employee, as primarily a truck driver who went out to a number of companies and picked up barrels for Solvent Savers. He remembers the companies that he personally visited quite well, and re-affirmed the companies he named in his Bristol Affidavit, e.g. G.E., Signor Division, Sperry-Rand, Solvents and Petroleum Service, Pass and Seymour, IBM, Cowles Chemical, and Bristol Laboritories. He stated that he had no knowledge of Solvent Savers' dealings with any other companies, specifically denying knowledge regarding Allied Chemical, Carrier, Smith-Corona, Dow Chemical, and FBC Chemical Company. Regarding Carrier, Galloway specifically remembered that Carrier had

another hauler, and it was thus not interested in dealing with Hough. Galloway stated that when he drove to a particular company, he was usually handed a purchase order, which he then gave to Hough when he returned. Hough then billed the company at the end of the month, with Galloway having no other involvement in Solvent Savers' paperwork.

Galloway described the premises at Lincklaen as follows. He stated that there was a pit on the premises, where still bottoms and other miscellaneous items were incinerated. He was never directly involved in the incineration, stating that this was taken care of by Dale Hough, his son Harold, and Joe Thompson, who Galloway said is now dead. Galloway has no personal knowledge of any dumping at Lincklaen, other than accidental spillage of chemicals from time to time at the site. Since he was on the road much of the time, however, he admitted that it is entirely possible that dumping was going on at Lincklaen without his knowledge. He did emphasize a number of times, however, that Solvent Savers was a "barrel business" i.e. barrels of chemicals were sold to Solvent Savers, which then re-distilled ther and resold them either back to the same companies or to a third party, primarily Lehans in New Jersey.

Galloway's information about the McDonough site is in marked contrast to that at Lincklaen. He informed me that McDonough was used soley as a burial ground, and that he personally transported at least 1,000 barrels of chemicals from Cowles Chemicals in Skineatles Falls to McDonough, and then buried these barrels underground, either alone or with Hough and others. Galloway described the Cowles chemicals as probably being out of their "filter systems", looking like molasses, and smelling pretty bad. He stated that there was no way to re-distill the Cowles chemicals, and thus they were buried at McDonough. When pressed, he stated that no other chemicals or barrels were buried at McDonough nor Lincklaen, to his knowledge.

Galloway stated that on one or two occasions, he and Hough dumped barrels at a dump "behind the Salina drive-in on the Onondaga Indian Reservation", which he identified as an official landfill, e.g. possibly used by the City of Syracuse. He was not aware of any other sites used by Solvent Savers for dumping.

Galloway described Hough as a nice old farmer-type who wore suspenders and was liked by all his neighbors. In Galloway's opinion, Hough was honest and knew what he was doing. Galloway did not deny that Hough could have been dumping wastes, but he said that Hough never told Galloway that this was in fact occurring. When I asked Galloway whether he felt that Hough was "in over his head in the chemical business", Galloway stated that no, he wasn't, and that he had a "pretty good operation".

Galloway remembers leaving Hough in the late sixties, primarily because he was not making enough money as a "partner". Galloway then went to work for International Harvester, during which time Galloway and I.H. worked on Hough's trucks quite regularly, so that Galloway stayed in touch with Hough. Galloway then took a job with Carrier Corporation, and in early 1981 he and his family moved to Independence, Missouri, where he is now employed at a grain mill.

My impression of Galloway is that he has a very good memory, he is a credible witness, and he was very willing to provide me with all the information that he had. By no means did he rush me off the phone, and he promised to call me collect or write me if he feels that there is anything else that he could tell us. I told him that we might be in touch with him again in the near future, since he appears to have more direct information than anyone else about Hough's operations and who he was dealing with. I did make clear to Galloway that he is no way legally liable in regard to the clean up at the Solvent Savers sites. Galloway told me that Bill Bulsiewicz, Bristol's attorney, told him the same thing, and he fully understood what we meant.

cc: Dean Sommer
Emily Edmunds

ONONDAGA NATION DRUM SITE
FACT SHEET

The Onondaga Nation Drum site is located within the boundaries of the Onondaga Indian Nation, in Onondaga County, New York. The 25-acre site was operated as a dump and junk yard during the 1960's by Benjamin Shenandoah of the Onondaga Nation. Materials disposed of at the site include construction debris, motor vehicles, tires, household appliances, medical waste and industrial waste. Sometime in the late 1960's the Onondaga Nation suspended Mr. Shenandoahs operation. Mr. Shenandoah is now deceased.

An EPA inspection of the site revealed approximately 1,200 55-gallon drums, 10 to 20% are suspected of containing solid or liquid residues. Many of the drums are in poor condition and have leaked their contents onto the ground. In addition, there are an unknown number of buried drums at the site as indicated by partially buried drums protruding from the ground in the vicinity of the aboveground drum disposal areas. Fourteen of twenty drum samples collected by EPA were determined to be ignitable, classifying them as hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Analysis of drum samples collected by the New York State Department of Environmental Conservation (NYSDEC) and the New York State Department of Health (NYSDOH) identified the following CERCLA designated hazardous substances: cadmium, chromium, ethylbenzene, lead, phenol and xylene.

An isolated area of the site was used for the disposal of bags of medical waste. These bags are green in color and have deteriorated and broken open. The contents of these bags include syringes, vials, intravenous tubing and used dressings. The bags and their contents are spread over an area which is approximately 50 feet by 150 feet in size. The medical waste extends into the bed of an intermittent stream that flows through the site.

In response to a request for assistance by NYSDEC, the EPA Removal Action Branch initiated a removal action on 22 August 1990. This action consisted of sampling, overpacking and staging 20 drums previously determined by NYSDEC to contain hazardous materials. High visibility fencing was erected around the overpacked drums to form a containment area. This area was posted with warning signs to advise the public of the health threat posed by direct contact with materials contained in these drums. These actions were completed on 24 August 1990.

The proposed removal action will include the removal and off-site disposal of all medical waste, hazardous substances, pollutants or contaminants found contained in drums; a geophysical survey to determine the location of buried drums; and a soil boring and soil gas analysis program to identify buried drums and possible subsurface contamination.

TAT-02-F-06465

COMMUNITY RELATIONS PLAN
ONONDAGA NATION DRUM SITE
ONONDAGA NATION
ONONDAGA COUNTY, NEW YORK

Issued: October 1991

Prepared By:
U.S. EPA Technical Assistance Team
Roy F. Weston, Inc.
Major Programs Division
Edison, New Jersey 08837

Prepared For:
J. Daniel Harkay
U.S. EPA Region II
Removal Action Branch
Edison, New Jersey 08837

I. BACKGROUND

A. Site Description

The Onondaga Nation Drum site is located within the boundaries of the Onondaga Indian Nation in Onondaga County, New York.

The site is situated in a sparsely populated rural area primarily used for residential and agricultural purposes. An intermittent stream flows in a northwesterly direction through the southwest corner of the site. This stream discharges to Onondaga Creek which is designated as protected waters and is used for fishing and recreation.

On 13 June 1988, a removal site evaluation was completed by the U.S. Environmental Protection Agency's (EPA) Removal Action Branch (RAB) in response to an 22 April 1988 referral from NYSDEC. This investigation was unable to document the existence of any threats to the public health, welfare or the environment, thereby rendering the site ineligible for removal funds under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986.

On 18 August 1990, the NYSDEC submitted a second referral which included analytical results on the contents of drums. The referral resulted in an expedited removal action in which EPA overpacked and secured 20 drums determined to contain hazardous materials by NYSDEC.

Upon further investigation of the discrepancy in opinions resulting from the two site assessments, it was discovered that only one small portion of the site was visited during the initial assessment. This area consisted of empty drums and is located in a portion of the site which is isolated and obscured from the major drum disposal area. The presence of dense vegetation also made field observations extremely difficult.

Inspections by EPA have revealed approximately 1200, 55-gallon drums on the site. The drums were identified on the surface and partially buried in four major disposal areas. Many of the drums are in poor condition and appear to have leaked their content onto the ground. In addition, there are an unknown number of buried drums at the site as indicated by partially buried drums protruding from the ground in the vicinity of the aboveground drum disposal areas. Analysis of samples collected by EPA during the site investigation resulted in the classification of 14 to 20 drums

sampled as ignitable, as defined by the Resource Conservation and Recovery Act (RCRA).

An isolated area on the site was used for the disposal of bags of medical waste. These bags are green in color and have deteriorated and broken open. The contents of these bags include syringes, vials, intravenous tubing, bottles and used dressings. The bags and their contents are spread over an area which is approximately 50 feet by 150 feet in size. The medical waste extends into the bed of the intermittent stream that flows through the site.

B. NPL Designation

This site is currently not on the National Priorities List (NPL). The NYSDEC previously attempted to rank the site however, the site did not score high enough to be included on the NPL. Recent conversations with NYSDEC indicate that they will be initiating a Phase II investigation. The results of this investigation will provide additional information on groundwater beneath and downgradient of the site.

II. THREAT

A. Threat of Public Exposure

Several CERCLA designated hazardous substances have been identified in samples taken from drums at the site. In November 1987, a joint NYSDEC, New York State Department of Health (NYSDOH) sampling effort identified ethylbenzene and xylene at concentrations of 160 and 2,441 mg/kg, respectively. Acetone was also identified but at a concentration below the method detection limit. EP-Toxicity analysis indicated the presence of cadmium, chromium and lead below regulatory limits. Analysis of additional drum samples collected by NYSDEC in March 1990 identified phenol and xylene at concentrations of 374 and 8,900 mg/kg respectively.

The presence of hazardous substances on site poses a serious health threat to nearby populations that may come into direct contact with these substances. Inhalation or ingestion of these compounds can cause serious health effects including damage to the respiratory system, central nervous system, gastrointestinal tract, skin, eyes, blood, liver and kidneys.

Hazardous substances stored in deteriorating drums have leaked or threaten to leak their contents onto the ground. This increases the risk to nearby populations of direct contact with these compounds. The actual or potential threat of drinking water contamination is also of concern, 6,214 people within three miles of the site rely on groundwater for their source of potable water.

Fourteen of the twenty drum samples collected by EPA during the 1990 site investigation were determined to be ignitable. This constitutes a significant threat of fire and explosion. In the event of a fire, hazardous substances would be released into the air and could potentially effect a large portion of the nearby population. Two diners are located within 1/4 mile of the site, these serve as a popular stopping point for motorists traveling Interstate Highway 81.

Medical waste disposed of at the site including used syringes and dressings, pose a threat of infection to local populations that may come into contact with this material. The area used for disposal of this waste extends into a dry stream bed. In the event of heavy rainfall, flooding conditions would carry this material downstream to the Onondaga Creek and eventually to Onondaga River which flows through the City of Onondaga.

B. Extent of Contamination

No efforts have been made to date to determine the extent of soil or groundwater contamination at the site. In July 1987, the NYSDOH collected samples from four private wells within the Onondaga Nation in the vicinity of the site. These samples were analyzed for priority pollutants, organochlorine pesticides, and acid and base neutral compounds. No contaminants were detected in any of these samples.

Medical waste disposed of at the site covers an area 50' by 150' in size, and extends into the bed of an intermittent stream. To date there is no evidence to suggest that this waste has migrated from the site.

C. Previous Actions to Abate Threat

In response to a request for assistance by NYSDEC, the EPA Removal Action Branch (RAB) initiated a removal action on 22 August 1990. By 24 August 1990, the EPA RAB had completed identifying, sampling, overpacking, and staging 20 drums previously determined by NYSDEC to contain hazardous materials. High visibility fencing was erected around the overpacked drums to form a

containment area. This area was posted with warning signs to advise the public of the health threat posed by direct contact with the materials contained in these drums.

D. Current Actions to Abate Threat

As of the date of release of this plan no actions were currently in progress at the site.

III. PROPOSED PROJECT

A. Objective of the Project

The objectives of this project are to mitigate the threat to public health and the environment posed by medical waste, hazardous substances, pollutants or contaminants found on or above the ground, at the site and to determine the location and extent of buried drums.

B. Project Tasks

The specific tasks necessary to accomplish the objectives of this project are as follows:

Site Preparation - Due to the overgrown nature of the site and its previous usage as a junk yard, it will be necessary to clear the site of vegetation and debris to fully assess the extent of contamination. A temporary road will be installed to allow motor vehicle and heavy equipment access to the site. Office, decontamination and crew trailers will be set up to support field activities.

Removal of Medical Waste - The medical waste found at the site will be removed and disposed of off-site. Due to the possibility that this waste could contain pathogenic, radioactive or infectious material, it will be handled by personnel specifically trained to handle such situations.

Site Stabilization - Following the removal of the medical waste, the surface drums will be recovered and staged in a secure area on site. Drums in an advanced state of deterioration will be overpacked or their contents will be transferred to new drums.

Sampling and Analysis - Drums containing waste will be sampled individually and analyzed for compatibility. From this data, a bulking scheme will be developed organizing the waste into compatible waste streams. Individual waste streams will be analyzed for disposal parameters. The results of disposal analysis will be

forwarded to treatment and disposal facilities for bids.

Bulking and Disposal - Once bids are accepted for disposal, drums from the respective waste streams will be consolidated in preparation for shipment to disposal facilities. Empty drums will be crushed and landfill or recycled by a drum reconditioner. All waste generated on site will be disposed of at RCRA approved facilities.

Subsurface Investigation - After the site is cleared of surface drums and debris a geophysical survey will be conducted to determine if buried drums are present on site. A soil gas sampling program will be conducted to investigate anomalies identified during the geophysical survey. Data obtained from the geophysical survey and the soil gas sampling program will be used to determine if any additional removal actions are warranted.

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

1. Provide accurate and concise information to interested citizens, elected officials, and media.

2. Coordinate local, state, and federal response teams.

3. Enlist the assistance of local officials as needed.

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

D. Community Relations Activities

DATE(S)	ACTIVITIES	OBJECTIVES	STAFF
As needed	Meetings with state, county, and local officials	To develop local contingency plans.	OSC
As needed	Distribute fact sheets	Inform public of removal progress.	OSC
As appropriate	Attend meetings of community action groups	Inform community groups of removal progress.	OSC

Federal Officials

US Senator Alfonse D'Amato
1259 Federal Building
Syracuse, New York 13261-7216
(315) 423 -5471

or Room 520
Senate Hart Office Building
Washington, DC 20510
(202) 224-6542

US Senator Daniel Patrick Moynihan
214 Main Street
Oneonta, New York 13820
(607) 433-2310

or Room 464
Russell Senate Office Building
Washington, DC 20510
(202) 224-4451

US Congressman James Walsh
1269 Federal Building
Syracuse, New York 13261-7216
(315) 423-5657

or 1238 Longworth Building
Washington, DC 20515
(202) 225-3701

State Agencies

Michael O'Toole Jr., P.E.
Director, Division of Hazardous Waste Remediation
New York State Department of Environmental Conservation
50 Wolf Road
Albany, New York 12233

State Officials

State Senator Tarky Lombardi
804 Federal Office Building
333 E. Washington Street
Syracuse New York 132032

Assemblywoman Joan Christensen
4615 S. Salina Street
Syracuse, New York 13205

County Officials

Nick Pirro
Onondaga County Executive
421 Montgomery Street
Syracuse, New York 13202
(315) 435-3516

Media Contacts

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1030 James Street
Syracuse, New York 13203
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WTVH-TV Channel 5
980 James Street
Syracuse, New York 13203

EPA REGIONAL GUIDANCE DOCUMENTS

The following documents are available for public review at EPA Region II Headquarters, Raritan Depot, Woodbridge Avenue, Edison, New Jersey during regular business hours. Contact Douglas Kodama (908) 906-6905 for more information.

* Glossary of EPA Acronyms

* Superfund Removal Procedures--Revision #3. Office of Solid Waste and Emergency Response, (OSWER) Directive 9360.0-03B, February 1988.

* Hazardous Waste Operations and Emergency Response. Notice of Proposed Rulemaking and Public Hearings. 29 CFR Part 1910, Monday, August 10, 1987.

* Guidance on Implementation of Revised Statutory Limits on Removal Action. OSWER Directive 9260.0-12, May 25, 1988.

* Redelegation of Authority under CERCLA and SARA. OSWER Directive 9012.0-02B, April 1988.

* Field Standard Operating Procedures (FSOP)
  - #4 Site Entry
  - #6 Work Zones
  - #8 Air Surveillance
  - #9 Site Safety Plan

* Standard Operating Safety Guides--U.S. EPA Office of Emergency and Remedial Response, July 5, 1988.

* Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA).

* Superfund Amendments and Reauthorization Act of 1986 (SARA).

* National Oil and Hazardous Substances Pollution Contingency Plan (NCP).

D. Hanley

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION II

IN THE MATTER OF THE ONONDAGA DRUM SUPERFUND SITE RHÔNE-POULENC BASIC CHEMICALS CO., Respondent Proceeding under Section 106(a) of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, 42 U.S.C. § 9606(a)	ADMINISTRATIVE ORDER ON CONSENT Index Number II-CERCLA-20222

I. JURISDICTION

1. This Administrative Order on Consent ("Consent Order") is entered into between the United States Environmental Protection Agency ("EPA") and the above-captioned Respondent (hereinafter referred to as the "Respondent") pursuant to the authority vested in the President of the United States under Section 106(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended ("CERCLA"), 42 U.S.C. § 9606(a), which authority was delegated to the Administrator of EPA pursuant to Executive Order 12580 and duly redelegated to the Regional Administrators of EPA. Notice of this Consent Order and the negotiations preceding its issuance were provided to the New York State Department of Environmental Conservation ("NYSDEC") and the Onondaga Nation.

II. EPA's FINDINGS OF FACT AND CONCLUSIONS OF LAW

2. The Onondaga Drum Superfund Site (hereinafter, the "Site") is located on approximately 25 acres of property situated west of the intersection of Route 11 and Quarry Road on the Onondaga Nation Territory in the Town of Nedrow, New York. The Site is located in a sparsely populated rural area which is used for both residential and agricultural purposes. A map of the Site is attached hereto as Exhibit 1.

3. Approximately 800 people live within one mile of the Site, with the nearest residence located approximately 500 feet to the north. An estimated 6,214 people are served by private and community wells within a three-mile radius of the Site.

4. A dump was operated at the Site from approximately the mid-1950s through the early 1980s. Materials disposed at this dump include industrial wastes, at least some of which were transported to the Site by Solvent Savers, a solvent reclamation business operating out of, among other locations, Pompey and Lincklaen, New York.

5. In November, 1987, NYSDEC and the New York State Department of Health ("NYSDOH") sampled the contents of drums which were found at the Site, identifying ethlybenzene and xylene in concentrations of up to 16 and 2,441 parts per million ("ppm"), respectively. Acetone (420 parts per billion ("ppb")), cadmium (91 ppb), chromium (11 ppb), and lead (727 ppb) also were detected. Analyses of additional drum samples collected by NYSDEC in March, 1990 identified phenols (374 ppm) and xylenes (8,900 ppm) in the waste. Acetone, ethylbenzene, xylene, phenols, lead, chromium, and cadmium are hazardous substances within the meaning of Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).

6. Drum content samples collected by EPA during a 1990 site investigation exhibited the characteristic of ignitability, which classifies the sampled materials as hazardous wastes under 40 CFR 261.21, and thus as hazardous substances within the meaning of Section 101(14) of CERCLA.

7. Releases, as the term "release" is defined in Section 101(22) of CERCLA, 42 U.S.C. § 9601(22), have occurred at the Site in that, among other things, hazardous substances have been disposed into the environment.

8. The Site constitutes a "facility" within the meaning of Section 101(9) of CERCLA.

9. Deteriorating drums have leaked their contents onto the ground at the Site, thereby presenting the risk that nearby populations will come into direct contact with the hazardous materials contained in, and leaking from, those drums. Moreover, protruding drums indicate the presence of an unknown number of buried drums at the Site which may have leaked or threaten to leak hazardous materials into the ground. Contaminants present at the Site also pose a threat of drinking water contamination, as well as a threat of fire and explosion.

10. To date, EPA has collected approximately 1300 surficial and partially buried drums found at the Site. Of these, 1046 were empty and were sent to a disposal facility for recycling. Waste contained in the remaining drums was bulked according to compatible waste streams. These remaining drums have been staged at the Site pending disposal at a Resource Conservation and Recovery Act - approved facility.

11. Exposure to acetone, cadmium, chromium, ethylbenzene, lead, phenol and xylene by inhalation, ingestion or dermal contact can result in toxic effects, including irritation of the eyes, skin, and respiratory system. Exposure to ethylbenzene, lead and xylene can cause central nervous system damage; exposure to cadmium, lead, phenol and xylene can cause kidney damage, while exposure to phenol and xylene can damage the liver as well. Both cadmium and chromium are suspected carcinogens.

12. Respondent is a "person" within the meaning of Section 101(21) of CERCLA, 42 U.S.C. § 9601(21). According to Respondent, it is the legal successor in interest of Cowles Chemical Company ("Cowles"). Cowles arranged for the treatment or disposal of hazardous substances which were disposed at the Site. Respondent thus is a potentially responsible party under Section 107(a)(3) of CERCLA, 42 U.S.C. § 9607(a)(3).

13. The actions required by this Consent Order are necessary to protect the public health or welfare or the environment, are in the public interest, and are consistent with CERCLA and the National Contingency Plan ("NCP"), 40 CFR Part 300.

14. Respondent has been given an opportunity to discuss with EPA the basis for issuance of this Consent Order and its terms.

III. DETERMINATION

15. Based upon EPA's Findings of Fact and Conclusions of Law set forth above and other information available to EPA, EPA has determined that the release and threat of release of hazardous substances into the environment at the Site may present an imminent and substantial endangerment to the public health, welfare, and the environment, within the meaning of Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).

IV. ORDER

16. Based upon the foregoing Findings of Fact and Conclusions of Law, Determination, and other information available to EPA, it is hereby ordered and agreed that Respondent shall undertake a response action at the Site in accordance with the requirements specified below. All activities specified below shall be initiated and completed as soon as possible even though maximum time periods for their completion are specified herein.

Description of Work

17. Within thirty (30) calendar days of the effective date of this Consent Order, Respondent shall submit to EPA for review and

approval a detailed Drum Disposal Plan which shall address the off-Site disposal of approximately 60 bulked drums and their contents which currently are staged at the Site. The Drum Disposal Plan shall include the following:

a. Detailed procedures and methods to be followed during the implementation of the Drum Disposal Plan;

b. EPA-approved procedures for sampling and analysis of materials present in the drums to be disposed under the Drum Disposal Plan. Samples collected from drummed materials shall be analyzed for disposal characteristics and target compound list parameters in order to identify hazardous substances and for proper disposal/treatment;

c. All sampling and analysis performed in connection with the requirements of the Drum Disposal Plan shall comply with the requirements set forth in paragraph 21.b.ii., below;

d. All disposal and treatment activities performed pursuant to the Drum Disposal Plan must be conducted in accordance with the requirements of paragraph 59., below;

e. All work performed pursuant to the Drum Disposal Plan shall comply with applicable Occupational Safety and Health Administration ("OSHA") standards; and

f. Waste profile forms shall be completed for all hazardous materials leaving the Site. All hazardous materials removed from the Site must be weighed upon departure from the Site and upon arrival at an EPA-permitted treatment/disposal facility.

18. Within 14 calendar days of EPA's approval of the Drum Disposal Plan, Respondent shall commence all work described therein.

19. Within sixty (60) calendar days of the effective date of this Consent Order, Respondent shall submit to EPA for review and approval a detailed Phase I Operations Plan that shall include the following:

a. Site Work Plan;

b. Sampling and Analysis Plan;

c. Clean-Up Plan; and

d. Health and Safety Plan.

20. The Site Work Plan shall address the following:

a. The presence of buried drums;

b. The presence of hazardous substances contained in buried drums at the Site;

c. The presence of surface and subsurface soil contamination;

d. The presence of groundwater contamination in areas to be excavated; and

e. The release of any materials at or from the Site which EPA determines to be a threat or potential threat to human health or the environment.

21. The Sampling and Analysis Plan ("SAP") shall include, but need not be limited to, the following:

a. Maps depicting:

i. Locations of all soil borings, test pits, drum locations, excavations, soil samples, and potable water wells to be sampled; and

ii. Work and safety zones including, but not limited to: exclusion zones, contamination reduction zones, drum staging and sampling areas, waste bulking and storage areas, and a command post. All work and safety zones shall be located from fixed reference points and plotted to scale.

b. Detailed procedures and methods to be followed during the implementation of the SAP, including:

i. EPA-approved procedures for sampling and analysis of soil, water, and drummed materials collected at the Site, as well as for samples to be taken from three potable water wells located near the Site. Samples collected from drummed materials shall be analyzed for compatibility, disposal characteristics, and target compound list parameters in order to identify hazardous substances and for proper disposal/treatment. All soil and water samples are to be analyzed for target compound list and target analyte list parameters; and

ii. All sampling and analysis performed pursuant to this Consent Order shall conform to EPA Quality Assurance/Quality Control ("QA/QC"), Data Quality

Objectives for Remedial Response Activities-Development Process-EPA/540/G-87/003, Data Quality Objectives for Remedial Response Activities-EPA/540/G-87/004, and Chain of Custody procedures as directed by the EPA and in conformance with the EPA publication entitled "Test Methods for Evaluating Solid Waste" (SW-846, November 1986, or as updated).

c. A plan for providing Site security, including measures to protect the health and safety of surrounding residents;

d. A QA/QC Plan and a description of Chain of Custody Procedures to be followed, which shall satisfy the following requirements:

i. The QA/QC Plan shall be completed in accordance with Section 10 of SW-846, and "Guidance for Preparation of Combined Work/Quality Assurance Project Plans for Environmental Monitoring" (U.S. EPA Office of Water Regulations and Standards, May, 1984);

ii. Respondent shall use the QA/QC Plan submitted to and approved by EPA pursuant to this Consent Order and shall use standard EPA Chain of Custody procedures, as set forth in the National Enforcement Investigations Center Policies and Procedures Manual, as revised in November 1984, and the National Enforcement Investigations Center Manual for the Evidence Audit published in September 1981, and SW-846, for all sample collection and analysis activities conducted pursuant to this Consent Order; and

iii. If performance of any subsequent phase of the work required by this Consent Order requires alteration of the QA/QC Plan, Respondent shall submit to EPA for review and approval the proposed amendments to the QA/QC Plan.

e. Procedures for the collection of potable water samples from one residential and two commercial groundwater wells located adjacent to the Site. Respondent shall provide EPA with the potable water sample results (including QA/QC data and chain of custody records) within 30 days of taking of such samples; and

f. A detailed time schedule for performance of specific tasks and for submitting plans and reports to EPA, as set forth in this Consent Order.

22. The Clean-Up Plan shall address and provide a detailed schedule for the removal, treatment and/or disposal of empty drums, contaminated soil and drummed materials and the performance of the other activities set forth below:

a. Removal, disposal, and/or treatment of all drummed materials and contaminated soil at the Site which are found to contain hazardous substances and/or hazardous wastes, including drummed wastes presently staged on-Site. For purposes of this paragraph, "contaminated soil" shall mean soil and/or debris that is grossly contaminated or saturated with waste. Identification of contaminated soil will be through visual observation or field scanning equipment which may include photoionization detectors, organic vapor analyzers, and detection tubes. All disposal and treatment activities must be conducted in accordance with the requirements of paragraph 59., below;

b. Procedures for locating, excavating, and overpacking buried drums found at the Site. Excavation shall comply with applicable OSHA standards. Removal and overpacking of buried drums shall be conducted in accordance with applicable methods as specified in the following EPA published documents: "Guidance Document for the Cleanup of Surface Tank and Drum Sites" (May, 1985) and "Drum Handling Practices at Hazardous Waste Sites" (January, 1986);

c. Procedures for the temporary storage of drummed materials and contaminated soils as they are staged and prepared for treatment and/or disposal, including:

   i. Measures to prevent the exposure of the drummed wastes and contaminated soils to the elements, population and environment;

   ii. Construction of a containment system to prevent spillage and runoff; and

   iii. Measures to prevent, contain, and monitor the emission of hazardous vapors during removal activities.

d. Waste profile forms shall be completed for all hazardous materials leaving the Site. All hazardous materials removed from the Site must be weighed upon departure from the Site and upon arrival at an EPA-permitted treatment/disposal facility;

e. Procedures for decontamination, crushing and disposal of empty drums;

f. Decontamination procedures for expendable and nonexpendable equipment; and

g. Sampling of groundwater which, after excavation of contaminated soil and/or buried drums, flows into and/or rises to fill the excavated area(s).

23. The Phase I Operations Plan shall include response measures to be taken in the event that, during the implementation of the Phase I Operations Plan, additional releases or threatened releases occur at the Site including, but not limited to, releases to air, soil, ground or surface water.

24. The Health and Safety Plan shall satisfy the requirements of 29 CFR Part 1910.120, standards for "Hazardous waste operations and emergency response," and EPA's "Standard Operating Safety Guides" (OSWER, 1988). If performance of any subsequent phase of the work required by this Consent Order requires alteration of the Health and Safety Plan, Respondent shall submit to EPA for review and approval proposed amendments to the Health and Safety Plan.

25. EPA either will approve the Drum Disposal Plan and the Phase I Operations Plan, or will require modifications thereto pursuant to paragraphs 50.- 52., below. Upon approval by EPA, the Drum Disposal Plan and the Phase I Operations Plan shall be deemed to be incorporated into and an enforceable part of this Consent Order.

26. Following EPA approval of the Drum Disposal Plan and the Phase I Operations Plan, any modifications to or deviations from the requirements of either document must be pre-approved by EPA.

27. If the potable water samples required pursuant to paragraph 21.e., above, identify groundwater contamination which exceeds either the EPA Removal Action Levels or Maximum Contaminant Levels established by EPA or NYSDOH for any hazardous substances which also have been or are found at the Site (or for any potential degradation product(s) of any hazardous substances which also have been or are found at the Site), Respondent shall immediately begin the provision of bottled water to each affected residence or business as an alternate supply of potable water. Within 45 days of the commencement of the provision of bottled water, Respondent shall submit, for EPA approval, a Work Plan which provides for the construction of an activated carbon treatment unit and/or other alternate source of potable water acceptable to EPA for each affected residence and/or business. EPA either will approve the Work Plan or will require modification thereto pursuant to paragraphs 50.- 52., below. Respondent shall install the water treatment units or other source of potable water within 30 days of EPA's approval of the Work Plan.

28. Within 30 calendar days of EPA's approval of the Phase I Operations Plan, Respondent shall commence all work described therein.

29. When Respondent is satisfied that the aforementioned requirements of this Consent Order have been completed, Respondent shall submit a Site Clean-Up Report to EPA specifically setting forth how Respondent has complied with this Consent Order and has satisfactorily implemented the requirements set forth in the EPA-approved Phase I Operations Plan and Drum Disposal Plan. The Site Clean-Up Report shall include or be accompanied by appropriate documentation which substantiates to EPA's satisfaction Respondent's assertion that the work required hereunder has been successfully completed, including:

a. Synopsis of all work performed under this Consent Order;

b. Identification and detailed description of all EPA-approved modifications to the Drum Disposal Plan and the Phase I Operations Plan which occurred during Respondent's performance of the work required under this Consent Order;

c. Results of all groundwater sampling and analysis required pursuant to paragraph 22.g., above, and all soil sampling and analysis required by the Phase I Operations Plan. All groundwater and soil sampling and analysis results shall include QA/QC data and chain of custody records;

d. A list of all laboratories, transporters, and disposal or recycling facilities utilized during the clean-up;

e. Copies of all manifests and bills of lading generated in connection with the transport of materials off-Site;

f. Copies of all "certificates of destruction" of all materials which are disposed and/or treated off-Site; and

g. A sworn statement by Respondent setting forth the following:

"I certify that the information contained in and accompanying this submission to the United States Environmental Protection Agency is true, accurate, and complete."

Designated Coordinator, Other Personnel

30. Within seven (7) days of the effective date of this Consent Order, Respondent shall select a coordinator, to be known as the Designated Coordinator, and submit the name, address, and telephone number of the Designated Coordinator to EPA. The Designated Coordinator shall be responsible for oversight of the implementation of this Consent Order. He or she shall have technical expertise sufficient to adequately oversee all aspects of the work contemplated by this Consent Order. EPA correspondence to the Respondent will be sent to the Designated Coordinator. Respondent shall have the right to change its Designated Coordinator. However, Respondent shall notify EPA in writing at least seven (7) days prior to any such change.

31. Respondent shall provide a copy of this Consent Order to each contractor and subcontractor retained to perform the work required by this Consent Order. Respondent shall include in all contracts or subcontracts entered into for work required under this Consent Order provisions stating that such contractors or subcontractors, including their agents and employees, shall perform activities required by such contracts or subcontracts in compliance with this Consent Order and all applicable laws and regulations. Respondent shall be responsible for ensuring that its contractors and subcontractors perform the work contemplated herein in accordance with this Consent Order.

32. All activities required of Respondent under the terms of this Consent Order shall be performed only by well-qualified persons possessing all necessary permits, licenses, and other authorizations required by federal, state, and local governments, and all work conducted pursuant to this Consent Order shall be performed in accordance with prevailing professional standards.

Insurance/Financial Responsibility

33. Prior to commencement of any work under this Order, Respondent shall provide evidence to EPA demonstrating that Respondent passes the financial test described in 40 CFR § 264.147(f) corresponding to liability coverage in the amount of ten million dollars.

34. For the duration of this Order, Respondent shall satisfy, or shall ensure that its contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of employer's liability insurance and workmen's compensation insurance for all persons performing work on behalf of Respondent, in furtherance of this Order.

Reporting Requirements

35. All reports and other documents submitted by Respondent to EPA (other than the biweekly progress reports referred to below) which purport to document Respondent's compliance with the terms of this Consent Order shall be signed by a responsible official(s) of the Respondent or its indemnitor. For purposes of this Consent Order, a responsible official is an official who is in charge of a principal business function.

36. During the implementation of this Consent Order, Respondent shall provide written progress reports to EPA every two weeks which fully describe all actions and activities undertaken pursuant to this Consent Order. Such progress reports shall, among other things, (a) describe the actions taken toward achieving compliance with this Consent Order during the previous two-week period, (b) include all results of sampling and tests and all other data received by Respondent during that period in the implementation of the work required hereunder, (c) describe all actions which are scheduled for the next two-week period, (d) provide other information relating to the progress of work as is customary in the industry, (e) and include information regarding percentage of completion, all delays encountered or anticipated that may affect the future schedule for completion of the work required hereunder, and a description of all efforts made to mitigate those delays or anticipated delays.

37. All work plans, reports, notices and other documents required to be submitted to EPA under this Consent Order shall be sent to the following addressees:

2 copies to:

James Harkay, On-Scene Coordinator
Removal Action Branch
Emergency and Remedial Response Division
U.S. Environmental Protection Agency
Woodbridge Avenue
Edison, New Jersey 08837

1 copy to:

Chief, New York/Caribbean Superfund Branch
Office of Regional Counsel
United States Environmental Protection Agency
26 Federal Plaza, Room 437
New York, New York 10278

Attention: Onondaga Drum Superfund Site Attorney

7 copies to:

Michael O'Toole, P.E.
Director, Hazardous Waste Remediation
New York State Department of Environmental Conservation
50 Wolf Road, Room 212
Albany, New York 12233-7010

38. Upon the occurrence of any event during performance of the work required hereunder which, pursuant to Section 103 of CERCLA, requires reporting to the National Response Center, Respondent shall immediately orally notify the EPA On-Scene Coordinator at (908) 321-6614 (or, in the event of the unavailability of the EPA On-Scene Coordinator, the Chief of the Removal Action Branch of the Emergency and Remedial Response Division of EPA, Region II at (908) 321-6621), in addition to the reporting required by Section 103. Within twenty (20) days of the onset of such an event, Respondent shall furnish EPA with a written report setting forth the events which occurred and the measures taken, and to be taken, in response thereto.

39. As appropriate during the course of implementing the actions required of Respondent pursuant to this Consent Order, Respondent or its consultant(s) or contractor(s), acting through the Designated Coordinator, may confer with EPA concerning the required actions. Based on new circumstances or new information not in the possession of EPA on the date of issuance of this Consent Order, the Designated Coordinator may submit a request to the EPA On-Scene Coordinator, in writing, for approval of a modification to the EPA-approved Drum Disposal Plan or Phase I Operations Plan. If approved by EPA in writing, such modification shall be deemed incorporated into this Consent Order.

40. Respondent shall include in the biweekly progress reports required in paragraph 36., above, a schedule for the field activities which are expected to occur pursuant to this Consent Order during the upcoming month. Respondent shall, in addition, provide EPA with at least one week advance notice of any foreseeable change in that schedule.

41. In the event of any action or occurrence during Respondent's performance of the requirements of this Consent Order which causes or threatens to cause a release of a hazardous substance or which may present an immediate threat to public health or welfare or the environment, Respondent shall immediately take all appropriate action to prevent, abate, or minimize the threat and shall immediately notify the EPA On-Scene Coordinator at (908) 321-6614 (or, in the event of the unavailability of the EPA On-Scene Coordinator, the Chief of the Removal Action Branch of EPA's Emergency and Remedial Response Division at (908) 321-6621). Respondent shall take such action in consultation with

the On-Scene Coordinator and in accordance with applicable provisions of this Consent Order including, but not limited to, the Health and Safety Plan. In the event that EPA determines that (a) the activities performed pursuant to this Consent Order, (b) significant changes in conditions at the Site, or (c) emergency circumstances occurring at the Site pose a threat to human health or the environment, EPA may direct Respondent to stop further implementation of any actions pursuant to this Consent Order or to take other and further actions reasonably necessary to abate the threat.

42. Nothing in the preceding paragraph shall be deemed to limit any authority of the United States to take, direct, or order all appropriate action to protect human health and the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances on, at, or from the Site.

Oversight

43. During the implementation of the requirements of this Consent Order, Respondent and its contractor(s) and subcontractors shall be available for such conferences with EPA and inspections by EPA at and around the Site and at laboratories where analytical work is being done hereunder as EPA may determine are necessary to adequately oversee the work being carried out or to be carried out by Respondent.

44. Respondent and its employees, agents, contractor(s) and consultant(s) shall cooperate with EPA in its efforts to oversee Respondent's implementation of this Consent Order.

Access and Availability of Data

45. To the extent that any area where Work is to be performed hereunder presently is owned by parties other than Respondent, Respondent shall use its best efforts to obtain access agreements from the present owners within thirty (30) days of the effective date of this Consent Order for purposes of implementing the requirements of this Consent Order. Such agreements shall provide access not only for Respondent, but also for EPA and its authorized representatives or agents, as well as NYSDEC and its authorized representatives or agents. Such agreements shall specify that Respondent is not EPA's representative with respect to liability associated with Site activities. If such access agreements are not obtained by Respondent within the time period specified herein, Respondent shall immediately notify EPA of its failure to obtain access, and shall include in that notification a summary of the steps Respondent has taken to attempt to obtain access. Subject to the United States' non-reviewable discretion, EPA may use its legal authorities to obtain access for

Respondent, may perform those response actions with EPA contractors at the property in question, or may terminate the Consent Order if Respondent cannot obtain access agreements. If EPA performs those tasks or activities with EPA contractors and does not terminate the Consent Order, Respondent shall perform all other activities not requiring access to that property. Respondent shall integrate the results of any such tasks undertaken by EPA into its reports and deliverables.

46. EPA and its designated representatives, including, but not limited to, employees, agents, contractor(s) and consultant(s) thereof, shall be permitted to observe the work carried out pursuant to this Consent Order. Respondent shall permit EPA and its designated representatives full access to and freedom of movement at the Site and any other premises where work under this Consent Order is to be performed, at all times, including, but not limited to, any time that work under this Consent Order is being performed, for purposes of inspecting or observing Respondent's progress in implementing the requirements of this Consent Order, verifying the information submitted to EPA by Respondent, conducting investigations relating to contamination at the Site, or for any other purpose EPA determines to be reasonably related to EPA oversight of the implementation of this Consent Order, consistent with the requirements of the Health and Safety Plan.

47. All data, information and records created, maintained or received by Respondent or its contractor(s) or consultant(s) in connection with implementation of the work under this Consent Order, including, but not limited to, contractual documents, invoices, receipts, work orders and disposal records, except for those items subject to the attorney-client privilege/attorney work product doctrine, shall, without delay, be made available to EPA upon request. EPA shall be permitted to copy all such documents. No such data, information, or records shall be destroyed for ten (10) years after completion of the work required by this Consent Order without either the express written approval of EPA or a written offer by Respondent to provide such material to EPA, followed by EPA's written rejection of that offer.

48. Upon advance or contemporaneous request by EPA, Respondent shall provide EPA or its designated representatives with duplicate and/or split samples of any material sampled in connection with the implementation of this Consent Order.

49. Notwithstanding any other provision of this Consent Order, EPA hereby retains all of its information gathering, access, and inspection authority under CERCLA, the Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C. §§ 6901-6991, and any other applicable statute or regulations.

Plans and Reports Requiring EPA Approval

50. If EPA disapproves or otherwise requires any modifications to any plan, report or other item required to be submitted to EPA for approval pursuant to this Consent Order, Respondent shall have fourteen (14) days from the receipt of notice of such disapproval or the required modifications to correct any deficiencies and resubmit the plan, report, or other written document to EPA for approval, unless a shorter or longer period is specified in the notice. Any notice of disapproval will include an explanation of why the plan, report, or other item is being disapproved. Respondent shall address each of the comments and resubmit the plan, report, or other item with the required changes within the time stated above. At such time as EPA determines that the plan, report, or other item is acceptable, EPA will transmit to Respondent a written statement to that effect.

51. If any plan, report, or other item required to be submitted to EPA for approval pursuant to this Consent Order is disapproved by EPA, even after being resubmitted following Respondent's receipt of EPA's comments on the initial submittal, Respondent shall be deemed to be out of compliance with this Consent Order. If any resubmitted plan, report, or other item, or portion thereof, is disapproved by EPA, EPA may again direct Respondent to make the necessary modifications thereto, and/or EPA may amend or develop the item(s) and recover the costs from Respondent of doing so. Respondent shall implement any such item(s) as amended or developed by EPA.

52. EPA shall be the final arbiter in any dispute regarding the sufficiency or acceptability of all documents submitted and all activities performed pursuant to this Consent Order. EPA may modify those documents and/or perform additional work unilaterally. EPA also may require Respondent to perform additional work necessary to implement the activities described in the "Description of Work" section and paragraph 41., above, of this Consent Order.

Community Relations

53. Respondent shall cooperate with EPA in providing information relating to the work required hereunder to the public. As requested by EPA, Respondent shall participate in the preparation of all appropriate information disseminated to the public and in public meetings which may be held or sponsored by EPA to explain activities at or concerning the Site.

General Provisions

54. This Consent Order shall apply to and be binding upon Respondent and its successors and assigns. Respondent agrees to instruct its officers, directors, employees and agents involved in the performance of the work required by this Consent Order to cooperate in carrying out Respondent's obligations under this Consent Order. Respondent agrees that its officers, directors, employees, and agents involved in the performance of the work required by this Consent Order shall take all necessary steps to accomplish the performance of said work in accordance with this Consent Order. The individual who has signed this Consent Order on behalf of Respondent certifies that he or she is authorized to bind Respondent to this Consent Order. No change in the ownership or corporate status of Respondent shall alter Respondent's responsibilities under this Consent Order.

55. Respondent shall provide EPA with written notice of any transfer of ownership rights or stock or assets in a corporate acquisition to any subsequent owner or successor at least thirty (30) days prior to such transfer. Respondent shall provide a copy of this Consent Order to any subsequent owner or successor upon such transfer. Notification required pursuant to this paragraph shall be sent to the EPA addressees set forth in paragraph 37., above.

56. All actions and activities carried out by Respondent pursuant to this Consent Order shall be performed in accordance with all applicable federal, state, and local laws, regulations, and requirements, including the NCP and any amendments thereto that are promulgated while this Consent Order is in effect.

57. Notwithstanding any other provision in this Consent Order, and in accordance with Section 121(e)(1) of CERCLA, no federal, state, or local permits shall be required for any portion of the work required hereunder that is conducted entirely on-Site, although Respondent must comply with the substantive requirements that would otherwise be included in such a permit. Respondent shall obtain all permits necessary for off-Site work under federal, state, or local laws and shall submit timely applications and requests for any such permits. This Consent Order is not, nor shall it act as, a permit issued pursuant to any federal or state statute or regulation.

58. All plans, reports and other submittals required to be submitted to EPA pursuant to this Consent Order shall, upon approval by EPA, be deemed to be incorporated in and an enforceable part of this Consent Order.

59. All waste disposal conducted by Respondent pursuant to this Consent Order shall be performed in compliance with all requirements of CERCLA, including Section 121(d)(3), 42 U.S.C.

§ 9621(d)(3), RCRA, the Toxic Substances Control Act ("TSCA"), 15 U.S.C. §§ 2601-2629, and all regulations promulgated pursuant thereto, and all other applicable federal and state laws and regulations. In addition, all waste disposal conducted by Respondent pursuant to this Consent Order shall be carried out in compliance with all applicable EPA policies and guidance documents, including the EPA guidance document entitled, "Superfund Removal Procedures" (OSWER, 1988). In addition, if hazardous substances from the Site are to be shipped to a waste management facility outside of New York State, Respondent shall insure that the environmental agency of the accepting state is notified of the following: (a) the name and location of the facility to which the wastes are to be shipped; (b) the type and quantity of waste to be shipped; (c) the expected schedule for the waste shipments; and (d) the method of transportation. Respondent shall provide such notification to the affected state in writing as soon as practicable, but in any event at least five (5) business days prior to the said shipments.

60. At the time of completion of all activities required by this Consent Order, demobilization shall include sampling and proper disposal or decontamination of protective clothing, remaining laboratory samples, and any equipment or structures constructed to facilitate the work hereunder.

61. All documents submitted by Respondent to EPA in the course of implementing this Consent Order shall be available to the public unless identified as confidential by Respondent pursuant to 40 CFR Part 2, Subpart B, and determined by EPA to merit treatment as confidential business information in accordance with applicable law. In addition, EPA may release all such documents to NYSDEC, and NYSDEC may make those documents available to the public unless Respondent conforms with applicable New York law and regulations regarding confidentiality. Respondent shall not assert a claim of confidentiality regarding any monitoring or hydrogeologic data, any information specified under Section 104(e)(7)(F) of CERCLA, or any other chemical, scientific or engineering data relating to the work performed hereunder.

62. Neither EPA nor the United States, by issuance of this Consent Order, assumes any liability for any injuries or damages to persons or property resulting from acts or omissions by Respondent or Respondent's employees, agents, contractor(s), or consultant(s) in carrying out any action or activity pursuant to this Consent Order, nor shall EPA or the United States be held as or be held out to be a party to any contract entered into by Respondent or Respondent's officers, employees, agents, contractor(s), or consultant(s) in carrying out any action or activity pursuant to this Consent Order.

63. Respondent agrees to indemnify and hold harmless EPA and the United States Government, its agencies, departments, agents, and

employees, from all claims, causes of action, damages, and costs of any type or description by third parties for any injuries or damages to persons or property resulting from acts or omissions of Respondent, its officers, directors, officials, agents, servants, receivers, trustees, successors, or assigns as a result of the fulfillment or attempted fulfillment of the terms and conditions of this Consent Order by Respondent.

64. Nothing contained in this Consent Order shall affect any right, claim, interest, defense, or cause of action of any party hereto with respect to third parties.

65. Nothing in this Consent Order shall be construed to constitute preauthorization under Section 111(a)(2) of CERCLA, 42 U.S.C. § 9611(a)(2), and 40 CFR § 300.700(d).

66. Respondent hereby waives any rights it may have to seek reimbursement pursuant to Sections 106(b)(2), 111 and/or 112 of CERCLA, 42 U.S.C. §§ 9606(b)(2), 9611, 9612, or any other provision of law, either directly or indirectly, from the Hazardous Substance Superfund of costs incurred by Respondent in complying with this Consent Order.

67. Nothing herein shall constitute or be construed as a satisfaction or release from liability for Respondent or Respondent's officers, directors, employees, agents, contractor(s), consultant(s), receivers, trustees, successors, or assigns, or for any other individual or entity. Nothing herein shall constitute a finding that Respondent is the sole responsible party with respect to the release and threatened release of hazardous substances at and from the Site.

68. No informal advice, guidance, suggestions or comments by EPA shall be construed to relieve Respondent of any of its obligations under this Consent Order.

69. Respondent's activities under this Consent Order shall be performed within the time limits set forth herein, or otherwise established or approved by EPA, unless performance is delayed by events which constitute force majeure. For purposes of this Consent Order, "force majeure" is defined as any event arising from causes beyond Respondent's control. "Force majeure" shall not include inability of Respondent to pay the costs or expenses associated with complying with this Consent Order or increases in such costs or expenses. When an event constituting force majeure occurs, Respondent shall perform the affected activities within a time period which shall not exceed the time provided in this Consent Order together with the period of delay attributed to force majeure; provided, however, that no deadline shall be extended beyond a period of time that is reasonably necessary. Respondent shall use its best efforts to avoid or minimize any

delay or prevention of performance of their obligations under this Consent Order.

70. Respondent shall verbally notify the EPA On-Scene Coordinator if circumstances have occurred or are likely to occur which may delay or prevent the performance of any activity required by this Consent Order, regardless of whether those circumstances constitute force majeure. If the On-Scene Coordinator cannot be reached, Respondent shall leave a message at his or her office. In addition, Respondent shall notify EPA in writing within seven (7) calendar days after the date when Respondent first becomes aware of the circumstances which may delay or prevent performance. Such written notice shall be accompanied by all available and pertinent documentation, including third-party correspondence, and shall contain the following: (a) a description of the circumstances, and Respondent's rationale for interpreting such circumstances as being beyond its control (should that be Respondent's claim); (b) the actions (including pertinent dates) that Respondent has taken and/or plans to take to minimize any delay; and (c) the date by which or the time period within which Respondent proposes to complete the delayed activities. Such notification shall not relieve Respondent of any of its obligations under this Consent Order. Respondent's failure to timely and properly notify EPA as required by this paragraph shall constitute a waiver of Respondent's right to claim an event of force majeure. The burden of proving that an event constituting force majeure has occurred shall rest with Respondent.

71. This Consent Order may be amended by mutual agreement of EPA and Respondent. Such amendments shall be in writing and shall have as their effective date that date on which such amendments are signed by EPA.

72. Except where otherwise expressly stated herein, all time periods specified in this Consent Order shall be construed as calendar days rather than business days.

Reimbursement

73. Within thirty (30) days of the effective date of this Consent Order, Respondent shall pay $150,000.00 to EPA in partial reimbursement of EPA's past direct and indirect costs incurred as of July 28, 1992 in connection with the Site. This payment shall be made by cashier's or certified check and shall be made payable to the "Hazardous Substance Superfund."

74. Respondent also hereby agrees to reimburse EPA for all costs incurred by EPA in overseeing Respondent's implementation of the requirements of this Consent Order and any costs incurred by EPA in obtaining access for Respondent in accordance with paragraph

45., above. Such costs shall include both direct and indirect costs. EPA will periodically send billings to Respondent for the costs incurred by EPA. The billings will be accompanied by a printout of cost data in EPA's financial management system and by a calculation of EPA's indirect costs. Respondent shall, within thirty (30) days of receipt of such billing, remit a cashier's or certified check for the amount of those costs, made payable to the "Hazardous Substance Superfund."

75. Each of the payments that Respondent is required to make pursuant to paragraphs 73. and 74., above, shall be mailed to the following address:

EPA - Region II
Attn: Superfund Accounting
P.O. Box 360188M
Pittsburgh, PA 15251

Checks shall reference the name of the Site (the "Onondaga Drum Superfund Site") and the index number of this Consent Order. A copy of each check and of the accompanying transmittal letter shall be sent to the EPA addresses identified in paragraph 37., above.

76. Respondent shall pay interest on any amounts overdue under paragraphs 73. and 74., above. Such interest shall begin to accrue on the first day that the respective payment is overdue. Interest shall accrue at the rate of interest on investments of the Hazardous Substances Superfund, in accordance with Section 107(a) of CERCLA.

Enforcement

77. Failure of Respondent to expeditiously and completely carry out the terms of this Consent Order may result in EPA conducting the required actions, pursuant to Section 104(a) of CERCLA, 42 U.S.C. § 9604(a).

78. If Respondent fails, without prior EPA approval, to comply with any of the requirements or time limits set forth in or established pursuant to this Consent Order, and such failure is not excused under the terms of paragraphs 69. and 70., above, Respondent shall, upon demand by EPA, pay a stipulated penalty to EPA in the amount indicated below for each day of noncompliance:

Days After Required Date	Stipulated Penalty
1 to 7 days	$ 1,000.00/day
8 to 15 days	$ 2,000.00/day
16 to 25 days	$ 2,500.00 /day
26 to 40 days	$ 3,000.00 /day

Any such penalty shall accrue as of the first day after the applicable deadline has passed, and shall continue to accrue until the noncompliance is corrected, through the 40th day of such noncompliance. Such penalties shall be due and payable ten (10) days following receipt of a written demand from EPA. Payment of any such penalty to EPA shall be made by cashier's or certified check made payable to the "Hazardous Substance Superfund," with a notation of the index number of this Consent Order, and shall be mailed to the address set forth in paragraph 75., above. A letter stating the basis for the penalties, the name and address of the Respondent, the name of the Site, and the EPA Region number shall accompany each such payment; a copy of the letter and the check shall be mailed to the EPA addressees listed in paragraph 37., above.

79. Notwithstanding any other provision of this Consent Order, failure of Respondent to comply with any provision of this Consent Order may result in the initiation of an enforcement action against Respondent, including enforcement actions pursuant to, Sections 106(b)(1) and/or 107(c)(3) of CERCLA, 42 U.S.C. §§ 9606(b)(1), 9607(c)(3), which may result in the assessment of fines of up to $25,000 for each day of such noncompliance and/or the assessment of punitive damages.

80. Notwithstanding any other provision of this Consent Order, EPA reserves its right to bring an action against Respondent (or any other responsible party) pursuant to Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), for recovery of any costs which have been or may be incurred by the United States Government with respect to the Site, which are not paid by Respondent to EPA. For example, and without limitation, EPA reserves the right to bring an action against Respondent for recovery of that portion of EPA's past costs at the Site which exceed the amount Respondent is required to pay pursuant to paragraph 73., above.

81. Nothing herein shall preclude EPA from taking any additional enforcement actions and/or other actions as it may deem necessary or appropriate for any purpose, including, the investigation, prevention, or abatement of a threat to the public health, welfare, or the environment arising from conditions at the Site. For example, and without limitation, EPA reserves the right to take action to require Respondent and/or any other entities to address soil at the Site which is not deemed to be "contaminated soil" for purposes of paragraph 22.a., above.

Termination and Satisfaction

82. Upon a determination by EPA, following its receipt of the Site Clean-Up Report, that the work required pursuant to this Consent Order has been fully carried out in accordance with this Consent Order, EPA will so notify Respondent, in writing, that

this Consent Order is terminated. This notice shall not, however, terminate Respondent's obligation to comply with any of Respondent's remaining obligations under this Consent Order including, but not necessarily limited to, record preservation and the payment of any costs specified in the "Reimbursement" and "Enforcement" sections of this Consent Order which have not yet, at that time, been paid by Respondent.

Effective Date and Effect of Consent

83. This Consent Order shall become effective on the date upon which Respondent receives a fully executed copy. All times for performance of actions or activities required herein will be calculated from said effective date.

84. By signing this Consent Order and taking actions under this Consent Order, Respondent does not admit, adopt, accept, concede, or acknowledge EPA's Findings of Fact and Conclusions of Law, nor does Respondent admit any legal liability or waive any defenses or causes of action with respect to issues addressed in this Consent Order, except as otherwise provided in this Consent Order. Respondent specifically reserves the right to contest EPA's Findings of Fact, Conclusions of Law and Determinations in any proceeding regarding the Site, other than actions brought by EPA to enforce this Order. However, Respondent agrees not to contest the authority or jurisdiction of the Regional Administrator of EPA Region II to issue this Consent Order, and Respondent also agrees not to contest the validity or terms of this Consent Order in any action to enforce its provisions.

U.S. ENVIRONMENTAL PROTECTION AGENCY

CONSTANTINE SIDAMON-ERISTOFF
Regional Administrator
U.S. Environmental Protection Agency
Region

9/29/92
Date of Issuance

CONSENT

Respondent, Rhône-Poulenc Basic Chemicals Co., has had an opportunity to confer with EPA to discuss the terms and the issuance of this Consent Order. The Respondent hereby consents to the issuance of this Consent Order and to its terms. Furthermore, the individual signing this Consent Order on behalf of Respondent certifies that he or she is fully and legally authorized to agree to the terms and conditions of this Consent Order and to bind Respondent.

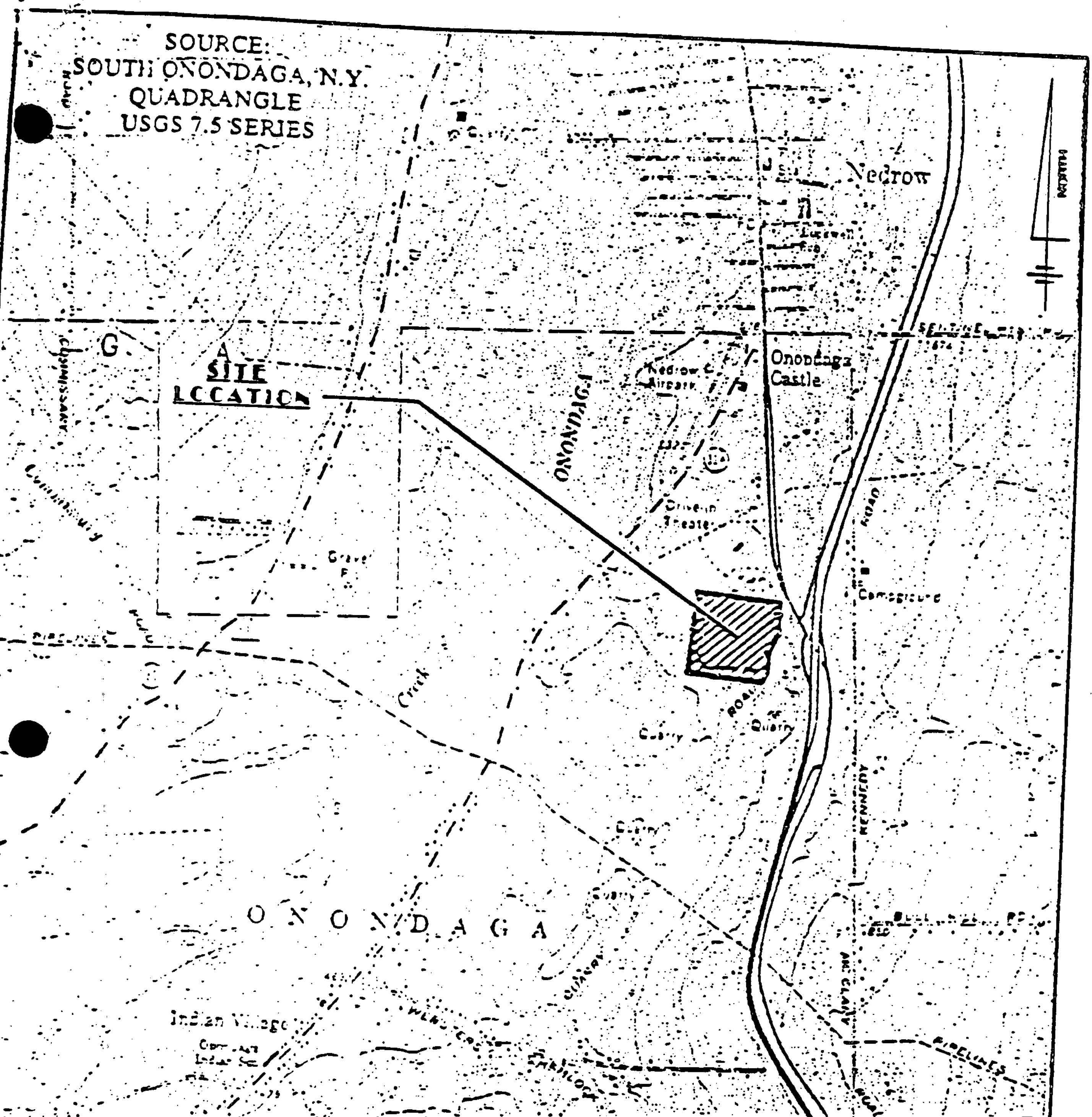
Brian A. Spiller
(signature)

9/25/92
DATE

Brian A. Spiller
(printed name of signatory)

Business Director Environmental Remediation
(title of signatory)

EXHIBIT 1



SITE LOCATION MAP OF:

ONONDAGA NATION DRUM SITE

ONONDAGA, NEW YORK

SCALE: 1 in. = 24,000 ft.