547SERBSF10,632

547SERBSF10,632

Site Name (Subject):	TOM SADLER ROAD WELLS
Site ID (Document ID):	NCD986231967
Document Name (DocType):	Removal (RMVL)
Report Segment:	
Description:	Immediate Removal Correspondence
Date of Document:	11/7/1996
Date Received:	
Box: *Enter SF and # with no spaces*	SF10,632
Access Level:	PUBLIC
Division:	WASTE MANAGEMENT
Section:	SUPERFUND
Program (Document Group):	SERB (SERB)
Document Category:	FACILITY

Print Report for Record

Go to New Blank Record

Go to New Record - (default to last record values)

Delete Record

file - Removal

MEMO

DATE: November 7, 1996

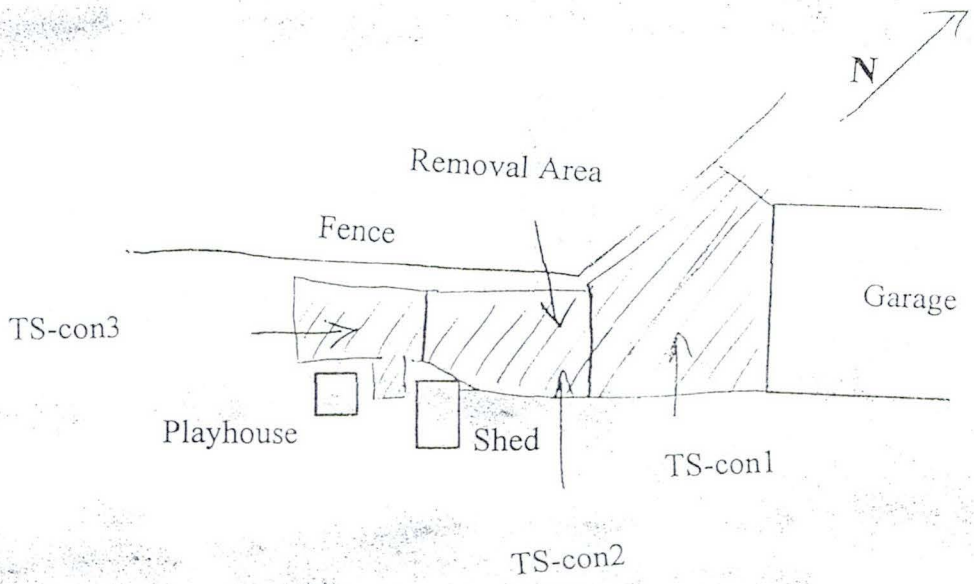
TO: FILE
cc: Pat DeRosa, Head, NC Site Evaluation & Removal Branch

FROM: Jeanette Stanley, Environmental Chemist, NC Superfund Section

SITE: Tom Sadler Road Wells
NCD 986 231 967
Charlotte, Mecklenburg, North Carolina

Dean Ullock, US EPA ERRB (404) 562-8757 called and left a message on October 30, 1996. He said that results from the post-removal samples collected and analyzed for chlorinated solvents had been received. He said that TS-con1 and TS-con2 showed no chlorinated solvents. TS-con3 showed a low level of chlorinated solvents, 0.013 mg/kg. This sample was a five-point composite.

He said that the clean soil that was delivered to the site while I was present on October 23 has been used to fill in the removal area. Dean did not specify the specific chlorinated solvent. ERRB is not planning any additional action on the site.



file - Removal

MEMO

DATE: October 28, 1996

TO: FILE
cc: Pat DeRosa, Head, NC Site Evaluation & Removal Branch

FROM: Jeanette Stanley, Environmental Chemist, NC Superfund Section

SITE: Tom Sadler Road Wells
NCD 986 231 967
Charlotte, Mecklenburg, North Carolina

On Friday, October 25, 1996, I talked with Joe Parker, Environmental Technician, Mooresville Regional Office (704) 663-1699. I informed him of the removal activities that had just been completed at the Tom Sadler Road Wells site. I informed Mr. Parker that Mr. Mingus is still be conducting auto repairs in his garage and that Dean Ullock left three 5-gallon containers of waste oil on the property that Mr. Mingus promised to dispose of properly. I also told Mr. Parker about three compressed gas cylinders that were left on the property. Mr. Parker said that he would visit Mr. Mingus and discuss proper handling of wastes. Mr. Parker also said that he would follow up the visit with a letter outlining the required procedures for handling future wastes generated by Mr. Mingus' garage activities.

MEMO

DATE: October 25, 1996

TO: FILE
cc: Pat DeRosa, Head, NC Site Evaluation & Removal Branch

FROM: Jeanette Stanley, Environmental Chemist, NC Superfund Section

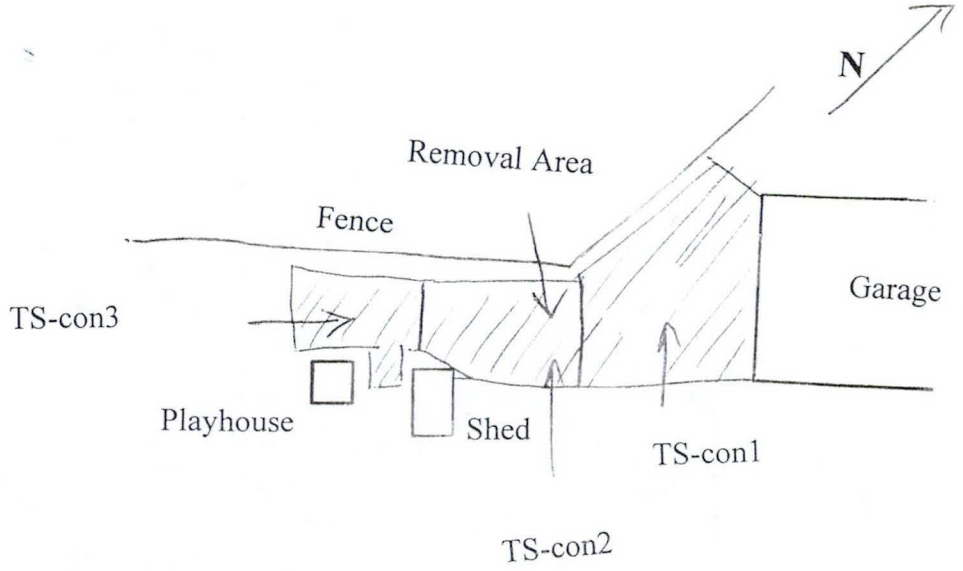
SITE: Tom Sadler Road Wells
NCD 986 231 967
Charlotte, Mecklenburg, North Carolina

I went to the Tom Sadler Road Wells site on October 23, 1996 to observe the removal being conducted on the property. I arrived at the site at 1150. Present onsite were Dean Ullock, US EPA ERRB; Jamie Laubenthal, PRC START contractor; OHM representatives operating earth moving equipment, and Southco Enterprises representatives who hauled away the contaminated soil. When I arrived, most of the excavation had occurred, to a depth ranging from 6 - 18" in an area on the southwest (left if facing from road) side of the garage. Dean and I inspected the excavated area and some additional soil was removed. A total of approximately 21 cubic yards of contaminated soil were hauled away from the site while I was there. ERRB also removed some solid waste for Mr. Mingus, the property owner.

Jamie Laubenthal collected three post removal samples. Each was a 5-point composite in a area of the removal. These were tested for total lead and chlorinated solvents. I received a split from these samples and carried them to the state lab for TCLP lead analysis. A sketch of the removal area and sampling points is given below. I photographed the removal activities and area. These photographs are attached.

Dean Ullock called me today and gave me the total lead results for the samples:

Sample	Time collected	Lead (mg/kg)
TS-con1	1400	31.44
TS-con2	1340	95.91
TS-con3	1350	12.26



file - Removal

SITE HEALTH AND SAFETY PLAN

A. General Information

Site Name Tom Sadler Road Wells ID # NCD 986 231 967

Location 2128 Tom Sadler Road, Charlotte,
Mecklenburg County, NC 28214

Proposed Date of Investigation October 21-31, 1996

Date of Briefing October 21, 1996

Date of Debriefing November 1, 1996

Nature of Visit (check one):

On-Site Reconnaissance	
Off-Site Reconnaissance	
Sampling	
Sampling Overview	
Remediation Overview	X

Health Department Official Contacted Ms. Sarah Edwards for Henry Sutton

Date of Contact October 21, 1996

Site Investigation Team: All site personnel have read the Site Health and Safety Plan and are familiar with its provisions.

	Personnel	Responsibilities	Signature
Team 1	Jeanette Stanley	team leader, recon	Jeanette Stanley
Team 1			
Team 2			
Team 2			

Plan Preparation:

Prepared By: David Lilley, Industrial Hygiene Consultant

Reviewed By: Jack Butler, Superfund Section Chief

B. SITE/WASTE CHARACTERISTICS

Waste Type(s) __X__Liquid _____Solid _____Sludge _____Gas _____Vapor

Characteristics _____Corrosive __X__Ignitable _____Radioactive

__X__Volatile __X__Toxic _____Reactive _____Other

List Known or Suspected Hazards (physical, chemical biological or radioactive) on Site and their toxicological effects. Also, if known, list chemical amounts

HAZARD	WARNING PROPERTIES	EXPOSURE LIMIT
1,1-dichloroethylene	Odor Threshold (OT) = no data	200 ppm
Carbon tetrachloride	OT = 0.0011 - 7.7 ppm	2 ppm

UNDERGROUND UTILITIES CHECKLIST

Utility	Locator/Contact Person	Phone #	Date of Location
Power	NA		
Telephone	NA		
Gas	NA		
Water	NA		
Sewer	NA		

Call made by:

ID # NCD 986 231 967

Facility Description: Size unknown Buildings yes

Disposal Methods Being Investigated Possible leakage of drums/containers.

Unusual Features on Site (dike integrity, power lines, terrain, etc.):
The site is a residential property.

History of the Site: The well in question was drilled in September of 1992. The well is about five feet away from a small auto repair shop that has existed on the site for about 30 years.

C. HAZARD EVALUATION

The site can be toured in level D protection. Steel toed work boots will be worn while conducting the tour of the site. Tyvek suits (saranex in wet conditions) are recommended to keep clothing clean.

D. WORK PLAN INSTRUCTION

Map or Sketch Attached? yes

Perimeter Identified? no

Command Post Identified? no

Zones of Contamination Identified? no

Personal Protective Equipment/Level of Protection: ____C _X_ D

Modifications

ID # NCD 986 231 967

Surveillance Equipment:

_____ HNU	_____ Detector Tubes and Pumps
_____ OVA	_____ 02 Meter
_____ Explosimeter	_____ Radiation Monitor

Decontamination Procedures

_____Level C Respirator wash, respirator removal, suit wash (if needed), suit removal, boot wash, boot removal and glove removal.

__X__Level D Boot wash and rinse and boot removal, suit removal, glove and goggle removal.

Modifications Dispose of trash properly, on-site if possible.

Work Schedule/Visit Objectives The purpose of this visit is to determine if the site poses a threat to the public health or environment because of releases of contaminats to soil, surface water, groundwater, or air. No sampling will be conducted at this time, sampling may take place on a later date.

EMERGENCY PRECAUTIONS

Route of Exposure	First Aid
Eyes	irrigate immediately
Skin	soap and water wash
Inhalation	fresh air and artificial respiration
Ingestion	get medical attention immediately

ID # NCD 986 231 967

Location of Nearest Phone: on site (this is a residence)

Hospital (Address and Phone Number)

1. PRO MED-Freedom, 4221 Tuckaseegee Road, Charlotte, NC (701) 521-9435

2. Mercy Hospital, 2001 Vail Avenue, Charlotte, NC 28207 (704) 379-5000

can handle chemically contaminated patients

Emergency Transportation Systems (Phone Numbers)

Fire 911

Ambulance 911

Rescue Squad 911

Emergency Route to Hospital 1. Take tom Sadler Road back to Route 27 and go south to Charlotte. The medical facility is where 27 crosses Tuckaseegee Road, which is about 5 miles from the site.

2. Take Tom Sadler Road back to Route 27 and go south to Charlotte. Stay on Route 27 and exit onto Route 16 East, take a right onto Queens Road, a left onto Randolph Road, then a left onto Caswell Road. The hospital is about 10 miles from the site.

PREVAILING WEATHER CONDITIONS AND FORECAST

EQUIPMENT CHECKLIST

___	Air purifying respirator	_X_	First Aid Kit
___	Cartridges for respirator	_X_	3 gal. Deionized H20
___	Eye Wash Unit	_X_	Rain suit
___	HNU	_X_	Gloves (PE/PVC/nitrile/cloth)
___	OVA	_X_	Boots/Boot Covers
___	Explosimeter	_X_	Coveralls (tyvek/saranex)
___	Radiation Monitor	_X_	Eye Protection (goggles/shield)
_X_	Decontamination Materials	_X_	Hard Hat

Poison Control Center - State Coordinator
Duke University Medical Center
Telephone: 1-800-672-1697
Box 3024
Durham, NC 27710

ASHEVILLE 704-255-4490	Western NC Poison Control Center Memorial Mission Hosp. 509 Biltmore Ave. 28801	HENDERSONVILLE 704-693-6522 Ext. 555,556	Margaret R. Pardee Memorial Hospital Fleming St., 28739
CHARLOTTE 704-379-5827	Mercy Hospital 2001 Vail Ave, 28207	HICKORY 704-322-6649	Catawba Mem. Hosp. Fairgrove Chur. Rd 28601
DURHAM 1-800-672-1697	Duke Univ. Med. Center Box 3007, 27710	JACKSONVILLE 919-577-2555	Onslow Mem. Hospital Western Blvd. 28540
GREENSBORO 919-379-4105	Moses Cone Hospital 1200 N. Elm St. 27420	WILMINGTON 919-343-7046	New Hanover Mem. Hospital 2131 S. 17th St. 28401

TO BE COMPLETED BY PROJECT MANAGER

PROJECT MANAGER: Jeanette Stanley PROJECT: Tom Sadler Rd. Well

INVESTIGATION DATE: Oct. 21-31, 1996

RECONNAISSANCE _____ SAMPLING VISIT _____ REMEDIATION/SAMPLING OVERVIEW X

Respirator Worn By	Approximate Time in Respirator

Air Monitoring Data (Include Calibration Reading)

HNU: _____

OVA: _____

Explosimter: _____

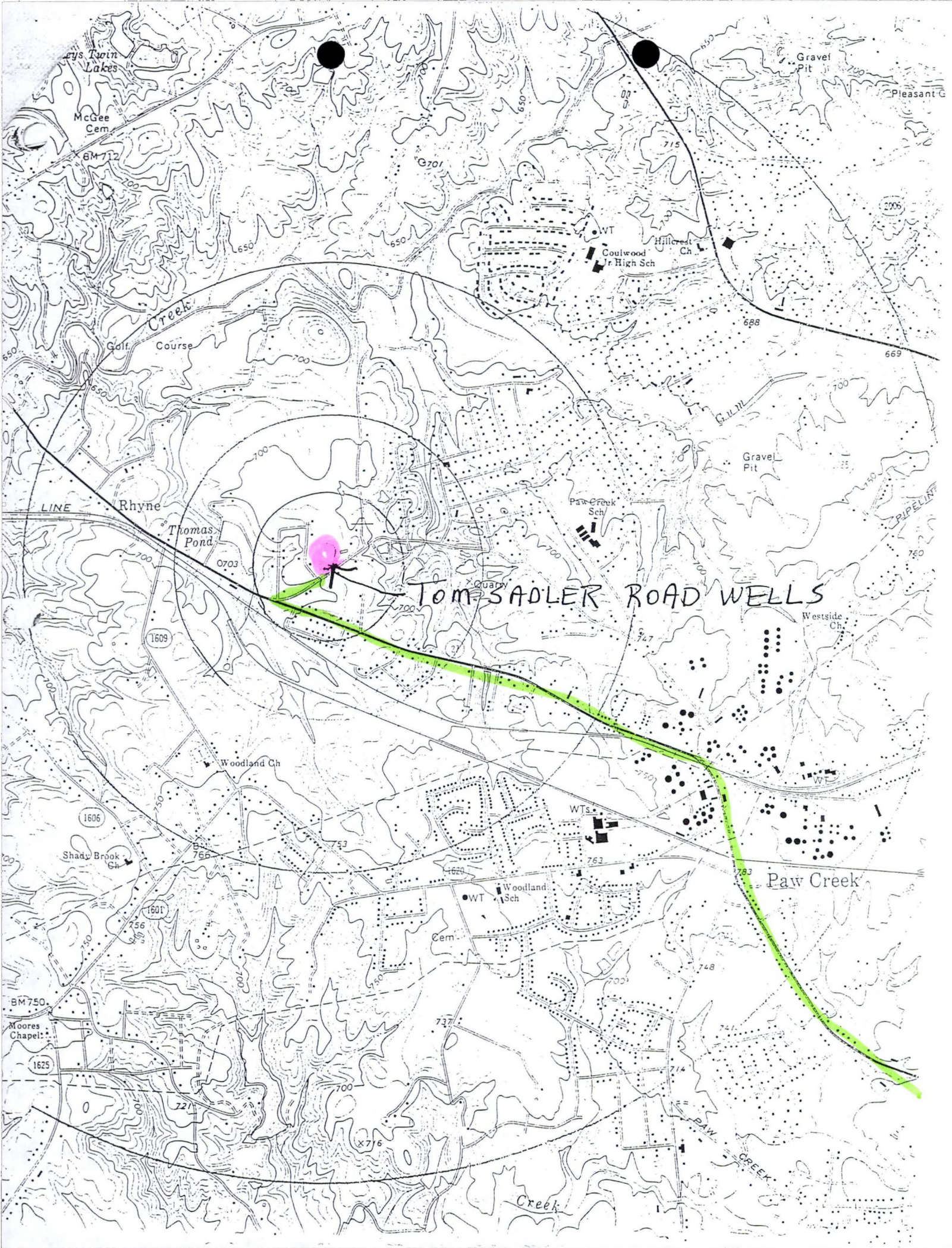
Radiation Meter: _____

Were there any injuries? _____ If yes, explain: _____

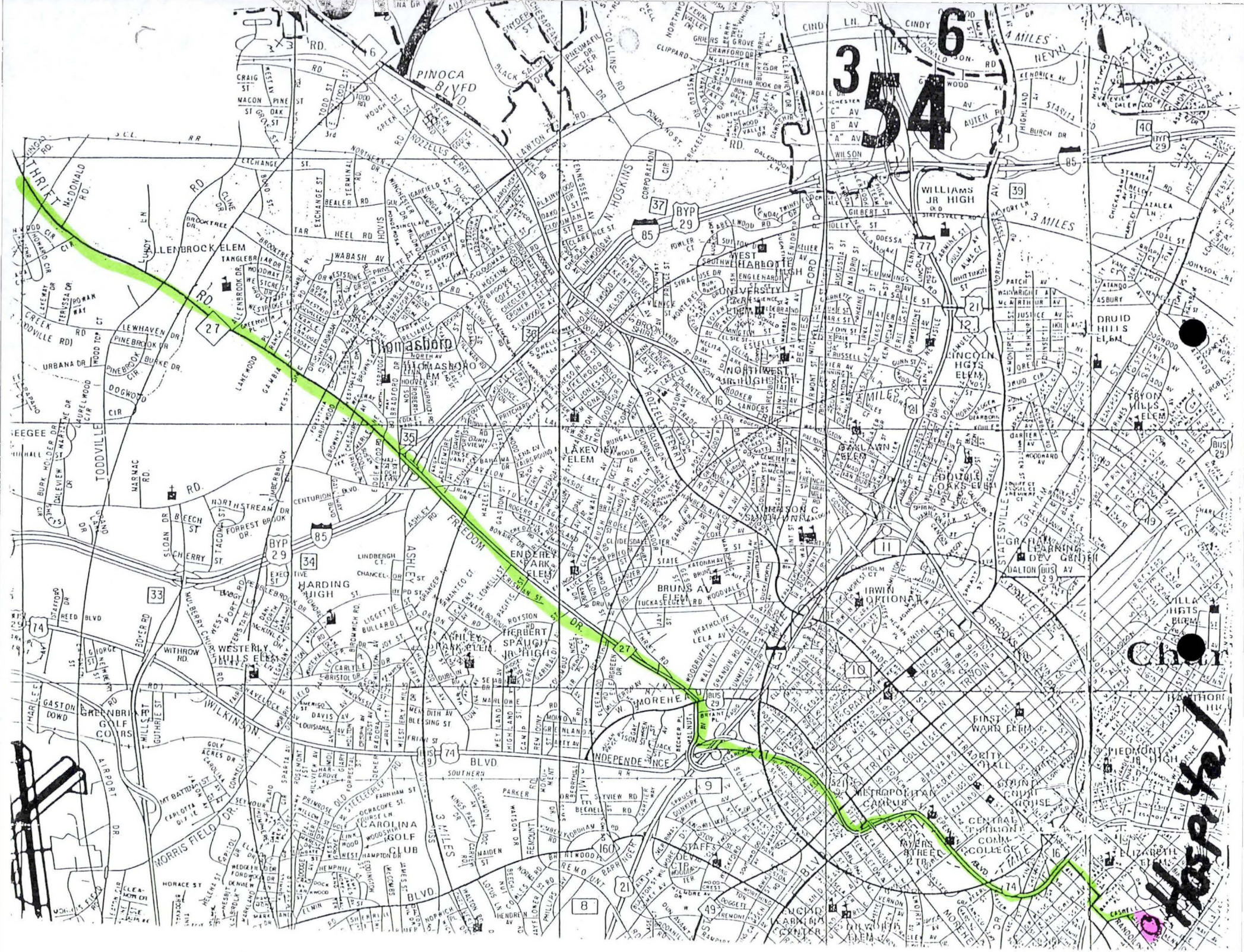
If the maximum personal protective equipment as outlined in the Hazard Evaluation Section was not used, please justify:

Visitors Present	Organization Represented

Signature


Tom SADLER ROAD WELLS
Twin Lakes
McGee Cem
BM 712
Gravel Pit
Pleasant G
WT
Coulwood Jr High Sch
Hillcrest Ch
Creek
Golf Course
Gravel Pit
LINE
Rhyne
Thomas Pond
Paw Creek Sch
PIPELINE
Quarry
Westside Ch
Woodland Ch
WTs
Shady Brook Ch
Woodland Sch
Paw Creek
Cem
BM 750
Moores Chapel
PAW CREEK
Creek


site
28214
28208
Medica
MOUNT HOLLY
ROZZELLES FERRY RD
FREEDOM DR
TODDVILLE RD
TUCKASEEGEE RD
BROOKSHIRE BLVD
OUTER BELT
MT HOLLY-HUNTERSVILLE RD
OUTER BELT HWY (PROPOSED / UNDER CONST)
COULWOOD SHOPPING CENTER
COULWOOD LIBRARY
COULWOOD MIDDLE SCHOOL
COULWOOD PARK
PAW CREEK ELEM. SCHOOL
PAW TUCKETT ELEM. SCHOOL
PAW CREEK CHRISTIAN ACADEMY
OAK DALE ELEM. SCHOOL
ALLEN BROOK ELEM. SCHOOL
THOMASBORO ELEM. SCHOOL
WILSON JR HIGH SCHOOL
WEST MECKLENBURG HIGH SCHOOL
TUCKASEEGEE ELEM. SCHOOL
HARDING HIGH SCHOOL
FOREST LAWN CEMETERY
TUCKASEEGEE PARK
FREEDOM MALL
PINE ISLAND COUNTRY CLUB
LITTLE ROCK
MULBERRY CHURCH RD
485
85
27
74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PINOCA BLVD
FREEDOM DR
Thomasboro
Chari

HAZARDOUS SUBSTANCE INFORMATION FORM

Chemical Name: 1,2-Dichloroethylene

I. PHYSICAL/CHEMICAL PROPERTIES

	Reference
Chemical Formula $C_2H_2Cl_2$	1
Natural Physical State at 25°C liquid	2
Vapor Pressure 180-265 mm Hg at 20°C	3
Melting Point -56 to -115 /°C Boiling Point 113 to 140°F/°C	3
Flash Point (open or closed cup) 36 - 39 °C/°F	3
Solubility - H2O 0.35 to 0.63%	3
Other alcohol, ether, most organic solvents	2

Physical Features: (odor, color, etc.) Colorless liquid with an ether-like slightly acrid odor, like chloroform (3) IP = 9.65 eV OVA Relative Response = 50%

II. TOXICOLOGICAL DATA

Standards: 200 ppm (4) TLV 200 ppm (5) PEL 4,000ppm (3) IDLH

Routes of Exposure: Ingestion, Inhalation, Eye and/or skin contact

Acute/Chronic Symptoms: Irritation of the eyes and respiratory system, central nervous system depression (3)

First Aid: Inhalation: artificial respiration; Ingestion: get medical attention immediately; Eye contact: irrigate immediately; Skin contact: soap and water wash immediately.

Chemical Name: 1,2-Dichloroethylene

III. HAZARDOUS CHARACTERISTICS — Reference

A. Combustibility Yes X No — 6
Toxic by-products phosgene and HCl formation — 6

B. Flammability LEL 9.7% UEL 12.8% — 6

C. Reactivity Hazard Not reactive with common materials — 6

D. Corrosivity Hazard yes/no pH: —

Neutralizing agent: —

E. Radioactive Hazard — Exposure Rate

Background	yes/no		
Alpha particles	yes/no		
Beta particles	yes/no		
Gamma radiation	yes/no		

IV. REFERENCES

1. The Condensed Chemical Dictionary, Sax, 11th Edition, 1987.
2. The Merck Index, 11th Edition, Sax, 1989.
3. Pocket Guide to Chemical Hazards, NIOSH, 1990.
4. Threshold Limit Values and Biological Exposure Indices for 1994-1995, ACGIH.
5. 29 CFR 1910.1000.
6. Chemical Hazard Response Information System, US Department of Transportation, 1987.

HAZARDOUS SUBSTANCE INFORMATION FORM

Chemical Name: Carbon Tetrachloride

I. PHYSICAL/CHEMICAL PROPERTIES

	Reference
Chemical Formula CCl4	1
Natural Physical State at 25°C liquid	2
Vapor Pressure 91.3 mm Hg at 20°C	2
Melting Point -9 °F/°C Boiling Point 170 °F/°C	3
Flash Point (open or closed cup) none °C/°F	3
Solubility - H_2O 1 ml dissolves in 2000 ml water	1
Other miscible with alcohol, benzene, chloroform, ether, carbon disulfide, petroleum ether, oils	1

Physical Features: (odor, color, etc.) Colorless, clear heavy liquid with an ether-like odor (1,3) IP = 11.47 eV, HNU sensitivity with 11.7 eV probe = 9.0.

II. TOXICOLOGICAL DATA

Standards: 5 ppm-skin (4) TLV 2 ppm (5) PEL potential human carcinogen (3) IDLH

Routes of Exposure: Inhalation, skin absorption, ingestion, eye contact

Acute/Chronic Symptoms: Central nervous system depression, nausea, vomiting, liver and kidney damage, skin irritation, potential human carcinogen (3)

First Aid: Inhalation: artificial respiration; Skin contact: soap and water wash immediately; Eye contact: water flush immediately and get medical attention.

Chemical Name: Carbon Tetrachloride

III. HAZARDOUS CHARACTERISTICS — Reference

A. Combustibility Yes ___ No X — 3
Toxic by-products ___

B. Flammability LEL ___ UEL ___

C. Reactivity Hazard Incompatible with chemically active metals, such as sodium, potassium, and magnesium; fluorine; aluminum — 3
Note: forms highly toxic phosgene gas when exposed to flames or welding arcs.

D. Corrosivity Hazard yes/no pH: ___

Neutralizing agent: ___

E. Radioactive Hazard — Exposure Rate

Background	yes/no	___	___
Alpha particles	yes/no	___	___
Beta particles	yes/no	___	___
Gamma radiation	yes/no	___	___

IV. REFERENCES

(1) The Merck Index, 11th Edition.
(2) The Condensed Chemical Dictionary, Hawley, 11th Edition.
(3) NIOSH Pocket Guide to Chemical Hazards, 1990.
(4) Threshold Limit Values and Biological Exposure Indices for 1994-1995, ACGIH.
(5) 29 CFR 1910.1000

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
100 ALABAMA STREET, S.W.
ATLANTA, GEORGIA 30303-3104

SEP 1 8 1996

WD-ERRB

Mr. Jack Butler, Chief
Superfund Section
NC Division of Solid Waste Management
P.O. Box 27687
Raleigh, NC 27611-7687

Dear Mr. Butler:

We are pleased to provide a copy of the Action Memorandum for the removal at the Tom Sandler Road Site located in charlotte, Mechkenburg, County, North Carolina. If you have any questions or comments concerning this document, please contact the On-Scene Coordinator at the following address:

Steve Spurlin
U.S. Environmental Protection Agency
Waste Management Division
Emergency Response & Removal Branch
100 Alabama Stret, SW, 11th Floor
Atlanta, Georgia 30303
404-562-8743

Sincerely,

Myron D. Lair, Chief
Emergency Response & Removal Branch

Enclosure

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
100 ALABAMA STREET, S.W.
ATLANTA, GEORGIA 30303-3104

SEP 1 8 1996

4WD-ERRB

ACTION MEMORANDUM

SUBJECT: Request for a Removal Action at the Tom Sandler Road Site, Charlotte, Mecklenburg County, North Carolina

FROM: Steve Spurlin, On-Scene Coordinator
Emergency Response and Removal Branch

TO: Richard Green
Acting Director
Waste Management Division

Site ID# NCD986231967

I. PURPOSE:

The purpose of this memorandum is to request and document approval of the proposed removal action described herein for the Tom Sandler Road Site (the Site) in Charlotte, Mecklenburg County, North Carolina.

II. SITE CONDITIONS AND BACKGROUND:

In response to a request by the North Carolina Department of Environment, Health and Natural Resources (NC-DEHNR) on May 14, 1996, a site assessment (SA) was conducted by the Emergency Response and Removal Branch (ERRB) on July 10, 1996.

The SA revealed that the Site is approximately 2 acres in size and has one private residence located upon it with numerous residences nearby. The property owner, now retired, previously used his property to operate an automobile repair business from his garage from the 1960's to 1984. During the course of normal business operations, the owner used various solvents as well as gasoline to clean automobile parts.

Analytical results from surface soil revealed moderate contamination with high levels of lead (3000ppm). Waste samples collected from drums revealed Varsol as well as several drums containing very flammable, used cleaning solvents.

A. Site Description

1. Removal Site Evaluation

The Tom Sandler Road Site is the location of a former residential, automobile repair business in operation from the 1960's to 1984. Automobiles were brought to the Site for repairs and overhauls.

The garage and nearby areas outside of the garage were the locations of the repair work and overhauls. It appears that areas outside of the garage were used for the parts cleaning operations.

The key problem areas of this site include:

Residents living on the Site.

Contaminated surface soils and drums of hazardous chemicals scattered throughout the Site.

Stressed vegetation and the potential for contaminated runoff.

2. Physical Location

The Site is located at 2128 Tom Sandler Road, Mecklenburg County, North Carolina.

The Site is situated in a well developed area in the North Charlotte area. Numerous residences are located adjacent to the Site.

3. Site Characteristics

Currently, the Site is no longer used to service automobiles. It serves as a residence for the owners who are now retired. All adjacent properties are occupied. This is the second removal action at this site.

4. Release or Threatened Release into the Environment of a Hazardous Substance or Contaminant

The ERRB Site Assessment revealed the presence of soils which contain hazardous substances as defined by section 101 (14) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) as amended. The hazardous substances include lead, toluene and xylene.

Evidence of release of hazardous substances includes:

- Sampling data revealing elevated levels of lead in surface soil in the yard area adjacent to and west of the garage. One particular composite (TS-S7) surface soil sample indicated lead levels of 3000 ppm.

- Barren soil, stressed vegetation and seven drums containing liquids are located at the Site.

5. National Priority List (NPL) Status

The Tom Sandler Road Site is not currently listed on the NPL.

Concurrent with the proposed removal activities, additional information which may be required by the CERCLA Site Evaluation program and will be coordinated between the OSC and the Site Assessment Manager.

6. Maps, Picture, and other Graphic Materials

Maps, pictures and other graphic materials can be found in the Site file, including a report prepared for EPA by the START contractor dated August 12, 1996.

B. Other Actions to Date

1. Previous Actions

In October 1993, the Region IV ERRB conducted an emergency response at this site. The on-site drinking water well was highly contaminated with chlorinated solvents and an alternate water supply was temporarily provided by EPA. The two households formerly served by this well are now using city water. This site was subsequently listed on CERCLIS and a site inspection and sampling were conducted by the NC Superfund Section on February 13, 1996. A composite soil sample was taken in the drum storage/playhouse area at the Mingus residence. Results indicated lead at 3000 mg/kg.

2. Current Actions

It is unlikely that either the NC-DEHNR, county or local agency will be taking any direct response actions to clean-up the Site.

C. State and Local Authorities Roles

ERRB will coordinate with local response agencies to insure that an appropriate contingency plan is established for response to off-site release(s) of hazardous substances while the removal action is conducted.

ERRB will coordinate with city/county public service agencies to distribute and disseminate relevant information regarding Fund-Lead site activities to the public, as needed.

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

A. Threats to Public Health or Welfare

The EPA has determined that a release of a hazardous substance, as defined by CERCLA, into the environment has occured at the Site. This Agency has also determined that release poses a threat to public health and welfare and the environment. Soil contamination with lead is found throughout the Site. Analytical and field observations confirm that lead based solvents have been discharged in some areas on the Site, and thus greatly increase the mobility and bioavailability of the lead. This in turn greatly increase the threat of human exposure, making it of immediate concern.

The current policy of the Agency for Toxic Substances and Disease Registry concludes that exposure to excessive soil lead levels, especially to children below the age of six, poses a serious public health threat. Because of the presence of children in nearby residences, a particularly sensitive population is potentially at risk.

Additionally, because of surface contamination, coupled with rain events, it is likely that the surface contamination will spread, thus increasing the potential for exposure.

B. Threats to the Environment

High levels of hazardous substances and pollutants within surface soil has been established by ERRB analyses. This heavy metal contamination could migrate into the groundwater, thus spreading the contamination into other properties. The lack of vegetation cover increases the ability to migrate.

IV. ENDANGERMENT DETERMINATION

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

V. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

The Removal Action is proposed to be conducted in one phase. However, due to the inherent uncertainties associated with the removal site actions, the OSC, in a manner consistent with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) remains obligated to modify removal procedures as conditions warrant.

1. Proposed Action Description

A. If necessary, photo-document and perform structural and physical inspections of the existing structures located on and adjacent to the Site. The inspection will be conducted before the initiation of the removal activities and at the completion of the planned work.

B. Develop and implement a personnel monitoring program and a Site air monitoring program.

C. Excavate soil contaminated with greater than 400 mg/kg total lead. Excavation of contaminated soils will be completed to a point at which analytical results indicate that total lead concentration is below 400 mg/kg and/or the hydrogeology of the Site would prevent any further excavation.

D. Provide for the removal, treatment and/or disposal of all hazardous substances at the Site.

E. Post-excavation sampling and analysis will be conducted in the excavated areas to assure that clean-up levels have been attained. If the clean-up level has not been attained, excavation will continue until the clean-up level is achieved or site hydrogeology precludes further excavation.

F. In the event that an area is backfilled, the proposed fill material shall be sampled and analyzed to confirm that it is not contaminated.

G. The Site will be restored to the condition in which it existed prior to the removal, to the extent practicable.

H. Stockpiled contaminated soil volume will be determined and the pile will be secured to prevent off-site migration due to the erosion effects of wind and water will be taken.

I. Provide for the collection and treatment/disposal of all contaminated water and sludge on-site, this includes washes, rinses, rinsate and contaminated sediment generated as a result of decontamination operations.

J. Secure the contaminated areas, and any contaminated soil removed from those areas and stored on-site, in such a manner as to prevent access to those areas by unauthorized personnel.

K. Develop and implement a dust suppression program to substantially minimize migration of contaminated particles at the Site.

L. Provide for the decontamination of all vehicles used in the excavation and/or transportation of contaminated media before departure from the exclusion zone.

M. Install caution and/or warning signs and/or fences or any other device which would identify an area as hazardous or contaminated at the Site.

N. Photo-document the Tom Sandler Road Site before removal action start-up and after completion. This shall include all the areas where heavy equipment will be utilized, transported and parked. Coordinate with the Department of Transportation to repair any damage incurred during removal activities.

O. Conduct additional sampling for waste profiling and treatability study.

2. Contribution to Remedial Performance

Based on the information that is available at this time, the proposed action will contribute to the effectiveness of any future response actions. The proposed action will eliminate the immediate threats identified in Section III of this document. If further site investigation indicates that a remedial response is necessary then the proposed action will remove the major source of contamination and aid the long term remediation.

3. Description of Alternative Technologies

Not applicable.

4. Engineering Evaluation/Cost Analysis (EE/CA)

An EE/CA is not applicable to this project due to the time-critical nature of this removal action.

5. Applicable or Relevant and Appropriate Requirements (ARARS)

ARAR's determined by the OSC to be applicable for this site include certain regulations of the Resource Conservation and Recovery Act, including the Land Disposal Regulations and the CERCLA off-site disposal rule.

At this time no State requirements have been identified as substantively additional ARARS.

6. Project Schedule

Implementation of the response action is expected to be initiated in early October, 1996. This removal action will be completed within 90 days after the ERCS contractor has been mobilized to the Site.

B. Estimated Costs

Extramural Costs:

REGIONAL ALLOWANCE COSTS	
ERCS	$50,000
Contingency (20%)	$10,000
NON-REGIONAL ALLOWANCE COSTS	
START	$15,000
TOTAL - EXTRAMURAL COSTS	$75,000

Intramural Costs:

Direct	$5000
Indirect	$2700
TOTAL - INTRAMURAL COST	$4200
TOTAL - REMOVAL PROJECT CEILING	$81,900

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

If action is significantly delayed or not taken at the Site, the threats explained in Section III of this Action Memorandum will significantly increase, resulting in immediate injuries to children or trespassers or chronic health problems for those residents living near the Site.

VII. OUTSTANDING POLICY ISSUES

None

VIII. ENFORCEMENT

(See Attachment A)

IX. RECOMMENDATION

This decision document represents the selected removal action for the Tom Sandler Road Site, in Charlotte, North Carolina, developed in accordance with CERCLA, as amended, and not inconsistent with the NCP. This decision is based on the Administrative Record for the Site.

Conditions at the Site meet the NCP section 300.415 (b)(2) criteria for a removal and I recommend your approval of the proposed removal action. The total project ceiling if approved will be **$81,900**. Of this, an estimated **$50,000** is derived from the Regional Removal Allowance.

APPROVED: _____ DATE: 9/16/96

DISAPPROVED: _____ DATE: _____

Richard Green, Acting Director
Waste Management Division
Environmental Protection Agency, Region IV

cc: Mike Kelly, Deputy Director
Solid Waste Management Division
DEHNR

Attachment A

ENFORCEMENT CONFIDENTIAL

VIII. ENFORCEMENT

Mr. G.J. Mingus, Jr. currently owns this residential property located at 2128 Tom Sandler Rd., Charlotte, North Carolina. Mr. G.J. Mingus, Jr. admits to operating an automotive repair business from his property from approximately 1960 to 1984. Mr. G.J. Mingus also admits to having no ability or assets to pay for removal expenses.

Due to the high levels of lead found at the Site coupled with the presence of children frequenting the Site, the removal action will be conducted within 45 days.

State of North Carolina
Department of Environment,
Health and Natural Resources
Division of Solid Waste Management

James B. Hunt, Jr., Governor
Jonathan B. Howes, Secretary
William L. Meyer, Director

file Removal File.

May 14, 1996

Myron D. Lair, Chief
Emergency Response and Removal Branch
US EPA Region IV
345 Courtland Street, NE
Atlanta, GA 30365

SUBJECT: Immediate Removal Evaluation
Tom Sadler Road wells
NCD 986 231 967
Charlotte, Mecklenburg County, NC

Dear Mr. Lair:

In October 1993, the US EPA ERRB conducted a removal action at this site. The on-site drinking water well was highly contaminated with chlorinated solvents and an alternative water supply was temporarily provided by EPA. The two households formerly served by this well are now using city water. This site was subsequently listed on CERCLIS and a Site Inspection with sampling was conducted by the NC Superfund Section on February 13, 1996. A composite surface soil sample was taken in the drum storage/playhouse area at the Mingus residence. Results received by the NC Superfund Section on May 3, 1996 showed lead at 3,000 mg/kg and bis (2-ethyl hexyl) phthalate at 10,133 ug/kg. Also detected were arsenic at 14 mg/kg, copper at 130 mg/kg, chromium at 166 mg/kg and cadmium at 20 mg/kg. This composite sample is labeled TS-008-SL on the attached drawing.

An 8' fence separates the Brigman property to the north from the Mingus property, preventing neighborhood children from entering the contaminated area. A low fence separates the drum storage area from the yard and hides some of the debris; however, it does not restrict access. The Mingus's have been notified by telephone and advised to keep children out of the area. Currently, no children regularly play in the area, but grandchildren and great grandchildren visit occassionally. The NC Superfund Section requests that EPA evaluate this area of contaminated soil for a removal action. If you have any questions, please call Jeanette Stanley at (919) 733-2801 ext. 316.

Attachment
cc: Mike Kelly, DSWM
Jack Butler, DSWM
Jeanette Stanley, DSWM
Doug Holyfield, DSWM
Phil Prete, DSWM
Grover Nicholson, DSWM
Pat Williamson, DSWM
Henry Sutton, Mecklenburg County DEP
Cindy Gurley, US EPA

Sincerely,

Pat DeRosa, Head
Site Evaluation and Removal Branch
NC Superfund Section

P.O. Box 27687,
Raleigh, North Carolina 27611-7687
Voice 919-733-4996

Reduce Reuse Recycle

FAX 919-715-3605

MEMO TO: Pat DeRosa, Head, Site Evaluation and Removal Branch

FROM: Jeanette Stanley, Environmental Chemist, NC Superfund Section

DATE: May 10, 1996

SUBJECT: Request for Emergency Removal Action
Tom Sadler Road wells
NCD 986 231 967
Charlotte, Mecklenburg County, NC

On October 29, 1993, a Removal Authorization was issued for the Tom Sadler Road Wells Site. The drinking water well on the Mingus property at 2128 Tom Sadler Road was highly contaminated with chlorinated solvents. This contamination was discovered by sampling conducted by the Mecklenburg County Department of Environmental Protection. The US EPA provided bottled water immediately and a granular activated carbon filter was installed soon afterward. The home has since been connected to city water.

A Preliminary Assessment was conducted on this property on May 3, 1995 and the site was recommended for further action under CERCLA. On February 13, 1996, onsite soil, drinking water wells and surface water and sediment samples were taken for the Site Inspection. The organic results received on March 29, 1996 did not show any areas of soil containing high levels of chlorinated solvents.

Metals results received on May 3, 1996 showed one area of lead-contaminated soil. This area of lead-contaminated soil was in the drum storage area on the south side (or left if facing the garage from the road). The sample was taken at four points in the area of the oil-stained ground. Two points were in the area of the shed and the playhouse. Another spot was underneath the varsol (marked "versol") drum and the fourth point to the right, or east of this point. The top two inches of soil were scraped away and the soil just below this point was taken. The sample location number was TS-008-SL and sample numbers were TS-28, TS-29 and TS-30 for volatile organics, semivolatile organics and metals, respectively. The sample results showed the following contaminants:

Lead	3,000 mg/kg	Copper	130 mg/kg
Cadmium	20 mg/kg	Arsenic	14 mg/kg
Chromium	166 mg/kg	bis(2-ethyl hexyl)phthalate	10.1 mg/kg

TCLP analysis of this contaminated soil sample showed lead at 6.04 mg/L. In addition, lead was detected at 24 and 28 mg/kg in samples TS-007-SL and TS-010-SL, respectively. Chromium, copper and arsenic were also detected in these two soil samples. The old drinking water well (no longer being used for drinking) contained 0.031 mg/L lead. The well is still being used for watering the garden and washing cars. A copy of the analytical results is attached. A map of the sampling locations is also attached. The fence shown in the area of sample location TS-008-SL is a low fence that hides some the stored material. It does not restrict access.

Based on these findings, I am requesting a removal evaluation. I will be notifying Mr. Mingus by telephone and letter of these findings and recommend that he restrict use of this area of this property, particularly by children.

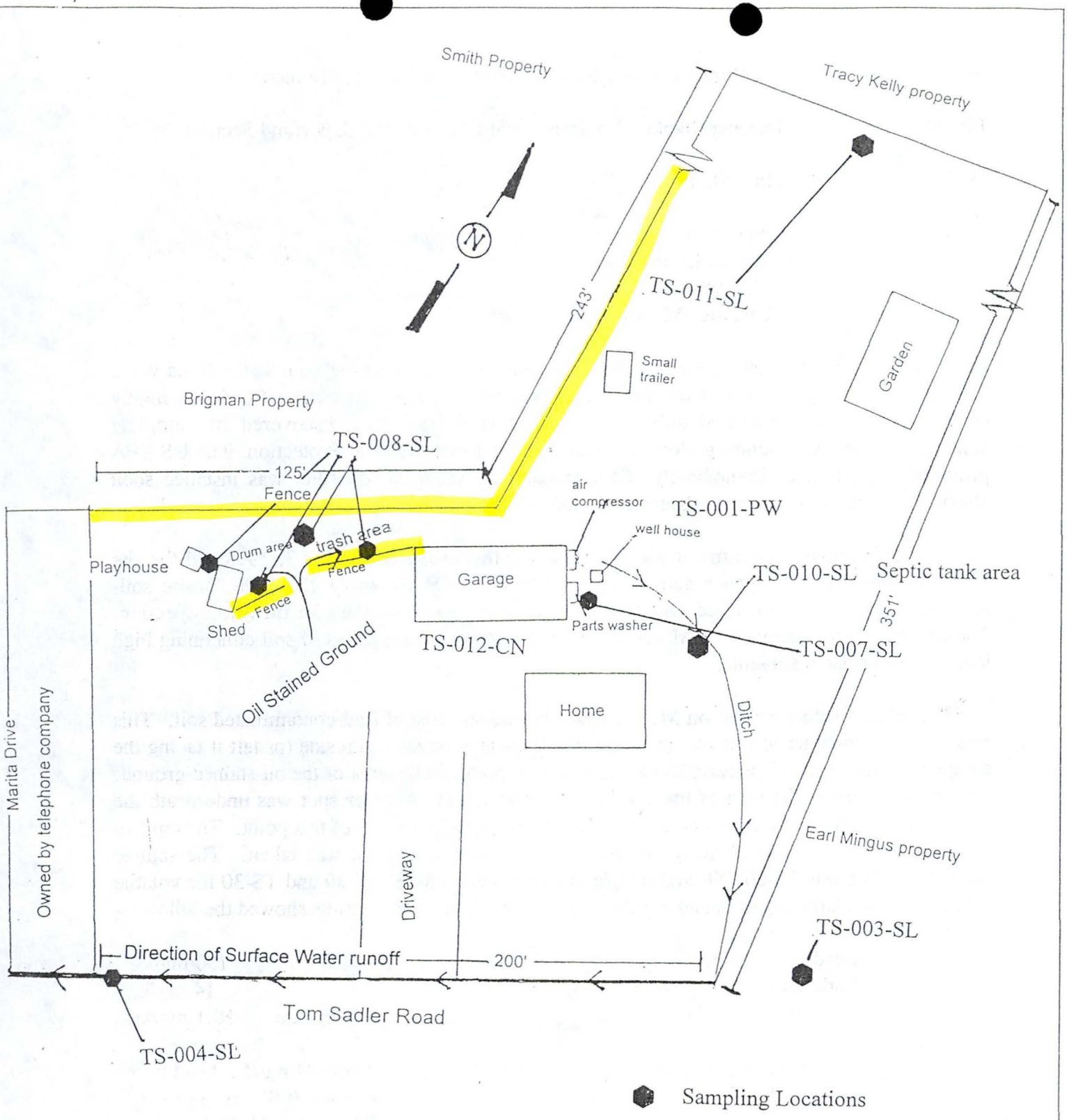

Fig. No: 1	Title: **Site Map and Sampling Locations**		
North Carolina Division of Solid Waste Management	Scale: Not to Scale	Date: February 1996	Drawn By: Stanley
Superfund Section	Site Name: Tom Sadler Road Wells		NCD 986 231 967

ment of Environment,
& Natural Resources
Waste Management Division

SAMPLE ANALYSIS REQUEST

State Laboratory of Public Health
P.O. Box 28047, 306 N. Wilmington Street
Raleigh, North Carolina 27611

Site Number TS-008-SL 02/13/96 1225 COMP
Tom Sadler Road Wells, NC J. STANLEY
Name of Site SOIL
ESD LAB METALS Soil
Collected By TS- 30 Time

Agency: Hazardous Waste Solid Waste Superfund

Sample Type

Environmental	Concentrate	Comments
Ground water (1)	Solid (5)	
Surface water (2)	Liquid (6)	
Soil (3)	Sludge (7)	
Other (4)	Other (8)	

Organic Chemistry

Parameter	Results(mg/l)
P&T:GC/MS	
Acid:B/N Ext.	
MTBE	

Radiochemistry

Parameter	Results (PCi/l)
Gross Alpha	
Gross Beta	

Microbiology

Parameter	Results (Col/100ml)

Inorganic Chemistry

Parameter	Results ~~(mg/l)~~ (mg/kg)
✓ Arsenic	14
Barium	
✓ Cadmium	20
Chloride	
✓ Chromium	166
✓ Copper	130
Fluoride	
Iron	
✓ Lead	3,100
Manganese	
✓ Mercury	<0.09
Nitrate	
✓ Selenium	<1
✓ Silver	<10
Sulfates	
Zinc	
pH	
Conductivity	
TDS	
TOC	

Date Received Reported by

Date Extracted Date Reported

002270 FEB 1996

TCLP Compounds

Inorganic Compounds	Results(mg/l)
Arsenic	
Barium	
Cadmium	
Chromium	
Lead	Lo.04
Mercury	
Selenium	
Silver	

Organic Compounds	Results(mg/l)
benzene	
carbon tetrachloride	
chlordane	
chlorobenzene	
chloroform	
o-cresol	
m-cresol	
p-cresol	
cresol	
1,4-dichlorobenzene	
1,2-dichloroethane	
1,1-dichloroethylene	
2,4-dinitrotoluene	
heptachlor	
hexachlorobenzene	
hexachlorobutadiene	
hexachloroethane	
methyl ethyl ketone	
nitrobenzene	
pentachlorophenol	
pyridine	
tetrachloroethylene	
trichloroethylene	
2,4,5-trichlorophenol	
2,4,6-trichlorophenol	
vinyl chloride	
endrin	
lindane	
methoxychlor	
toxaphene	
2,4-D	
2,4,5-TP (Silvex)	

N.C. Department of Environment, Health, & Natural Resources
Solid Waste Management Division

[redacted] ANALYSIS REQUEST

State Laboratory of Public Health
P.O. Box 28047, 306 N. Wilmington Street
Raleigh, North Carolina 27611

Site Number TS-001-PW 02/13/96 1345 GRAB
Tom Sadler Road Wells, NC J. STANLEY
Name of Site POTABLE WELL
ESD LAB METALS Ground Water
Collected By TS- 3 Time

Agency: ___ Hazardous Waste ___ Solid Waste ___ Superfund

Sample Type

Environmental	Concentrate	Comments
___ Ground water (1)	___ Solid (5)	Mingus residence
___ Surface water (2)	___ Liquid (6)	(well not being
___ Soil (3)	___ Sludge (7)	used for drinking
___ Other (4)	___ Other (8)	

Organic Chemistry

Parameter	Results (mg/l)
___ P&T:GC/MS	
___ Acid:B/N Ext.	
___ MTBE	

Radiochemistry

Parameter	Results (PCi/l)
___ Gross Alpha	
___ Gross Beta	

Microbiology

Parameter	Results (Col/100ml)

Inorganic Chemistry

Parameter	Results (mg/l)
✓ Arsenic	<0.01
___ Barium	
✓ Cadmium	<0.002
___ Chloride	
✓ Chromium	<0.01
✓ Copper	<0.05
___ Fluoride	
___ Iron	
✓ Lead	0.031
___ Manganese	
✓ Mercury	<0.0005
___ Nitrate	
✓ Selenium	<0.005
✓ Silver	<0.05
___ Sulfates	
___ Zinc	
___ pH	
___ Conductivity	
___ TDS	
___ TOC	

TCLP Compounds

Inorganic Compounds	Results (mg/l)
___ Arsenic	
___ Barium	
___ Cadmium	
___ Chromium	
___ Lead	
___ Mercury	
___ Selenium	
___ Silver	

Organic Compounds	Results (mg/l)
___ benzene	
___ carbon tetrachloride	
___ chlordane	
___ chlorobenzene	
___ chloroform	
___ o-cresol	
___ m-cresol	
___ p-cresol	
___ cresol	
___ 1,4-dichlorobenzene	
___ 1,2-dichloroethane	
___ 1,1-dichloroethylene	
___ 2,4-dinitrotoluene	
___ heptachlor	
___ hexachlorobenzene	
___ hexachlorobutadiene	
___ hexachloroethane	
___ methyl ethyl ketone	
___ nitrobenzene	
___ pentachlorophenol	
___ pyridine	
___ tetrachloroethylene	
___ trichloroethylene	
___ 2,4,5-trichlorophenol	
___ 2,4,6-trichlorophenol	
___ vinyl chloride	
___ endrin	
___ lindane	
___ methoxychlor	
___ toxaphene	
___ 2,4-D	

Date Received Reported by
Date Extracted Date Reported 13 Mar 96

STATE LABORATORY OF PUBLIC HEALTH

P.O. BOX 28047 - 306 N. WILMINGTON, ST., RALEIGH, N.C. 27611

ORGANIC CHEMICAL ANALYSIS

BASE/NEUTRAL AND ACID EXTRACTABLES	LAB NO	960703	960705	960707	960709	960711	960713
	FIELD #	TS-20	TS-23	TS-26	TS-29	TS-32	TS-35
COMPOUND	TYPE	(2)	(3)	(3)	(3)	(3)	(3)
	UNITS	µg/l ~~µg/kg~~	~~µg/l~~ µg/kg	~~µg/l~~ µg/kg	~~µg/l~~ µg/kg	~~µg/l~~ µg/kg	~~µg/l~~ µg/kg
pyrene	10/330	U	U	U	U	U	U
benzidine	50/1650						
butyl benzyl phthalate	10/330						
benz(a)anthracene	↓						
chrysene	↓						
3,3-dichlorobenzidine	50/1650				↓		
bis(2-ethylhexyl)phthalate	10/330				10,133		
di-n-octyl phthalate	10/330				U		
benzo(b)fluoranthene	50/1650						
benzo(k)fluoranthene	↓						
benzo(a)pyrene							
indeno(1,2,3-cd)pyrene							
dibenzo(a,h)anthracene							
benzo(g,h,i)perylene	↓	↓	↓	↓	↓	↓	↓
aniline	50/1650	U	U	U	U	U	U
benzoic acid	↓						
benzyl alcohol							
4-chloroaniline	↓						
dibenzofuran	10/330						
2-methylnaphthalene	↓						
2-methylphenol							
4-methylphenol	↓						
2-nitroaniline	50/1650						
3-nitroaniline	↓						
4-nitroaniline							
2,4,5-trichlorophenol	↓	↓	↓	↓	↓	↓	↓
HYDROCARBONS	+/-	(-)	(-)	(-)	(+)	(-)	(-)

MDL

J - Estimated value. H20/501L

K - Actual value is known to be less than value given.

L - Actual value is known to be greater than value given.

U - Material was analyzed for but not detected. The number is the Minimum Detection Limit. MDL

NA - Not analyzed.

1/ - Tentative identification.

2/ - On NRDC List of Priority Pollutants.

[redacted] of Environment,
Natural Resources
ste Management Division

SAMPLE ANALYSIS REQUES

State [illegible]
P.O. Box 28047, 306 N. Wilmington Street
Raleigh, North Carolina 27611

Site Number TS-003-SL 02/13/96 1130 GRAB

Name of Site Tom Sadler Road Wells, NC J. STANLEY

Collected By SOIL ESD LAB METALS Soil

ID# TS- 9 Time

Agency: ___ Hazardous Waste ___ Solid Waste ___ Superfund

Sample Type

Environmental	Concentrate	Comments
___ Ground water (1)	___ Solid (5)	
___ Surface water (2)	___ Liquid (6)	
___ Soil (3)	___ Sludge (7)	
___ Other (4)	___ Other (8)	

Organic Chemistry

Parameter	Results(mg/l)
___ P&T:GC/MS	
___ Acid:B/N Ext.	
___ MTBE	

Radiochemistry

Parameter	Results (PCi/l)
___ Gross Alpha	
___ Gross Beta	

Microbiology

Parameter	Results (Col/100ml)

Inorganic Chemistry

Parameter	Results ~~(mg/l)~~ (mg/kg)
✓ Arsenic	<2
___ Barium	
✓ Cadmium	120
___ Chloride	
✓ Chromium	<10
✓ Copper	<10
___ Fluoride	
___ Iron	
✓ Lead	20
___ Manganese	
✓ Mercury	<0.09
___ Nitrate	
✓ Selenium	<1
✓ Silver	<10
___ Sulfates	
___ Zinc	
___ pH	
___ Conductivity	
___ TDS	
___ TOC	

TCLP Compounds

Inorganic Compounds	Results(mg/l)
___ Arsenic	
___ Barium	
___ Cadmium	
___ Chromium	
___ Lead	
___ Mercury	
___ Selenium	
___ Silver	

Organic Compounds	Results(mg/l)
___ benzene	
___ carbon tetrachloride	
___ chlordane	
___ chlorobenzene	
___ chloroform	
___ o-cresol	
___ m-cresol	
___ p-cresol	
___ cresol	
___ 1,4-dichlorobenzene	
___ 1,2-dichloroethane	
___ 1,1-dichloroethylene	
___ 2,4-dinitrotoluene	
___ heptachlor	
___ hexachlorobenzene	
___ hexachlorobutadiene	
___ hexachloroethane	
___ methyl ethyl ketone	
___ nitrobenzene	
___ pentachlorophenol	
___ pyridine	
___ tetrachloroethylene	
___ trichloroethylene	
___ 2,4,5-trichlorophenol	
___ 2,4,6-trichlorophenol	
___ vinyl chloride	
___ endrin	
___ lindane	
___ methoxychlor	
___ toxaphene	
___ 2,4-D	
___ 2,4,5-TP (Silvex)	

Date Received Reported by

Date Extracted Date Reported

002265 FEB 1196

Lab Number

[redacted] of Environment,
Natural Resources
Waste Management Division

SAMPLE ANALYSIS REQUEST

State Laboratory of Public Health
P.O. Box 28047, 306 N. Wilmington Street
Raleigh, North Carolina 27611

Site Number _____ Field Sampl TS-004-SL 02/13/96 1200 GRAB
Tom Sadler Road Wells, NC J. STANLEY

Name of Site _____ Site Locati SOIL ESD LAB METALS Soil
TS- 12

Collected By _____ ID# _____ Date Collected _____ Time _____

Agency: ____ Hazardous Waste ____ Solid Waste ____ Superfund

Sample Type

Environmental	Concentrate	Comments
___ Ground water (1)	___ Solid (5)	_____
___ Surface water (2)	___ Liquid (6)	_____
___ Soil (3)	___ Sludge (7)	_____
___ Other (4)	___ Other (8)	_____

Organic Chemistry

Parameter	Results(mg/l)
___ P&T:GC/MS	
___ Acid:B/N Ext.	
___ MTBE	

Radiochemistry

Parameter	Results (PCi/l)
___ Gross Alpha	
___ Gross Beta	

Microbiology

Parameter	Results (Col/100ml)

Inorganic Chemistry

Parameter	Results ~~(mg/l)~~ (mg/kg)
✓ Arsenic	<2
___ Barium	
✓ Cadmium	<10
___ Chloride	
✓ Chromium	19
✓ Copper	46
___ Fluoride	
___ Iron	
✓ Lead	19
___ Manganese	
✓ Mercury	<0.09
___ Nitrate	
✓ Selenium	<1
✓ Silver	<10
___ Sulfates	
___ Zinc	
___ pH	
___ Conductivity	
___ TDS	
___ TOC	

Date Received _____ Reported by _____

Date Extracted _____ Date Reported _____

002266 FEB1196

TCLP Compounds

Inorganic Compounds	Results(mg/l)
___ Arsenic	
___ Barium	
___ Cadmium	
___ Chromium	
___ Lead	
___ Mercury	
___ Selenium	
___ Silver	

Organic Compounds	Results(mg/l)
___ benzene	
___ carbon tetrachloride	
___ chlordane	
___ chlorobenzene	
___ chloroform	
___ o-cresol	
___ m-cresol	
___ p-cresol	
___ cresol	
___ 1,4-dichlorobenzene	
___ 1,2-dichloroethane	
___ 1,1-dichloroethylene	
___ 2,4-dinitrotoluene	
___ heptachlor	
___ hexachlorobenzene	
___ hexachlorobutadiene	
___ hexachloroethane	
___ methyl ethyl ketone	
___ nitrobenzene	
___ pentachlorophenol	
___ pyridine	
___ tetrachloroethylene	
___ trichloroethylene	
___ 2,4,5-trichlorophenol	
___ 2,4,6-trichlorophenol	
___ vinyl chloride	
___ endrin	
___ lindane	
___ methoxychlor	
___ toxaphene	
___ 2,4-D	
___ 2,4,5-TP (Silvex)	

...ient of Environment,
...l Natural Resources
...aste Management Division

SAMPLE ANALYSIS REQUEST

State Laboratory of Public Health
P.O. Box 28047, 306 N. Wilmington Street
Raleigh, North Carolina 27611

Site Number TS-007-SL 02/13/96 1250 GRAB
Tom Sadler Road Wells, NC J. STANLEY

Name of Site SOIL
ESD LAB METALS Soil

Collected By TS- 27 ID# Date Collected Time

Agency: ___Hazardous Waste ___Solid Waste ___Superfund

Sample Type

Environmental	Concentrate	Comments
___ Ground water (1)	___ Solid (5)	
___ Surface water (2)	___ Liquid (6)	
___ Soil (3)	___ Sludge (7)	
___ Other (4)	___ Other (8)	

Organic Chemistry

Parameter	Results(mg/l)
___ P&T:GC/MS	
___ Acid:B/N Ext.	
___ MTBE	

Radiochemistry

Parameter	Results (PCi/l)
___ Gross Alpha	
___ Gross Beta	

Microbiology

Parameter	Results (Col/100ml)

Inorganic Chemistry

Parameter	Results ~~(mg/l)~~ (mg/kg)
✓ Arsenic	4
___ Barium	
✓ Cadmium	<10
___ Chloride	
✓ Chromium	38
✓ Copper	14
___ Fluoride	
___ Iron	
✓ Lead	24
___ Manganese	
✓ Mercury	<0.09
___ Nitrate	
✓ Selenium	<1
✓ Silver	<10
___ Sulfates	
___ Zinc	
___ pH	
___ Conductivity	
___ TDS	
___ TOC	

Date Received Reported by

Date Extracted Date Reported

002269 FEB1196

TCLP Compounds

Inorganic Compounds	Results(mg/l)
___ Arsenic	
___ Barium	
___ Cadmium	
___ Chromium	
___ Lead	
___ Mercury	
___ Selenium	
___ Silver	

Organic Compounds	Results(mg/l)
___ benzene	
___ carbon tetrachloride	
___ chlordane	
___ chlorobenzene	
___ chloroform	
___ o-cresol	
___ m-cresol	
___ p-cresol	
___ cresol	
___ 1,4-dichlorobenzene	
___ 1,2-dichloroethane	
___ 1,1-dichloroethylene	
___ 2,4-dinitrotoluene	
___ heptachlor	
___ hexachlorobenzene	
___ hexachlorobutadiene	
___ hexachloroethane	
___ methyl ethyl ketone	
___ nitrobenzene	
___ pentachlorophenol	
___ pyridine	
___ tetrachloroethylene	
___ trichloroethylene	
___ 2,4,5-trichlorophenol	
___ 2,4,6-trichlorophenol	
___ vinyl chloride	
___ endrin	
___ lindane	
___ methoxychlor	
___ toxaphene	
___ 2,4-D	
___ 2,4,5-TP (Silvex)	

...ment of Environment,
...& Natural Resources
Waste Management Division

SAMPLE ANALYSIS REQUEST

State Laboratory of Public Health
P.O. Box 28047, 306 N. Wilmington Street
Raleigh, North Carolina 27611

Site Number TS-010-SL 02/13/96 1315 GRAB
Tom Sadler Road Wells, NC J. STANLEY
Name of Site SOIL
ESD LAB METALS Soil
Collected By TS- 33 Time

Agency: ___ Hazardous Waste ___ Solid Waste ___ Superfund

Sample Type

Environmental	Concentrate	Comments
___ Ground water (1)	___ Solid (5)	
___ Surface water (2)	___ Liquid (6)	
___ Soil (3)	___ Sludge (7)	
___ Other (4)	___ Other (8)	

Organic Chemistry

Parameter	Results (mg/l)
___ P&T:GC/MS	
___ Acid:B/N Ext.	
___ MTBE	

Radiochemistry

Parameter	Results (PCi/l)
___ Gross Alpha	
___ Gross Beta	

Microbiology

Parameter	Results (Col/100ml)

Inorganic Chemistry

Parameter	Results ~~(mg/l)~~ (mg/kg)
✓ Arsenic	2
___ Barium	
✓ Cadmium	<10
___ Chloride	
✓ Chromium	26
✓ Copper	24
___ Fluoride	
___ Iron	
✓ Lead	28
___ Manganese	
✓ Mercury	<0.09
___ Nitrate	
✓ Selenium	<1
✓ Silver	<10
___ Sulfates	
___ Zinc	
___ pH	
___ Conductivity	
___ TDS	
___ TOC	

Date Received ___ Reported by ___

Date Extracted ___ Date Reported FEB 1 96

TCLP Compounds

Inorganic Compounds	Results (mg/l)
___ Arsenic	
___ Barium	
___ Cadmium	
___ Chromium	
___ Lead	
___ Mercury	
___ Selenium	
___ Silver	

Organic Compounds	Results (mg/l)
___ benzene	
___ carbon tetrachloride	
___ chlordane	
___ chlorobenzene	
___ chloroform	
___ o-cresol	
___ m-cresol	
___ p-cresol	
___ cresol	
___ 1,4-dichlorobenzene	
___ 1,2-dichloroethane	
___ 1,1-dichloroethylene	
___ 2,4-dinitrotoluene	
___ heptachlor	
___ hexachlorobenzene	
___ hexachlorobutadiene	
___ hexachloroethane	
___ methyl ethyl ketone	
___ nitrobenzene	
___ pentachlorophenol	
___ pyridine	
___ tetrachloroethylene	
___ trichloroethylene	
___ 2,4,5-trichlorophenol	
___ 2,4,6-trichlorophenol	
___ vinyl chloride	
___ endrin	
___ lindane	
___ methoxychlor	
___ toxaphene	
___ 2,4-D	
___ 2,4,5-TP Silvex	

Department of Environment, & Natural Resources
Waste Management Division

SAMPLE ANALYSIS REQUEST

State Laboratory of Public Health
P.O. Box 28047, 306 N. Wilmington Street
Raleigh, North Carolina 27611

Site Number TS-011-SL 02/13/96 1340 GRAB
Tom Sadler Road Wells, NC J. STANLEY

Name of Site SOIL
ESD LAB METALS Soil

Collected By TS- 36 Time

Agency: ___ Hazardous Waste ___ Solid Waste ___ Superfund

Sample Type

Environmental	Concentrate	Comments
___ Ground water (1)	___ Solid (5)	
___ Surface water (2)	___ Liquid (6)	
___ Soil (3)	___ Sludge (7)	
___ Other (4)	___ Other (8)	

Organic Chemistry

Parameter	Results(mg/l)
___ P&T:GC/MS	
___ Acid:B/N Ext.	
___ MTBE	

Radiochemistry

Parameter	Results (PCi/l)
___ Gross Alpha	
___ Gross Beta	

Microbiology

Parameter	Results (Col/100ml)

Inorganic Chemistry

Parameter	Results ~~(mg/l)~~ (mg/kg)
✓ Arsenic	2
___ Barium	
✓ Cadmium	<10
___ Chloride	
✓ Chromium	14
✓ Copper	18
___ Fluoride	
___ Iron	
✓ Lead	<20
___ Manganese	
✓ Mercury	<0.09
___ Nitrate	
✓ Selenium	<1
✓ Silver	<10
___ Sulfates	
___ Zinc	
___ pH	
___ Conductivity	
___ TDS	
___ TOC	

Date Received ___ Reported by ___

Date Extracted ___ Date Reported FEB 1 '96

TCLP Compounds

Inorganic Compounds	Results(mg/l)
___ Arsenic	
___ Barium	
___ Cadmium	
___ Chromium	
___ Lead	
___ Mercury	
___ Selenium	
___ Silver	

Organic Compounds	Results(mg/l)
___ benzene	
___ carbon tetrachloride	
___ chlordane	
___ chlorobenzene	
___ chloroform	
___ o-cresol	
___ m-cresol	
___ p-cresol	
___ cresol	
___ 1,4-dichlorobenzene	
___ 1,2-dichloroethane	
___ 1,1-dichloroethylene	
___ 2,4-dinitrotoluene	
___ heptachlor	
___ hexachlorobenzene	
___ hexachlorobutadiene	
___ hexachloroethane	
___ methyl ethyl ketone	
___ nitrobenzene	
___ pentachlorophenol	
___ pyridine	
___ tetrachloroethylene	
___ trichloroethylene	
___ 2,4,5-trichlorophenol	
___ 2,4,6-trichlorophenol	
___ vinyl chloride	
___ endrin	
___ lindane	
___ methoxychlor	
___ toxaphene	
___ 2,4-D	
___ 2,4,5-TP Silvex	