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International Specialists in the Environment

MEMORANDUM

DATE: Jaunary 16, 1990

TO: John Osborn, FIT-RPO, USEPA, Region 10

THRU: Jeffrey Villnow, FITOM, E & E, Seattle

FROM: Charles F. Pitz, FIT-PM, E & E, Seattle

SUBJ: Site Inspection Recommendations
Nu-Way Cleaners
Yakima, Washington

REF: TDD F10-8806-03
PAN FWA0584SA

CC: William Glasser, HWD-SM, USEPA, Region 10

On the basis of the information presented in the Nu-Way Screening Site Inspection report and the Yakima Soil Gas Study Final Report (TDD F10-8806-01 through F10-8806-07), it is E & E's judgement that a Listing Site Inspection (LSI) is justified. Additional work at this site is required to properly characterize the impact of site operations on the local population and environment. The following recommendations should be considered:

- Immediately discontinue the use of the on-site sump for the disposal of wastes. All drains leading to the sump should be dismantled.

- Collect soil samples from the soils surrounding and below the sump to determine if the hazardous constituents identified in the sump have been released to the subsurface. This additional sampling may require the removal of some or all of the concrete flooring surrounding the sump.

- If a release of hazardous constituents is confirmed at the site, then the extent of contamination should be determined, and the affected soils removed or remediated.

- Considering the existing analytical evidence of the wide-spread occurrence of tetrachloroethene in the unconfined aquifer in Yakima and the sampling results of this study and the Yakima Soil Gas Study, it is recommended that groundwater samples be collected from the unconfined aquifer in the vicinity of the Nu-Way site. Such sampling would probably require the installation of monitoring wells both up- and downgradient of the facility.

CFP:gam

Enclosures

SITE INSPECTION REPORT
NU-WAY CLEANERS
YAKIMA, WASHINGTON
TDD F10-8806-03
PAN FWA0584SA

Site Name/Address

Nu-Way Cleaners
801 S. 3rd Street
Yakima, Washington 98901

Site Inspection Participants

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Principal Site Contacts

Wallace Munly, Owner, Nu-Way Cleaners, Yakima, Washington, 509/452-0621

Trula Munly, Employee, Nu-Way Cleaners, Yakima, Washington, 509/452-0621

Date(s) of Investigation

Site Reconnaissance: February 27, 1989
Sampling: March 29, 1989

DISCLAIMER

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABSTRACT

Pursuant to United States Environmental Protection Agency (EPA) Contract Number 68-01-7347 and Technical Directive Document (TDD) Number F10-8806-03, a file review and Screening Site Inspection of the Nu-Way Cleaners Site, located in Yakima, Washington, was conducted between March and December 1989. As a part of this inspection, one sump sediment sample and one background soil sample were collected to evaluate the site's potential for inclusion on the National Priorities List (NPL). The samples were analyzed for volatile and semivolatile organic compounds through the EPA's Contract Laboratory Program (CLP).

More than 30 volatile and semivolatile organic compounds were identified in the sediment from the Nu-Way sump, in some cases at concentrations of more than one million times background. Only two of these compounds also were identified in the background soil sample, at significantly lower concentrations. More than 20 different semivolatile compounds were identified in the background soil sample, but the concentrations were typically much lower on the average then those detected in the sump sample. The absence of the compounds identified in the background soil from the analytical report for the sump sample may be the result of the elevated detection limits required for the sump sample.

Evidence collected during the Nu-Way SSI strongly suggests that the on-site sump is open to the subsurface beneath the facility. Considering the shallow depth to groundwater in the area, and the coarse grained character of the sediments beneath the site, it is very likely that some or all of the hazardous constituents known to have been discharged to the sump have reached the shallow aquifer.

1.0 INTRODUCTION

Pursuant to United States Environmental Protection Agency (EPA) Contract No. 68-01-7347 and Technical Directive Document (TDD) No. F10-8806-03, Ecology and Environment, Inc. (E & E) conducted a Screening Site Inspection (SSI) of the Nu-Way Cleaners (Nu-Way) Site located in Yakima, Washington. The EPA Site Inspection process is intended to evaluate actual or potential environmental or public health hazards at a particular site relative to other sites across the nation for the purpose of identifying remedial action priorities. The Screening Site Inspection represents the initial phase of the SI process and is intended to collect sufficient data to enable evaluation of the site's potential for inclusion on the National Priorities List (NPL) and, for those sites determined to be NPL candidates, establish priorities for additional action. The SI process does not include extensive or complete site characterization, contaminant fate determination, or quantitative risk assessment.

This document presents a summary of the objectives, activities, and results of the Nu-Way Cleaners SSI. Included are descriptions of site background information (Section 2.0), sampling objectives and scope (Sections 3.0 and 4.0), analytical results of sampling (Section 5.0), and inspection conclusions (Section 6.0).

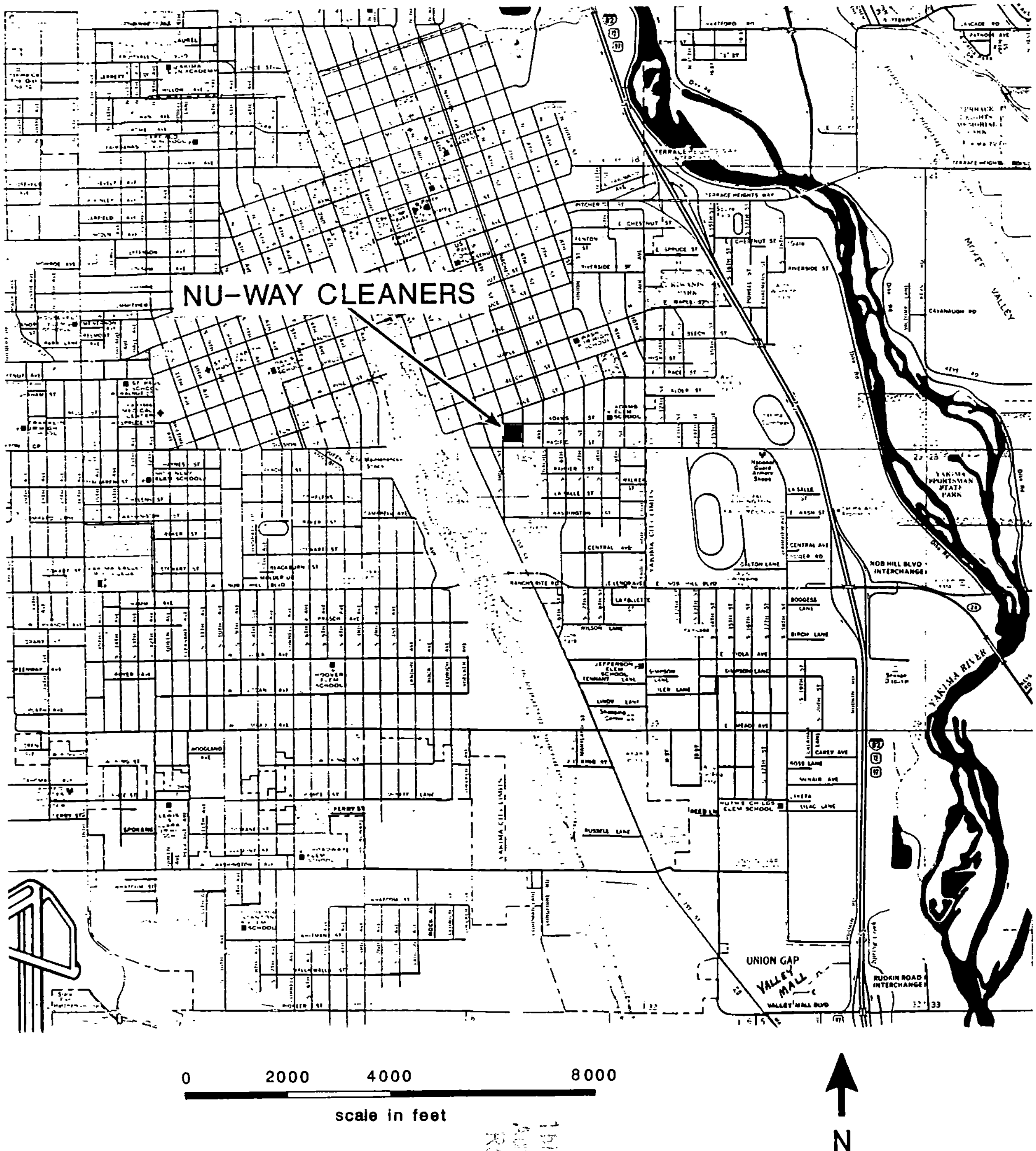
2.0 BACKGROUND

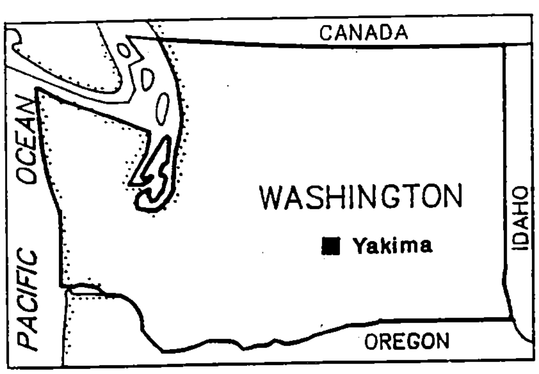
2.1 Site Location and Description

The Nu-Way site is located at 801 South 3rd Street, Yakima, Washington, in section 19 of Township 13 North, Range 19 East (Figure 1) (USGS 1985). The site is located in a neighborhood of mixed commercial and residential development, near the southern edge of downtown Yakima.

The Nu-Way facility consists of one building approximately 30 feet by 50 feet in size, bordered on the north and west by paved parking areas, on the south by a empty lot, and on the east by a church (Figure 2) (E & E 1989a). A small city park, known as South 2nd Street Park, lies diagonal to the site to the northwest, and an auto repair shop is located across the street to the north. A private residence lies immediately south of the empty lot. The Nu-Way facility and surrounding neighborhood are served by city water and sewer systems. Surface runoff from the site vicinity drains to the city storm sewer system (City of Yakima 1989). There are six schools and a state fairground within a 1-mile radius of the site.

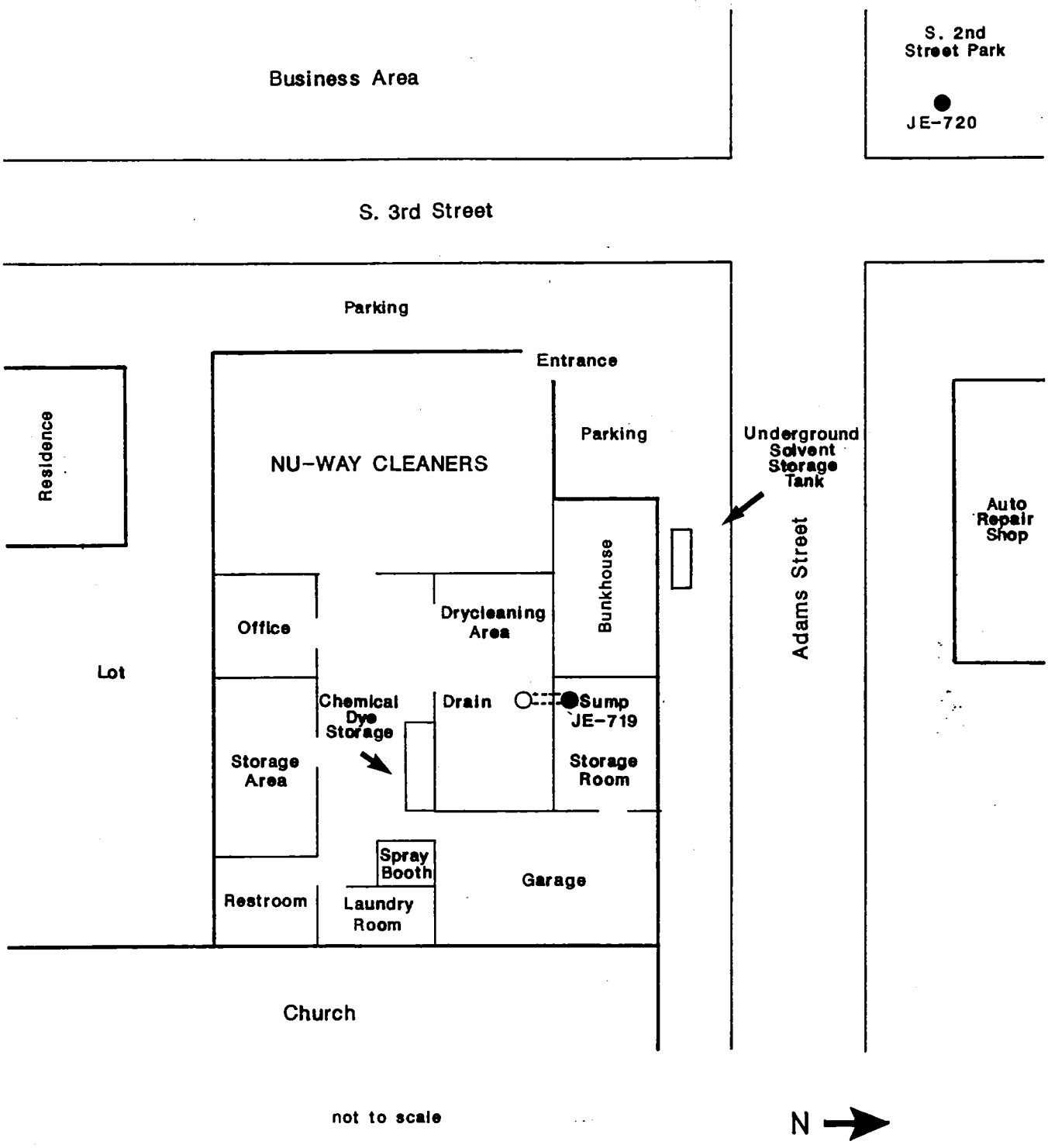
The site has been the location of three separate drycleaning businesses since the 1950s. From the 1950s to 1971, the site was owned and operated by two different parties, Mr. Don Dunn and Mr. Johnny Duncan, for unknown periods of time. Since 1971, the site has been owned and operated as a drycleaning business by Mr. Wallace Munly. The history of the site prior to the 1950s is unknown.





ecology & environment, inc.	
Job: F10-8806-03	Waste Site: WA 0584
Drawn by: B.T.	Date: March 14, 1989

FIGURE
LOCATION MAP
NU-WAY CLEANERS
Yakima, WA.



LEGEND

JE-720 Sample Location

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Job: F10-8806-03	Waste Site: WA 0584
Drawn by: B.T.	Date: March 14, 1989

FIGURE 2
SITE MAP WITH SOIL SAMPLE LOCATIONS
NU-WAY CLEANERS
Yakima, WA

The Nu-Way facility houses office and storage areas, a drycleaning room, a chemical dye storage area, a spray booth, a bunkhouse, a laundry room, and a garage (E & E 1989a) (Figure 2). A large drycleaning machine is located in the western half of the drycleaning room. At the time of the site inspection, the drycleaning machine was noted to be leaking in several places, and the concrete floor beneath and around the system was stained. A floor drain in this room reportedly is connected to a sump in the adjacent storage shed. This sump is constructed of an open 55-gallon steel drum buried in the ground so that the top rim is flush with the concrete storage shed floor. This sump is reportedly a minimum of 20 years old, and showed significant evidence of deterioration. Mr. Munly stated that he periodically cleans the sludge out of the sump, and that he has observed gravel at the base of the drum while doing so. At the time of the inspection, the drum was half full of a linty sludge, with approximately 1 inch of free standing liquid at the top. On the basis of information collected during the site inspection, it is considered highly likely that the sump is open to the subsurface soils.

A 750-gallon underground storage tank located on the north side of the building is used to store drycleaning solvents for the operation. The condition and age of this tank is unknown currently. Adjacent to the drycleaning area is a work room where a variety of chemical leather dyes are stored adjacent to a spray booth. Miscellaneous containers of paint, solvents, and petroleum products also were observed in the garage, which is used for personal auto repairs by Mr. Munly (E & E 1989a).

2.2 Site Operations and Waste Characteristics

The solvent usage and waste disposal practices used at the Nu-Way site between the 1950s and 1971 are unknown. The information contained in this section address the activities of the current business only. A summary of the waste-related activities on-site is presented in Table 1.

The Nu-Way business primarily operates as a clothing drycleaning service, with laundering, pressing, and leather dying services also available. All drycleaning takes place in the main drycleaning machine in the back portion of the shop. The machine utilizes Stoddard solvents to clean soiled clothing. Mr. Munly stated that approximately 1,000 gallons of solvent are used every year in this operation. Stoddard solvents normally contain 85 percent nonane and 15 percent trimethyl benzene (Sax 1986). According to Mr. Munly, the floor surrounding the drycleaning machine is hosed down with water approximately once a week for cleaning purposes. This washwater, and any solvents on the floor, drain into the sump located in the adjacent storage area. Mr. Munly stated that the waste liquid is allowed to "evaporate" from the drum. The volume and concentration of waste solvents that may have entered the sump in this way are unknown.

All of the Stoddard solvent used in the drycleaning machine reportedly is recycled through filters to remove impurities, and is reused in future cycles. Mr. Munly claimed that the 1,000 gallons of solvent used each year are lost through volatilization, or absorption onto

Table 1

WASTE-RELATED ACTIVITIES ON SITE

Activity/Process	Dates	Waste(s) Reportedly Produced	Reported Storage/ Disposal Method(s)	Containment Features	Hazardous Constituents[1]
Drycleaning Operations	~1950s - 1971	Unknown	Unknown	Unknown	Unknown
Drycleaning Operations	1971 - present	Stoddard solvent, petroleum hydrocarbons	55-gallon drum buried in ground via underground drain	55- gallon buried drum	Nonane, trimethylbenzene, petroleum hydrocarbons (A)
		Filter Sludges	Landfill	Dumpster	Solvents (A)
Leather Dying Operation		Unknown	Unknown	Unknown	Unknown - chemical dyes (A)
Auto Maintenance and Repair	1971 - present	Unknown	Unknown	Unknown	Unknown - petroleum products, solvents, paints (A)

References:

(A) denotes the presence of constituent is alleged.

clothing, with minimal loss through spillage or filtration. The filters are reportedly composed of diatomaceous earth and carbon. Approximately two 5-gallon buckets of sludge from the filters are generated each week at Nu-Way, containing lint, dirt, carbon and diatomaceous earth, and probably a small percentage of waste Stoddard solvents. This sludge material is disposed of in a dumpster for eventual burial in a local landfill.

A wide variety of chemical dyes presently are stored at the Nu-Way facility. These dyes reportedly are used in a leather dying business Mr. Munly operates on a periodic basis. Leather apparel are dyed in the spray booth adjacent to storage area. Little is known regarding any wastes that are produced during this operation or any disposal practices that may be associated with this activity.

The garage located in the rear portion of the Nu-Way building currently is used for Mr. Munly's private auto maintenance and repair. It is possible that waste solvents, paints, and petroleum products are generated in this shop, but the potential volume and disposal practices associated with any such waste are unknown.

2.3 Potential Contaminant Transport Pathways/Receptors

2.3.1 Surface Water

The Nu-Way facility lies approximately 1.3 miles west of the Yakima River (USGS 1985). The most probable overland route of surface water runoff from the site to the Yakima River is greater than 2 miles, with the intervening terrain sloping an average of 2 to 3 percent to the east and southeast. However, the likelihood of surface runoff traveling from the site to the Yakima River is thought to be very small, due to the presence of the city storm sewer system, the high permeability of the regional surface soils, and the relatively arid climate of the region. The storm sewer system in the Nu-Way area is comprised of a series of shallow dry wells that collect and drain runoff to the shallow subsurface, and ultimately, to the shallow aquifer (City of Yakima 1989). There is no recorded use of the water from the Yakima River for drinking or irrigation within 15 miles downstream of the most probable point of entry (E & E 1989a).

2.3.2 Groundwater

The shallow, unconfined aquifer beneath the Nu-Way facility is encountered within 20 feet of the ground surface (Ecology Well Logs). This aquifer is the uppermost of a three-aquifer system reported in the Yakima area (USACE 1978). It is composed of unconsolidated alluvial sand, gravel, and cobble layers thought to be hydraulically unconnected to the next deepest aquifer. Groundwater in the shallow aquifer flows generally to the southeast, with flow velocities reported between 0.4 and 40 feet per day (Foxworthy 1962). Groundwater from the shallow aquifer commonly is used for drinking water supplies in the Yakima area,

with an estimated user population of greater than 10,000 people within a 4-mile radius of the site (Ecology Well Logs; DSHS 1989). The nearest downgradient drinking water well completed in the shallow aquifer is located within 0.5 mile of the Nu-Way facility.

2.3.3 Air

The Yakima area is characterized by a temperate to mildly arid climate, with cold winters and warm summers (Ecology 1985). The average annual precipitation for the area is approximately 8 inches and the average annual lake evaporation is approximately 34 inches, resulting in a net annual precipitation of approximately -26 inches. The average daily temperature for Yakima is 0°C during winter months and 20°C during the summer (USDA 1985). The prevailing wind direction in the Yakima area is from the west-northwest, with an average windspeed of approximately 7 miles per hour.

The estimated population within a 4-mile radius of the Nu-Way facility is greater than 60,000 people.

2.4 Investigative/Regulatory History

No past investigations by any state or federal environmental regulatory agency have taken place at the Nu-Way site.

3.0 PROJECT DESCRIPTION

3.1 Sampling Objectives and Scope

As mentioned in Section 1.0, a Screening Site Inspection is primarily intended to gather sufficient data to enable evaluation of a site's potential for inclusion on the NPL. Accordingly, the following sampling objective was defined for the Nu-Way Cleaners SSI (E & E 1989b):

- Determine if past waste disposal practices at the Nu-Way facility have contaminated the site's subsurface soils.

In order to accomplish this objective, a proposal was made to collect a borehole sample immediately adjacent to the sump. However, at the time of sampling it was determined that the concrete flooring around the sump prohibited boring. Therefore, as the best field alternative to accomplish the original objective, the following general field activities were conducted:

- A sample was collected from the sludges present in the on-site sump;
- A soil sample was collected off site to assist in establishing background conditions; and
- Samples were submitted to a CLP laboratory for analysis of volatile and semivolatile organic compounds.

In partial support of the sampling that was conducted during the Nu-Way investigation, a soil gas sampling project was conducted in the Yakima area during the summer of 1989. A discussion of the results of that sampling, and the significance of that study to the Nu-Way investigation, can be found in the Yakima Soil Gas Study Final Report (E & E 1989c).

3.2 Data Types, Uses, and Quality Requirements

The data types collected, their uses, and associated analytical quality requirements necessary to satisfy the sampling objectives are summarized in Table 2. Specific methods by which the necessary data were collected are described below.

4.0 SAMPLING PROGRAM

4.1 Sample Types, Numbers, Locations, and Rationale

Sample types, numbers, locations, and rationale are summarized in Table 3. Due to the presence of a concrete foundation, a borehole soil sample adjacent to the sump was not collected as proposed in the Field Operations Work Plan (E & E 1989b). As an alternative, a sample of the sludge present inside of the sump was collected and submitted for analysis (JE-719). In addition, a soil sample (JE-720) was collected from the park northwest of the Nu-Way site in order to assist in establishing background conditions. This sample was a composite of the soil from 0 to 6 inches bgs. The approximate sample locations are identified in Figure 2.

4.2 Sampling Methods

The inability to collect a borehole sample at the Nu-Way site required an alternative sampling approach in the field. Samplers choose to collect a sample of the sludge present in the sump using a stainless steel scoop attached to a pole. The sample was transferred directly from the scoop to the appropriate sampling containers with a minimum of disturbance. The background soil sample from the park was collected from an interval between 0 and 6 inches bgs using a stainless steel spoon. The soil collected was transferred directly to the appropriate sampling container with a minimum of disturbance.

4.3 Sample Analytical and Handling Requirements

Sample analytical requirements for the Nu-Way Cleaners SSI are summarized in Table 4. Included are descriptions of requested analytes, the analytical program(s) used, sample-preservation techniques, and maximum sample holding times. Analytical methods and bottle requirements for samples collected during this investigation are described in the Field Operations Work Plan (E & E 1989b). A complete list of CLP volatile and semivolatile compounds analyzed for is presented in Appendix A.

TABLE 2

DATA TYPES, USES, AND QUALITY REQUIREMENTS

Objective Number[1]	Data Types	Prioritized Data Uses	Contaminants of Concern	Levels of Concern[2]	Analytical Program Required[3]
1	Chemical characteristics of soil	o HRS score evaluation o Site characterization	Volatile organics, semivolatile organics	ppb	CLP

1. See Section 3.1.

2. Levels of concern reflect anticipated environmental conditions and subsequent analytical detection limits.

3. Analytical program(s) are specified in accordance with anticipated data uses and levels of concern. Data quality objectives for analytical programs [i.e., CLP, EPA Region Laboratory, and E & E's mobile or base support field screening laboratories (FASP)] are described in "A Compendium of Superfund Field Operations Methods" (EPA 1987a).

Table 3

SAMPLE TYPES, NUMBERS, LOCATIONS, AND RATIONALE

Sample Matrix	Number of Samples Collected	Sample Type(s)	Sample Location(s)	Rationale
Sediment	1	Grab	Sludge in on-site sump	o Determine is sump sludge contains hazardous constituents
Soil	1	Grab	Off site (0-6")	o Establish background conditions for surface soil
TOTAL	2			

Table 4

SAMPLE ANALYTICAL REQUIREMENTS

Sample Matrix	Number of Samples Collected	Sample Location(s)	Analytical Requirements[1]	Analytical Program[2]	Preservation Technique	Maximum Holding Time
Soil/Sediment	2	Off site / On site	VOCs	CLP RAS	Ice	7 days
			BNAs	CLP RAS	Ice	7 days

1. VOC - EPA TCL Volatile Organic Compounds (see Appendix A)
   BNA - EPA TCL Base/Neutral/Acid extractable compounds (see Appendix A)

2. CLP RAS - Contract Laboratory Programs Routine Analytical Services

Due to the potential evidentiary nature of the data collected, all samples intended for analysis through the CLP or EPA Region 10 Laboratory were handled and documented in accordance with procedures specified in EPA's User's Guide to the Contract Laboratory Program (EPA 1986), CLP Statements of Work (EPA 1987b, EPA 1987c), and National Enforcement Investigations Center Policies and Procedures (EPA 1985). Sample packaging conformed with applicable Department of Transportation Regulations (49 CFR 171-177) and/or International Air Transport Association guidelines (IATA 1987). Organic samples were shipped for analysis within 24 hours of collection and inorganic samples were shipped within 5 working days of collection. Shipment was via an overnight delivery service.

Sample documentation information for the project is summarized in Appendix B. Included in Appendix B are project numbers, account numbers, sample names, laboratory numbers, and chain-of-custody numbers.

4.4 Equipment Decontamination

To the greatest extent possible, disposable and/or dedicated personal protection and sampling equipment was utilized to avoid cross-contamination. Equipment decontamination, when necessary, was performed in accordance with procedures outlined in the project work plan (E & E 1989b).

Following completion of the field work, all equipment (including support vehicles) was cleaned using pressurized steam and/or a hot water wash with nonphosphate detergent. Sampling equipment was then rinsed with potable water, sealed in plastic bags, and transferred to the E & E base support facility for full decontamination prior to reuse.

5.0 SAMPLE RESULTS AND DISCUSSION

The following paragraphs present analytical data developed during this study. A complete record of sample documentation information is presented in Appendix B. The data quality assurance review memoranda for the samples analyzed, with a complete listing of the analytical results, is presented in Appendix C. A summary of the inspection is presented in Appendix D on EPA Form 2070-13.

Within this report, various units of concentration are presented. Data are presented as received from the analytical laboratory after validation for analytical acceptability; or in certain cases, excerpted from reports without alteration. The following list is presented as an aid to interpretation of the analytical data.

- mg/kg (milligrams per kilogram) or ppm (parts per million)
- µg/kg (micrograms per kilogram) or ppb (parts per billion)
- mg/L (milligrams per liter) or ppm (parts per million)
- µg/L (micrograms per liter) or ppb (parts per billion)

During the data evaluation process, the conditions used to define an observed release (or elevated concentration) of a particular substance to (or in) any of the matrices samples are summarized below.

If Background Concentration is:	Observed Release (Elevated Concentration) Occurs if Detected Concentration is:
Not detected.	Greater than or equal to 3 times the detection limit.
Greater than or equal to the detection limit, but less than 2 times the detection limit.	Greater than or equal to 3 times the applicable background concentration to greater than or equal to 4 times the detection limit, whichever is less.
Greater than or equal to 2 times the detection limit.	Greater than or equal to 2 times the applicable background concentration.

Tables presented in the following subsections list all substances identified in one or more samples at concentrations above the CRQL (Appendix B). Only those substances determined to be present at elevated concentrations are discussed in the narrative. Concentrations with the "J" qualifier, although estimated, were still used in the evaluation process for defining an elevated concentration as described above. Values with a "J" qualifier only affect the concentration reported, the identity of the element or organic compound has been confirmed. Concentrations reported with "J" qualifiers are reasonable approximations of the actual concentrations present. Unacceptable data have been rejected during data validation and are not used in the interpretation of site conditions. Data qualifiers are discussed in detail in Appendix C.

It should be noted that the sump sample (JE719) was classified by the CLP laboratory as a medium level sample, resulting in an increase in the average analyte detection limit. The higher detection limits may result in certain analytes being reported as absent from a sample, when in actuality they still may be present at levels of concern. All concentrations discussed in this section are estimated values.

5.1 Volatile Organic Compounds

The analytical results for volatile organic compounds in samples JE-719 (sump) and JE-720 (background soil) are summarized in Table 5. No VOCs were detected in the background sample. Elevated concentrations of five VOC analytes were reported in the sump sample, including acetone, tetrachloroethene, toluene, ethylbenzene, and total xylenes. The average VOC concentration detected in the sump sample is 67,900 µg/kg, with total xylenes representing the highest concentration at 250,000 µg/kg. The minimum detection limit for an analyte for this sample was 4,300 µg/kg.

Table 5

SUMMARY OF ANALYTICAL RESULTS FOR
VOLATILE ORGANIC COMPOUNDS
IN SEDIMENT AND SOIL SAMPLES
NU-WAY CLEANERS
YAKIMA, WASHINGTON
March 1989
(µg/kg)

Compound	JE-719 Sump Sample	JE-720 Background Sample
Acetone	37,000 J	13 U
Tetrachloroethene	35,000 J	6 U
Toluene	6,300 J	6 U
Ethylbenzene	11,000 J	6 U
Total Xylenes	250,000 J	6 U

U - The material was analyzed for, but was not detected. The associated numerical value is a contractual quantitation limit, adjusted for sample weight/sample volume, extraction volume, percent solids and sample dilution.

J - The associated numerical value is an estimated quantity because quality control criteria were not met or concentrations reported were less than the CRQL.

5.2 Semivolatile Organic Compounds

The analytical results for semivolatile organic compounds in samples JE-719 (sump) and JE-720 (background soil) are summarized in Table 6. Seven semivolatile compounds were identified in the background soil sample. Concentrations for this sample range between 85 µg/kg (naphthalene) and 240 µg/kg (fluoranthene). Five of the semivolatiles detected in the background sample were not reported in the sump sample. However, the minimum detection limit for semivolatile compounds in the sump sample was 34,000 µg/kg. The remaining two semivolatile compounds detected in the background sample also were detected in the sump sample at concentrations more than 100,000 times greater. In total, seven semivolatiles were reported in the sump sample at elevated concentrations, with concentrations ranging between 3,900 and 1,300,000 µg/kg (diethylphthalate and bis(2-ethylhexyl)phthalate, respectively). The average concentration of semivolatiles detected in the sump sample is 497,000 µg/kg. Five of the compounds are from the phthalate group; the remaining two are naphthalenes.

Table 6

SUMMARY OF ANALYTICAL RESULTS FOR
SEMIVOLATILE ORGANIC COMPOUNDS
IN SEDIMENT AND SOIL SAMPLES
NU-WAY CLEANERS
YAKIMA, WASHINGTON
March 1989
(µg/kg)

Compound	JE-719 Sump Sample	JE-720 Background Soil
Naphthalene	500,000 J	85 J
2-Methylnaphthalene	430,000 J	98 J
Diethylphthalate	3,900 J	860 U
Phenanthrene	34,000 UJ	220 J
Di-n-Butylphthalate	51,000 J	860 U
Fluoranthene	34,000 UJ	240 J
Pyrene	34,000 UJ	230 J
Butylbenzylphthalate	1,100,000 J	860 U
Benzo(a)Anthracene	34,000 UJ	140 J
Chrysene	34,000 UJ	180 J
bis(2-Ethylhexyl)Phthalate	1,300,000 J	220 UJ
Di-n-Octylphthalate	91,000 J	860 U

U - The material was analyzed for, but was not detected. The associated numerical value is a contractual quantitation limit, adjusted for sample weight/sample volume, extraction volume, percent solids and sample dilution.

J - The associated numerical value is an estimated quantity because quality control criteria were not met or concentrations reported were less than the CRQL.

5.3 Tentatively Identified Semivolatile Organic Compounds

The analytical results for tentatively identified semivolatile organic compounds for samples JE-719 (sump) and JE-720 (background soil) are summarized in Table 7. Eighteen TICs were reported for the background sample at elevated concentrations, ranging in concentration between 200 and 17,000 µg/kg. Twelve of the eighteen TICs detected are alkanes, including the TIC with the highest concentration, with an average concentration of 3,300 µg/kg.

Twenty-eight TICs were reported for the sump sample at elevated concentrations. None of the TICs detected in the sump sample were reported in the background sample. The concentrations of TICs in the sump sample range between 14,000 µg/kg (cyclic hydrocarbon) and 7,200,000 µg/kg (decane), with an average concentration of 1,465,000 µg/kg.

Table 7

SUMMARY OF ANALYTICAL RESULTS FOR
TENTATIVELY IDENTIFIED COMPOUNDS
IN SEDIMENT AND SOIL SAMPLES
NU-WAY CLEANERS
YAKIMA, WASHINGTON
March 1989
(µg/kg)

Compound	Retention Time	JE-719 Sump Sample	JE-720 Background Soil
C3 Alkylbenzene	10.32	3,000,000 J	
Decane	11.14	7,200,000 J	
C11 Branched Alkane	11.67	5,400,000 J	
C11 Branched Alkane	11.90	2,500,000 J	
Unknown Aromatic	12.39	4,500,000 J	
C12 Alkane & C4 Benzene	13.59	2,100,000 J	
Unsaturated Cyclic	13.80	1,300,000 J	
C12 Alkane	14.07	5,800,000 J	
Unknown Aromatic	14.14	890,000 J	
C4 Alkylbenzene	14.19	1,600,000 J	
C12 Branched Alkane	14.25	630,000 J	
Unknown Aromatic Acid	14.34	660,000 J	
C13 Alkane	14.95	930,000 J	
C5 Alkylbenzene	15.17	700,000 J	
Alkylsubstituted Aromatic	15.64	270,000 J	
C14 Branched Alkane	15.79	530,000 J	
Tridecane	16.19	730,000 J	
1-Methylnaphthalene	16.67	340,000 J	
C14 Alkane	18.49		430 J
C15 Alkane	21.59		200 J
C9 Cyclic Hydrocarbon	22.25	29,000 J	
C9 Cyclic Hydrocarbon	23.35	290,000 J	
Methylethyl Cyclohexane	24.30	81,000 J	
Unknown Organic Acid	24.54		450 J
Unknown Long-Chain	24.84		650 J
C10 Oxycyclophydrocarbon	24.90	28,000 J	
C11 Tricycloparaffin	25.86	66,000 J	
C20 Alkane	25.86		570 J
C20 Alkane	26.84		580 J
C10 Cyclic Hydrocarbon	27.46	14,000 J	
C4 Alkylphenanthrene	27.59		690 J
C23 Alkane	27.77		1,000 J
C10 Unsaturated Hydrocarbon	28.01	650,000 J	
C10 Unsaturated Hydrocarbon	28.51	140,000 J	
C23 Alkane	28.69		1,100 J
C24 Alkane	29.57		2,700 J
Pentacosane	29.61	330,000 J	

Table 7 (Cont.)

Compound	Retention Time	JE-719 Sump Sample	JE-720 Background Soil
C24 Alkane	30.49		1,100 J
C24 Unknown Alkane	31.32		560 J
C28 Alkane	31.57		5,200 J
Heptacosane	31.61	320,000 J	
C28 Alkane	32.84		1,700 J
Unknown Aldehyde	33.42		1,800 J
C30 Alkane	34.46		17,000 J
Unknown	37.34		1,600 J
C30 Alkane	38.91		8,000 J

J - The associated numerical value is an estimated quantity because quality control criteria were not met or concentrations reported were less than the CRQL.

6.0 SUMMARY AND CONCLUSIONS

6.1 Summary

The Nu-Way Cleaners site is located near the downtown district of Yakima, Washington, in a mixed neighborhood of commercial and residential development. The site has been home to three separate drycleaning businesses since the 1950s. No environmental investigations have been conducted at the site in the past. The current business, Nu-Way Cleaners, has occupied the site since 1971. The Nu-Way business provides a drycleaning and laundry service, in addition to a small leather-dying operation. A garage located in the back of the facility is used for the maintenance and repair of personal automobiles by the Nu-Way owner.

The Nu-Way drycleaning operation utilizes approximately 1,000 gallons of Stoddard solvents each year. A large majority of that volume reportedly is lost to evaporation. However, an unknown volume of solvents spilled to the facility floor is drained to a sump located in a shed adjacent to the facility building. This sump, constructed of a 55-gallon steel drum buried to floor level, is probably open to the subsurface soils. Sludges collected in the drycleaning machine filters are disposed of on a weekly basis to the local landfill. These sludges may contain a small volume of Stoddard solvents. Little information is known regarding the wastes generated during leather dying or auto maintenance operations, or any disposal practices associated with these activities.

Two samples were collected during the Nu-Way SSI. A sediment sample was collected from the sludges in the sump, and a background soil sample was collected from South 2nd Street Park, northwest of the Nu-Way

facility. Both samples were analyzed for volatile and semivolatile organic compounds through a CLP laboratory. No VOCs were identified in the background sample but several volatile hydrocarbons and organic solvents were identified in the sump sample at concentrations as great as 100,000 times background. A variety of semivolatile compounds were identified in the background sample. The majority of these compounds were not detected in the sump sample, but their absence in the analytical report may be the result of the elevated detection limits required for that sample. A number of semivolatile compounds not reported in the background sample were reported for the sump sample at concentrations as great as 1,000,000 times background. Twenty-eight semivolatile TICs also were reported for the sump sample, at concentrations averaging more than 1,460,000 µg/kg. None of these compounds were detected in the background sample. More than a dozen semivolatile TICs were reported for the background sample, at concentrations as high as 17,000 µg/kg. The fact that none of these compounds were reported in the sump sample may be due to the elevated detection limits.

6.2 Conclusions

On the basis of the preliminary sampling data that has been collected for this SSI, and knowledge of existing site conditions, it is probable that a variety of waste organic solvents and petroleum hydrocarbons have been released to the subsurface from the Nu-Way facility via the sump. These wastes probably represent material generated during the combined activities of drycleaning (volatile organic solvents), leather dying (phlalates, naphthalenes), and auto maintenance (phlalates, naphthalenes, alkanes, benzenes, etc.). Considering the shallow depth to groundwater in the vicinity of the Nu-Way facility, and the coarse grained character of the subsurface sediments, it is very likely that some or all of the compounds detected in the sump sample have reached the shallow aquifer, dependent in large part upon the varying compound solubilities. Due to the absence of available groundwater sampling locations in the vicinity of the Nu-Way facility, this likelihood remains to be confirmed.

The origin of the semivolatile compounds noted at elevated concentrations in the background soil sample from the park is unknown. The absence of these compounds in the sump sample may simply be a factor of the elevated detection limits required for this sample, or may imply that a different source is responsible for their presence.

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Appendix A

EPA CLP - VOLATILE AND SEMIVOLATILE ORGANIC COMPOUND ANALYTE LIST

ANALYTICAL PROTOCOLS

The standardized organic analytical methods are based on Federal Register Methods 625 (Base/Neutral/Acid), 608 (Pesticide), 624 (Volatile Organic Analytes), EPA Methods for Chemical Analysis of Water and Wastes (MCAWW), and Test Methods for Evaluating Solid Wastes (SW-846) modified for CLP use in the analysis of both water and soil samples.

Table A-1

ORGANICS ANALYSES

	Volatile Compounds	Contract Required Quantitation Limits * Low Concentration Soil/Sediment[a] (µg/kg)
1.	Chloromethane	10
2.	Bromomethane	10
3.	Vinyl Chloride	10
4.	Chloroethane	10
5.	Methylene Chloride	5
6.	Acetone	10
7.	Carbon Disulfide	5
8.	1,1-Dichloroethene	5
9.	1,1-Dichloroethane	5
10.	trans-1,2-Dichloroethene	5
11.	Chloroform	5
12.	1,2-Dichloroethane	5
13.	2-Butanone	10
14.	1,1,1-Trichloroethane	5
15.	Carbon Tetrachloride	5
16.	Vinyl Acetate	10
17.	Bromodichloromethane	5
18.	1,2-Dichloropropane	5
19.	trans-1,3-Dichloropropene	5
20.	Trichloroethene	5
21.	Dibromochloromethane	5
22.	1,1,2-Trichloroethane	5
23.	Benzene	5
24.	cis-1,3-Dichloropropene	5
25.	2-Chloroethylvinylether	10
26.	Bromoform	5
27.	2-Hexanone	10
28.	4-Methyl-2-Pentanone	10
29.	Tetrachloroethene	5
30.	1,1,2,2-Tetrachloroethane	5
31.	Toluene	5
32.	Chlorobenzene	5
33.	Ethyl Benzene	5
34.	Styrene	5
35.	Total Xylenes	5

SIR/880603

Table A-1 (Cont.)

	Semivolatile Compounds	Contract Required Quantitation Limits * Low Concentration Soil/Sediment[b] (µg/kg)
1.	Phenol	330
2.	bis(-2-Chloroethyl)Ether	330
3.	2-Chlorophenol	330
4.	1,3-Dichlorobenzene	330
5.	1,4-Dichlorobenzene	330
6.	Benzyl Alcohol	330
7.	1,2-Dichlorobenzene	330
8.	2-Methylphenol	330
9.	bis(2-Chloroisopropyl)Ether	330
10.	4-Methylphenol	330
11.	N-Nitroso-Di-n-propylamine	330
12.	Hexachloroethane	330
13.	Nitrobenzene	330
14.	Isophorone	330
15.	2-Nitrophenol	330
16.	2,4-Dimethylphenol	330
17.	Benzoic Acid	1,600
18.	bis(2-Chloroethoxy)Methane	330
19.	2,4-Dichlorophenol	330
20.	1,2,4-Trichlorobenzene	330
21.	Naphthalene	330
22.	4-Chloroanaline	330
23.	Hexachlorobutadiene	330
24.	4-Chloro-3-Methylphenol	330
25.	2-Methylnaphthalene	330
26.	Hexachlorocyclopentadiene	330
27.	2,4,6-Trichlorophenol	330
28.	2,4,5-Trichlorophenol	1,600
29.	2-Chloronaphthalene	330
30.	2-Nitroanaline	1,600
31.	Dimethyl Phthalate	330
32.	Acenaphthylene	330
33.	3-Nitroaniline	1,600
34.	Acenaphthene	330
35.	2,4-Dinitrophenol	1,600

Table A-1 (Cont.)

	Semivolatile Compounds	Contract Required Quantitation Limits * Low Concentration Soil/Sediment[b] (µg/kg)
36.	4-Nitrophenol	1,600
37.	Dibenzofuran	330
38.	2,4-Dinitrotoluene	330
39.	2,6-Dinitrotoluene	330
40.	Diethylphthalate	330
41.	4-Chlorophenyl-phenylether	330
42.	Fluorene	330
43.	4-Nitroaniline	1,600
44.	4,6-Dinitro-2-Methylphenol	1,600
45.	N-Nitrosodiphenylamine	330
46.	4-Bromophenyl-phenylether	330
47.	Hexachlorobenzene	330
48.	Pentachlorophenol	1,600
49.	Phenathrene	330
50.	Anthracene	330
51.	Di-n-Butylphthalate	330
52.	Fluoranthene	330
53.	Pyrene	330
54.	Butylbenzylphthalate	330
55.	3,3'-Dichlorobenzidine	660
56.	Benzo(a)Anthracene	330
57.	bis(2-Ethylhexyl)Phthalate	330
58.	Chrysene	330
59.	Di-n-Octyl Phthalate	330
60.	Benzo(b)Fluoranthene	330
61.	Benzo(k)Fluoranthene	330
62.	Benzo(a)Pyrene	330
63.	Indeno(1,2,3-cd)Pyrene	330
64.	Dibenz(a,h)Anthracene	330
65.	Benzo(g,h,i)Perylene	330

Table A-1 (Cont.)

a Medium Soil/Sediment Contract Required Quantitation Limits (CRQL) for Volatile TCL Compounds are 100 times the individual Low Soil/Sediment CRQL.

b Medium Soil/Sediment Contract Required Quantitation Limits (CRQL) for Semivolatile TCL Compounds are 60 times the individual Low Soil/ Sediment (CRQL).

* Specific quantitation limits are highly matrix dependent. The quantitation limits listed herein are provided for guidance and may not always be achievable.

Appendix B

SAMPLE DOCUMENTATION RECORD

ECOLOGY & ENVIRONMENT, INC.
SAMPLE SUMMARY REPORT
REGION X

Site Name: NU-WAY CLEANERS
TDD: 8806-03 PAN: FWA0584SA
Case #1: 11645 SAS #1: Lab #1: DATAC

Sample Description	EPA/FASP Sample Number	Lab Sample Number	Collection Date	Matrix	Analysis	Lab	Storet
NS-1	89134675	JE719	03/29/89	SLUDGE	VOA/BNA	1	
NS-2	89134676	JE720	03/29/89	SOIL	VOA/BNA	1	

Appendix C

QUALITY ASSURANCE MEMORANDA

ecology and environment, inc.
101 YESLER WAY, SEATTLE, WASHINGTON, 98104, TEL. 206/624-9537
International Specialists in the Environment

MEMORANDUM

DATE: June 6, 1989

FOR: Rhonda Wreggelsworth, RSCC, USEPA, Region X

THRU: Jeffrey Villnow, FIT-OM, E & E, Seattle

FROM: Mark Woodke, Chemist, E & E, Seattle
Tracy Yerian, Senior Chemist, E & E, Seattle

SUBJ: QA of Case 11645 (Organics)
NuWay Cleaners

REF: F10-8904-007
PAN F10Z094QA

CC: John Osborn, PO, USEPA, Region X
Bruce Woods, ESD-DPO, USEPA, Region X
Gerald Muth, DPO, Region X Laboratory, Manchester
Keith Schwab, DPO, USEPA, Region VIII
Deborah Flood, HWD-SM, USEPA, Region X
John J. Roland, FIT-PD, E & E, Seattle
Charles Pitz, FIT-PM, E & E, Seattle

The Quality Assurance review of two samples, Case 11645, collected from NuWay Cleaners, has been completed. One low level soil sample and one medium level soil sample were analyzed for TCL Volatiles and Semi-volatiles by Data Chem, Inc. of Salt Lake City, Utah. The samples were numbered:

JE719 (Medium) JE720 (Low)

Samples JE719 and JE720 underwent matrix spike and matrix spike duplicate analysis.

Data Qualifications

The following comments refer to the laboratory performance in meeting the Quality Control Specifications outlined in IFB WA-87K236-238, following Laboratory Data Validation Functional Guidelines for Evaluating Organics Analysis (February 1, 1988).

1) Timeliness

Sample Number	Sample Date	Rec'd Date	VOA Anal.	BNA Ext.	BNA Anal.
JE719	03/29/89	03/30/89	04/09/89	04/08/89	04/12/89
JE720	03/29/89	03/30/89	04/03/89	04/05/89	04/11/89

All samples met holding time criteria for volatiles and semivolatiles, except:

Sample Number	Matrix	Fraction	Sampling Date	Extraction Date	Time Elapsed	QC Criteria
JE719	Soil	BNA	03/29/89	04/08/89	10 days	7 days

Data, by sample and fraction, was flagged "J" (estimated quantity) or "UJ" (not detected, adjusted quantitation limit) as appropriate.

2) Instrument Tuning

All tuning check compound mass abundances and ratios were within contract required limits for volatile and semivolatile analysis.

3) Initial Calibration

All SPCC compounds were within contract required limits for the initial calibration with average Relative Response Factors (RRFs) above 0.05 for volatiles and semivolatiles. All CCC compounds were within contract required limits for the initial calibration with Percent Relative Standard Deviations (RSDs) below 30 percent.

All non-SPCC compounds had average RRFs of greater than or equal to 0.05 in the initial volatile or semivolatile calibration.

All non-CCC compounds had percent RSDs less than or equal to 30 percent for the initial volatile or semivolatile calibration, except:

Date	Time	Fraction	Compound	RSD	Associated Samples
03/11/89	1619	VOA	2-Butanone	68	JE719
04/04/89	1333	BNA	4-Nitroaniline	35	JE719, JE720
			3,3'-Dichlorobenzidine	37	
04/19/89	1505	BNA	4-Nitroaniline	37	JE719DL
			3,3'-Dichlorobenzidine	38	

For samples associated with the corresponding calibration and TCL compounds listed above, positive results and sample quantitation limits were flagged as estimated (J or UJ), as a high RSD is indicative of poor system linearity.

4) Continuing Calibrations

All SPCC compounds were at or above the contract required Relative Response Factor (RRF(50)) criteria of 0.05 for volatiles and semivolatiles. All CCC compounds were at or below the contract required Relative Percent Difference (RPD) limits of 25 percent for the volatile and semivolatile continuing calibrations.

All non-SPCC compounds had RRF(50)s of greater than or equal to 0.05 for continuing volatile and semivolatile calibrations.

All non-CCC compounds had percent difference (%D) values for the continuing calibration less than or equal to 25 percent, except:

Date	Time	Fraction	Compound	Level	%D	Associated Samples
04/09/89	1402	VOA	Chloromethane	Medium	43	JE719
			Bromomethane		-92	
			Chloroethane		-30	
			Methylene Chloride		-33	
			Carbon Disulfide		42	
			1,2-Dichloroethene		-28	

(Cont.)

Date	Time	Fraction	Compound	%D	Associated Samples
04/11/89	1959	BNA	Benzoic Acid	-99	JE719, JE720
			2,4-Dinitrophenol	49	
			4-Nitrophenol	43	
			Indeno(1,2,3-cd)Pyrene	29	
			Dibenz(a,h)Anthracene	30	
			Benzo(g,h,i)Perylene	45	
04/21/89	1017	BNA	4-Nitroaniline	50	JE719DL
			3,3'-Dichlorobenzidine	40	

No action was taken based on continuing calibration results listed above, as the above compounds were not detected in samples JE719 and JE720.

5) Blanks

Frequency criteria was met for laboratory blank analysis.

The following compounds were detected in laboratory blanks at levels above IDL for TCL compounds:

Blank ID	Fraction	Compound	Level	Conc. µg/kg	CRQL µg/kg	Associated Samples
VBLK02	VOA	2-Butanone	Medium	3,000	10	JE719
SBLK01	BNA	bis(2-Ethylhexyl) Phthalate	Low	150	330	JE720

Reported levels of the above compounds in the samples were flagged "UJ" (adjusted quantitation limit) if the concentrations were below five times the concentrations found in the appropriate blank (10 times for common solvents).

No Tentatively Identified Compounds (TICs) were identified in the laboratory blanks.

6) Surrogate Recovery

Recoveries (%R) for all surrogate compounds for volatile and semivolatile analysis met QC criteria, except:

Sample Number	Fraction	Compound	Level	%R	QC Limits
JE719	VOA	Toluene-d8	Medium	69	81 - 117
JE719MS	VOA	Toluene-d8	Medium	71	81 - 117
JE719MSD	VOA	Toluene-d8	Medium	74	81 - 117
JE719	VOA	Bromofluorobenzene	Medium	428	74 - 121
JE719MS	VOA	Bromofluorobenzene	Medium	476	74 - 121
JE719MSD	VOA	Bromofluorobenzene	Medium	464	74 - 121
JE719	BNA	Nitrobenzene-d5	Medium	169	23 - 120
JE719DL	BNA	Nitrobenzene-d5	Medium	246	23 - 120
JE719MS	BNA	Nitrobenzene-d5	Medium	175	23 - 120
JE719MSD	BNA	Nitrobenzene-d5	Medium	228	23 - 120
JE720MS	BNA	Nitrobenzene-d5	Low	121	23 - 120
JE720MSD	BNA	Nitrobenzene-d5	Low	129	23 - 120

For the volatile fraction of sample JE719, positive results and sample quantitation limits were flagged as estimated (J or UJ). No action was taken for the semivolatile fraction as only one surrogate compound was out of QA limits.

7) Matrix Spike and Matrix Spike Duplicate

All Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Percent Recoveries (%Rs) met advisory QC guidelines, except:

Sample Number	Fraction	Compound	Level	%R	QC Limits
JE719MS	BNA	1,4-Dichlorobenzene	Medium	13	28 - 104
		1,2,4-Trichlorobenzene		27	38 - 107
		2,4-Dinitrotoluene		13	28 - 89
		Pyrene		25	35 - 142
JE719MSD	BNA	1,4-Dichlorobenzene	Medium	15	28 - 104
		1,2,4-Trichlorobenzene		30	38 - 107
		2,4-Dinitrotoluene		16	28 - 89
		Pyrene		29	35 - 142
JE720MS	BNA	4-Nitrophenol	Low	120	11 - 114
		Pentachlorophenol		118	17 - 109
JE720MSD	BNA	4-Nitrophenol	Low	137	11 - 114
		Pentachlorophenol		112	17 - 109

For the above compounds, positive results and sample quantitation limits for the acid fraction of JE720 were flagged as estimated (J or UJ). Positive results and sample quantitation limits for the base/neutral fraction of JE719 were flagged as estimated (J or UJ).

All RPD values for the MS and MSD were within QC guidelines.

8) Internal Standard Recovery

All internal standard areas were within established QC limits.

9) Sample Analysis

All reported results above IDLs but below Contract Required Quantitation Limit (CRQL) were flagged as estimated (J) on the Data Sheets.

10) Laboratory Contact

No laboratory contact was required.

Data Use

The usefulness of the data is based on the criteria outlined in the "Laboratory Data Validation Functional Guidelines for Evaluating Organics Analyses" (February 1, 1988).

Upon consideration of the data qualifications noted above, the data are ACCEPTABLE for use except where flagged with data qualifiers which modify the usefulness of the individual values.

This QA memorandum completes the series of QA reviews of CLP and/or EPA lab data for samples collected during the Site Inspection identified on the cover page under the heading NuWay Cleaners.

Data Qualifiers

U - The material was analyzed for, but was not detected. The associated numerical value is a contractual quantitation limit, adjusted for sample weight/sample volume, extraction volume, percent solids and sample dilution.

J - The associated numerical value is an estimated quantity because quality control criteria were not met or concentrations reported were less than the CRQL.

UJ - The material was analyzed for, but was not detected. The associated numerical value is an estimated quantitation limit.

R - Quality Control indicates that data are unusable (compound may or may not be present). Resampling and reanalysis are necessary for verification.

N - Presumptive evidence of presence of material (tentative identification).

M - Mass spectral criteria for positive identification were not met. However, in the opinion of the laboratory, the identification is correct based on the analyst's professional judgement.

X - The reported result may be a combination of indistinguishable isomers.

ORG/11645

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE I

JE719

Lab Name: DATACHEM INC. Contract: 68-01-7466

Lab Code: DATAC Case No.: 11645 SAS No.: _____ SDG No.: JE719

Matrix: (soil/water) SOIL Lab Sample ID: CLP2598

Sample wt/vol: 4.0 (g/mL) G Lab File ID: FJ73JE719

Level: (low/med) MED Date Received: 03/30/89

% Moisture: not dec. 71 Date Analyzed: 04/09/89

Column: (pack/cap) PACK Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	8600	UJ
74-83-9	Bromomethane	8600	UJ
75-01-4	Vinyl Chloride	8600	UJ
75-00-3	Chloroethane	8600	UJ
75-09-2	Methylene Chloride	4300	UJ
67-64-1	Acetone	37000	J
75-15-0	Carbon Disulfide	4300	UJ
75-35-4	1,1-Dichloroethene	4300	UJ
75-35-3	1,1-Dichloroethane	4300	UJ
540-59-0	1,2-Dichloroethene (total)	4300	UJ
67-66-3	Chloroform	4300	UJ
107-06-2	1,2-Dichloroethane	4300	UJ
78-93-3	2-Butanone	18000	U
71-55-6	1,1,1-Trichloroethane	4300	UJ
56-23-5	Carbon Tetrachloride	4300	UJ
108-05-4	Vinyl Acetate	8600	UJ
75-27-4	Bromodichloromethane	4300	UJ
78-87-5	1,2-Dichloropropane	4300	UJ
10061-01-5	cis-1,3-Dichloropropene	4300	UJ
79-01-6	Trichloroethene	4300	UJ
124-48-1	Dibromochloromethane	4300	UJ
79-00-5	1,1,2-Trichloroethane	4300	UJ
71-43-2	Benzene	4300	UJ
10061-02-6	Trans-1,3-Dichloropropene	4300	UJ
75-25-2	Bromoform	4300	UJ
108-10-1	4-Methyl-2-Pentanone	8600	UJ
591-78-6	2-Hexanone	8600	UJ
127-18-4	Tetrachloroethene	35000	J
79-34-5	1,1,2,2-Tetrachloroethane	4300	UJ
108-88-3	Toluene	6300	J
108-90-7	Chlorobenzene	4300	UJ
100-41-4	Ethylbenzene	11000	J
100-42-5	Styrene	4300	UJ
1330-20-7	Total Xylenes	250000	J

19

FORM I VOA

MW 6/2/89

1/87 Re

37

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE
JE719

Lab Name: DATACHEM INC. Contract: 68-01-7466

Lab Code: DATAC Case No.: 11645 SAS No.: _____ SDG No.: JE719

Matrix: (soil/water) SOIL Lab Sample ID: CLP2598

Sample wt/vol: 4.0 (g/mL) G Lab File ID: FJ73JE719

Level: (low/med) MED Date Received: 03/30/89

% Moisture: not dec. 71 Date Analyzed: 04/09/89

Column (pack/cap) PACK Dilution Factor: 2.0

Number TICs found: 8

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		C9-CYCLIC HYDROCARBON	22.25	29000	J
2.		C9-CYCLIC HYDROCARBON	23.35	290000	J
3.		METHYLETHYL CYCLOHEXANE	24.30	81000	J
4.		C10 OXY-CYCLOHYDROCARBON	24.90	28000	J
5.		C11 TRICYCLOPARAFFIN	25.86	66000	J
6.		C10 CYCLIC HYDROCARBON	27.46	14000	J
7.		C10 UNSAT. HYDROCARBON	28.01	650000	J
8.		C10 UNSAT. HYDROCARBON	28.51	140000	J

6/2/89

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE JE720

Lab Name: DATACHEM INC. Contract: 68-01-7466

Lab Code: DATAC Case No.: 11645 SAS No.: _____ SDG No.: JE719

Matrix: (soil/water) SOIL Lab Sample ID: CLP2599

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FI14JE720

Level: (low/med) LOW Date Received: 03/30/89

% Moisture: not dec. 23 Date Analyzed: 04/03/89

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	13	U
74-83-9	Bromomethane	13	U
75-01-4	Vinyl Chloride	13	U
75-00-3	Chloroethane	13	U
75-09-2	Methylene Chloride	6	U
67-64-1	Acetone	13	U
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-35-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	13	U
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	13	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	Trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	13	U
591-78-6	2-Hexanone	13	U
127-18-4	Tetrachloroethene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Total Xylenes	6	U

6

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE: JE720

Lab Name: DATACHEM INC. Contract: 68-01-7466

Lab Code: DATAC Case No.: 11645 SAS No.: _____ SDG No.: JE719

Matrix: (soil/water) SOIL Lab Sample ID: CLP2599

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FI14JE720

Level: (low/med) LOW Date Received: 03/30/89

% Moisture: not dec. 23 Date Analyzed: 04/03/89

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

E

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE N

JE719

Lab Name: DATACHEM INC. Contract: 68-01-7466

Lab Code: DATAC Case No.: 11645 SAS No.: _____ SDG No.: JE719

Matrix: (soil/water) SOIL Lab Sample ID: CLP2598

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GD16JE719

Level: (low/med) MED Date Received: 03/30/89

% Moisture: not dec. 71 dec. ____ Date Extracted: 04/08/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 04/12/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	34000	UJ
111-44-4	bis(2-Chloroethyl)Ether	34000	UJ
95-57-8	2-Chlorophenol	34000	UJ
541-73-1	1,3-Dichlorobenzene	34000	UJ
106-46-7	1,4-Dichlorobenzene	34000	UJ
100-51-6	Benzyl Alcohol	34000	UJ
95-50-1	1,2-Dichlorobenzene	34000	UJ
95-48-7	2-Methylphenol	34000	UJ
39638-32-9	bis(2-Chloroisopropyl)Ether	34000	UJ
106-44-5	4-Methylphenol	34000	UJ
621-64-7	N-Nitroso-Di-n-Propylamine	34000	UJ
67-72-1	Hexachloroethane	34000	UJ
98-95-3	Nitrobenzene	34000	UJ
78-59-1	Isophorone	34000	UJ
88-75-5	2-Nitrophenol	34000	UJ
105-67-9	2,4-Dimethylphenol	34000	UJ
65-85-0	Benzoic Acid	170000	UJ
111-91-1	bis(2-Chloroethoxy)Methane	34000	UJ
120-83-2	2,4-Dichlorophenol	34000	UJ
120-82-1	1,2,4-Trichlorobenzene	34000	UJ
91-20-3	Naphthalene	500000	J
106-47-8	4-Chloroaniline	34000	UJ
87-68-3	Hexachlorobutadiene	34000	UJ
59-50-7	4-Chloro-3-Methylphenol	34000	UJ
91-57-6	2-Methylnaphthalene	430000	J
77-47-4	Hexachlorocyclopentadiene	34000	UJ
88-06-2	2,4,6-Trichlorophenol	34000	UJ
95-95-4	2,4,5-Trichlorophenol	170000	UJ
91-58-7	2-Chloronaphthalene	34000	UJ
88-74-4	2-Nitroaniline	170000	UJ
131-11-3	Dimethyl Phthalate	34000	UJ
208-96-8	Acenaphthylene	34000	UJ
606-20-2	2,6-Dinitrotoluene	34000	UJ

FORM I SV-1 1/87 Rev

41

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE JE719

Lab Name: DATACHEM INC. Contract: 68-01-7466

Lab Code: DATAC Case No.: 11645 SAS No.: _____ SDG No.: JE719

Matrix: (soil/water) SOIL Lab Sample ID: CLP2598

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GD16JE719

Level: (low/med) MED Date Received: 03/30/89

% Moisture: not dec. 71 dec. _____ Date Extracted: 04/08/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 04/12/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	170000	UJ
83-32-9	Acenaphthene	34000	UJ
51-28-5	2,4-Dinitrophenol	170000	UJ
100-02-7	4-Nitrophenol	170000	UJ
132-64-9	Dibenzofuran	34000	UJ
121-14-2	2,4-Dinitrotoluene	34000	UJ
84-66-2	Diethylphthalate	3900	J
7005-72-3	4-Chlorophenyl-phenylether	34000	UJ
86-73-7	Fluorene	34000	UJ
100-10-6	4-Nitroaniline	170000	UJ
534-52-1	4,6-Dinitro-2-Methylphenol	170000	UJ
86-30-6	N-Nitrosodiphenylamine (1)	34000	UJ
101-55-3	4-Bromophenyl-phenylether	34000	UJ
118-74-1	Hexachlorobenzene	34000	UJ
87-86-5	Pentachlorophenol	170000	UJ
85-01-8	Phenanthrene	34000	UJ
120-12-7	Anthracene	34000	UJ
84-74-2	Di-n-Butylphthalate	31000	J
206-44-0	Fluoranthene	34000	UJ
129-00-0	Pyrene	34000	UJ
85-68-7	Butylbenzylphthalate	1100000	J
91-94-1	3,3'-Dichlorobenzidine	69000	UJ
56-55-3	Benzo(a)Anthracene	34000	UJ
218-01-9	Chrysene	34000	UJ
117-81-7	bis(2-Ethylhexyl)Phthalate	1300000	J
117-84-0	Di-n-Octyl Phthalate	91000	J
205-99-2	Benzo(b)Fluoranthene	34000	UJ
207-08-9	Benzo(k)Fluoranthene	34000	UJ
50-32-8	Benzo(a)Pyrene	34000	UJ
193-39-5	Indeno(1,2,3-cd)Pyrene	34000	UJ
53-70-3	Dibenz(a,h)Anthracene	34000	UJ
191-24-2	Benzo(g,h,i)Perylene	34000	UJ

(1) - Cannot be separated from Diphenylamine

MW 42

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE: JE719

Lab Name: DATACHEM INC. Contract: 68-01-7466

Lab Code: DATAC Case No.: 11645 SAS No.: _____ SDG No.: JE719

Matrix: (soil/water) SOIL Lab Sample ID: CLP2598

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GD16JE719

Level: (low/med) MED Date Received: 03/30/89

% Moisture: not dec. 71 dec. _____ Date Extracted: 04/08/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 04/12/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.0

Number TICs found: 20 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	C3 ALKYLBENZENE	10.32	3000000	J
2.	124-18-5	DECANE	11.14	7200000	J
3.	UNKNOWN	C11 BRANCHED ALKANE	11.67	5400000	J
4.	UNKNOWN	C11 BRANCHED ALKANE	11.90	2500000	J
5.	UNKNOWN	UNKNOWN AROMATIC	12.39	4500000	J
6.	UNKNOWN	C12 ALKANE & C4 BENZENE	13.59	2100000	J
7.	UNKNOWN	UNSATURATED CYCLIC CMPD.	13.80	1300000	J
8.	UNKNOWN	C12 ALKANE	14.07	5800000	J
9.	UNKNOWN	UNKNOWN AROMATIC	14.14	890000	J
10.	UNKNOWN	C4 ALKYLBENZENE	14.19	1600000	J
11.	UNKNOWN	C12 BRANCHED ALKANE	14.25	630000	J
12.	UNKNOWN	UNKNOWN AROMATIC ACID	14.34	660000	J
13.	UNKNOWN	C13 ALKANE	14.95	930000	J
14.	UNKNOWN	C5 ALKYLBENZENE	15.17	700000	J
15.	UNKNOWN	ALKYLSUBSTITUTED AROMATIC	15.64	270000	J
16.	UNKNOWN	C14 BRANCHED ALKANE	15.79	530000	J
17.	629-50-5	TRIDECANE	16.19	730000	J
18.	629-99-2	1-METHYLNAPHTHALENE	16.67	340000	J
19.	629-99-2	PENTACOSANE	29.61	330000	J
20.	593-49-7	HEPTACOSANE	31.61	320000	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE: JE720

Lab Name: DATACHEM INC. Contract: 68-01-7466

Lab Code: DATAC Case No.: 11645 SAS No.: _____ SDG No.: JE719

Matrix: (soil/water) SOIL Lab Sample ID: CLP2599

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GD11JE720

Level: (low/med) LOW Date Received: 03/30/89

% Moisture: not dec. 23 dec. _____ Date Extracted: 04/05/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 04/11/89

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	860	UJ
111-44-4	bis(2-Chloroethyl)Ether	860	U
95-57-8	2-Chlorophenol	860	UJ
541-73-1	1,3-Dichlorobenzene	860	U
106-46-7	1,4-Dichlorobenzene	860	U
100-51-6	Benzyl Alcohol	860	UJ
95-50-1	1,2-Dichlorobenzene	860	U
95-48-7	2-Methylphenol	860	UJ
39638-32-9	bis(2-Chloroisopropyl)Ether	860	U
106-44-5	4-Methylphenol	860	UJ
621-64-7	N-Nitroso-Di-n-Propylamine	860	U
67-72-1	Hexachloroethane	860	U
98-95-3	Nitrobenzene	860	U
78-59-1	Isophorone	860	U
88-75-5	2-Nitrophenol	860	UJ
105-67-9	2,4-Dimethylphenol	860	UJ
65-85-0	Benzoic Acid	4200	UJ
111-91-1	bis(2-Chloroethoxy)Methane	860	U
120-83-2	2,4-Dichlorophenol	860	UJ
120-82-1	1,2,4-Trichlorobenzene	860	U
91-20-3	Naphthalene	85	J
106-47-8	4-Chloroaniline	860	U
87-68-3	Hexachlorobutadiene	860	U
59-50-7	4-Chloro-3-Methylphenol	860	UJ
91-57-6	2-Methylnaphthalene	98	J
77-47-4	Hexachlorocyclopentadiene	860	U
88-06-2	2,4,6-Trichlorophenol	860	UJ
95-95-4	2,4,5-Trichlorophenol	4200	UJ
91-58-7	2-Chloronaphthalene	860	U
88-74-4	2-Nitroaniline	4200	U
131-11-3	Dimethyl Phthalate	860	U
208-96-8	Acenaphthylene	860	U
606-20-2	2,6-Dinitrotoluene	860	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE: JE720

Lab Name: DATACHEM INC. Contract: 68-01-7466

Lab Code: DATAC Case No.: 11645 SAS No.: _____ SDG No.: JE719

Matrix: (soil/water) SOIL Lab Sample ID: CLP2599

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GD11JE720

Level: (low/med) LOW Date Received: 03/30/89

% Moisture: not dec. 23 dec. ____ Date Extracted: 04/05/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 04/11/89

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	4200	U
83-32-9	Acenaphthene	860	U
51-28-5	2,4-Dinitrophenol	4200	UJ
100-02-7	4-Nitrophenol	4200	UJ
132-64-9	Dibenzofuran	860	U
121-14-2	2,4-Dinitrotoluene	860	U
84-66-2	Diethylphthalate	860	U
7005-72-3	4-Chlorophenyl-phenylether	860	U
86-73-7	Fluorene	860	U
100-10-6	4-Nitroaniline	4200	UJ
534-52-1	4,6-Dinitro-2-Methylphenol	4200	UJ
86-30-6	N-Nitrosodiphenylamine (1)	860	U
101-55-3	4-Bromophenyl-phenylether	860	U
118-74-1	Hexachlorobenzene	860	U
87-86-5	Pentachlorophenol	4200	UJ
85-01-8	Phenanthrene	220	J
120-12-7	Anthracene	860	U
84-74-2	Di-n-Butylphthalate	860	U
206-44-0	Fluoranthene	240	J
129-00-0	Pyrene	230	J
85-68-7	Butylbenzylphthalate	860	U
91-94-1	3,3'-Dichlorobenzidine	1700	UJ
56-55-3	Benzo(a)Anthracene	140	J
218-01-9	Chrysene	180	J
117-81-7	bis(2-Ethylhexyl)Phthalate	220	UJ
117-84-0	Di-n-Octyl Phthalate	860	U
205-99-2	Benzo(b)Fluoranthene	860	U
207-08-9	Benzo(k)Fluoranthene	860	U
50-32-8	Benzo(a)Pyrene	860	U
193-39-5	Indeno(1,2,3-cd)Pyrene	860	U
53-70-3	Dibenz(a,h)Anthracene	860	U
191-24-2	Benzo(g,h,i)Perylene	860	U

(1) - Cannot be separated from Diphenylamine

MW 6/12/89

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE: JE720

Lab Name: DATACHEM INC. Contract: 68-01-7466

Lab Code: DATAC Case No.: 11645 SAS No.: _____ SDG No.: JE719

Matrix: (soil/water) SOIL Lab Sample ID: CLP2599

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GD11JE720

Level: (low/med) LOW Date Received: 03/30/89

% Moisture: not dec. 23 dec. ____ Date Extracted: 04/05/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 04/11/89

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.0

Number TICs found: 18 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	ALKANE @C14	18.49	430	J
2.	UNKNOWN	ALKANE @C15	21.59	200	J
3.	UNKNOWN	UNKNOWN ORGANIC ACID	24.54	450	J
4.	UNKNOWN	UNK. LONG-CHAIN CMPD.	24.84	650	J
5.	UNKNOWN	ALKANE @C20	25.86	570	J
6.	UNKNOWN	ALKANE @C20	26.84	580	J
7.	UNKNOWN	C4 ALKYLPHENANTHRENE	27.59	690	J
8.	UNKNOWN	ALKANE @C23	27.77	1000	J
9.	UNKNOWN	ALKANE @C23	28.69	1100	J
10.	UNKNOWN	ALKANE @C24	29.57	2700	J
11.	UNKNOWN	ALKANE @C24	30.49	1100	J
12.	UNKNOWN	UNKNOWN ALKENE @C24	31.32	560	J
13.	UNKNOWN	ALKANE @C28	31.57	5200	J
14.	UNKNOWN	ALKANE @C28	32.84	1700	J
15.	UNKNOWN	UNKNOWN ALDEHYDE	33.42	1800	J
16.	UNKNOWN	ALKANE @C30	34.46	17000	J
17.	UNKNOWN	UNKNOWN	37.34	1600	J
18.	UNKNOWN	ALKANE @C30	38.91	8000	J

4/2/89 46

Appendix D

SITE INSPECTION REPORT FORM (EPA FORM 2070-13)

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
WA	D063369698

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Nu-Way Cleaners	801 South 3rd Street

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Yakima	WA	98901	Yakima	077	04

09 COORDINATES LATITUDE	LONGITUDE
46°35'36.2"	120°29'50.4"

10 TYPE OF OWNERSHIP (Check one)
X A. PRIVATE ___B. FEDERAL _____ ___C. STATE ___D.COUNTY ___E. MUNICIPAL
___F. OTHER _____ ___G.UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION	02 SITE STATUS	03 YEARS OF OPERATION		
2/27/89 MO/DAY/YR	X ACTIVE ___INACTIVE	1950 BEGINNING YEAR	Present ENDING YEAR	___UNKNOWN

04 AGENCY PERFORMING INSPECTION (Check all that apply)
___A. EPA X B. EPA CONTRACTOR Ecology & Environment, Inc. (E & E) (Name of firm) ___C. MUNICIPAL ___D. MUNICIPAL CONTRACTOR
___E. STATE ___F. STATE CONTRACTOR _____ (Name of firm) ___G. OTHER _____ (Specify)

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO.
Gerald Lee	FIT-SM	E & E	206/624-9537
09 OTHER INSPECTORS	10 TITLE	11 ORGANIZATION	12 TELEPHONE NO.
Charles F. Pitz	FIT-PM	E & E	206/624-9537
13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO.
Wallace Munly	Owner	420 North 31st Avenue	509/248-5376

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
X PERMISSION ___ WARRANT	1300	Fair, cold

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO.
William Glasser	EPA, Region 10	206/442-7215

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
Charles F. Pitz	EPA-FIT	E & E	206/624-9537	12/15/89

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
WA	D063369698

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)
___A. SOLID ___E. SLURRY
___B. POWDER, FINES ___F. LIQUID
_X_C. SLUDGE ___G. GAS
___D. OTHER _____ (Specify)

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)
TONS _____
CUBIC YARDS _____
NO. OF DRUMS < 1

03 WASTE CHARACTERISTICS (Check all that apply)
___A. TOXIC ___E. SOLUBLE _X_I. HIGHLY VOLATILE
___B. CORROSIVE ___F. INFECTIOUS ___J. EXPLOSIVE
___C. RADIOACTIVE _X_G. FLAMMABLE ___K. REACTIVE
___D. PERSISTENT ___H. IGNITABLE ___L. INCOMPATIBLE
___M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE	< 55	Gallons	Sludge in sump at time of sampling.
OLW	OILY WASTE			Unknown volume of waste fluids
SOL	SOLVENTS			(water, solvents, petroleum products)
PSD	PESTICIDES			has been discharged to the sump for
OCC	OTHER ORGANIC CHEMICALS			more than 20 years.
IOC	INORGANIC CHEMICALS			
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
	A FULL LIST OF HAZARDOUS CONSTITUENTS IS PRESENTED IN THE FINAL REPORT				
	Sludge Sample from On-Site Sump - Representative Constituents*				
	Tetrachloroethene			35,000 (est)	µg/kg
	Acetone			37,000 (est)	µg/kg
	Total Xylenes			250,000 (est)	µg/kg
	Naphthalene			500,000 (est)	µg/kg
	2-Methylnaphthalene			430,000 (est)	µg/kg
	Butylbenzylphthalate			1,100,000 (est)	µg/kg
	bis(2-Ethylhexyl)phthalate			1,300,000 (est)	µg/kg
	Decane			7,200,000 (est)	µg/kg
	C11 Branched Alkane			5,400,000 (est)	µg/kg
	C12 Alkane			5,800,000 (est)	µg/kg
	etc.				
	* Estimated values				

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS	Stoddard Solvents		FDS		
FDS	Various chemical dyes		FDS		
FDS			FDS		
FDS			FDS		

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

1. E & E Screening Site Inspection, February and March 1989, Nu-Way Cleaners, Reconnaissance visit and sampling.

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
WA	D063369698

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 X A. GROUNDWATER CONTAMINATION — 02 ___ OBSERVED (DATE: _____) X POTENTIAL ___ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: > 10,000 — 04 NARRATIVE DESCRIPTION

Waste operation fluids discharged to sump have probably entered shallow aquifer, due to conditions of sump. Waste fluids discharged probably contain organic solvents, petroleum products. Concentrations in fluids are unknown.

01 ___ B. SURFACE WATER CONTAMINATION — 02 ___ OBSERVED (DATE: _____) ___ POTENTIAL ___ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

None known, observed, or suspected. All site runoff would enter local city storm sewer system, evaporate, or percolate into local soils.

01 ___ C. CONTAMINATION OF AIR — 02 ___ OBSERVED (DATE: _____) ___ POTENTIAL ___ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

None known, observed, or suspected. Possible release of solvent vapors from drycleaning operation to local neighborhood.

01 ___ D. FIRE/EXPLOSIVE CONDITIONS — 02 ___ OBSERVED (DATE: _____) ___ POTENTIAL ___ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: Unknown — 04 NARRATIVE DESCRIPTION

Presence of solvents and petroleum products on site pose typical fire hazards.

01 X E. DIRECT CONTACT — 02 ___ OBSERVED (DATE: _____) X POTENTIAL ___ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: 3 — 04 NARRATIVE DESCRIPTION

On-site employees are most likely to come in direct contact with wastes.

01 X F. CONTAMINATION OF SOIL — 02 ___ OBSERVED (DATE: _____) X POTENTIAL ___ ALLEGED

03 AREA POTENTIALLY AFFECTED: Unknown (Acres) — 04 NARRATIVE DESCRIPTION

On-site soils were not sampled directly, but its very probable that the subsurface soils beneath the sump contain hazardous constituents.

01 X G. DRINKING WATER CONTAMINATION — 02 ___ OBSERVED (DATE: _____) X POTENTIAL ___ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: > 10,000 — 04 NARRATIVE DESCRIPTION

Potential release of hazardous constituents to shallow aquifer. Shallow aquifer is used regularly by down-gradient population as a drinking water source.

01 X H. WORKER EXPOSURE/INJURY — 02 ___ OBSERVED (DATE: _____) X POTENTIAL ___ ALLEGED

03 WORKERS POTENTIALLY AFFECTED: 3 — 04 NARRATIVE DESCRIPTION

All employees potentially exposed to solvent fumes. One employee sleeps in a bunkhouse immediately adjoining the shed with the sump.

01 X I. POPULATION EXPOSURE/INJURY — 02 ___ OBSERVED (DATE: _____) X POTENTIAL ___ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

None known or observed. Greatest potential for exposure is via groundwater pathway.

II. HAZARDOUS CONDITIONS AND INCIDENTS (CONTINUED)

01 ___ J. DAMAGE TO FLORA — 02 ___ OBSERVED (DATE: _____) ___ POTENTIAL ___ ALLEGED

04 NARRATIVE DESCRIPTION

None known or observed. Resident immediately downgradient of site grows annual garden.

01 ___ K. DAMAGE TO FAUNA — 02 ___ OBSERVED (DATE: _____) ___ POTENTIAL ___ ALLEGED

04 NARRATIVE DESCRIPTION (Include name(s) of species)

None known or observed.

01 _X_ L. CONTAMINATION OF FOOD CHAIN — 02 ___ OBSERVED (DATE: _____) _X_ POTENTIAL ___ ALLEGED

04 NARRATIVE DESCRIPTION

None known or observed. Resident immediately downgradient of site grows annual garden.

01 _X_ M. UNSTABLE CONTAINMENT OF WASTES — 02 _X_ OBSERVED (DATE: 3/29/89) ___ POTENTIAL ___ ALLEGED

(Spills/runoff/standing liquids/leaking drums)

03 POPULATION POTENTIALLY AFFECTED: > 10,000 — 04 NARRATIVE DESCRIPTION

Sump probably discharges waste solvents and petroleum products to shallow aquifer.

01 ___ N. DAMAGE TO OFFSITE PROPERTY — 02 ___ OBSERVED (DATE: _____) ___ POTENTIAL ___ ALLEGED

04 NARRATIVE DESCRIPTION

None known or observed.

01 _X_ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ___ OBSERVED (DATE: _____) _X_ POTENTIAL ___ ALLEGED

04 NARRATIVE DESCRIPTION

None known or observed. Site runoff may drain to city storm sewer system, may contain hazardous constituents.

01 _X_ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ___ OBSERVED (DATE: _____) _X_ POTENTIAL ___ ALLEGED

04 NARRATIVE DESCRIPTION

Discharge of waste fluids to on-site sump is an unauthorized practice. Nu-Way holds no discharge permits.

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

III. TOTAL POPULATION POTENTIALLY AFFECTED: > 10,000

IV. COMMENTS

Most probable threat to the local population is discharge of hazardous constituents to the shallow aquifer, which is widely used for drinking purposes. Impact of this practice on residents in nearby homes may be of concern.

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

1. E & E Screening Site Inspection, February and March 1989, Nu-Way Cleaners.

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
WA	D063369698

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)				
X 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		
___ D. TANK, ABOVE GROUND		
___ E. TANK, BELOW GROUND		
X F. LANDFILL		
___ G. LANDFARM		
___ H. OPEN DUMP		
X I. OTHER Sump (Specify)	Unknown	

04 TREATMENT (Check all that apply)
- ___ A. INCINERATION
- ___ B. UNDERGROUND INJECTION
- ___ C. CHEMICAL/PHYSICAL
- ___ D. BIOLOGICAL
- ___ E. WASTE OIL PROCESSING
- X F. SOLVENT RECOVERY
- ___ G. OTHER RECYCLING/RECOVERY
- ___ H. OTHER _____ (Specify)

05 Other
- 1 A. BUILDINGS ON SITE

06 AREA OF SITE
0.1 (Acres)

07 COMMENTS

Unknown volume of wastewater/solvent wastes/petroleum wastes have been discharged to an on-site sump. Filters used on drycleaning machine are disposed of periodically in dumpster for eventual landfill, and contain lint, carbon.

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)

___ A. ADEQUATE, SECURE ___ B.MODERATE ___ C.INADEQUATE, POOR X D. INSECURE, UNSOUND, DANGEROUS

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

On-site sump is comprised of a 55-gallon steel drum buried flush with ground surface. Drum shows signs of significant deterioration, probably does not have bottom. Drum is reportedly 20 years old. Floor drains in shop lead to sump.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: X YES ___ NO

02 COMMENTS

Sump is located in storage shed adjacent to drycleaning room.

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

1. E & E Screening Site Inspection, February and March 1989, Nu-Way Cleaners.

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
WA	D063369698

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as applicable)

	SURFACE	WELL
COMMUNITY	A. X	B. ___
NON-COMMUNITY	C. ___	D. ___

02 STATUS

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

03 DISTANCE TO SITE

A. > 8 (mi)
B. ___ (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)

___A. ONLY SOURCE FOR DRINKING
X B. DRINKING (Other sources available)
___C. COMMERCIAL, INDUSTRIAL IRRIGATION (Limited other sources available)
___D. NOT USED, UNUSABLE

COMMERCIAL, INDUSTRIAL, IRRIGATION (No other water sources available)

02 POPULATION SERVED BY GROUNDWATER > 10,000

03 DISTANCE TO NEAREST DRINKING WATER WELL ~ 0.5 (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
< 20 (ft)	Southeast	< 20 (ft)	Unknown (gpd)	___YES X NO

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

A number of shallow domestic wells are located downgradient of the site beyond the city limits. Virtually all residents closer to the site are served by city water supplies.

10 RECHARGE AREA		11 DISCHARGE AREA	
___YES	COMMENTS	___YES	COMMENTS
___NO	Unknown	___NO	Unknown

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

X 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
Yakima River	___	~ 1.3 (mi)
Unnamed irrigation canal	___	~ 0.9 (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. ~ 11,400	B. ~ 38,600	C. ~ 58,000
NO. OF PERSONS	NO. OF PERSONS	NO. OF PERSONS

02 DISTANCE TO NEAREST POPULATION
< 0.1 (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE
> 5,000

04 DISTANCE TO NEAREST OFF-SITE BUILDING
< 0.1 (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)

The Nu-Way site is located on the southeastern edge of downtown Yakima in a mixed commercial/residential neighborhood. Church immediately east, auto repair shop north, bowling alley to west, and residence to south.

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
WA	D063369698

II. 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 X D. GREATER THAN 10^{-3} cm/sec

02 PERMEABILITY OF BEDROCK (Check one)

___A. IMPERMEABLE (Less than 10^{-6} cm/sec) X 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	
> 750 (ft)	Unknown (ft)	Unknown	

06 NET PRECIPITATION	07 ONE-YEAR 24-HOUR RAINFALL	08 SLOPE SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
-26 (in)	0.88 (in)	< 3 %	East-Southeast	< 3 %

09 FLOOD POTENTIAL
SITE IS IN 500 YEAR FLOODPLAIN

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

11 DISTANCE TO WETLANDS (5-acre minimum)

ESTUARINE	OTHER
A. > 5 (mi)	B. > 1.2 (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)
_____ (mi)
ENDANGERED SPECIES: None

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. < 0.1 (mi)	B. < 0.1 (mi)	C. _____ (mi)	D. ~ 0.8 (mi)

4 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

The site lies on a gently sloping floodplain approximately 1.3 miles west of the Yakima River. Cultural features lying between the site and the river may influence pattern of surface water runoff, including city storm sewer system. Probable overland runoff route is more than 2 miles from site to river.

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

1. Ecology well logs.
2. USGS Topo Quads - Yakima East, West Climatic Atlas of the United States.
3. NOAA, 1968, Precipitation Frequency Atlas of the Western United States.
4. NOAA, 1973, Soil Survey of the Yakima County area.
5. USDA, 1985.
6. E & E Screening Site Inspection, February 27, 1989.

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
WA	D063369698

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER			
SURFACE WATER			
WASTE			
AIR			
RUNOFF			
SPILL			
SOIL	1	Data Chem 960 West Levoy Drive Salt Lake City, Utah	December 1989
VEGETATION			
OTHER - Sump Sludge	1	Data Chem 960 West Levoy Drive Salt Lake City, Utah	December 1989

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
	None

IV. PHOTOGRAPHS AND MAPS

01 TYPE ___ GROUND ___ AERIAL

02 IN CUSTODY OF _____
(Name of organization or individual)

03 MAPS
___ YES
_X_ NO

04 LOCATION OF MAPS _____

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

None

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

1. E & E Screening Site Inspection, March 29, 1989 (Sampling).

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
WA	D063369698

II. CURRENT OWNER(S)			PARENT COMPANY (If applicable)		
01 NAME Wallace Munly	02 D+B NUMBER		08 NAME	09 D+B NUMBER	
03 STREET ADDRESS (P.O. BOX, RFD #, ETC.) 420 North 31st Avenue	04 SIC CODE		10 STREET ADDRESS (P.O. BOX, RFD #, ETC.)	11 SIC CODE	
05 CITY Yakima	06 STATE WA	07 ZIP CODE 98901	12 CITY	13 STATE	14 ZIP CODE
01 NAME	02 D+B NUMBER		08 NAME	09 D+B NUMBER	
03 STREET ADDRESS (P.O. BOX, RFD #, ETC.)	04 SIC CODE		10 STREET ADDRESS (P.O. BOX, RFD #, ETC.)	11 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE
01 NAME	02 D+B NUMBER		08 NAME	09 D+B NUMBER	
03 STREET ADDRESS (P.O. BOX, RFD #, ETC.)	04 SIC CODE		10 STREET ADDRESS (P.O. BOX, RFD #, ETC.)	11 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE

III. PREVIOUS OWNER(S) (List most recent first)			IV. REALTY OWNER(S) (If applicable; list most recent first)		
01 NAME John Duncan	02 D+B NUMBER		01 NAME	02 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.) Unknown	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 Tom Dunn	02 D+B NUMBER		01 NAME	02 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.) Unknown	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)

1. Wallace Munly, February 27, 1989, Owner, Nu-Way Cleaners, Personal communication with Gerald Lee, E & E.

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
WA	D063369698

II. CURRENT OPERATOR (Provide 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

OPERATOR'S PARENT COMPANY (If applicable)

10 NAME	11 D+B NUMBER
None	

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
John Duncan	

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

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD
~1950 - 1971	

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
Tom Dunn	

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

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD
~1950 - 1971	

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)

1. Wallace Munly, February 27, 1989, Owner, Nu-Way Cleaners, Personal communication with Gerald Lee, E & E.

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
WA	D063369698

II. ON-SITE GENERATOR

01 NAME	02 D+B NUMBER
None	
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
None			
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
None			
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)

1. E & E Screening Site Inspection, February 1989.
2. Wallace Munly, February 27, 1989, Owner, Nu-Way Cleaners, Personal communication with Gerald Lee, E & E.

II. PAST RESPONSE ACTIVITIES

01 ___A. WATER SUPPLY CLOSED	02 DATE _____	03 AGENCY _____	
04 DESCRIPTION			
None			
01 ___B. TEMPORARY WATER SUPPLY PROVIDED	02 DATE _____	03 AGENCY _____	
04 DESCRIPTION			
None			
01 ___C. PERMANENT WATER SUPPLY PROVIDED	02 DATE _____	03 AGENCY _____	
04 DESCRIPTION			
None			
01 ___D. SPILLED MATERIAL REMOVED	02 DATE _____	03 AGENCY _____	
04 DESCRIPTION			
None			
01 ___E. CONTAMINATED SOIL REMOVED	02 DATE _____	03 AGENCY _____	
04 DESCRIPTION			
None			
01 ___F. WASTE REPACKAGED	02 DATE _____	03 AGENCY _____	
04 DESCRIPTION			
None			
01 ___G. WASTE DISPOSED ELSEWHERE	02 DATE _____	03 AGENCY _____	
04 DESCRIPTION			
None			
01 ___H. ON SITE BURIAL	02 DATE _____	03 AGENCY _____	
04 DESCRIPTION			
None			
01 ___I. IN SITU CHEMICAL TREATMENT	02 DATE _____	03 AGENCY _____	
04 DESCRIPTION			
None			
01 ___J. IN SITU BIOLOGICAL TREATMENT	02 DATE _____	03 AGENCY _____	
04 DESCRIPTION			
None			
01 ___K. IN SITU PHYSICAL TREATMENT	02 DATE _____	03 AGENCY _____	
04 DESCRIPTION			
None			
01 ___L. ENCAPSULATION	02 DATE _____	03 AGENCY _____	
04 DESCRIPTION			
None			
01 ___M. EMERGENCY WASTE TREATMENT	02 DATE _____	03 AGENCY _____	
04 DESCRIPTION			
None			
01 ___N. CUTOFF WALLS	02 DATE _____	03 AGENCY _____	
04 DESCRIPTION			
None			
01 ___O. EMERGENCY DIKING/SURFACE WATER DIVERSION	02 DATE _____	03 AGENCY _____	
04 DESCRIPTION			
None			
01 ___P. CUTOFF TRENCHES/SUMP	02 DATE _____	03 AGENCY _____	
04 DESCRIPTION			
None			
01 ___Q. SUBSURFACE CUTOFF WALL	02 DATE _____	03 AGENCY _____	
04 DESCRIPTION			
None			

59

II. PAST RESPONSE ACTIVITIES (Continued)

01 ___R. BARRIER WALLS CONSTRUCTED 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
None

01 ___S. CAPPING/COVERING 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
None

01 ___T. BULK TANKAGE REPAIRED 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
None

01 ___U. GROUT CURTAIN CONSTRUCTED 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
None

01 ___V. BOTTOM SEALED 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
None

01 ___W. GAS CONTROL 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
None

01 ___X. FIRE CONTROL 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
None

01 ___Y. LEACHATE TREATMENT 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
None

01 ___Z. AREA EVACUATED 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
None

01 ___1. ACCESS TO SITE RESTRICTED 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
None

01 ___2. POPULATION RELOCATED 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
None

01 ___3. OTHER REMEDIAL ACTIVITIES 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

None

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

1. E & E Screening Site Inspection, February 1989.
2. Wallace Munly, February 27, 1989, Owner, Nu-Way Cleaners, Personal communication with Gerald Lee, E & E.

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION ___ YES _X_ NO

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

None

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

1. E & E Screening Site Inspection, February 1989.
2. Wallace Munly, February 27, 1989, Owner, Nu-Way Cleaners, Personal communication with Gerald Lee, E & E.

19