PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT

BOVANO INDUSTRIES, INC.
830 SOUTH MAIN STREET
CHESHIRE, CONNECTICUT

HRP #BOV-2000.P2

PREPARED FOR: MR. JAMES FLOOD
BOVANO INDUSTRIES, INC.
830 SOUTH MAIN STREET
CHESHIRE, CONNECTICUT 06410

PREPARED BY: HRP ASSOCIATES, INC.
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Issued On: July 27, 1995

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HRP
ASSOCIATES, INC.

July 27, 1995

Mr. Anthony Ciccomascolo
Bank of Boston Connecticut
81 West Main Street
Waterbury, Connecticut 06702

RE: HRP PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT FOR BOVANO OF CHESHIRE, 830 SOUTH MAIN STREET, CHESHIRE, CONNECTICUT, DATED JULY 27, 1995 (HRP #BOV-0002.P2)

Dear Mr. Ciccomascolo:

The purpose of this letter is to indicate to the Bank of Boston Connecticut (the "Bank") that it may rely upon the contents of the referenced reports, to the full extent of HRP's professional errors and omissions insurance coverage. I have asked our insurance agent to provide to you directly via fax transmission evidence of this insurance. Enclosed with this letter are the relevant descriptions of this insurance coverage. Please feel free to contact me if you have any further questions. Thank you.

Sincerely,

HRP ASSOCIATES, INC.

Robert A. Stewart

Robert A. Stewart
Project Manager

Attachments

g\j\rel-ltr.bov

167 New Britain Ave. ■ Plainville, CT 06062 ■ (203) 793-6899 ■ FAX (203) 793-6871

TABLE OF CONTENTS

Section		Page
I.	INTRODUCTION	1
II.	SITE AND AREA OVERVIEW	5
III.	SITE HISTORY	11
IV.	SITE FEATURES	13
V.	REGULATORY COMPLIANCE HISTORY	18
VI.	SITE WALKOVER SURVEY	20
VII.	TEST BORING AND MONITOR WELL INSTALLATION PROGRAM	22
VIII.	GROUND WATER MONITORING PROGRAM	23
IX.	CONCLUSIONS AND RECOMMENDATIONS	25
X.	LIMITATIONS ON WORK PRODUCT	27
XI.	REFERENCES	30

LIST OF FIGURES

1	Site Location	(follows text)
2	Site Plan	(follows text)
3	Ground Water Contour Map	(follows text)

LIST OF TABLES

1	Ground Water Classifications, Uses and Compatible Discharges	(follows figures)
2	Surface Water Classifications, Uses and Compatible Discharges	(follows figures)
3	Monitor Well Survey Data	(follows figures)

HRP
ASSOCIATES, INC.

July 27, 1995

Mr. James Flood
Bovano Industries, Inc.
830 South Main Street
Cheshire, Connecticut 06410

RE: PHASE I ENVIRONMENTAL SITE ASSESSMENT AND PHASE II LIMITED SUBSURFACE INVESTIGATION, BOVANO OF CHESHIRE, 830 SOUTH MAIN STREET, CHESHIRE, CONNECTICUT (HRP #BOV-0002.P2)

Dear Mr. Flood:

Attached for your use are two copies of the Phase I Environmental Site Assessment Report prepared by HRP Associates, Inc. for the property referenced above.

HRP's Conclusions and Recommendations are summarized in Section VII of the report.

If you have any questions, please do not hesitate to contact us. Thank you.

Sincerely yours,

HRP ASSOCIATES, INC.

Jennifer K. Convey

Jennifer K. Convey
Project Geologist

Robert A. Stewart

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Project Manager

Attachments
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LIST OF APPENDICES

A ORDER 2036

B ORDER 3242

C DEP RCRA INSPECTIONS

D WASTE DISPOSAL DOCUMENTATION

E NOV 307

F ORDER HM 688

G WELL WATER ANALYSIS

H MATERIAL SAFETY DATA SHEETS

I OCS REPORTS

J MONITOR WELL COMPLETION FORMS

K LABORATORY RESULTS

I. INTRODUCTION

A. Purpose

The purpose of this Phase I Environmental Site Assessment (ESA) is to evaluate the potential for contamination of site soil, ground water and surface water resulting from site operations, use and conditions. This ESA is designed to evaluate site contamination potential for the purposes of real property management in consideration of the Connecticut "Super Lien" (C.G.S. Section 22a-452a) and the Connecticut "Transfer Act" (C.G.S. Section 22a-134). This ESA is consistent with the scope described in the ASTM document "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (2d. Edition: E1527-94).

This report is consistent with the form and content recommended for a "Phase I Transfer Act Site Assessment" as described in the Connecticut Department of Environmental Protection (DEP) "Transfer Act Site Assessment Guidance Document" dated November 1991.

B. Client

Mr. James Flood
Bovano Industries, Inc.
830 South Main Street
Cheshire, Connecticut 06410

C. Background

Site Name and Address:	Bovano Industries, Inc. 830 South Main Street Cheshire, Connecticut 06410
Owner Name and Address:	Bovano Industries, Inc. 830 South Main Street Cheshire, Connecticut 06410
Telephone:	(203) 272-3208
Date of Ownership:	December 19, 1967

Present Land Use and Operational Status:	The site is occupied by Bovano Industries (Bovano of Cheshire), which manufactures enameled copper giftware. The Old Foundry Gift Shop specialty gift store, and Sweet Claude's Ice Cream Shop are also present on-site.
Proposed Land Use, If Known:	Not reported

D. Previous Environmental Audits and Hydrogeologic Investigations:

Bovano Industries, Inc. (Bovano) has a long and eventual history of inspections and enforcement with the Connecticut Department of Environmental Protection (DEP). This summary is based on DEP files, Bovano files, and HRP files for previous work at Bovano. Pertinent information is included in Appendices A to G. A large amount of correspondence between the DEP, Bovano and its consultants, of minimal direct relevance to this ESA, has been omitted. Environmental compliance and enforcement at the Bovano site has occurred in four general phases:

1. Order No. 2036, issued 23 February 1976 (and as modified 22 December 1977), which, in essence, required Bovano to install a treatment system for its metal finishing operations (Appendix A). As part of the compliance process, Bovano installed the former "sludge lagoon" (Figure 2) to settle and dewater copper hydroxide sludge resulting from treatment of the copper etch wastewater.

   On 8 December 1978, Bovano was issued a permit from the DEP Water Compliance Unit to discharge treated wastewater to the ground, apparently via the former sludge lagoon. The sludge lagoon reportedly consisted of concrete block walls with a 6" crushed limestone base to further neutralize any residual acidity. The lagoon dimensions were stated 15' x 15' x 4½' deep. The permit regulated copper, total suspended solids (TSD) and pH. The expiration date was 8 December 1983. In granting this permit, the DEP acknowledged full compliance with Order No. 2036. The town of Cheshire was apparently copied on most DEP correspondence, and its approvals for compliance with local regulations and orders parallel those of the DEP.

2. The second episode of enforcement shortly followed the effective date of the Resource Conservation and Recovery Act (RCRA 19 November 1980), with the issuance of Order No. 3242. This order focused on three items (Appendix B):

   a. An investigation of soil, surface water, and ground water contamination;

   b. A best management plan (BMP) for chemical handling and storage; and

   c. Elimination of metal finishing wastewater discharges to ground water.

   The basis for Order No. 3242 appears to be the 14 December 1981 RCRA inspection (Appendix C), which paid particular attention to the former "sludge lagoon". The DEP inspector opined at the time that the lagoon was not regulated under RCRA, and subsequent DEP actions have been consistent with this interpretation.

   Insufficiently prompt attention to the Order resulted in referral to the Attorney General's office, and a stipulated judgement (SJ) on 23 May 1984 (this material was unavailable in DEP files, but is included with the TRC report discussed below). Bovano eventually fully complied with the terms of the SJ on June 25, 1987. The details are summarized in two Bovano letters to the DEP dated 7 February 1984, 12 November 1986, and 24 June 1987. Some of the more significant results include:

   a. Elimination of the trichloroethylene (TCE) degreaser (1 June 1982).

   b. TRC soil and ground water investigation of 30 April 1982, 13 July 1984, and 17 September 1986 - these studies indicated some copper and TCE soil and ground water contamination. TCE was present at significant levels only in one monitor well near the former chemical storage area; the level dropped from 1,220 parts per billion (ppb) in 1982 to 6.1 ppb in 1985. In 1985, the drinking water standard for TCE was 25 ppb, and presently it is 5 ppb. Ground water contaminants elsewhere on the site, if detected at all were at significant levels.

      in Corrected by Bob Stewart HRP

   c. Contaminated soil was removed from two areas: (1) the former lagoon, and (2) the former chemical storage area (presently the garage) to the satisfaction and with the approval of the DEP. Both features were eliminated as part

of the BMP prepared by Bovano. Supporting documentation for waste disposal related to these events, plus other routine and episodic waste disposal, is included in Appendix D.

A DEP RCRA inspection of 22 August 1983 expanded on the 1981 DEP RCRA inspection. The 1983 inspection mentioned the monitor wells installed by TRC in 1982, and noted "1 ppm" TCE in the monitor well near the loading dock, with the three other monitor wells "clean". The catch basin near the loading dock reportedly emptied into an underlying dry well for seepage that formerly included untreated process water from the copper etch machine.

3. An 18 February 1987 hazardous waste inspection resulted in Notice of Violation (NOV) No. 307 (Appendix E), for the following deficiencies:

   a. hazardous waste determinations
   b. general inspection requirements
   c. personnel training
   d. *contingency plan and emergency procedures*
   e. use and management of containers

   Bovano received a "Certificate of Compliance" on 5 June 1992 as part of satisfying the requirements of Order No. HM-688 (Appendix F), as discussed below.

4. The latest DEP enforcement against Bovano on 10 May 1990 was prompted by a 29 November 1989 RCRA inspection to confirm compliance with NOV No. 307. Order No. HM-688 made two requirements, the first essentially to focus on items a-e listed above, for NOV No. 307, and the second to excavate and remove enamel dust and associated contaminated soil from two areas on the site (Figure 2). The first requirement was satisfied on 21 August 1990. The second requirement was completed on 5 June 1992, which also achieved compliance with NOV No. 307. Roughly 20 tons of contaminated soil were disposed as hazardous waste via a licensed hauler.

II. SITE AND AREA OVERVIEW

A. Site Information

1. Site location, acreage and adjoining roads (Figure 1) -

According to the Cheshire Assessor's files, the property occupies 1.46 acres on the east side of South Main Street, south of its intersection with Connecticut Route 42.

2. *Site buildings, roadways and parking areas (Figure 2) -*

The site contains the following four buildings:

Sweet Claude's Ice Cream Shop - this two-story building with basement, built circa 1906 with a footprint area of 1,606 square feet, is the westernmost building on the site.

Free-Standing Garage - the two story garage, probably built circa 1906 with a footprint area of 480 square feet, is just east of the Ice Cream Shop, historically used for storage of shop supplies, construction materials, and process chemicals.

Office Building (with design and minor manufacturing) - this two-story building, built circa 1969 with a footprint area of 4,400 square feet, is at the east end of the site.

Factory Building with Store - This single-story building, which has a footprint area of about 11,600 square feet, consists of numerous additions to the original building from before 1900.

A gravel parking area south of the office building provides access to Jinny Hill Road east of the site, and paved parking areas and driveways provide access to all site buildings from South Main Street to the west.

B. Local and adjacent land use

1. Surrounding land uses -

North: Residential and wooded land, including building ruins inferred to be from a stable.

South: McDonald's Restaurant

East: Mill River, then residential and wooded land.

West: South Main Street

2. Selected published sources of contamination within one mile of site -

The following list refers to sources of leachate or wastewater within one mile of the site that would be expected to have a possible impact on the site due to their hydrogeologic setting. The sources of leachate and wastewater were obtained from the compilations published by the Connecticut Department of Environmental Protection Water Compliance Unit (now the Water Management Bureau) for the various river basins in the state. The sources of leachate and wastewater include "surface and ground water discharges which: (1) have received a wastewater discharge permit from the state or (2) are historic (sic) and now defunct waste disposal sites or (3) are locations of accidental spills, leaks or discharges of a variety of liquid or solid wastes."

Basin 5302: Mill River

I.D.# Location Nature of Leachate and/or Discharge

1 Bovano (sic) - metal finishing wastewater to leaching system, sludge drying beds (sic) - to go to sewer - HWMU monitoring required

2 Mund's Shell Station - gas tank leak

3 Suburban Excavator's - waste oils to ground - 1982 WCU Order

4 McPhee's Texaco - floor drain discharge to ground - now to sewer

5 DanJon Mfg. - former solvents to ground - 1982 WCU Order

Based on the south-easterly direction of ground water flow on the property, as discussed elsewhere, only the on-site source is expected to have a direct impact on the quality of soil and ground water at the subject property. The other listed sources appear to account at least in part for the degraded (GB/GAA) ground water quality discussed below. Sources 2-5 are within 1/3 mile south-southwest of the site. Bovano and sources 3 and 5 were issued Orders concurrently by the DEP in 1982.

3. State Superfund Status -

The site is included on "An Inventory of Hazardous Waste Sites in Connecticut and Recommendations for Continuing Action," issued January, 1987, and as amended, by the Connecticut Department of Environmental Protection. Metals, solvents, and acids discharged to a septic system, the ground, and a drywell are noted. The list identifies the area as Class GA groundwater, and notes contamination of the South Cheshire wellfield leading to the 1982 Order #3242 (to cease discharge, investigate, and take remedial action) against Bovano and other area businesses. Mention is made of the 1985 emptying and excavation of the lagoon, and the 1986 excavation of copper-contaminated soil. By 1986, TCE in ground water reportedly had dropped below Federal Health Advisory levels.

4. Federal Superfund Status -

The site is included on the CERCLIS extracted on April 3, 1995, from the *U. S. Environmental Protection Agency Superfund* Program, as provided by DataSite On-Line Services of Austin, Texas. No CERCLIS sites abut the subject property, and no National Priority List (NPL) sites are within one mile of the site.

5. RCRA Notification Status -

The site is included as a Large Quantity Generator of hazardous waste and as a TSD (treatment, storage, disposal) facility on the list extracted February 2, 1995, by DataSite. A violation investigation record and corrective action are noted. Bovano has EPA ID #CTD001179346. There are no other TSDs within one mile of the site, and no generators on abutting properties.

As discussed elsewhere in various DEP inspections (Appendix C), the site erroneously registered as a TSD when RCRA went into effect in 1980, and operates as a generator.

C. <u>Potential Receptors and Environmentally Sensitive Aspects</u>

1. Ground water classification, resource uses, and compatible discharges within one mile of site (Table 1) -

The site is on the border between the Class GB/GAA groundwater area to the northeast and the Class GAA area to the southwest.

The GAA classification is for groundwater that is suitable as a public drinking water supply. The GB designation indicates that the water is presumed not suitable for human consumption without treatment. The GB/GAA classification refers to water that has been designated GB by the DEP, where the goal is to achieve GAA groundwater quality.

Ground water classifications, resource uses and compatible discharges are more fully described in Table 1.

2. Surface water classification, resource uses and compatible discharges within one mile of site (Table 2) -

The Mill River east of the site has been classified as B/AA by the Connecticut DEP. The B/AA classification indicates that the present water quality is Class B (suitable for bathing or other recreational purposes, certain fish and wildlife habitats, industrial uses and navigation), with a reclassification goal of Class AA (suitable as a public drinking water supply).

Surface water classifications, resource uses and compatible discharges are more fully described in Table 2.

3. Wetlands areas -

Wetlands are present on the eastern edge of the site along the Mill River. The Saco silt loam mapped on the site is included on the List of Hydric Soils (Soil Conservation Service, 1987) and the Inland Wetland Soils-Connecticut (Soil Conservation Service, 1984). The specific extent of hydric soils can not be mapped without evaluation by a certified professional soil scientist.

4. Status of site water supply wells -

Just south of the manufacturing building (Figure 2) is a 110' supply well for the two main buildings on the site. According to Mr. Jim Flood, analyses have shown the well water to contain no detected lead or indicator volatile organic compounds (VOCs), or other typical potability inhibitors (Appendix G). This well is situated opposite the former location of the TCE degreaser.

D. Physiographic, Geologic and Hydrogeologic Setting

1. Site topography -

The site slopes from an elevation of 174 feet above mean sea level on the northern property line to 162 feet along South Main Street on the western side and 160 feet on the eastern side. The steepest slope is just north of the factory, with more gentle slopes across the remainder of the property.

2. Site soils -

The Soil Survey of New Haven County (Soil Conservation Service, 1979) shows the majority of the site to be classified as Urban Land, which is mostly covered by buildings, roads, and paved parking lots. By definition, soil characteristics in these areas may vary considerably. The easternmost edge of the site is covered by Saco silt loam, a nearly level, very poor drained soil which is found on low flood plains of major streams, and is formed in alluvium derived mainly from gneiss and schist. Subsurface investigations of the site have found materials consistent with these descriptions.

3. Surficial geology -

The surficial material mapped on the site is glacial meltwater sand and gravel overlying sands (Stone et al., 1992). This stratified drift consists of sand, gravel, silt, and clay. Along the Mill River are deposits of alluvium, comprising sand, silt and gravel (Flint, 1962).

4. Bedrock geology -

Bedrock beneath the site is the New Haven Arkose, a poorly sorted, reddish-brown, medium- to coarse-grained, sandstone-like sedimentary rock known locally as brownstone (Rodgers, 1985). the Cheshire area is known to contain chalcopyrite and galena, two associated minerals which contain copper and lead, respectively (Sohon, 1951). Chalcopyrite, a copper iron sulfide, is one of the major copper minerals. Galena, a lead sulfide, is the most common lead mineral (Chesterman, 1979). Both minerals are commonly associated with barite deposits, as noted on Jinny Hill Road (Fritts, 1963).

5. Inferred direction of ground water movement -

The shape of the ground water table is generally assumed to reflect the slope of the ground surface, and consequently ground water is inferred to move in the direction of the steepest topographic gradient. As confirmed by the concurrent subsurface investigation of the water table, ground water on the site flows southeast, toward the Mill River.

III. SITE HISTORY

A. City directories for Hamden (which include Cheshire):

Bovano Industries or Bovano of Cheshire is listed from 1961 through 1991 (the most recent directory available). The Old Foundry Gift Shop has been listed since 1966. From 1960 through 1964, the Grimes Noden Corp. (leather manufacturers), were listed on-site, and the Aims Manufacturing Corp. (copper enameling) was present from 1956 through 1960. The WOWW Radio Station was also listed for 1965.

No pre-1956 directories were available.

B. Sanborn Fire Insurance Company maps for New Haven:

No Sanborn maps were available for the area of the site.

C. Aerial Photograph Reconnaissance

Flight Year 1934; Scale 1"=1166'; Photo #5017
Flight Year 1951; Scale 1"=1666'; Photo #CNG-2H-183

The factory building and house are visible on-site.

Flight Year 1965; Scale 1"=1666'; Photo #20 3576

The factory, ice cream shop building, and garage are present.

Flight Year 1970; Scale 1"=1000'; Photo #33 2413

The office building is now present; the other buildings appear generally unchanged.

Flight Year 1975; Scale 1"=1000'; Photo #33 5437
Flight Year 1980; Scale 1"=1000'; Photo #36-1705
Flight Year 1986; Scale 1"=1000'; Photo #36-6880
Flight Year 1990; Scale 1"=1000'; Photo #36-133

The site appears generally as observed during the site inspection.

D. Summary of Site History

The original factory building was a non-ferrous metal foundry dating back to before 1900, according to the site contact. Bovano has occupied the main site building since 1954. Built in 1906, the Ice Cream Shop was a private dwelling until 1985. A newspaper article from the Waterbury Republican-American (18 November 1991) reported that Bovano Industries was founded at the site in 1953.

IV. SITE FEATURES (FIGURE 2)

A. Site Utilities

1.	Source of Heat:	Natural gas
2.	Gas:	Yankee Gas
3.	Electric:	Northeast Utilities (NU)
4.	Telephone:	Southern New England Telephone (SNET)
5.	Water:	Bovano: On-site private supply well Ice Cream Shop: Public water supply
6.	Sewer:	On-site septic systems (factory and office buildings) and Cheshire municipal sanitary sewer system (ice cream shop and factory building since 1983)

B. Transformers and Capacitors

The one transformer observed on-site belongs to NU. No staining was observed on the transformer or pad, which is located just south of the southeast corner of the factory building. Although no large capacitors were observed during the site inspection, PCBs may be present in fluorescent lights in the building if the capacitors were manufactured before 1979, which is likely.

C. Site Drainage

1. Building interior drainage -

   No floor drains were observed in the site building. Previous DEP inspections identified floor drains and trenches which have subsequently been sealed (Appendices A-c). These former drains directed treated and untreated process wastewater to, respectively, the sludge lagoon and catch basin/dry well.

2. Site exterior drainage -

   The one catch basin observed during the site inspection reportedly discharges directly to a dry well (Figure 2). The bermed floor liner under the copper etching apparatus collects etching fluids, which are recycled into the system.

D. Raw Material and Waste Handling

1. Specific processes and operations conducted on-site -

Bovano makes enameled copper giftware through the following processes:

a. Silk-screen decorative patterns on copper with acid-resistant ink ("blue resist");

b. Run copper through a cupric chloride etchant, which dissolves copper not protected by "blue resist";

c. Run etched shapes through alkaline rinse then nitric and sulfuric bright-dip rinses to remove "blue resist" and clean copper;

d. Enamel copper by hand with powdered, colored glass by baking (back of pattern also coated with enamel of a single color);

e. Lacquer enameled copper; and

f. Assemble finished pieces.

Design and typical business office activities, as well as retail sale of the product also take place on-site. The Ice Cream Shop makes and sells its own ice cream.

2. Summary of raw material use and storage at time of site inspection

Raw materials reported and observed during the site inspection are summarized in the table below.

Material	Use	Location
enamels (finely ground silica powder containing metals, including lead, for coloring)	copper enameling	storage area of factory building, basement of ice cream shop
sheet copper stock	base for product	factory building
food-grade spray-on cellulose	mixed with enamel for back of product	factory building *storage area*

Material	Use	Location
cupric chloride etchant (containing hydrogen peroxide and hydrochloric acid)	for cutting copper	factory building
bright dip (sulfuric plus nitric acids)	used for cleaning etched copper	factory building
alkaline rinsant	for removing silk screened "blue resist"	factory building
blue resist	silk-screened on copper stock for shape of product before etching	factory building
lacquer	used on final product	factory building
acetone	used for minor cleanup after lacquer application	factory building
xylol	used for cleaning silk-screens	factory building
clay	used for suspension of enamel for spray application to back of pieces	factory building
acetylene/oxygen	assembly welding	factory and office buildings

Raw materials formerly used on-site, but not present at the time of the site inspection, reportedly included trichloroethylene, and two 55-gallon drums in the garage reportedly contain phosphotex, a bright-dip for steel, a metal which has rarely been used on-site. Material Safety Data Sheets (MSDSs) are provided in Appendix H.

3. Summary of waste generation and storage -

As shown in the waste shipping log provided by Mr. Flood (see Appendix D), which lists hazardous waste shipments since 1987, the site was generating an average of more than 6,000 gallons of hazardous waste each year, and more than 10,000 gallons per year since 1993. According to the Hazardous Waste Manifests dating back to 1985 (also in Appendix D). These wastes include sulfuric, nitric and hydrochloric acids, lead, copper nitrate, copper sulfate, cadmium, sodium hydroxide sludge, ferric chloride solution, lacquer, trichloroethylene mixed with oil, and single shipments of mixed diesel, gasoline and water, and metal hydroxide sludge and soil.

Historically, sodium hydroxide sludge, various contaminated soils, and fuel-water mixtures were generated in response to remedial action conducted as part of, or during compliance with DEP Order No. 3242 and HM-688 (Appendices B, C, D, F).

Enamel dust is now collected in a roof-mounted dust collector. Once a year the dust is recovered, mixed with water and re-used in *routine operations*.

4. On-site waste disposal systems -

The office building is serviced entirely by a septic system south of the building, and the Ice Cream Shop by the Cheshire municipal sanitary sewer. The factory building was connected to the sanitary sewer in 1983, except for one bathroom, which is connected to a septic system north of the office building. The sludge lagoon and catch basin/dry well are discussed in detail above, and the sink in the office building, which formerly discharged to the ground, recently has been connected to the septic system. The DEP is satisfied with remedial actions associated with the sludge lagoon and dry well.

5. Summary of present and former underground or above-ground storage tanks for raw and waste materials -

In 1988, one 2,000 gallon and one 550 gallon underground fuel oil tank were removed from just south of the factory building.

One 275 gallon fuel oil tank just south of the Ice Cream Shop is under a concrete slab with some access from the basement through the foundation in 1988.

A 2,000 gallon underground fuel oil tank for the house was also removed in 1988.

In 1988, a mixture of diesel, gasoline and water was removed from the site during UST removal.

Mr. Flood reportedly received a letter from the Fire Marshal indicating that no contaminated soils were found during UST removal.

One 275 gallon above-ground fuel oil tank is present in the basement of the Ice Cream Shop.

The following above-ground tanks are present on the factory building:

- Two 1,000 gallon bermed waste tanks
- Two 55 gallon drums for nitric and sulfuric acid rinses

In addition, there are three approximately 35 gallon bermed process vessels containing rinses for the manufacturing products.

V. REGULATORY COMPLIANCE HISTORY

This ESA is not a regulatory compliance audit and is not designed or intended for such use. The HRP Inspector may have made observations during the site inspection or may have been provided with copies of documents from environmental regulatory agency files or from site contacts which imply that site operations or conditions require compliance with particular environmental regulatory agency regulations or permit provisions. Information thus obtained is presented below.

A. DEP File Search

1. Bureau of Water Management

   No documentation concerning the site was found in the Water Compliance Unit files reviewed. The client, however, provided information, disseminated throughout this report, which normally would be found in such a file.

2. Bureau of Waste Management

   a. Hazardous Waste Program Files

      The available files have been reviewed in Section I.D of this report.

   b. Oil and Chemical Spills (OCS) Response Division Files

      Voluminous files are maintained by OCS for Bovano. The information in those files has been largely disseminated throughout this report, and mainly in Section I.D.

      Two minor incidents in the immediate site vicinity were noted in the Cheshire general files: a 1994 release of less than one gallon of non-PCB transformer oil at 828 South Main Street (cleaned up), and a 1980 report of underground gasoline at 831 South Main Street. Copies of the Incident Reports are attached as Appendix I.

3. Underground Storage Tank (UST) Program List and Files

   a. UST

      The UST lists show that three tanks have been removed from the site. No existing underground storage tanks were

registered with the UST section. This coincides with the reported tank-related information.

b. Leaking UST

No leaking underground storage tanks were registered for the site itself. The Shell Service Station across South Main Street is included with four leaking tanks.

4. Additional databases -

According to DataSite On-Line Services of Austin, Texas, the site is not included on the following databases:

CERCLA Information System Sites Detail Report (3/20/95)
RAATS Enforcements (3/28/95)
Toxic Release Inventory (TRI) (1987-92)
Emergency Response Notification System (ERNS) (1/2/93)
EPA Civil Enforcement Docket (CED) (11/17/94)

5. Adjacent land and surrounding area -

Except where previously noted, none of the adjacent properties is included on these lists.

B. Municipal File Search

1. Fire Department Files and Interviews

No information concerning the site was available from the Cheshire Fire Marshal's office. According to Mr. Flood, ETI reported that the Fire Marshal inspected the former UST graves (see Section IV.D.5) and approved backfilling, although no written confirmation was provided.

2. Health Department Files and Interviews

No site-specific information was available from the Chespocott Health District.

VI. SITE WALKOVER SURVEY

A. Investigators

HRP personnel and date of walkover survey -

The site walkover survey was conducted on March 29, 1995, by Robert A. Stewart, and on May 26, 1995, by Jennifer K. Convey of HRP Associates, Inc.

B. Site contacts and interviews

The following persons were interviewed as part of this site inspection:

Mr. Jim Flood, site owner and contact
Staff, Cheshire Assessor's Office
Staff, Cheshire Fire Marshal's Office
Staff, Chesprocott Health District

C. Limiting site conditions

Part of the site is covered by the site building and pavement, preventing close examination of on-site soils in those areas.

D. Building Interiors

1. Indicators of contamination -

The floor of the factory building was stained near the copper etching apparatus and in storage areas, as is typical of such facilities. No floor drains or significant cracks in the floor slab were observed. A bermed floor linear near the copper etch line has a recessed area near the southeast corner for collection of any spilled etching liquids, which are recycled into the system.

2. Asbestos Containing Materials -

No friable materials suspected to contain asbestos were observed in the Bovano buildings during the site inspection. A three foot long piece of suspected asbestos-containing pipe wrap was observed in the furnace room in the Ice Cream Shop basement. HRP analyzed no samples for asbestos as part of this investigation.

E. Site Exterior

1. Evidence of Surficial Contamination -

a. Stained soil -

No stained soil was observed on-site during the site inspection.

b. Surface water -

No obvious surface water contamination was observed during the site inspection. The Mill River at the eastern edge of the site was tested by TRC in 1982 and contained no TCE.

c. Seeps or leachate -

No existing seeps or sources of leachate were observed during the site inspection. The former discharges to the sludge lagoon and catch basin/dry well are inferred to be *historical sources of leachate to on-site soils and* groundwater.

d. Odors -

No unusual odors were reported or detected during the site inspection.

e. Stressed vegetation -

No stressed vegetation was reported or identified during the site inspection.

f. Unusual topographic features or soil disturbances -

The appearance of the site is in keeping with its known history.

2. Evidence of Waste Deposits -

With the exception of the former sludge lagoon and enamel dust stock piles, no other waste deposits were reported, observed, or identified during the site inspection, background research, or historical aerial photograph review.

VII. TEST BORING AND MONITOR WELL INSTALLATION PROGRAM

A. Methods

Two soil test borings were installed and converted to monitor wells to further evaluate ground water quality at the site on June 23, 1995, by Associated Drilling of Meriden, Connecticut, under direct supervision of HRP (Figure 2). Test boring MW-3 was installed near the southwest corner of the site to replace destroyed well MW-A, installed by TRC in 1982. Test boring MW-4 was installed southwest of the office building to evaluate groundwater as it leaves the site. Test boring logs with sample descriptions and monitor well completion diagrams are included as Appendix A.

The test borings were installed by advancing 4¼ hollow stem augers generally to refusal, presumably on large boulders or bedrock.

B. Results

The soils encountered in the borings typically consisted of red to brown, fine to coarse sand with gravel interpreted to be, in part, artificial fill. This is consistent with published information for the area and previous drilling by TRC. The natural materials are mapped as till consisting of sand, gravel, silt, and clay (Stone, et al., 1992 and Flint, 1963).

Summary of test data 6/29/95

6/29/95

Well no.	Location	mg/l Cadmium	mg/l Chromium	mg/l Copper	mg/l Lead	ppb DCE	ppb TCE
MWA	behind bldg	0	0	0	0	0	0
MWB	behind bldg	0	0	0	0	0	0
MWC	behind bldg	0	0	0	0	0	0
MW1	front warehouse	0	0	0	0	0	0
MW2	corner gift shop	0	0	0	0	0	0
MW3	driveway	0	0.22	0.74	0.308	4	7
MW4	parking lot	0.01	0.45	13.5	0.52	0	0

7 wells

Summary of well tests done on 6/29/95 with samples from seven wells located on Bavaro property -

Summary of test data 6/29/95

6/29/95

Well no.	Location	mg/l Cadmium	mg/l Chromium	mg/l Copper	mg/l Lead	ppb DCE	ppb TCE
MWA	behind bldg	0	0	0	0	0	0
MWB	behind bldg	0	0	0	0	0	0
MWC	behind bldg	0	0	0	0	0	0
MW1	front warehouse	0	0	0	0	0	0
MW2	corner gift shop	0	0	0	0	0	0
MW3	driveway	0	0.22	0.74	0.308	4	7
MW4	parking lot	0.01	0.45	13.5	0.52	0	0

7 wells

Summary of well tests done on 6/29/95 with samples from seven wells located on Barnes property.

TABLE 3

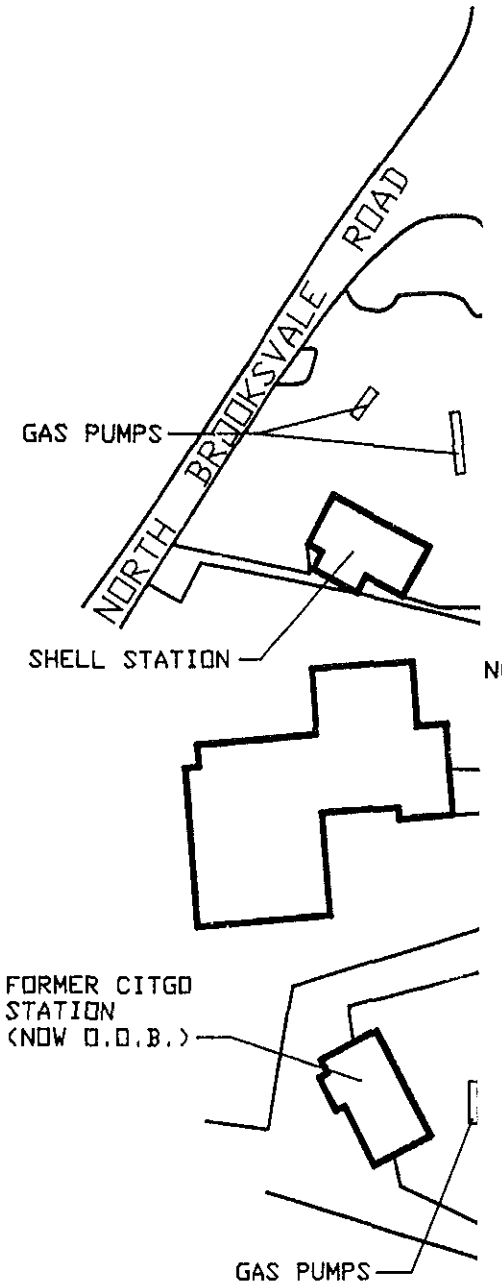
MONITOR WELL SURVEY DATA

Monitor Well	Top of Casing Elevation	Depth to Water	Water Table Elevation	Screened Interval
MW-1	101.85	11.7	90.15	76-58-91.58
MW-2	101.78	13.73	88.05	64.93-89.93
MW-3	100.29	11.60	88.69	84.47-94.47
MW-4	95.77	7.20	88.57	81.61-91.61
MW-A	99.82	8.00	91.82	NR
MW-B	100.00	8.24	91.76	NR
MW-C	101.81	11.40	90.41	NR

NOTES:

1. All elevations measured with respect to an arbitrary datum of 100.00'.
2. Water level measurements obtained 6/29/95

NR = Not Reported



LEGEND

MW-A, MW-2 ⊕	EXISTING MONITOR WELL
MWP1 ⊕	PROPOSED MONITOR WELL
91 ———	WATER LEVEL ISOPLETH RELATIVE TO ARBITRARY 100.0' DATUM
←	DIRECTION OF GROUND WATER MOVEMENT

DRAFT

FIGURE
GROUND WATER CONTOURS
BOVANO OF CHESHIRE
AND RELATED PROPERTIES
SOUTH MAIN STREET
CHESHIRE, CT.
HRP #BOV.0002.P2

MAP IS BASED ON:
1. McDONALD'S PRELIMINARY SITE PLAN, SOUTH MAIN STREET, CHESHIRE, CT., JANUARY 16, 1976 (McDONALD'S CORP. OAK BROOK, ILLINOIS) SCALE 1" = 20
2. TOPOGRAPHIC SURVEY OF TOWN OF CHES NEW HAVEN CO.,CT., SHEET #78, SCALE 1" = 100' (AERIAL PHOTOGRAPH OF APRIL 14, 1992)

BOV002P2\GWCONT (M)

HRP
ASSOCIATES, INC.
167 New Britain Avenue
Plainville, CT 06062
(860) 793-6899
FAX: (860) 793-6871

VIII. GROUND WATER MONITORING PROGRAM

A. Methods

The two existing on-site wells MW-1, MW-2, and the three off-site wells MW-A, MW-B, and MW-C (Figure 2), were sampled and surveyed on May 26, 1995. The existing on-site and off-site wells were gauged and analyzed to determine whether additional wells would be needed. Based on the preliminary data, the two new wells were also installed. New monitor wells MW-3 and MW-4 were installed on June 23, 1995, and sampled and surveyed on June 26, 1995. The three existing off-site wells were installed as part of a different ESA authorized by Stop and Shop. These wells were sampled with the permission of the adjacent land owner.

Each new well was constructed with ten feet of screen (about eight feet below and two feet above the water table). The well screen was 2" I.D. PVC connected to flush-threaded 2" I.D. PVC riser. The well screen had a slot width of 0.010". The annular space around the well screen was packed with graded silica sand upon which was added, successively, one half to two feet of bentonite chips, drill cuttings to the surface, and a cast-iron handhole with a bolted cover, set in concrete, and finished flush with grade. Each monitor well was finished with a locking cap. Monitor well completion diagrams are included in Appendix J.

The monitor wells were surveyed with respect to a benchmark assigned an arbitrary elevation of 100.00 feet. The survey was closed with a total cumulative error of 0.00 foot. HRP considers a total cumulative error of 0.05 foot or less acceptable.

The following groundwater sampling protocol was followed for each monitor well:

1. Measure the static water levels with a Keck gauge and depth to bottom of well with a tape measure and plopper;

2. Develop each well using a clean, dedicated PVC hand bailer to remove at least six well (water) volumes from the casing;

3. Obtain ground water sample using bailer and place in new EPA type containers, then label; and,

4. Store samples on ice and deliver to laboratory following proper chain of custody procedures.

Prior to sampling, the wells were developed by removing six well casing volumes with dedicated Tygon tubing and a battery-powered peristaltic pump or clean, 2-inch dedicated bailers. Well development is conducted

to promote representative water quality in the samples obtained. Fine-grained sediments are removed during development, which may clog the well screen and react with ground water, thereby altering the actual chemical quality. Development is also conducted to increase well yield so that representative samples can be collected in the shortest time.

Ground water samples were collected in appropriate containers, stored under refrigeration, and analyzed by a state-certified laboratory for halogenated volatile organic compounds (by EPA Method 8010), aromatic volatile organic compounds plus MTBE (by EPA Method 8020), and cadmium, copper, lead, specific conductance, and pH (Appendix B). Water samples collected from each well before, during, and after development were tested in the field for temperature, pH, and specific conductance. These analytical methods were chosen in view of historical on-site and nearby operations, as described in the introduction.

B. Results

Groundwater measurements taken from all wells on June 29, 1995, showed that on-site groundwater flows to the southwest, with an approximate gradient of 0.032 (Table 3, Figure 3).

No metals were detected in groundwater from wells MW-1, MW-2, MW-A, MW-B, and MW-C. Chromium, copper, and lead were detected in water from wells MW-3 and MW-4 at levels above drinking water standards (chromium - 0.05 ppm, copper - 0.25 ppm; lead - 0.015 ppm). Laboratory analyses are included in Appendix K.

Well MW-3 also contained t-1,2-dichloroethylene (t-1,2-DCE) at 4 ppb and trichloroethylene (TCE) at 7 ppb. TCE was above the ground water protection criteria (GWPC) of 5 ppb. Except for tetrachloroethylene (PCE) at the detection limit in MW-C, no VOCs were detected in water from MW-1, MW-2, MW-4, MW-A, and MW-B.

HRP's 1994 sampling of wells MW-1 and MW-2 showed low levels of copper in ground water. No VOCs were detected during that sampling event.

The volatilization criteria (VC) apply to the upper 10 feet of the saturated zone at any site for which the water table is within 15 feet of the ground surface, (all wells of this study), or within 15 feet of any structure (monitor wells MW-1 and MW-2 of this study). No compounds exceeded the VC in on-site wells.

IX. CONCLUSIONS AND RECOMMENDATIONS

A. Conclusions

The site has had a long industrial history, initially as a foundry, and then in the 1950's, as Bovano Industries, a manufacturer of enameled giftware. Waste disposal practices at the site have been the subject of DEP enforcement beginning in 1976, and subsequently on three later occasions. Bovano has complied with all enforcement actions, most recently in 1992. There is presently no outstanding municipal, state or federal enforcement against the site. The site is presently a generator of hazardous waste. Although also listed as a TSD, this was a mistaken original filing which is recognized by the DEP.

Present industrial wastes include (1) liquid cupric chloride etchant and (2) nitric and sulfuric acid bright dip rinses, both of which are hazardous (EPA waste code D002). These wastes are properly manifested and disposed via a licensed waste hauler. Excess enamel powder is now collected in a baghouse and recycled; no waste enamel powder is now generated. As discussed in Section I.D of this report, chemical handling, storage and disposal practices at Bovano are conducted in a manner acceptable to the DEP.

Historical hazardous and non-hazardous wastes have included (1) sodium hydroxide and copper hydroxide sludge from treatment of the waste copper etchant, (2) bright dip solutions and rinses, (3) trichloroethylene, and (4) waste enamel powder. As discussed in Section I.D of this report, the historical sources of soil and groundwater contamination identified by the DEP have been remediated to that agency's satisfaction.

Groundwater contamination is still present on the site in the form of copper, chromium, lead, TCE and T-1,2-DCE. These constituents seem to reflect residual contamination from historical waste disposal to the ground, as discussed in Section I.D and related Appendixes. A certain proportion of the metals detected (copper and lead in particular) may also reflect naturally occurring accessory sulfide mineralization in local barite veins. Groundwater monitoring by TRC (first in 1982) and HRP (beginning in 1994) have documented diminishing levels of TCE. In February of 1995, these various constituents were not detected in the on-site water supply well, the only groundwater receptor on the property. McDonald's Restaurant, the immediate downgradient receptor, uses the public water supply.

B. Recommendations

Bovano should continue its program of self-audits to ensure compliance with applicable regulations. In the past this practice has been successful in meeting DEP requirements.

The drum in the garage should be analyzed for waste characterization as a preface to proper off-site disposal in a manner consistent with applicable regulations.

The small amounts of enamel powder in the garage and ice cream sop basement should be removed to the factory building for reuse or appropriate disposal.

A licensed asbestos abatement contractor should be contacted concerning the presumed asbestos-containing material in the basement of the ice cream shop.

HRP recommends semi-annual groundwater monitoring of the on-site monitor wells for copper, lead and halogenated VOCs to track the progress of natural attenuation processes at the site. The water supply well should be tested annually for these parameters plus potability. As the documented sources of soil and groundwater contamination have been removed (Section I.D), HRP recommends no further investigation or remedial action for the site at this time.

X. LIMITATIONS ON WORK PRODUCT

All work product and reports provided by HRP in connection with the performance of any phase of Environmental Site Assessments, and any services related to remedial action, including all work performed under this Agreement for Professional Services and any follow-up work is subject to the following limitations.

A. The observations described in the Project Report(s) are made under the stated conditions. The conclusions presented in the Report(s) are based solely upon the indicated services, and not on scientific tasks or procedures beyond the scope of described services or the time and budgetary constraints imposed by the Client. The work described in Project Report(s) is carried out in accordance with the Agreement for Professional Services.

B. In preparing Project Reports, HRP relies on certain information provided by state and local officials and information and representations made by other parties referenced therein, and on information contained in the files of state and/or local agencies made available to HRP at the time of the site assessment. To the extent that such files are missing, incomplete or not provided to HRP, HRP is not responsible. Although there may be some degree of overlap in the information provided by these various sources, HRP does not attempt to independently verify the accuracy or completeness of all information reviewed or received during the course of this site assessment.

C. Observations are made of the site and of structures on the site as indicated within the Project Report(s). Where access to portions of the site or to structures on the site is unavailable or limited, HRP renders no opinion as to the presence of potential contamination by hazardous substances, wastes or petroleum and chemical products and wastes. In addition, HRP renders no opinion as to the presence of indirect evidence relating to potential contamination by hazardous substances, wastes or petroleum and chemical products or wastes where direct observation of the interior walls, floors, or ceilings of a structure on a site is obstructed by objects or coverings on or over these surfaces.

D. Unless otherwise specified in the Project Report(s), HRP does not perform testing or analyses to determine the presence or concentration of asbestos or polychlorinated biphenyls (PCBs), lead paint, urea formaldehyde foam insulation (UFFI), or radon at the site or in the environment of the site.

E. The purpose of the Project Report(s) is to assess the physical characteristics of the subject site with respect to the potential presence in the site soil, ground water or surface water environment of contamination by hazardous substances, hazardous waste or petroleum and chemical products and wastes. HRP has not confirmed the compliance of present or past owners

or operators of the site with federal, state, or local laws and regulations, environmental or otherwise.

F. If the conclusions and recommendations contained in the Project Report(s) are based in part upon the data obtained from a limited number of soil, ground water, or surface water samples obtained from widely spaced surface or subsurface explorations; then the nature and extent of variations between these explorations may not become evident until further exploration. If variations or other latent conditions then appear evident, it will be necessary to re-evaluate the conclusions and recommendations of the Project Report(s).

G. If water level readings are made in test pits, borings, and/or observation wells; these observations are made at the times and under the conditions stated on the test pit or boring logs or in the Project Report(s). However, it must be noted that fluctuations in the level of ground water may occur due to variations in rainfall, passage of time and other factors. Should additional data become available in the future, these data may alter the basis of conclusions and recommendations presented in the Project Report(s).

H. Except as noted within the text of the Project Report(s), no quantitative laboratory testing is performed as part of the site assessment. Where such analyses have been conducted by an outside laboratory, HRP has relied upon the data provided, and has not conducted an independent evaluation of the reliability of these tests.

I. If the conclusions and recommendations contained in the Project Report(s) are based, in part, upon various types of chemical data, then the conclusions and recommendations are contingent upon the validity of such data. These data (if obtained) are reviewed and interpretations made in the Project Report(s). If indicated within the Project Report(s), some of these data may be preliminary "screening" level data and should be confirmed with quantitative analyses if more specific information is necessary. Moreover, it should be noted that variations in the types and concentrations of contaminants and variations in their flow paths may occur due to seasonal water table fluctuations, past disposal practices, the passage of time, and other factors. Should additional chemical data become available in the future, these data may alter the basis of the conclusions and recommendations presented in the Project Report(s).

J. Chemical analyses may be performed for specific parameters during the course of this site assessment, as described in the text of the Project Report(s). However, it is understood that additional chemical constituents not searched for during the current study may be present in soil, ground water, or surface water at the site.

K. It is recommended that HRP be retained to provide further hydrogeologic and engineering services during the conduct of further exploration or the construction and/or implementation of any remedial measures recommended in HRP's Project Report(s). This is to allow HRP and the Client to observe consistency with the concepts and recommendations contained therein, and to allow the development of changes to the remedial program in the event that subsurface conditions or other conditions differ from those anticipated.

XI. REFERENCES

Published Sources

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Stone, J. R., Schafer, J. P. London, E. H. and Thompson, W. H. 1992. Surficial Materials Map of Connecticut. Connecticut Geological and Natural History Survey. Scale 1:125,000.

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United States Geological Survey. 1967. Photorevised 1984. Mount Carmel Quadrangle, 7.5 Minute Series.

Database Listings and Other Information Sources

Connecticut Department of Environmental Protection File Search

A. Bureau of Water Management
   1. Engineering and Enforcement Division
B. Bureau of Waste Management
   1. Waste Engineering and Enforcement Division
      a. Hazardous Waste Program
      b. Solid Waste Program
   2. Oil and Chemical Spill Response Division
      a. Emergency Response Files
      b. Underground Storage Tank Program
   3. Engineering and Enforcement Division

Connecticut Natural Resources Center, Aerial Photographs, 1965-1990.

Connecticut State Library and Archives, Historical Aerial Photographs, 1934-1951; and city directories for Cheshire.

RCRA Notifiers List, 1986 through February 7, 1991.

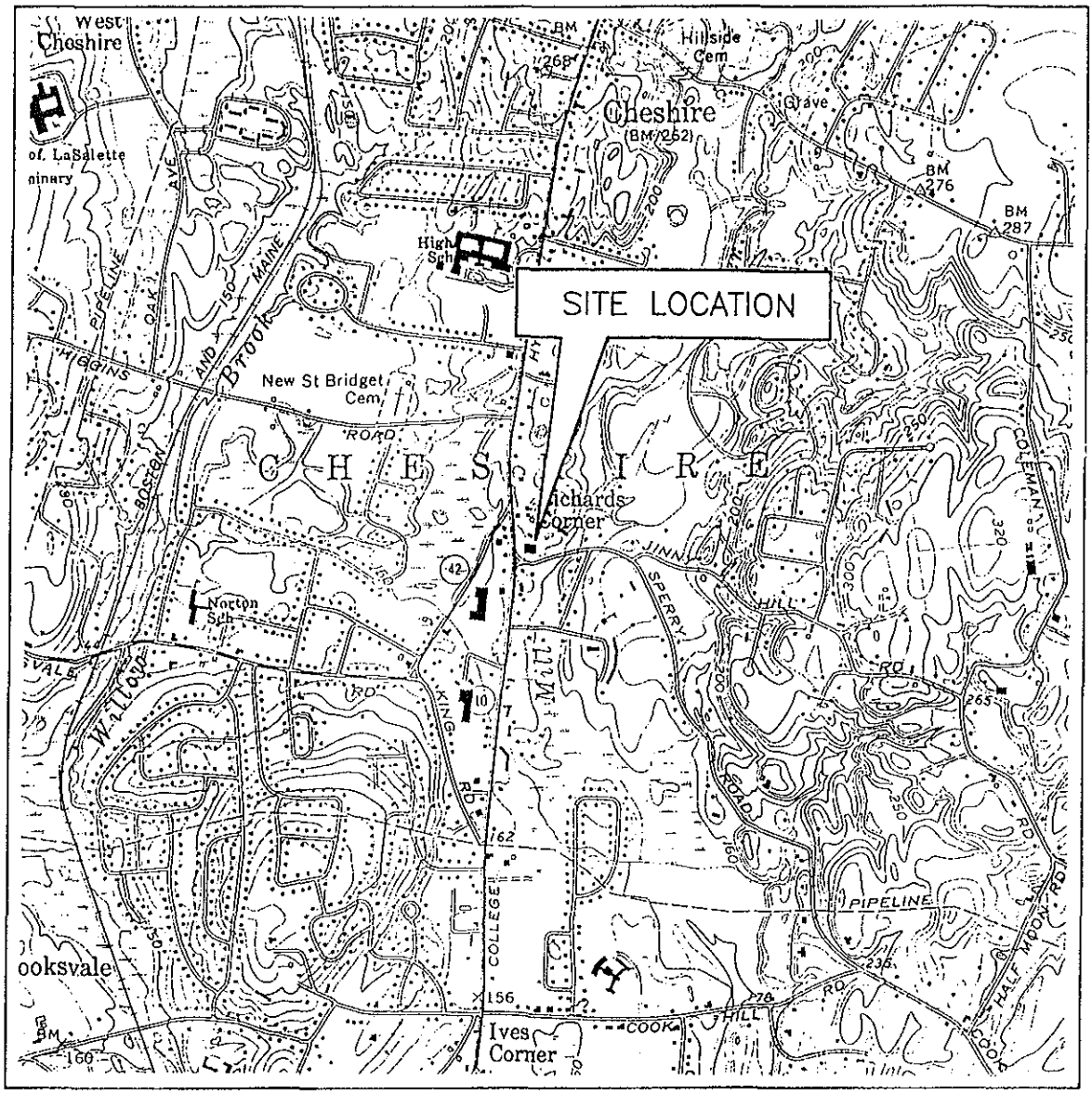
DataSite Company, Austin, Texas, for the following:

CERCLA Information System Sites Detail Report (3/20/95)
RAATS Enforcements (3/28/95)
Toxic Release Inventory (TRI) (1987-92)
Federal Inventory Notification System (FINDS) (3/15/95)
Emergency Response Notification System (ERNS) (1/2/93)
EPA Civil Enforcement Docket (CED) (11/17/94)

Town of Cheshire File Search

A) Assessor's Office
B) Fire Marshal's Office
C) Chesprocott Health Department

TRC Consultants, Inc. 1984, Technical Report to Bovano Industries on Groundwater Investigations.



SCALE 1 : 24000

1 1/2 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

CONTOUR INTERVAL 10 FEET

N

FIGURE 1
SITE LOCATION
BOVANO OF CHESHIRE
830 SOUTH MAIN STREET
CHESHIRE, CONNECTICUT
HRP# BOV.0002.P2

HRP
ASSOCIATES, INC.

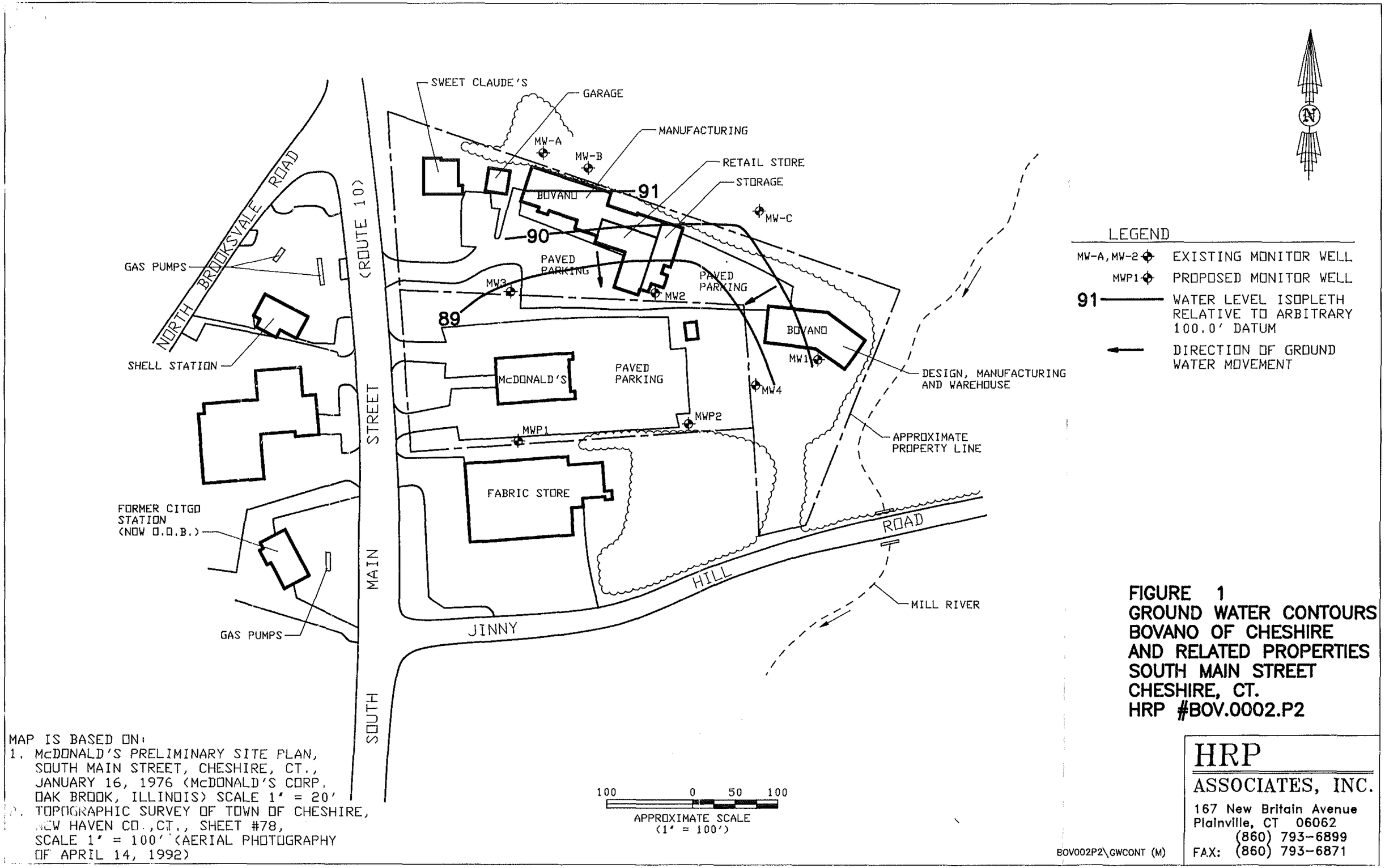


FIGURE 1
GROUND WATER CONTOURS
BOVANO OF CHESHIRE
AND RELATED PROPERTIES
SOUTH MAIN STREET
CHESHIRE, CT.
HRP #BOV.0002.P2

HRP
ASSOCIATES, INC.
167 New Britain Avenue
Plainville, CT 06062
(860) 793-6899
FAX: (860) 793-6871

TABLE 1

SUMMARY OF GROUND WATER CLASSIFICATIONS, USES, AND COMPATIBLE DISCHARGES

CLASS	DESIGNATED USES	COMPATIBLE DISCHARGES
GAA	Existing or potential public drinking water supplies; treatment not required	Restricted to wastewaters of human or animal origin and other minor cooling and clean water discharges
GA	Private and potential public drinking water supplies without treatment	Restricted to wastewaters of human, animal, or other natural origin posing no threat to untreated drinking water supplies
GB	Industrial process water and cooling waters; presumed not suitable for human consumption without treatment due to waste discharges, spills or leaks of chemicals or other adverse land uses	All the above discharges plus certain treated industrial discharges
GC	Assimilation of treated discharges which have been permitted by the DEP	All the above plus other industrial wastewater discharges that do not degrade surface waters below established goals
GA/GA/GC	Same as GA waters	Same as GC waters
GB/GA	Same as GB waters	Same as GA waters
GB/GAA	Same as GB waters	Same as GAA waters
GB/GB/GC	Same as GB waters	Same as GC waters

TABLE 2 *SUMMARY OF SURFACE WATER CLASSIFICATIONS, USES, AND COMPATIBLE DISCHARGES*		
CLASS	**DESIGNATED USES**	**COMPATIBLE DISCHARGES**
AA	Existing or proposed drinking water supply; fish and wildlife habitat; recreational use; agricultural, industrial supply; recreational uses may be restricted.	Discharges by permit from public or private drinking water treatment systems, dredge and dredge material dewatering operations and other clean water discharges
A or SA	Potential drinking water supply; marine fish and shellfish for human consumption, fish and wildlife habitat; recreational use; agricultural, industrial supply; navigation.	Same as those allowed to water of class AA
B or SB	Class B: recreation, fish and wildlife habitat; agricultural and industrial supply, navigation. Class SB: marine fish and shellfish for possible human consumption, recreation, industrial and navigation.	Discharges by permit allowed to waters of class AA or A, plus cooling water discharges, discharges from municipal and industrial wastewater treatment systems and other discharges subject to provisions of Section 22a-430.
C or SC	Certain fish, shellfish and wildlife habitat, certain aquaculture operations, certain recreational activities, industrial use and navigation.	Same as those allowed to water of class B
D or SD	May be suitable for bathing or other recreational purposes, certain fish and wildlife habitats, industrial uses and navigation.	Same as those allowed to water of class B
C/B or D/B, SC/SB or SD/SB	Same as for C or D, SC or SD	Same as those allowed for water of class B or SB
B/AA, B/A or C/A, SB/SA or SC/SA	Same as for B or C, SB or SC	Same as those allowed for water of class AA, A or SA

WEST CORPORATION/STM LTD., PARTNERSHIP
dba - TAY-MAC CORPORATION

P.O. BOX A.K., WOODBRIDGE, CT 06525-0505
PHONE: (203) 387-6603 FAX: (203) 387-8229

March 20, 1996

Bovano of Cheshire
Attn: Jim Flood
830 So. Main Street
Cheshire, CT 06410

Dear Jim:

It was a pleasure to meet with you last week and as per our conversation, I was able to discuss the situation with my attorney today and she has posed numerous questions which I obviously cannot answer. Unfortunately she is leaving on vacation tomorrow and will return on April 1st.

I think at this point it might be a good idea to have Bob Stewart call her so that they can discuss the situation. She was concerned and could not understand why E.P.A. would be involved, however, maybe Bob can answer a lot of her questions.

My attorney's name is Abbie Eremich at Wiggin & Dana in New Haven, and her phone number is 498-4397.

I just wanted you to know that I have followed up on this and will continue once Abbie is back and can dig into it.

Yours very truly,

R. C. Taylor, III
President

RCTIII/cjl
cc: Abbie Eremich

APPENDIX A

ORDER 2036

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

STATE OFFICE BUILDING HARTFORD, CONNECTICUT 06115

(E.P.A.)

STATE OF CONNECTICUT
vs.
BOVANO OF CHESHIRE

IN THE MATTER OF AN ORDER TO BOVANO OF CHESHIRE TO ABATE POLLUTION

ORDER

Having found that Bovano of Cheshire is causing pollution of the waters of the state under the provisions of Chapter 474a, Connecticut General Statutes as amended the Commissioner of Environmental Protection acting under Section 25-54h hereby Orders Bovano of Cheshire to take such action as is necessary to:

1) Install necessary treatment facilities to assure the adequate treatment of all wastewaters associated with various metal finishing operations.

Bovano of Cheshire is further Ordered to accomplish the above described program, except as may be revised by the recommendations of detailed engineering study and agreed to by the Director of Water Compliance and Hazardous Substances in accordance with the following schedule:

8/31/76

A) On or before July 31, 1976, submit for the review and approval of the Director of Water Compliance and Hazardous Substances an engineering report.

B) On or before October 31, 1976, submit for the review and approval of the Director of Water Compliance and Hazardous Substances contract plans and specifications.

C) On or before January 31, 1977 verify to the Director of Water Compliance and Hazardous Substances that construction has been started.

D) On or before May 31, 1977 verify to the Director of Water Compliance and Hazardous Substances that the constructed facilities have been placed in operation.

See 25-54m Copy filed on land records. Not Done

25-54g [illegible]

Entered as an Order of the Commissioner of Environmental Protection this 23th day of February, 1976.

Joseph N. Gill, Commissioner

By: Robert B. Taylor
Robert B. Taylor, DIRECTOR
WATER COMPLIANCE & HAZARDOUS SUBSTANCES

ORDER No. 2036

Cheshire

SENT CERTIFIED - RRR

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
STATE OFFICE BUILDING HARTFORD, CONNECTICUT 06115

October 6, 1976

APPROVAL

Bovano of Cheshire
830 South Main Street
Cheshire, Connecticut 06410

Dear Mr. Flood:

The Waste Water Survey prepared for Bovano of Cheshire by Engineered Environments has been reviewed by the Department of Environmental Protection.

This report complies with Department of Environmental Protection Water Compliance Unit's Order No. 2036 to Bovano of Cheshire entered on February 23, 1976, fulfilling the requirements of Step A of the Order. The report is hereby approved in accordance with Section 25-54h of the Connecticut General Statutes as amended.

This report shall be the basis of the functional design of the treatment facilities developed in the plans and specifications required in Step B of Order.

This approval does not relieve the discharger obligation to obtain any other authorizations as may be required by other provisions of the Connecticut General Statutes, or regulations of Connecticut State agencies.

Very truly yours,

Robert B. Taylor

Robert B. Taylor, Director
Water Compliance & Hazardous Substances

RBT/WH/llg

cc: J.F. Ackerman, Jr.

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
STATE OFFICE BUILDING HARTFORD, CONNECTICUT 06115

November 9, 1976

Bovano of Cheshire
830 South Main Street
Cheshire, Connecticut 06410

Re: Waste Treatment Plans

Dear Mr. Flood:

I have reviewed the contract plans and specifications prepared by Engineered Environments for the wastewater treatment system at Bovano of Cheshire. There are three areas of concern, two of which deal with sludge disposal. They are as follows:

1) The 1500 gallon collection/neutralization tank should be provided with additional valve outlets below the 1/3 level.

2) Sludge drying facilities and the ultimate disposal site is mentioned as being at Bovano. Details on the drying facilities and disposal site should be included in the plans and specifications.

3) The present method of disposal of the copper sulphate salts is unacceptable due to solubility of the salts. These salts should be either reclaimed or re-dissolved followed by batch treatment.

As soon as these items are clarified the plans and specifications will be approved.

Respectfully,

William R. Hogan

William R. Hogan
Senior Sanitary Engineer
Water Compliance Unit
566-7166

WRH/llg

cc: James Ackerman
Engineered Environments

RECEIVED
NOV 11 1976
BOVANO'S HALL INC.

Bovano of Cheshire

830 SOUTH MAIN STREET • CHESHIRE, CONNECTICUT 06410 • TELEPHONE 203/272-3208

November 30, 1976

WATER COMPLIANCE
Dept. of Environmental Protection
RECEIVED
DEC 2 1976
ANSWERED
REFERRED
FILED

Mr. William R. Hogan
Senior Sanitary Engineer
Water Compliance Unit, Dept. Env. Protection
State Office Building
Hartford, Conn. 06115

Dear Mr. Hogan:

In reference to our telephone conversation last week, I am enclosing a copy of the corrections and additions to our waste treatment system as designed by Mr. James Ackerman of Engineered Environments.

The sludge acceptor, item 2 of the corrections and additions list, will be located on the West side of our building where there is adequate space in an area that is now currently a field.

It is our intention to add an addition to our building which will be about 20 feet square also on the West side of our building in order that we will have sufficient room to install the equipment. We are currently proceeding with applications to the Cheshire Zoning Board for the building of this building.

In reference to item 3 on your letter of November 9th concerning the disposal of copper sulfate salts, it has been agreed that we will re-dissolve these salts in the sludge treatment tank along with the daily effluent from our cleaning cycle.

We will appreciate receiving your approval of these plans as soon as possible in order that we may proceed.

Yours truly,

David W. Flood

DWF:ja
enclosure

BOVANO OF CHESHIRE

Corrections/Additions to Waste Treatment System

1. Correct specification for collection/neutralization tank to read:

   1 - 1500-gallon polyethylene collection/neutralization tank (to accumulate wastes and to serve as treatment vessel) equipped with 4 valve outlets at 3/4, 1/2, 1/4 and 1/8 of height of tank wall for discharging clear supernatent water.

2. Add to "Equipment Required" list:

   1 - sludge acceptor, on Bovano property, approximately 15' x 15' x 4-1/2' deep. Bottom lined with 6" of crushed limestone.

Town Hall
84 South Main Street

RECEIVED
DEC 14 1977
BOVANO IND. INC.

Office of the
TOWN ENGINEER

December 13, 1977

TO: Sewer Commission

FROM: Ronald K. Kennedy, Town Engineer

SUBJECT: Bovano of Cheshire

Enclosed is a letter from Mr. David Flood of Bovano proposing to connect the house and the factory building located on lot #93 to the sewer presently being constructed in Area 5 and to defer connection of the factory building located on lot #79 until such time that sewers are available on Jinny Hill Road. It is recommended that this request be approved by the Commission. By copy of this correspondence Mr. Flood is requested to advise this office of the desired location of the building connection.

With regard to the process waste, it is recommended that the pre-treated process effluent be discharged to the sanitary sewer along with the sanitary waste. The other alternative would be for Bovano to obtain a permit from the DEP to discharge the pretreated effluent to the adjacent brook.

Ronald K. Kennedy

jac
cc: Mr. David A. Flood

Bovano of Cheshire

November 18, 1977 830 SOUTH MAIN STREET • CHESHIRE, CONNECTICUT 06410 • TELEPHONE 203/272-3208

Mr. Ronald K. Kennedy, Town Engineer
Town Hall
84 South Main Street
Cheshire, Conn. 06410

Dear Mr. Kennedy:

In response to your letter of October 28th and our meeting on Tuesday, November 8th, we have reviewed our request to connect our factory to the sewer line on Jinny Hill Road as opposed to South Main Street and wish to make a modification in this request. It does appear to be feasible after some internal changes to connect our factory as well as the house located on lot #93 to South Main Street and we will propose to proceed in this manner. We would expect, however, to be allowed to connect the factory building located on lot #79 to the Jinny Hill Road sewer at the time it is installed.

We would like to have your opinion, however, as to whether we will be expected to connect our process waste to the sewer along with the sanitary waste. We are currently under orders from the Department of Enviornmental Protection to treat our process waste which is currently acidic in nature and contains insoluable copper. This waste will be treated in such a manner as to bring the pH level to the neutral point, and at that point remove the soluable copper by precipitation. The remaining effluent will then be basically plain water. This effluent will amount to approximately 1,000 to 1,500 gallons per day. A copy of our DEP order was given to you at our meeting on November 8th. All of this process water originates from the factory building on lot #93.

In response to your last question, we do have two building lots as described above with common ownership.

If you have further questions please contact me.

Yours truly,

David W. Flood

DWF:ja

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

STATE OFFICE BUILDING HARTFORD, CONNECTICUT 06115

December 10, 1979

RECEIVED
DEC 13 1979
BOVANO IND. INC.

Bovano of Cheshire
830 South Main Street
Cheshire, Connecticut 06410

Attention: James Flood

Re: Request for Permit Modification

Dear Mr. Flood:

Thank you for your letter dated February 19. The staff has reviewed the permit modifications that you have proposed and the following comments are a result:

1) Although you have reduced the frequency of treatment from once per day to once per week due to water conservation the collection of a sample of treated wastewater on a monthly basis will continue to be a condition of you permit. This condition is consistent with applicable department guidelines for the discharge of industrial wastewaters.

2) Contrary to your statement regarding sample type a composite sample can be collected. Normally, composite samples are collected over a four hour period; but, when the time required to discharge a treated batch is less than four hours aliquot samples can be collected during the time it takes to discharge a treated batch, as long as the time period exceeds one hour.

Should you have any further questions regarding this matter please contact Richard Mason at 566-7167.

Sincerely,

Edward C. Parker

Edward C. Parker
Principal Sanitary Engineer
Water Compliance

ECP/lc

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

STATE OFFICE BUILDING HARTFORD, CONNECTICUT 06115

January 3, 1977

APPROVAL OF PLANS AND SPECIFICATIONS

Bovano of Cheshire
830 South Main Street
Cheshire, Connecticut 06410

Attention: Mr. David Flood

Re: DEP/WPC 025-009
Town of Cheshire
Quinnipiac River Watershed

Gentlemen:

Bovano of Cheshire is hereby authorized to install one 1500 gallon collection/neutralization tank with agitator, one 25 gallon aboveground sump with sump pumps, one reagent pump, one diaphragm pump, one 15' sludge drying bed and all necessary piping and appurtenances for the treatment of a maximum flow of 1200 gallons per day of acid cleaning and etching wastes prior to being discharged to the groundwaters in the watershed of the Quinnipiac River in accordance with plans and specifications prepared by Engineered Environments and filed with this Department on October 19, 1976.

Upon verification that the facilities hereby approved have been constructed in accordance with the plans and specifications submitted, a letter acknowledging compliance with the terms of the Commissioner of Environmental Protection's ORDER No. 2036 and/or a permit as authorized by Subsection e of Section 25-54i of the Connecticut General Statutes as amended will be issued.

This approval does not relieve the discharger of the obligation to obtain any other authorizations as may be required by other provisions of the Connecticut General Statutes, or regulations of Connecticut State agencies.

Very truly yours,

Robert B. Taylor, Director
Water Compliance & Hazardous Substances

RBT/WH/llg

cc: State Tax Department
James Ackerman, Engineered Environments

RECEIVED
JAN 6 1977

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

STATE OFFICE BUILDING HARTFORD, CONNECTICUT 06115

STATE OF CONNECTICUT
VS.
BOVANO OF CHESHIRE

IN THE MATTER OF AN ORDER TO BOVANO OF CHESHIRE TO ABATE POLLUTION

O R D E R

Having found that Bovano of Cheshire is causing pollution of the waters of the State under the provisions of Chapter 474a of the General Statutes as amended, the Commissioner of Environmental Protection acting under Section 25-54h hereby Orders Bovano of Cheshire to comply with all the conditions of the Order entered as an Order of the Commissioner of Environmental Protection on the 23rd day of February, 1976 except that:

1) Paragraph D in conformance with a written request from Bovano of Cheshire and agreed to by the Commissioner of Environmental Protection acting under Section 25-54o of the General Statutes as amended is modified to read as follows:

D) On or before June 30, 1978 verify to the Commissioner of Environmental Protection that the constructed facilities have been placed in operation.

Entered as a modification of an Order of the Commissioner of Environmental Protection this 22nd day of December, 1977.

Stanley J. Pac
Stanley J. Pac
COMMISSIONER

ORDER No. 2036 Modified
Cheshire

12/77

SENT CERTIFIED - RRR

RECEIVED
DEC 30 1977
BOVANO IND. INC.

STATE OF CONNECTICUT

DEPARTMENT OF ENVIRONMENTAL PROTECTION

WATER COMPLIANCE UNIT

STATE OFFICE BUILDING HARTFORD, CONNECTICUT 06115

PERMIT

Bovano of Cheshire
830 South Main Street
Cheshire, Connecticut 06410

Attention: Mr. David Flood

Re: DEP/WPC-025-009
Town of Cheshire
Quinnipiac River Watershed

Gentlemen:

This permit is authorized to be issued by Subsection e of Section 25-54i of Chapter 474a of the Connecticut General Statutes, as amended. The Commissioner of Environmental Protection (hereinafter "the Commissioner") has found that the system installed for the treatment of the discharge will protect the waters of the state from pollution.

The Commissioner has determined that Bovano of Cheshire is in full compliance with the provisions of Order No. 2036 entered on February 23, 1976. The Commissioner, acting under Section 25-54i, hereby permits Bovano of Cheshire to discharge 1,200 gallons per day of treated metal finishing wastewater to the groundwaters in the Quinnipiac River watershed in accordance with the following conditions:

1) The wastewater shall be collected, treated and discharged in accordance with the plans and specifications approved by the Director of Water Compliance on February 23, 1976.

2) The discharge described in this permit shall not exceed and shall otherwise conform to the specific terms and general conditions specified herein:

A) Discharge Serial No. 001
Discharge Location - Groundwaters in the watershed of the Quinnipiac River in the Town of Cheshire
Average Daily Flow - 1,200 gallons per day

Parameter	Maximum Daily Concentration	Average Daily Concentration
Copper	3.0 mg/l	1.0 mg/l
Total Suspended Solids	30.0 mg/l	20.0 mg/l

1) The pH of the discharge shall not be less than 6.5 or greater than 9.5.

3) The discharge shall be monitored and results reported to the Director of Water Compliance by the 10th of each month according to the following schedule:

A) Discharge Serial No. 001

Parameter	Minimum Frequency of Sampling	Sample Type
Copper	Monthly	Composite
Total Suspended Solids	Monthly	Composite
pH	Monthly	Range during composite

1) Record the quantity of the batch discharged.

4) The treatment facilities shall not be bypassed at any time.

5) The disposal of screenings, sludges and other solids or oils and other liquid chemical wastes shall be at locations approved in accordance with the provisions of Chapter 474a and/or Chapter 361a of the Connecticut General Statutes or to waste haulers licensed under Chapter 474a of the Connecticut General Statutes.

This PERMIT is issued under Section 25-54i and shall expire on December 8, 1983. The PERMIT shall be subject to all the Section 25-54i General Conditions dated November 3, 1975 which are hereby incorporated into this PERMIT.

Entered as a PERMIT of the Commissioner the 8th day of December, 1978.

Stanley J. Pac
COMMISSIONER

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

RECEIVED

MAY 6 1982

Original

BOVANO IND. INC.

STATE OF CONNECTICUT
VS.
BOVANO INDUSTRIES, INCORPORATED

IN THE MATTER OF AN ORDER TO BOVANO INDUSTRIES, INCORPORATED TO ABATE POLLUTION

ORDER

Having found that Bovano Industries, Incorporated is maintaining a condition which reasonably can be expected to create a source of pollution of the waters of the State under the provisions of Chapter 474a, Connecticut General Statutes as amended, the Commissioner of Environmental Protection acting under Section 25-54k hereby Orders Bovano Industries, Incorporated to take such action as is necessary to:

1) Investigate the extent and degree of groundwater, surface water and soil contamination, if any, as the result of activities at 830 S. Main Street, Cheshire and take necessary remedial actions to alleviate the contamination.

2) Implement a plan to provide for best management practices for industrial chemical storage, usage and waste handling.

3) Eliminate the discharge of metal finishing wastewaters to the groundwaters of the state.

Bovano Industries, Incorporated is further Ordered to accomplish the above described program, except as may be revised by the recommendation of detailed engineering and hydrogeologic study and agreed to by the Commissioner of Environmental Protection in accordance with the following schedule:

A) On or before May 31, 1982, verify to the Commissioner of Environmental Protection that a qualified consultant has been retained to perform the necessary studies under Directives 1, 2 and 3.

B) On or before July 31, 1982 submit for the review and approval of the Commissioner of Environmental Protection, a scope of study report for Directive 1 which includes the proposed location and depths of groundwater monitor wells, soil and surface water sampling locations, and proposed sampling program.

C) On or before August 31, 1982 verify to the Commissioner of Environmental Protection that monitoring wells as per Step B have been installed as approved by the Commissioner of Environmental Protection and that the proposed sampling program has begun

D) On or before October 31, 1982, submit for the review and approval of the Commissioner of Environmental Protection, a comprehensive hydrogeologic and engineering report which defines the extent and degree to contamination and establishes, as necessary, a specific remedial action program and a schedule for implementation of these proposals.

E) On or before November 30, 1982 verify to the Commissioner of Environmental Protection that removal of contaminated soils has been started,

F) On or before December 31, 1982 verify to the Commissioner of Environmental Protection that removal of contaminated soils has been completed.

G) On or before November 30, 1982 verify to the Commissioner of Environmental Protection that necessary remedial actions have been started.

H) On or before March 31, 1983 verify to the Commissioner of Environmental Protection that necessary remedial actions have been completed.

I) On or before July 31, 1982 submit for the review and approval of the Commissioner of Environmental Protection an engineering report that complies with Directive 2 and 3 above.

J) On or before September 30, 1982 submit for the review and approval of the Commissioner of Environmental plans and specifications that comply with Directive 2 and 3 above.

K) On or before November 30, 1982 verify to the Commissioner of Environmental Protection that construction of the facilities required by Directives 2 and 3 above has been started.

L) On or before March 31, 1983 verify to the Commissioner of Environmental Protection that construction of the facilities required by Directives 2 and 3 has been completed.

Entered as an Order of the Commissioner of Environmental Protection this 30 day of April, 1982.

Stanley J. Pac

Stanley J. Pac
COMMISSIONER

ORDER No. 3242

TOWN OF CHESHIRE

SENT CERTIFIED MAIL-RRR

TABLE OF CONTENTS

SECTION		PAGE
1.0	INTRODUCTION	1
2.0	SITE GEOLOGY	2
3.0	FIELD INVESTIGATION	3
4.0	RESULTS	6
4.1	Ground Water Flow	6
4.2	Chemical Analysis	6
5.0	RECOMMENDATIONS	9
5.1	TCE Usage	9
5.2	Chemical Storage	9
5.3	Copper Sludge Process	9
5.4	Further Site Contamination Study	10
6.0	COSTS	12
6.1	TCE Usage	12
6.2	Chemical Storage	12
6.3	Sludge Process Revision	12
6.4	Further Site Investigation Work	13

LIST OF FIGURES

FIGURE		PAGE
1	General Site Map - Bovano Industries, Cheshire, Conn.	4

LIST OF TABLES

TABLE		PAGE
1	Bovano of Cheshire Water Analysis Results	7

30 April, 1982 TRC report

1.0 INTRODUCTION

On April 30, 1982 Bovano Industries of Cheshire, Connecticut was issued a legal order of abatement from the Connecticut Department of Environmental Protection (DEP) to conduct the following:

1) Investigate the extent and degree of ground water, surface water and soil contamination at the Bovano property.

2) Implement a chemical storage, usage and waste handling plan.

3) Eliminate the discharge of metal finishing waste to the ground water of the state.

These actions were required by the DEP due to the suspect contribution to contamination of the ground water of the state from a copper sludge basin operated by Bovano, and from spillage of trichloroethylene used in a manufacturing process at Bovano.

Bovano contracted with TRC on August 31, 1982 to provide consulting services as outlined in May 21, 1982 proposal No. 8205-N51-27.

2.0 SITE GEOLOGY

The underlying bedrock at the Bovano site is a coarse-grained variety of the sedimentary rocks known as the New Haven Arkose. The New Haven Arkose is typically a conglomeratic arkose and arkosic siltstone (Fritts 1963). The bedding of this bedrock unit all dip toward the east at an angle of between 10-20 degrees. Bedrock mapping of the Mt. Carmel Quadrangle (Fritts 1963) does not indicate any faults, intrusions or other unconformities in the vicinity (less than 1/2 mile) of the Bovano property.

Bedrock surface contours as mapped by Halni 1974 indicate that the bedrock surface slopes to the west at a slope of approximately 0.038 ft/ft in the vicinity of the site.

Depth to Bedrock maps of the Mt. Carmel Quadrangle (Handman et al, 1975) indicate the depth of unconsolidated sediment over bedrock increases in a westerly direction across the Bovano property from approximately 25 feet to over 100 feet.

Backhoe test pits conducted on site indicated that the unconsolidated sediments underlying the Bovano property consist primarily of a stratified drift of coarse sand and gravel with some alluvial deposits along the banks of the Mill River.

3.0 FIELD INVESTIGATION

On September 21, 1982 four backhoe test pits were excavated on the Bovano property using Bovano's equipment and operator. A TRC geologist and field technician were present to install ground water monitoring wells in the pits and to log soils data (see Figure 1, Site Map). Monitoring wells were installed in the test pits using 4 inch PVC perforated drain pipe wrapped with filter fabric for the screened interval.

where screen how much - Logs.

After allowed to stabilize for one week, the water levels of these wells were recorded and ground water samples collected. At this time water samples from the Mill River, both upstrem and downstream of the Bovano property, were collected.

A general site reconnaissance of the property was made in order to determine present and past waste handling practices that may have contributed to ground water contamination.

Bovano Industries presently operates a metal finishing waste treatment system for a copper acid wash. This waste is collected in a 1500 gallon concrete tank where it is batch treated by neutralizing with caustic to a pH of 10.5 to 11. Copper is precipitated out during this process and the copper sludge is discharged to a sludge lagoon lined with limestone chips. The supernatant from this process is drawn off and discharged to a leaching catch basin. This catch basin also collects storm water runoff from the parking area. Approximately 1500 gallons supernatant is discharged every 10 days. As a requirement of a state DEP discharge permit, the supernatant is analyzed monthly for suspended solids (S.S.) copper (Cu), and pH. The average values for these parameters are generally less than 5ppm S.S., less than 1ppm Cu and 10.5 to 11 pH. The copper sludge from this process amounts to less than 1/2 cubic yard per year.

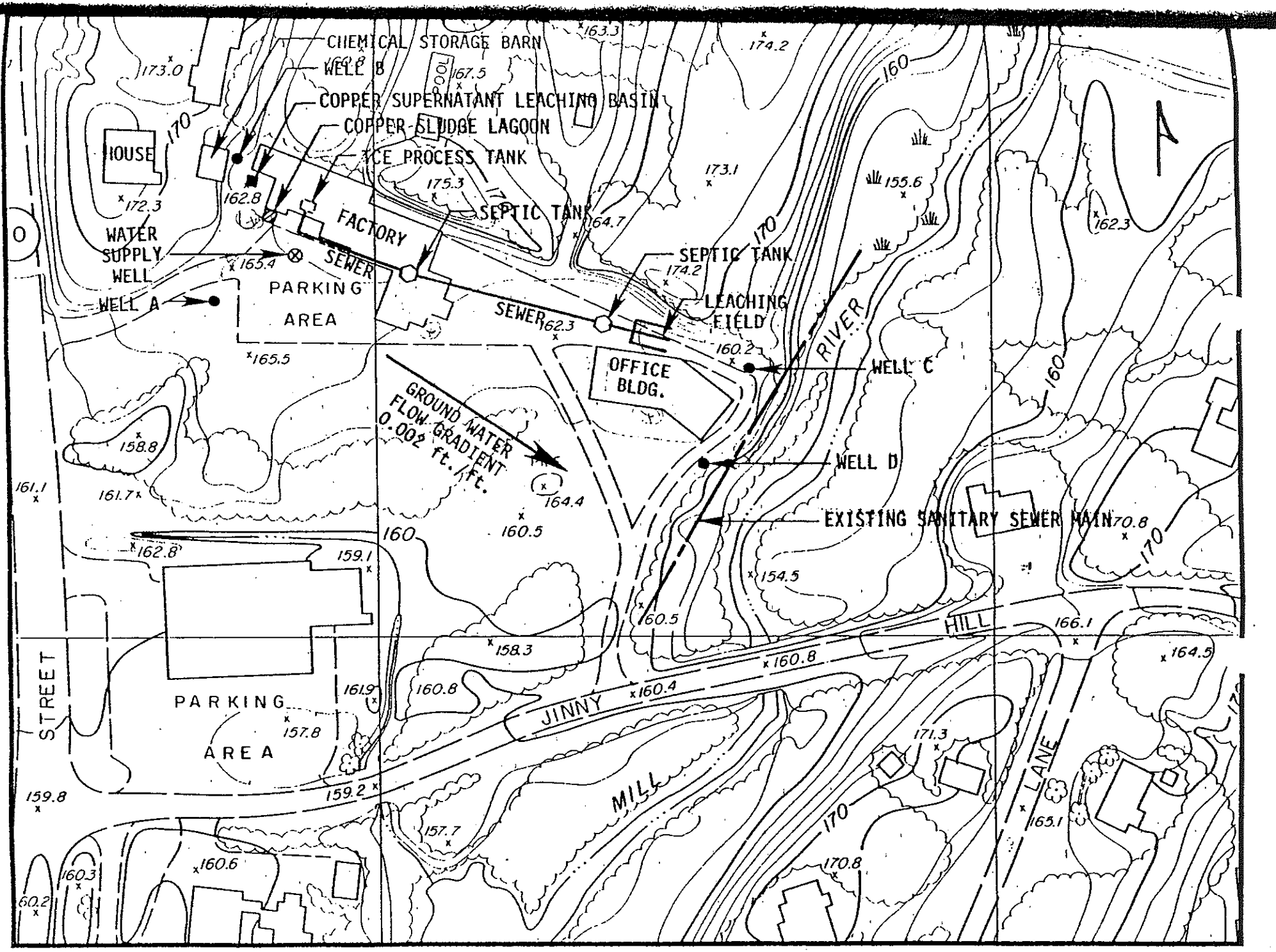


Figure 1. General Site Map - Bovano Industries, Cheshire, Connecticut.

Bovano Industries has used Trichlorocthylene (TCE) as a degreasing and dying agent since about 1964. The use of this chemical was discontinued recently. The TCE used in processing was kept in a heated vat for the dipping of parts. The only means of discharge of the TCE was apparently from "dragout", when baskets of parts were removed from the tank. This dragout would have fallen to a concrete floor where it would have been collected in a concrete trough used to discharge cooling waters. This trough discharges to a 4 inch PVC sewer and eventually to a subsurface sewage disposal system, located to the east of the Bovano property, approximately 100 feet from the Mill River. The septic tank in this system was found to contain 6" of a metallic grey sludge. This disposal system is apparently no longer in use. ? when

Another possible source of TCE contamination of ground water at Bovano may have been from spillage or leakage due to handling and storage. Chemical feedstacks and waste are presently stored in a barn on an earthen floor.

4.0 RESULTS

4.1 Ground Water Flow

Ground water levels measured in the four wells indicated a 0.9 foot drop in the water table from wells A and B towards wells C and D. This change in elevation results in a ground water flow gradient through the Bovano property of 0.002 ft/ft towards the east-southeast.

4.2 Chemical Analysis

Three ground water samples and two river water samples were analyzed for TCE. Two ground water samples in the vicinity of the sludge lagoon were also analyzed for copper.

In the review of the chemical analyses data (Table 1), it can be seen that well B shows significantly elevated concentrations of both TCE and copper. The elevated copper concentration (10.20 mg/L) can be attributed to the proximity of this well to the copper supernatant leaching basin and the copper sludge lagoon. Copper concentration of 0.09 mg/L in well A indicate ground water that is relatively unaffected by the copper lagoon and leachate basin. As a point of reference, the State of Connecticut's Drinking Water Standard for copper is 1.0 mg/L.

The elevated TCE level of 1.22 mg/L in well B is most likely attributed to chemical handling and storage practices at the loading dock and the storage barn area. It is possible that inadvertent spillage and/or leakage throughout the years may have caused some minor contamination of the soils in this area. It should be noted that no noticable (via site or odor) contamination of the soils or ground water were observed during the digging of well B.

TABLE 1

BOVANO OF CHESHIRE
WATER ANALYSIS RESULTS

SAMPLING POINT	TCE	COPPER
Well A	-	0.09 mg/L
Well B	1.22 mg/L	10.20 mg/L
Well C	Nondetectable <14.6 µg/L	-
Well D	25.46 µg/L	-
Mill River Upstream	Nondetectable <14.6 µg/L	-
Mill River Downstream	Nondetectable <14.6 µg/L	-

Less significant amounts of TCE (25.46µg/L) were found in well D. This contamination can be attributed to the leaching field up-gradient of this well. Well C and Mill River upstream and downstream samples were found to have nondetectable (<14.6 µg/L) concentrations of TCE.

In reviewing the monthly quality reports for the supernatant we see no reason why this permit would not be granted.

The sewer line should be made to bypass the two existing septic tanks. The structual integrity of the sewer should be assured for a distance with 75 feet of the water supply well.

The sludge generated from this process should be dewatered in order to reduce volume and cut disposal costs. The sludge could be discharged to screens and allowed to dry. The water from the sludge could be collected in a sump and pumped to the sewer on an as-needed basis. The dried sludge could then be placed in drums for disposal.

The sludge and lime chips from the existing lagoon should be removed and placed in drums for disposal.

5.4 Further Site Contamination Study

In order to comply with state DEP requirements, further site contamination study may be required of Bovano. TRC recognizes the areas of concern to be the loading dock and leaching field. Ten soil samples could be taken from the loading dock area to determine the extent and magnitude of TCE contamination. Samples would be taken at various depths in order to determine the vertical extent of contamination. The sludge from the septic tank next to the leaching field should also be analyzed to determine the degree of contamination. If found to be heavily contaminated, this material would have to be removed and disposed of.

Through TRC communication with the DEP, it was indicated that further ground water monitoring wells would be required around Bovano property.

to rock [illegible]

For planning purposes, two 30 feet deep wells with a 10 foot screened interval, located down-gradient of both areas should be sufficient for comprehensive ground water monitoring of this site. Water samples from the two newly installed wells and three of the existing wells would be collected and analyzed for TCE.

? depth to rock

[illegible]

6.0 COSTS

6.1 TCE Usage

If sold, there would be a net gain. If waste is to be disposed of at a hazardous waste facility, assume a cost ot $150 per 55 gal drum for disposal and transportation costs.

6.2 Chemical Storage

Assume a 10' x 10' concrete pad with a 6" concrete containment curb. Estimated = $500.00.

6.3 Sludge Process Revision

Capital:	Costs
1) 120 LF 6" sewer installed @ $20/LF	$2,400
2) Bypassing septic tanks and interior plumbing	500
3) Sludge dewatering process	1,500
4) Lagoon closure (remove and drum ≈1.5 yd^3 of material)	300
5) Lagoon sludge disposal (assume 3 drums x $150/drum)	450
Total Estimated Capital Costs	$5,150

Operation and Maintenance Costs:

1) Sewer user charge; assume $0.40/100 ft^3 x 3500 ft^3/yr	$13/yr
2) Sludge disposal; 2 drums/yr x $150	300
Total Estimated O & M Costs	$313/yr

6.4 Further Site Investigation Work

1) Collect samples	$ 160
2) Analyze 10 soil/sludge samples for TCE	750
3) Report	130
4) ODC's	50
	$1,090

1) Monitoring Wells (2) Assume 1 day drilling @ $800/day	$ 800
2) Well pipe 20' Screen x $7 = 140 40 Solid x 5 = 200	340
3) Inspection	258
4) Analysis 5 TCE @ $150	300
5) Report	86
	$1,784

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

July 5, 1983

Mr. Joseph Lieberman
Attorney General
30 Trinity Street
Hartford, Connecticut 06106

RE: DEP/WPC 025-009
Town of Cheshire
Mill River Watershed

Dear Mr. Lieberman:

On April 30, 1983 Order No. 3242 was issued to Bovano Industries, Incorporated requiring investigation of the extent of groundwater, surface water, and soil contamination and the undertaking of appropriate remedial actions, implementation of best management practices for industrial chemical storage, usage and waste handling, and elimination of the discharge of metal finishing wastewater to the waters of the state.

Bovano Industries, Incorporated has failed to undertake and complete the above required tasks and thereby has failed to comply with Steps A through L of Order No. 3242. Therefore, I am referring this matter to your Office requesting that you bring appropriate legal action in Superior Court of Hartford County in accordance with Section 22a-435 and Section 22a-438 of the Connecticut General Statutes.

Sincerely yours,

Stanley J. Pac

Stanley J. Pac
COMMISSIONER

SJP/WS/lrm

cc: Robert Whitehead, Asst. Attorney General

Phone:
165 Capitol Avenue • Hartford, Connecticut 06106

An Equal Opportunity Employer

Attorney General Referral

Name: Bovano Industries, Incorporated   City: Cheshire

DEP Staff Person: Wesley Winterbottom   Phone: 566-5903

Reason for Referral	***	Order Schedule (# 3242)	Effluent Violations
		Discharge Without Permit	Bypass
		Contempt - Previous Judgement	Improper Operation
		Other - See Comments	

Relevant History		Warning Notice Issued	***	Deficient Response
	***	No Response		Application Pending
		No Application Submitted		Hearing Requested
		Final Determination		Previous Referral
		Civil Penalty		Plans & Specs Approved
		Engineering Report Approved		

File Information Available		Sample Results	Inspection Report
		Engineering Report	Plans and Specs
	***	Other - See Comments	

Attached Information	***	Abatement Order & Modification		Permit
		Secretary of State Print Out	***	Other - See Comments
		Stipulation		

>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>><<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<

Remedy	Temporary Injunction	Forfeiture
	Permanent Injunction	*** Stipulation (Modified Schedule)
	Stipulation (Other Action)	

>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>><<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<

Comments: Bovano Industries, Incorporated has submitted an engineering report in response to Step D which was found to be deficient (See Attached). At a meeting on May 10, 1983, the Department informed Mr. David Flood of these deficiencies, the need for correcting them, and the need to comply with the remaining items of Order No. 3242. No response has been received.

>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>><<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

April 22, 1983

Bovano of Cheshire
830 South Main Street
Cheshire, Connecticut 06410

Attention: Mr. David Flood
President

Re: Bovano of Cheshire
Cheshire

Gentlemen:

Enclosed please find the Department's comments on the November 1982 Report prepared by TRC Environmental Consultants, Inc. for your firm in response to Order #3242. Please contact me to arrange a meeting to discuss these review comments.

Sincerely yours,

Wesley L. Winterbottom

Wesley L. Winterbottom
Principal Sanitary Engineer
WATER COMPLIANCE UNIT

WLW:clf
[redacted]

TRC Environmental Consultants, Inc.
Attn: Mr. Mark S. Halvorsen, P.E.
Principal Engineer

SUGGESTION COMMITTEE SAY: Improve Your Own Condition; Earn Cash and Recognition: Send in a Suggestion!

Interdepartment Mess e

STO-201 REV. 3/74 STATE OF CONNECTICUT
(Stock No. 6938-051-01)

SAVE TIME: *Handw. n messages are acceptable.*
Use carbon if you really need a copy. If typewritten, ignore faint lines.

	NAME	TITLE	DATE
To	√ Wes Winterbottom	Prin. Sanitary Engineer	Jan. 21, 1983
	AGENCY: DEP/Water Compliance	ADDRESS	
From	NAME: Ellen Z. Harrison	TITLE: Sr. Envir. Analyst	TELEPHONE
	AGENCY: DEP/Water Compliance	ADDRESS	

SUBJECT

BOVANO, CHESHIRE ORDER # 3242

I have reviewed the preliminary report on ground water submitted on December 15, 1982 by TRC on behalf of Bovano of Cheshire. As discussed with TRC, Mr. Flood, and you the study undertaken by TRC and described in the report is a first phase.

This phase I report indicates a significant (1 mg/l) concentration of trichloroethylene in the ground waters near the drywell to which waste water is discharged. Whether the source is storage and handling as suggested in the report or dragout in the waste water is not known. A solvent concentration greater than 1 ppm was detected in the waste water. The report suggests a soil sampling program in the vicinity of the storage area to assess the possible impact. Lower, levels of trichloroethylene were also detected in monitor well "D" near the Mill River.

how know →

The steps outlined below must be accomplished in a phase II report before Bovano is in compliance with the investigation directive of the order.

1. Three additional monitor wells should be installed. The four existing wells are very shallow installations. No logs, construction details, elevations or water levels for these existing wells are provided in the report. The additional wells should be screened from the water table down to at least 25 feet, below the water level unless an aquitard is encountered in drilling which the supervising geologist deems it unwise to penetrate. The locations should be approximately as shown on the attached map. It is likely that when the New Haven Water South Cheshire wells are pumping that the ground water gradient is to the south and not towards the Mill River. There are also indications that the "septic tank" shown under the building is actually a dry well, providing access to the ground waters.

These 3 new wells plus the 4 existing wells should be sampled for organohalides and for copper, pH, TDS, and possibly other parameters associated with their wastewater discharge. New Haven Water maintains a certified laboratory and they have indicated a willingness to perform the necessary analyses. Bovano might be interested in following upon this offer.

Because of the relatively high levels of trichloreothylene found in well B, it seems likely that remedial measures to withdraw and treat contaminated ground water in this area will be required. The additional monitor well in this area should be installed and tested to provide sufficient information for the design of a recovery well. ★

SAVE TIME: *If convenient, bandwrite reply to sender on this same sheet.*

Thought should, in fact, be given to the installation of a monitor well in this area which could itself serve as a recovery well.

2. Soil samples from the storage area and a proposal to deal with any contaminated soil are needed.

3. Samples of sludge from the septic tank(s) should be analyzed for solvents.

There are several remaining issues. Namely the relocation of the wastewater discharge from the dry well to the sewer. In his letter to Commissioner Pac, Mr. Flood questions the need for this despite the fact that the TRC report recommends it. The report also recommends the removal of the on-site copper sludge. I feel that it is important that the sludge be removed and the wastewater discharge to the ground be eliminated in this GB/GAA area.

Ellen Z. Harrison

Ellen Z. Harrison
Sr. Envir. Analyst

EZH:zg

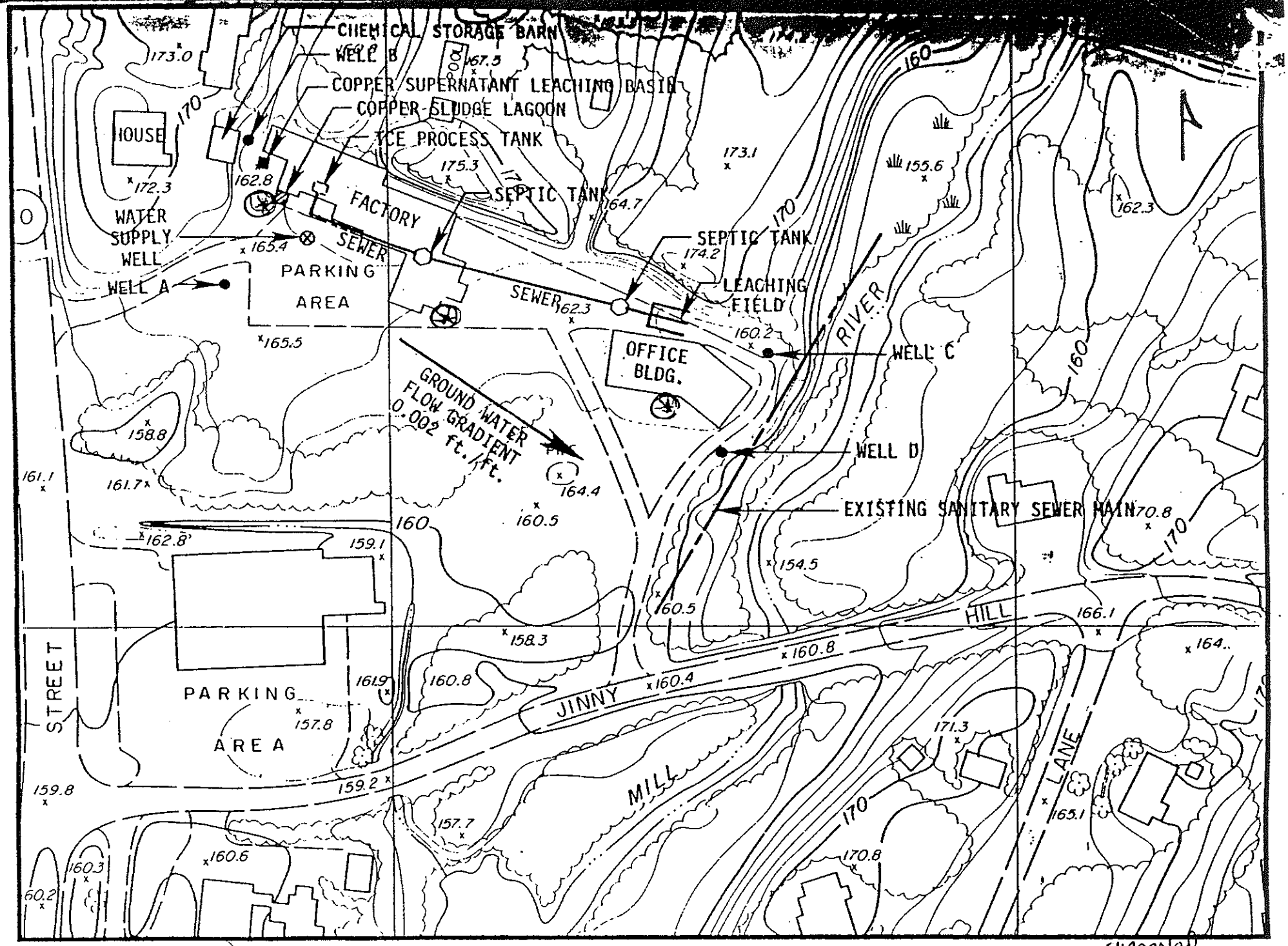


Figure 1. General Site Map - Bovano Industries, Cheshire, Connecticut.

(*) suggested monitor well locations

Kevin

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

February 24,1984

Mr. David Flood
President
Bovano of Cheshire
Cheshire, Connecticut

Dear Mr. Flood:

Thank you for meeting with David Dods and myself on February 15, 1984. The purpose of the visit was to get a better idea of Bovano's copper hydroxide sludge. A tour of the facility characterized how the sludge may not be a hazardous waste stream. This preliminary determination is based upon the following:

1. The process generating the copper-hydroxide sludge is a sulfuric acid etching of copper. This process is not listed in Section 261 of 40 CFR.

2. The treatment system for the spent acid constitutes a waste water treatment system and is excluded from facility requirements.

Still required is to address the characteristically hazardous criteria of section 261 of 40 CFR. This will require having the Extraction procedure (EP) toxicity test performed on the sludge by a certified lab for the following metals.

Arsenic	Mercury
Barium	Selenium
Cadmium	Silver
Chromium	Copper
Lead	Nickel

Only with the results of these metals can a final determination be made regarding whether Bovano's lagoon is regulated by the Hazardous Waste unit.

Please send me a copy of the EP results when they are available, at which time I will make a final determination. Contact me at 566-5712 if you have any further questions.

Sincerely,

Kevin P. Vidmar

Kevin P. Vidmar
Sanitary Engineer
Hazardous Waste Unit

KPV/mc
cc : S. Alexander

Phone:
165 Capitol Avenue • Hartford, Connecticut 06106
An Equal Opportunity Employer

Bovano Cheshire cpl

Bovano of Cheshire

830 SOUTH MAIN STREET • CHESHIRE, CONNECTICUT 06410 • TELEPHONE 203/272-3208

March 5, 1984

State of Connecticut
D.E.P. Attn: Kevin P. Vidmar
165 Capitol Avenue
Hartford, Ct. 06106

Dear Mr. Vidmar:

Enclosed is a copy of tests made on the sludge pit as requested.

We will await further instructions from you.

Yours truly,

David W. Flood

DWF:ja
enclosure

RECEIVED
MAR 5 1984
HAZARDOUS MATERIALS
MANAGEMENT UNIT

ENVIRONMENTAL SCIENCE CORPORATION
P.O. BOX 616
WALNUT STREET • MIDDLETOWN, CONN. 06457
TELEPHONE: 347-6961

Laboratory Report

LAB. REPORT NO.
C-258

State Certification No. PH-0476

IENT

Mr. James A. Flood
Bovano of Cheshire
Box 250, 830 South Main Street
Cheshire, Conn. 06410

DATE February 22, 1984

CLIENT PHONE NO. 272-3208

ECIAL INSTRUCTIONS:

P.O. #84/49

SAMPLE DESCRIPTION	TEST	RESULTS
Sludge	EP TOXICITY:	mg/l
	Arsenic	<0.05
	Barium	0.74
	Cadmium	<0.01
	Chromium	0.03
	Lead	0.04
	Copper	195
	Nickel	0.67

RECEIVED
MAR 6 1984
HAZARDOUS MATERIALS MANAGEMENT UNIT

MARKS

March 2, 1984
DATE REPORTED

LABORATORY DIRECTOR

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

March 13, 1984

Mr. Dave Flood
President
Bovano of Cheshire
830 S. Main Street
Cheshire, Connecticut 06410

Dear Mr. Flood:

Thank you for submitting the EP sample results to me. These results show Bovano's sludge is not characteristically hazardous as defined in 40CFR261.24.

Based on these results, and the previous determination of my 2/24/84 letter, the Hazardous Waste Management Section will not require Bovano of Cheshire implement groundwater monitoring for its sludge lagoon. However, please be aware that the Water Compliance Unit is an entirely separate Unit which functions under different regulations, and they may still require some form of groundwater monitoring.

In addition, because of the high copper leachate results, our Department cannot authorize disposal of this material to a solid waste disposal area.

Thank you for your cooperation in this matter.

Sincerely,

Kevin P. Vidmar

Kevin P. Vidmar
Sanitary Engineer
Hazardous Waste Management Section

KPV:et

Phone:
165 Capitol Avenue • Hartford, Connecticut 06106

An Equal Opportunity Employer

(3)

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

February 24,1984

Mr. David Flood
President
Bovano of Cheshire
Cheshire, Connecticut

Dear Mr. Flood:

Thank you for meeting with David Dods and myself on February 15, 1984. The purpose of the visit was to get a better idea of Bovano's copper hydroxide sludge. A tour of the facility characterized how the sludge may not be a hazardous waste stream. This preliminary determination is based upon the following:

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Sincerely,

Kevin P. Vidmar

Kevin P. Vidmar
Sanitary Engineer
Hazardous Waste Unit

KPV/mc
cc : S. Alexander

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

April 22, 1983

Bovano of Cheshire
830 South Main Street
Cheshire, Connecticut 06410

Attention: Mr. David Flood
President

Re: Bovano of Cheshire
Cheshire

Gentlemen:

Enclosed please find the Department's comments on the November 1982 Report prepared by TRC Environmental Consultants, Inc. for your firm in response to Order #3242. Please contact me to arrange a meeting to discuss these review comments.

Sincerely yours,

Wesley L. Winterbottom
Principal Sanitary Engineer
WATER COMPLIANCE UNIT

WLW:clf
CC: Ellen Harrison, DEP

TRC Environmental Consultants, Inc.
Attn: Mr. Mark S. Halvorsen, P.E.
Principal Engineer

Phone:
165 Capitol Avenue • Hartford, Connecticut 06106

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HAZARDOUS WASTE MANAGEMENT SECTION - STATE OF CONNECTICUT DEP - INVENTORY FOR P.A. 79-605, Section 13

INVENTORY WORKSHEET

TOWN: CHESHIRE

INSPECTOR: PAUL HASSLER

DATE INV. 8/22/8

SITE NAME & ADDRESS	TYPE OF WASTE HAZ/NON-HAZ. LIST WASTE	SPECIFY ON-SITE ACTIVITY	QUANTITY OF WASTE	G.W. CLASS	COMMENTS
NAME: BOVANO INDUSTRIES	ACIDS (NITRIC + SULFURIC)	SEPTIC TANK AND LEACH FIELD	12,000 GAL/DAYS	GA	P-5 1976
	RINSES				P-5 4/23/82
	SOLVENTS (TYPE ?)	TO GROUND	UNKNOWN UNAVAILABLE		
	FERRIC CHLORIDE ETCH RINSES	TO DRYWELL NEAR DOCK.	? UNAVAILABLE		CURRENTLY UNDER ORDER BY WATER COMPLIANCE.
STREET ADDRESS: 830 S. MAIN ST.	ACIDS	"	?		
	DRAG-OUT SPILLAGE AND WET SCRUBBER WATER FROM PICKLING	"	?		JW 4 TESTS WELLS FOR G.W. MONITORING DUG W/ BACKHOE TO 15' LOADING DOCK WELL YIELDED 1 ppm TCE OETA
DATE ESTABLISHED: 1954					
☐ NO EVIDENCE OR INFORMATION INDICATING ON-SITE DISPOSAL	NaOH SLUDGE	TO GROUND	SMALL AMT		STATUS: GEN, TSD + UIC.

WORKSHEET COMPLETED BY: Michael McDonald

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

June 24, 1983

Bovano of Cheshire
830 South Main St.
P.O. Box 250
Cheshire, CT 06410

Attention: David Flood

Ref: STODDAID water displacement #1 and solvent disposal information/
your 6/14/83 telephone conversation

Dear Mr. Flood:

Confirming our recent telephone conversation in accordance with the Connecticut Hazardous Waste Management Regulations Section 25-54cc(c)-11-b as a generator you might use your own transportation to deliver the referenced two 55-gallon drums of solvent to an off-site licensed waste treatment facility provided that all DOT regulations regarding packaging and labeling are met.

For your information I am including a copy of permitted hazardous waste treatment facilities in the State of Connecticut.

Very truly yours,

Marina Crawford

Marina Crawford
Sanitary Engineer
Hazardous Waste Management Section

MC:mv
Enclosure

Phone:
566-5712
State Office Building, Hartford, Connecticut ~~06115~~ 06106

An Equal Opportunity Employer

HAZARDOUS WASTE MANIFEST AND SHIPPING PAPER
EPHM-7 REV 4-81

DEPARTMENT OF ENVIROI

GENERATOR COMPLETES

NAME	MAILING ADDRESS
GENERATOR Bovano of Cheshire	P.O.Box 250 330 S.Main St., Cheshire, Ct.06410
PRIMARY TRANSPORTER Hubbard Hall Chemical Co.	663 Leonard St., Waterbury, Ct.06708
CONTINUING TRANSPORTER GENERAL CHEM	FRAMINGHAM MA 01701
H.W.F. General Chemical	P.O.Box 608, Framingham, Mass.01701

IF MORE THAN ONE MANIFEST / SHIPPING PAPER IS USED: TOTAL NO. OF FORMS ARE 1; THIS FORM NO. IS 1 MANIFEST NO. OF FIRST FORM CT 0029621 DATE SHIPPE

U.S. D.O.T. SHIPPING NAME	D.O.T. HAZARD CLASS	U.N. / N.A. NO.	WT./VOL.	UNITS	UNIT CODE
1 Waste Trichlorethylene N.O.S.	ORM-A	UN1710	1,500	lb.	P
2.					
3					
4.					
5.					
6.					

SPECIAL HANDLING INSTRUCTIONS INCLUDING ANY CONTAINER EXEMPTION; AND EM

~~To Be Told~~

IN THE EVENT OF A SPILL, CONTACT THE NATIONAL RESPONSE CENTER, U.S. C

REQUIRED LABELS
☒ YES ☐ NO

THIS IS TO CERTIFY THAT I AM THE PRIMARY TRANSPORTER AND HAVE ACCEPTED THE DESCRIBED SHIPMENT IN PROPER CONDITION FOR TRANSPORT TO THE IDENTIFIED H.W.F.

ED SHERMAN
SIGNATURE OF TRANSPORTER

PLACARDS REQUIRED
DANGEROUS

THIS IS TO CERTIFY THAT I AM THE CONTINUING TRANSPORTER AND HAVE ACCEPTED THE DESCRIBED SHIPMENT IN PROPER CONDITION FOR TRANSPORT TO THE IDENTIFIED H.W.F.

SIGNATURE OF TRANSPORTER

INDICATE ANY DIFFERENCES BETWEEN MANIFEST AND SHIPMENT AND LIST REJECTED MATERIALS, IN

I CERTIFY THAT THE DESCRIBED WASTE(S) WAS DELIVERED BY THE AFOREMENTIONED DELIVERING TRA

MANIFEST IS CORRECT TO THE BEST OF MY KNOWLEDGE.

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

May 17, 1984

APPROVAL OF PLANS AND SPECIFICATIONS

RECEIVED

MAY 21 1984

BOVANO IND. INC.

Bovano Industries, Inc.
830 South Main Street
P.O. Box 250
Cheshire, CT 06410

Attention: Mr. David W. Flood

RE: DEP/WPC-025-009
Town of Cheshire
Quinnipiac River Watershed

Gentlemen:

Bovano Industries, Inc. is hereby authorized to install necessary piping for the conveyance of an average flow of 200 gallons per day domestic sewage and metal finishing wastewater to the Town of Cheshire wastewater treatment facility in accordance with plans prepared by Bovano Industries, Inc. and filed with this Department on February 17, 1984.

Upon verification that the facility hereby approved have been constructed in accordance with the plans submitted, a letter acknowledging compliance wth the terms of the Commissioner of Environmental Protection's ORDER NO. 3242 and/or a permit as authorized by Subsection e of Seection 22a-430 of the Connecticut General Statutes as amended will be issued.

This Approval does not relieve the discharger of the obligation to obtain any other authorizations as may be required by other provisions of the Connecticut General Statutes, or regulations of Connecticut State Agencies.

Very truly yours,

Robert E. Moore

Robert E. Moore
Asst. Deputy Commissioner

REM/SA/lmm

Phone:
165 Capitol Avenue • Hartford, Connecticut 06106

An Equal Opportunity Employer

Town Hall
84 South Main Street

Rec'd from TRC
10/3/83

WATER POLLUTION CONTROL AUTHORITY

APPLICATION FOR AUTHORIZATION TO DISCHARGE WASTE FROM AN INDUSTRIAL FACILITY

9/12/83
Date

Water Pollution Control Authority
84 South Main Street
Cheshire, Connecticut 06410

Gentlemen:

Bovano Ind. Inc. (person or firm) hereby applies for authorization to discharge 50 gal./day (volume-gals./day) of Sewage (nature of discharge) to the sanitary sewer system in the Town of Cheshire.

DESCRIBE IN DETAIL THE LOCATION OF THE PROPOSED DISCHARGE, PREFERABLY SUBMITTING MAP:

S.W. Corner of Mfg. Bldg.
Map Attached.

CRIBE IN DETAIL THE OPERATION(S) GENERATING THE DISCHARGE AND THE ICIPATED QUALITY OF THE DISCHARGE. ATTACH ADDITIONAL SHEETS, IF NEC-SSARY. (Note: A separate authorization and, therefore, a separate ap-ication is required for each discharge):

Sewage from Two Restrooms

TO BE COMPLETED BY APPLICANT ONLY:

David W. Flood (Authorized Signature)

David W. Flood (Print or type name)

President (Title)

Bovano Ind. Inc. (Firm Name)

830 So. Main St. (Address)

P.O. Box 250

Cheshire, Ct. 06410

TO BE COMPLETED BY APPLICANT'S CONSULTING ENGINEER:

I have investigated the proposed wastewater discharge system at Bovano Ind. Inc. and find that if it is properly maintained and operated, the effluent discharged into the Cheshire sanitary sewer system will substantially comply with the requirements of Section #4.0 of the Town of Cheshire Sewer Regulations.

9968 (Connecticut)
Registered Professional Engineer No.

TRC Environmental Consultants, Inc Consulting Firm

Gordon T. Brookman, P.E. Contact

800 Connecticut Boulevard Address

East Hartford, CT 06108

Gordon T. Brookman
September 29, 1983

TOWN OF CHESHIRE

Water Pollution Control Authority
84 South Main Street • Cheshire, Connecticut 06410
203-272-4908

June 29, 1984

Bovano Industries, Inc.
830 South Main Street
P. O. Box 250
Cheshire, Connecticut 06410

Attention of Mr. David W. Flood

Dear Mr. Flood:

We have reviewed your Application of September 12, 1983, For Authorization to Discharge Waste From An Industrial Facility and find it satisfactory.

This letter is your authorization to proceed with this work and is our approval of your application.

We also have a copy of the State of Connecticut Approval of Plans and Specifications dated May 17, 1984.

Very truly yours,

WATER POLLUTION CONTROL AUTHORITY

Thomas F. Crowe, Jr.
Town Engineer

sck
c/c Mr. John Bozzuto

TOWN OF CHESHIRE

Water Pollution Control Authority
84 South Main Street • Cheshire, Connecticut 06410
203-272-4908

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Very truly yours,

WATER POLLUTION CONTROL AUTHORITY

Thomas F. Crowe, Jr.
Town Engineer

sck
c/c Mr. John Bozzuto

TECHNICAL REPORT
TO BOVANO INDUSTRIES
ON GROUND WATER INVESTIGATIONS
Revised

TRC Environmental Consultants, Inc.

Frederick W. Johnson; Project Manager
Glenn Daukas; Assistant Geologist
TRC Project No. 2661-N51
July 13, 1984

800 Connecticut Blvd.
East Hartford, CT 06108
(203) 289-8631

TABLE OF CONTENTS

SECTION		PAGE
1.0	Introduction	1
2.0	Well Installation	3
3.0	Ground Water Sampling	3
4.0	Discussion.	4

LIST OF FIGURES

FIGURE		PAGE
1	General Site Map-Bovano Industries, Cheshire, CT	2
1A	Site Elevation Map	2

APPENDICES

1 Connecticut Test Boring Monitor Well Logs
2 Monitoring Well Construction Details
3 South Central CT Regional Water Authority Monitoring Well Water Sample Results

1.0 INTRODUCTION

In response to a stipulation by the Superior Court, Judicial District of Hartford on May 22, 1984, Bovano Industries was required to install two monitoring wells at their facility located at 830 South Main Street, Cheshire, Connecticut.

The location of the wells (Figures 1 and 1a) were specified by the Court and were required as a result of a legal order of abatement, issued on April 30, 1982, from the Connecticut Department of Environmental Protection. The order was a result of suspect contribution to contamination of the ground water of the state from a copper sludge basin operated by Bovano, and from spillage of trichloroethylene used in a manufacturing process at Bovano.

On May 25, 1984, TRC, under contract with Bovano Industries, directed the installation of the wells using the services of Connecticut Test Borings, Inc. of Seymour, Connecticut.

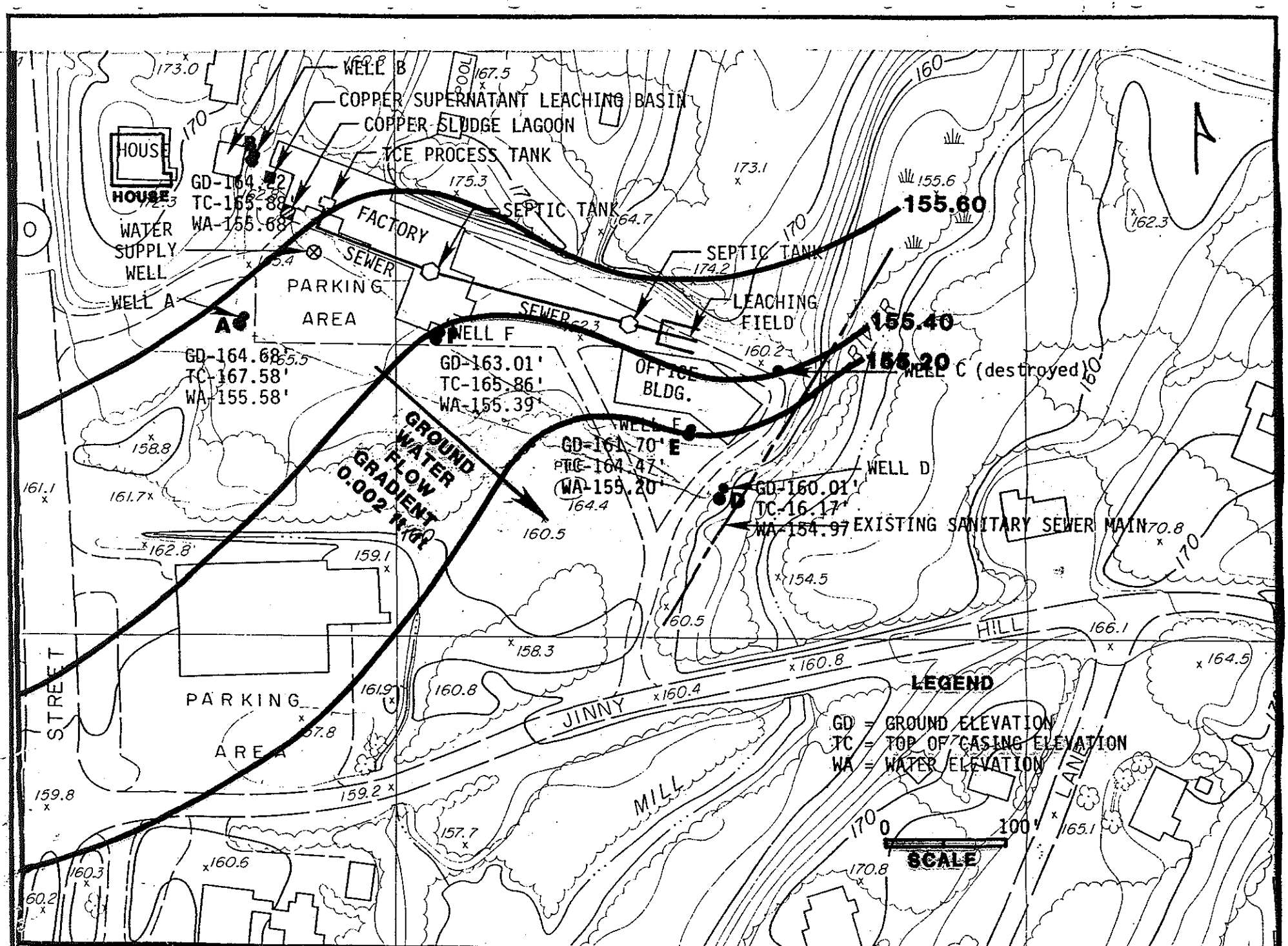


Figure 1. General Site Map - Bovano Industries, Cheshire, Connecticut.
Figure 1a. Site Elevations - Bovano Industries, Cheshire, Connecticut.

2.0 WELL INSTALLATION

Under the supervision of a TRC geologist, the wells were installed using a truck mounted auger rig equipped with a four-inch inside diameter hollow stem auger. Split spoon samples were collected at five foot intervals and logged by the TRC geologist which are presented by Connecticut Test Borings, Inc. (Appendix 1). The location of the two monitoring wells are at the southeast corner of the factory, Well F, and the center of the south face of the office building, Well E (Figures 1 and 1a). Well construction consists of 2" PVC solid well riser with 15' of perforated well screen in Well E and 25' of screen in Well F. The screen was covered with filter fabric to prevent infiltration of suspended solids. A bentonite seal was placed at a depth of approximately one foot above the top of the well screen and a locking protective steel casing was cemented into place at the ground surface creating an impervious seal (Appendix 2). Four backhoe dug wells had previously been installed on September 21, 1982 by TRC with Bovano's equipment and operator. Between that date and May 25, 1984 monitoring Well C (Figure 1) was destroyed by snow removal operations.

3.0 GROUND WATER SAMPLING

Ground Water samples were collected on June 19, 1984 and analyzed on June 20, 1984 by the South Central Connecticut Regional Water Authority, New Haven, Connecticut. The results are listed in Appendix 3. On July 3, 1984 ground surface, top of casing and water table elevations were determined by TRC with the help of a Bovano employee (See Figure 1a).

4.0 DISCUSSION

The results of the elevation survey shows ground water flow to be in a southeasterly direction with a flow gradient of 0.002 ft/ft (See Figure 1A). Of the five wells sampled, monitoring Wells A and B showed trichloroethylene (TCE) levels of 50 ppb and 34 ppb respectively, which are above the Connecticut Department of Health level of 25 ppb for potable water. TCE was not detected in monitoring Wells D, E, and F. (Appendix 3).

In September of 1982 TRC conducted a sampling round of the existing backhoe wells. A comparison of the results of this sampling round and the June 1984 round show that trichloroethylene levels in Wells B and D have dropped significantly. During the 1982 sampling round Well A was only analyzed for copper, therefore no comparison can be made.

5.0 CONCLUSIONS AND RECOMMENDATIONS

Based upon the results of this technical evaluation and TRC's September 1982 report to Bovano TRC feels that Bovano has satisfied the requirements of the May 22, 1984 Stipulated Judgement (Appendix 4) from the Connecticut Department of Environmental Protection. Specifically, the items outlined in the Stipulated Judgement have been addressed as follows:

ITEM 1: The two additional wells have been installed as detailed in this report.

ITEM 2: TRC's September 1982 report to Bovano identified soil and ground water contamination at the Bovano property. The recent analysis of ground water from existing, and the two new ground water monitoring wells have further defined the extent of contamination.

TRC's September 1982 report also recommended best management practices to eliminate any potential source of ground water contamination.

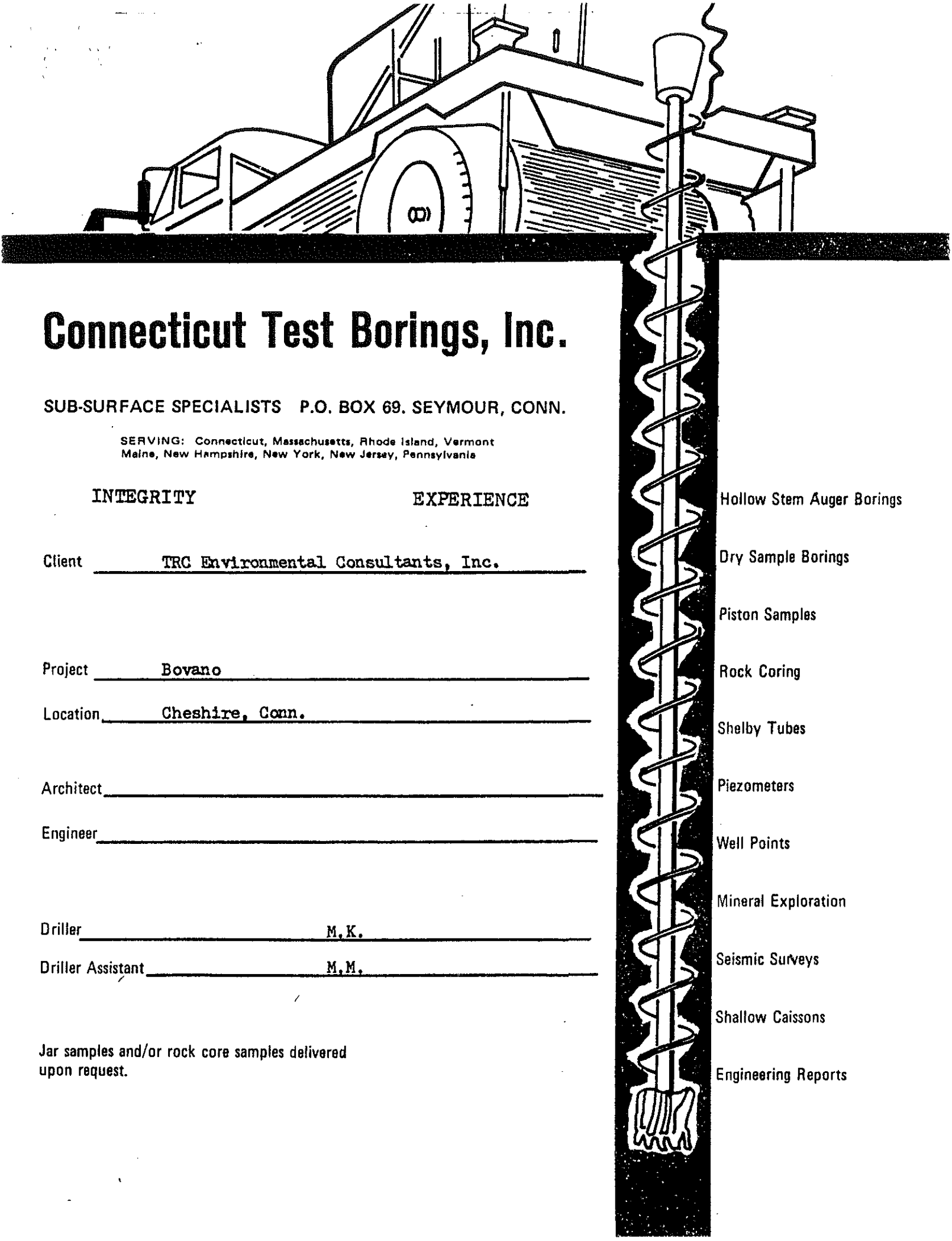
ITEM 3: Bovano Industries has implemented, or is in the process of implementing the best management practices specified in TRC's September 1982 report. This included the elimination of the use and storage of trichlorinated solvents, and elimination of the copper sludge storage sump. A permit is pending with the Town of Cheshire for Bovano to dispose of all this waste to the municipal sanitary sewer. The only outstanding best management practice not implemented by Bovano to date is the upgrading of the chemical storage area with an impervious floor and spill containment berm.

The recent ground water analysis has shown levels of trichlorinated solvents only slightly above state drinking water standards in two wells on site. Based on this data, and the fact that all use and storage of such compounds has stopped. TRC does not feel that any ground water remediation is necessary.

ITEMS 4 & 5: These items simply outline schedules for implementation of the above items.

In conclusion, TRC feels upon completion the upgrading of the chemical storage area, and connection to the municipal sanitary sewer system that Bovano Industries will be in compliance with the Connecticut DEP's May 22, 1984 Stipulated Judgement.

APPENDIX 1



Connecticut Test Borings, Inc.

SUB-SURFACE SPECIALISTS P.O. BOX 69. SEYMOUR, CONN.

SERVING: Connecticut, Massachusetts, Rhode Island, Vermont
Maine, New Hampshire, New York, New Jersey, Pennsylvania

INTEGRITY EXPERIENCE

Client TRC Environmental Consultants, Inc.

Project Bovano

Location Cheshire, Conn.

Architect

Engineer

Driller M.K.

Driller Assistant M.M.

Jar samples and/or rock core samples delivered upon request.

Hollow Stem Auger Borings

Dry Sample Borings

Piston Samples

Rock Coring

Shelby Tubes

Piezometers

Well Points

Mineral Exploration

Seismic Surveys

Shallow Caissons

Engineering Reports

Seymour 888-3857 •

SUB-SURFACE SPECIALISTS • P. O. BOX 69, SEYMOUR, CONN.
SERVING: Connecticut, Massachusetts, Rhode Island, Vermont, Maine, New Hampshire, New York, New Jersey, Pennsylvania

Connecticut Test Borings, Inc.

SOILS CORRELATION CHART

PENETRATION RESISTANCE & SOIL PROPERTIES

Predominant sand and gravel		Predominant silt and clay		
COHESIONLESS	SOILS	COHESIVE	SOILS	COMPRESSIVE
Blows per foot	Relative Density	Blows per foot	Consistency	Strength (qu*)
0 to 4	very loose	0 to 2	very soft	below .25
4 to 10	loose	2 to 4	soft	.25 to .50
10 to 30	medium	4 to 8	medium	.50 to 1.0
30 to 50	dense	8 to 15	stiff	1 to 2
over 50	very dense	15 to 30	very stiff	2 to 4
		over 30	hard	over 4

NOTES:
Above based on 2" O.D. sampler x 1-3/8" i.d. 140 Wt. x 30" Fall (qu*) = Tons per square Foot

STATE OF CONNECTICUT BASIC BUILDING CODE

TABLE 15. PRESUMPTIVE SURFACE BEARING VALUES OF FOUNDATION MATERIALS

	CLASS OF MATERIAL	Tons per Square Foot
1	Massive crystalline bed rock including granite, diorite, gneiss, trap rock hard limestone and dolomite.	100
2	Foliated rock including bedded limestone, schist and slate in sound condition.	40
3	Sedimentary rock including hardshales, sandstones, and thoroughly cemented conglomerates.	25
4	Soft or broken bed rock (excluding shale) and soft limestone.	10
5	Compacted, partially cemented gravels, sand and hardpan overlying rock.	10
6	Gravel and sand-gravel mixtures.	6
7	Loose gravel, hard dry clay, compact coarse sand, and soft shales.	4
8	Loose, coarse sand and sand-gravel mixtures and compact fine sand (confined).	3
9	Loose medium sand (confined), stiff clay.	2
10	Soft broken shale, soft clay.	1.5

SOIL SAMPLING LOG

CONNECTICUT TEST BORINGS, INC.

Sub-Surface Specialists

P.O. BOX 69
SEYMOUR, CONNECTICUT
(203) 888-3857

SHEET 1 OF 1

DATE START 5-29-84
DATE FINISH 5-29-84
WEIGHT OF HAMMER 140 · 300
HAMMER FALL .....30" 22" .....

GROUND WATER OBSERVATIONS

DATE	TIME	DEPTH
5-29-84	0 hrs.	5'

SAMPLER O.D. 2" I.D. 1 3/8"
TYPE OF RIG Hydraulic Rotary

ESPECIALLY COMPILED FOR
TRC Environmental Consultants, Inc.
800 Connecticut Boulevard
East Hartford, Conn. 06108

PROJ. NO. .....
LOCATION Cheshire, Conn.
LINE & STA. (Sovano)
OFFSET
GROUND ELEVATION
HOLE. NO. MW-E

	CASING	SAMPLER	CORE BARREL
TYPE	HSA	SS	
SIZE I.D.	3½"	1 3/8"	

DEPTH BELOW SURFACE	SAMPLE NO. DEPTHS ELEV. FT.	Type of Sample	BLOWS PER 6" ON SAMPLER From 0-6	TO 6-12	TO 12-18	DENSITY OR CONSIST. MOISTURE	PROFILE CHANGE DEPTH ELEV.	FIELD IDENTIFICATION OF SOILS REMARKS	SAMPLE NO.	PEN	REC.
							4"	Traprock fill.			
								Red br. f-c sand, some f-c gravel, lit. silt, lit. cobbles.			
	5' to 6'6"	SS	25	50	60	V. Dense wet	5'6"		1	18	8
								Red br. f-c sand and f-c gravel, some cobbles, lit. silt.			
							9'				
10	10' to 11'6"	SS	9	11	15	M. Comp wet		Red br. f-c sand, lit. f-c gravel, tr. silt, tr. cobbles.	2	18	10
	15' to 16'6"	SS	9	11	6	M. Comp wet		Same	3	18	6
20	20' to 20'5"	SS	50/5"			V. Dense wet	20'6"		4	5	5
							21'	Red br. silt, some f-c sand, lit. clay, lit. f-c gravel.			
								Refusal on HSA on rock or boulder.			
								Bottom of boring 21'.			
30								NOTE: Installed 22'6" of 2" PVC water observation pipe w/15' of fabric covered screen 20' below grade, 2'6" above grade. Installed Bentonite seal from 2'6" to 6". Installed steel protective pipe w/locking cap 3' above grade. Well was developed.			
40											

Proportions used: trace = 0-10%, little = 10-20%, some = 20-35%, and = 35-50%

NOT RESPONSIBLE FOR SAMPLE STORAGE AFTER 30 DAYS

DRILLER: M.K.
HELPER: M.M.
SOILS ENGINEER
DRILLING INSPECTOR Alan Dabers TRC

SAMPLE TYPE
C = CORED W = WASHED
SS = SPLIT SPOON
UP = UNDISTURBED PISTON
TP = TEST PIT
UT = UNDISTURBED THINWALL

COHESIONLESS DENSITY
0-10 LOOSE
10-30 MED. COMP.
30-50 DENSE
50+ VERY DENSE

TOTAL FOOTAGE:
Earth Boring Ft.
Rock Coring Ft.
HOLE NO.

SOIL SAMPLING LOG

CONNECTICUT TEST BORINGS, INC.

Sub-Surface Specialists

P.O. BOX 69
SEYMOUR, CONNECTICUT
(203) 888-3857

SHEET 1 OF 1

DATE START 5-29-84
DATE FINISH 5-29-84
WEIGHT OF HAMMER 140 ~~300~~
HAMMER FALL 30" ~~24~~

GROUND WATER OBSERVATIONS

DATE	TIME	DEPTH
5-29-84	0 hrs.	8'6"

SAMPLER O.D. 2" I.D. 1 3/8"
TYPE OF RIG Hydraulic Rotary

ESPECIALLY COMPILED FOR
THC Environmental Consultants, Inc.
800 Connecticut Boulevard
East Hartford, Conn. 06108

PROJ. NO.
LOCATION Cheshire, Conn.
LINE & STA. (Bovano)
OFFSET
GROUND ELEVATION
HOLE. NO. MW-F

	CASING	SAMPLER	CORE BARREL
TYPE	HSA	SS	
SIZE I.D.	3½"	1 3/8"	

DEPTH BELOW SURFACE	SAMPLE NO. DEPTHS ELEV. FT.	Type of Sample	BLOWS PER 6" ON SAMPLER From 0-6	TO 6-12	TO 12-18	DENSITY OR CONSIST. MOISTURE	PROFILE CHANGE DEPTH ELEV.	FIELD IDENTIFICATION OF SOILS REMARKS	SAMPLE NO.	PEN	REC.
							2"	Blktop.			
	5' to 6'6"	SS	12	49	53	V.Dense dry		Red br. f-c sand and c-f gravel, some cobbles, lit. silt.	1	18	17
							9'				
10	10' to 12'	SS	23	18	13 35	Dense wet		Red br. f-c sand, some f-c gravel, lit. cobbles, tr. silt.	2	24	8
	15' to 16'6"	SS	42	23	25	Dense wet		Same	3	18	8
							18'				
20								Red br. f-c sand, lit. f-c gravel, tr. cobbles, tr. silt.			
	25' to 27'	SS	13	12	13 14	M.Comp wet		Same	4	24	22
30	30' to 31'6"	SS	8	11	14	M.Comp wet		Same	5	18	16
							34'	Bottom of boring 34'.			
40								NOTE: Installed 35' of 2" PVC water observation pipe 34' below grade, 1' abbve grade w/25' of fabric covered screen. Installed 1' bentonite seal from 2' - 1'. Installed 5' prot. pipe 2' above grade w/locking cap. Well was developed.			

Proportions used: trace = 0-10%, little = 10-20%, some = 20-35%, and = 35-50%

NOT RESPONSIBLE FOR SAMPLE STORAGE AFTER 30 DAYS

DRILLER: M.K.
HELPER: M.M.
SOILS ENGINEER
DRILLING INSPECTOR

SAMPLE TYPE
C = CORED W = WASHED
SS = SPLIT SPOON
UP = UNDISTURBED PISTON
TP = TEST PIT
UT = UNDISTURBED THINWALL

COHESIONLESS DENSITY
0-10 LOOSE
10-30 MED. COMP.
30-50 DENSE
50+ VERY DENSE

TOTAL FOOTAGE:
Earth Boring Ft.
Rock Coring Ft.
HOLE NO.

APPENDIX 2

TRC Environmental Consultants, Inc.

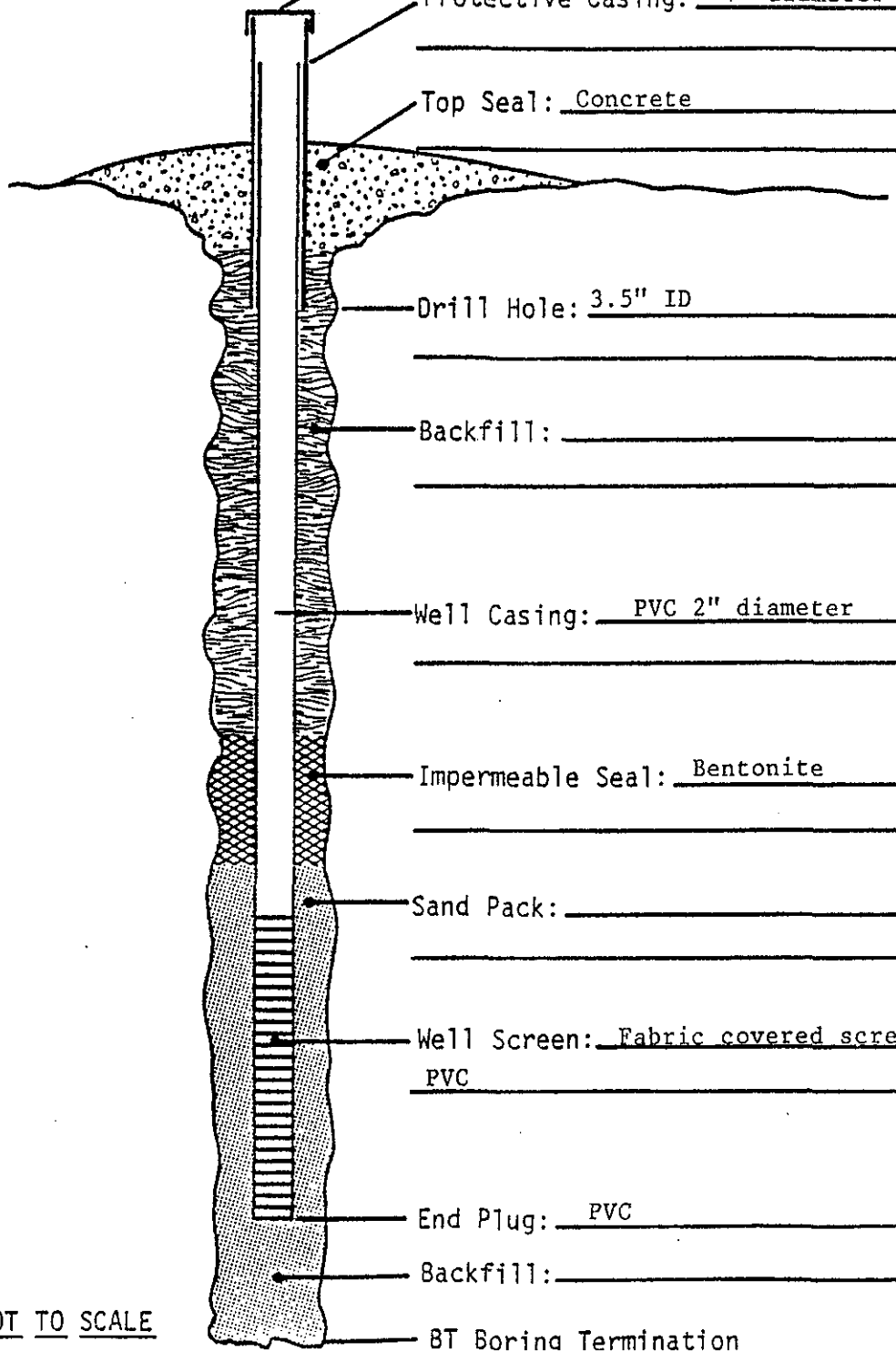
800 Connecticut Boulevard
East Hartford, Connecticut 06108
(203) 289-8631

MONITORING WELL CONSTRUCTION DETAIL

TRC Project # 2661-N51-00 Page 1 of 1 Boring # MW-E

Project Bovano

DEPTH	ELEV.
+3'	164.47'
0	161.70'
6"	161.20'
26"	159.20
7'6"	154.20'
22'6"	139.20'



Top Cap: Locking steel

Protective Casing: 4" diameter steel

Top Seal: Concrete

Drill Hole: 3.5" ID

Backfill:

Well Casing: PVC 2" diameter

Impermeable Seal: Bentonite

Sand Pack:

Well Screen: Fabric covered screen, 2" diameter PVC

End Plug: PVC

Backfill:

BT Boring Termination

NOT TO SCALE

TRC Environmental Consultants, Inc.

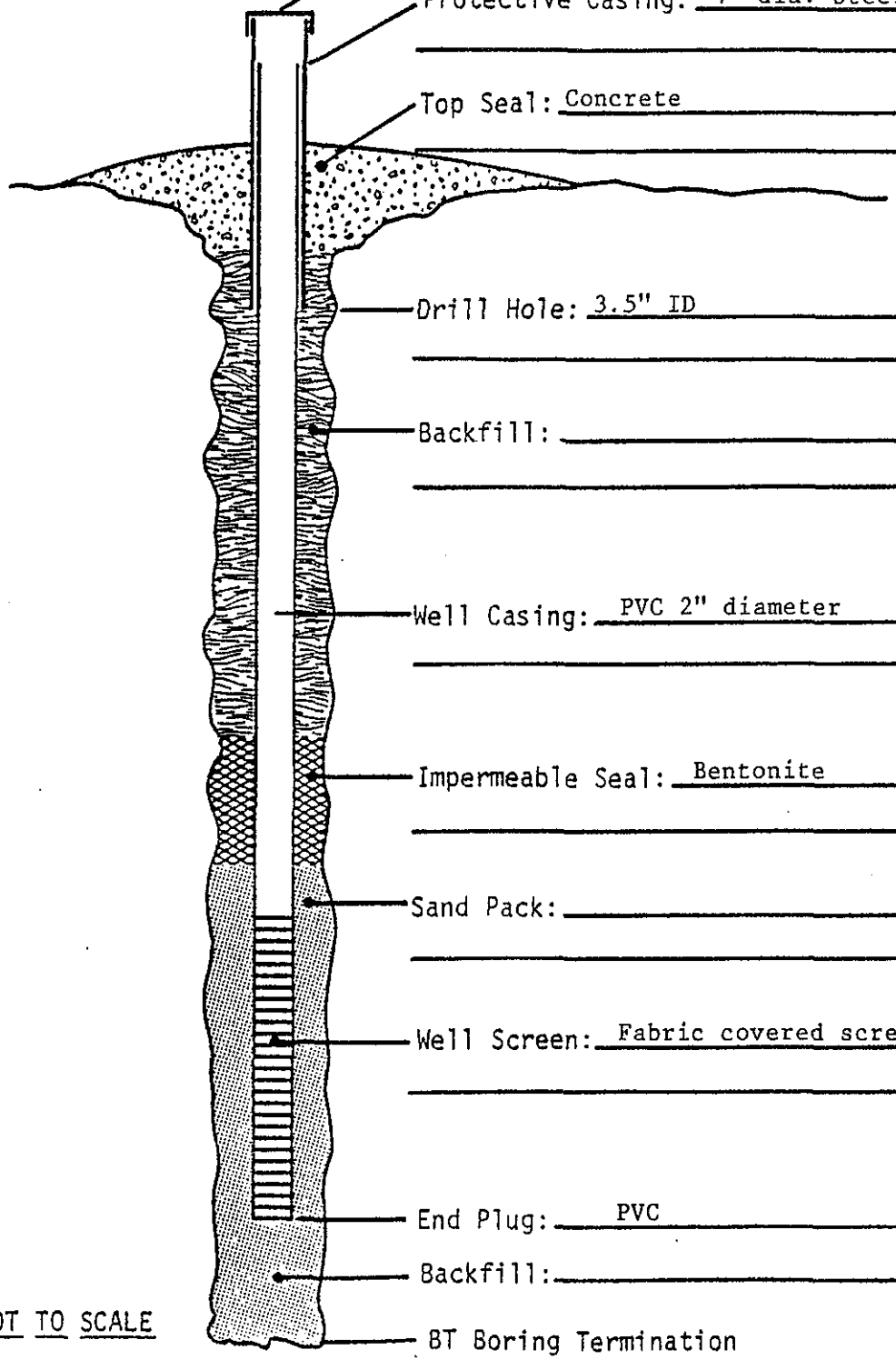
800 Connecticut Boulevard
East Hartford, Connecticut 06108
(203) 289-8631

MONITORING WELL CONSTRUCTION DETAIL

TRC Project # 2661-N51-00 Page 1 of 1 Boring # MW F

Project Bovano

DEPTH	ELEV.
+2'	165.86'
0'	163.01'
1'	162.01'
2'	161.01'
9'	154.01'
34.0'	129.01'



Top Cap: Locking steel

Protective Casing: 4" dia. steel

Top Seal: Concrete

Drill Hole: 3.5" ID

Backfill:

Well Casing: PVC 2" diameter

Impermeable Seal: Bentonite

Sand Pack:

Well Screen: Fabric covered screen, 2" diameter

End Plug: PVC

Backfill:

BT Boring Termination

NOT TO SCALE

APPENDIX 3

SOUTH CENTRAL CONNECTICUT REGIONAL WATER AUTHORITY
90 Sargent Drive, New Haven, CT 06511
(203) 624-6671, Extension 364 Laboratory Certification #PH-0411

Laboratory Report: ORGANICS ANALYSES

Customer: Bovano Sample Location: Cheshire MWA

Vial # : B37 Date of Sample: 6-19-84 Date of Analysis: 6-20-84

Purgeable Volatile Halocarbons:

Compound	Results**	Compound	Results**
Chloromethane	ND	1,2-Dichloropropane	ND
Bromomethane		trans-1,3-Dichloropropylene	
Dichlorodifluoromethane		Trichloroethylene	50
Vinyl chloride		Carbon tetrachloride	ND
Chloroethane		1,1,2-Trichloroethane	
Methylene chloride		cis-1,3-Dichloropropylene	
Trichlorofluoromethane		2-Chloroethylvinyl ether	
1,1-Dichloroethane		1,1,1-Trichloroethane	
1,1-Dichloroethylene		1,1,2,2-Tetrachloroethane	
trans-1,2-Dichloroethylene	<1	**Trihalomethanes:**	
1,2-Dichloroethane	ND	Chloroform	
Tetrachloroethylene		Bromodichloromethane	
OTHERS:		Dibromochloromethane	
		Bromoform	
		TOTAL THMS:	

** values are expressed as ug/l ND = None detected (Limits: <1.0 ppb)

SIGNATURE: Jeffrey E Peters TITLE: Chemist

COMMENTS:

SOUTH CENTRAL CONNECTICUT REGIONAL WATER AUTHORITY
90 Sargent Drive, New Haven, CT 06511
(203) 624-6671, Extension 364 Laboratory Certification #PH-0411

Laboratory Report: ORGANICS ANALYSES

Customer: Cheshire Sample Location: MWB

Vial # : C11 Date of Sample: 6-19-84 Date of Analysis: 6-20-84

Purgeable Volatile Halocarbons:

Compound	Results**	Compound	Results**
hloromethane	ND	1,2-Dichloropropane	ND
Bromomethane		trans-1,3-Dichloropropylene	
Dichlorodifluoromethane		Trichloroethylene	34
Vinyl chloride		Carbon tetrachloride	ND
hloroethane		1,1,2-Trichloroethane	
Methylene chloride		cis-1,3-Dichloropropylene	
Trichlorofluoromethane		2-Chloroethylvinyl ether	
,1-Dichloroethane		1,1,1-Trichloroethane	<1
,1-Dichloroethylene		1,1,2,2-Tetrachloroethane	ND
rans-1,2-Dichloroethylene		Trihalomethanes:	
,2-Dichloroethane		Chloroform	
Tetrachloroethylene		Bromodichloromethane	
THERS:		Dibromochloromethane	
		Bromoform	
		TOTAL THMS:	

** values are expressed as ug/l ND = None detected (Limits: <1.0 ppb)

SIGNATURE: Jeffrey E Peters TITLE: Chemist

COMMENTS:

SOUTH CENTRAL CONNECTICUT REGIONAL WATER AUTHORITY
90 Sargent Drive, New Haven, CT 06511
(203) 624-6671, Extension 364 Laboratory Certification #PH-0411

Laboratory Report: ORGANICS ANALYSES

Customer: Bovano Sample Location: Cheshire Well D

Vial # : B44 Date of Sample: 6-18-84 Date of Analysis: 6-20-84

Purgeable Volatile Halocarbons:

Compound	Results**	Compound	Results**
hloromethane	ND	1,2-Dichloropropane	ND
Bromomethane		trans-1,3-Dichloropropylene	
Dichlorodifluoromethane		Trichloroethylene	
Vinyl chloride		Carbon tetrachloride	
hloroethane		1,1,2-Trichloroethane	
Methylene chloride		cis-1,3-Dichloropropylene	
Trichlorofluoromethane		2-Chloroethylvinyl ether	
,1-Dichloroethane		1,1,1-Trichloroethane	
,1-Dichloroethylene		1,1,2,2-Tetrachloroethane	
trans-1,2-Dichloroethylene		Trihalomethanes:	
,2-Dichloroethane		Chloroform	
Tetrachloroethylene		Bromodichloromethane	
THERS:		Dibromochloromethane	
		Bromoform	
		TOTAL THMS:	

** values are expressed as ug/l ND = None detected (Limits: <1.0 ppb)

SIGNATURE: Jeffrey E Peters TITLE: Chemist

COMMENTS:

SOUTH CENTRAL CONNECTICUT REGIONAL WATER AUTHORITY
90 Sargent Drive, New Haven, CT 06511
(203) 624-6671, Extension 364 Laboratory Certification #PH-0411

Laboratory Report: ORGANICS ANALYSES

Customer: Bovano Sample Location: Cheshire MWF

Vial # : B14 Date of Sample: 6-19-84 Date of Analysis: 6-20-84

Purgeable Volatile Halocarbons:

Compound	Results**	Compound	Results**
Chloromethane	ND	1,2-Dichloropropane	ND
Bromomethane		trans-1,3-Dichloropropylene	
Dichlorodifluoromethane		Trichloroethylene	<1
Vinyl chloride		Carbon tetrachloride	ND
Chloroethane		1,1,2-Trichloroethane	
Methylene chloride		cis-1,3-Dichloropropylene	
Trichlorofluoromethane		2-Chloroethylvinyl ether	
1,1-Dichloroethane		1,1,1-Trichloroethane	
1,1-Dichloroethylene		1,1,2,2-Tetrachloroethane	
trans-1,2-Dichloroethylene		Trihalomethanes:	
1,2-Dichloroethane		Chloroform	
Tetrachloroethylene		Bromodichloromethane	
OTHERS:		Dibromochloromethane	
		Bromoform	
		TOTAL THMS:	

** values are expressed as ug/l ND = None detected (Limits: <1.0 ppb)

SIGNATURE: Jeffrey E Peters TITLE: Chemist

COMMENTS:

SOUTH CENTRAL CONNECTICUT REGIONAL WATER AUTHORITY
90 Sargent Drive, New Haven, CT 06511
(203) 624-6671, Extension 364 Laboratory Certification #PH-0411

Laboratory Report: ORGANICS ANALYSES

Customer: Bovano Sample Location: MWF

Vial # : A38 Date of Sample: 6-19-84 Date of Analysis: 6-20-84

Purgeable Volatile Halocarbons:

Compound	Results**	Compound	Results**
Chloromethane	ND	1,2-Dichloropropane	ND
Bromomethane		trans-1,3-Dichloropropylene	
Dichlorodifluoromethane		Trichloroethylene	1.0
Vinyl chloride		Carbon tetrachloride	ND
Chloroethane		1,1,2-Trichloroethane	
Methylene chloride		cis-1,3-Dichloropropylene	
Trichlorofluoromethane		2-Chloroethylvinyl ether	
1,1-Dichloroethane		1,1,1-Trichloroethane	
1,1-Dichloroethylene		1,1,2,2-Tetrachloroethane	
trans-1,2-Dichloroethylene		**Trihalomethanes:**	
1,2-Dichloroethane		Chloroform	
Tetrachloroethylene		Bromodichloromethane	
OTHERS:		Dibromochloromethane	
		Bromoform	
		TOTAL THMS:	

** values are expressed as ug/l ND = None detected (Limits: <1.0 ppb)

SIGNATURE: Jeffrey E Peters TITLE: Chemist

COMMENTS:

APPENDIX 4

NO. CV-83-0288646S

STANLEY J. PAC, COMMISSIONER OF ENVIRONMENTAL PROTECTION	:	SUPERIOR COURT
VS.	:	JUDICIAL DISTRICT OF HARTFORD/ NEW BRITAIN AT HARTFORD
BOVANO INDUSTRIES, INCORPORATED	:	MAY 22, 1984

MOTION FOR STIPULATED JUDGMENT

The parties to the captioned matter hereby stipulate that the following order may enter as the judgment of the Court in this case:

1. On or before May 30, 1984, the defendant will verify to the Commissioner of Environmental Protection that two additional monitoring wells have been installed, one at the southern edge of the parking area of the defendant's facility and the other at the south of the office building located on the defendant's property, both of which are shown on a map attached hereto as Exhibit 1 and marked as 1 and 2 respectively.

2. On or before June 30, 1984, the defendant will submit for the review, comment and/or approval of the Commissioner of Environmental Protection a report detailing the extent and degree of ground water, surface water and soil contamination, if any, and proposed remedial actions ("the plan") to alleviate the contamination, if any any, at the defendant's facility. This report shall also contain a plan to provide for best management practices for industrial chemical storage, usage and waste handling.

SOROKIN & SOROKIN, P.C.
ONE CORPORATE CENTER • HARTFORD, CONNECTICUT 06103 • (203) 525 6643 • JURIS NO. 50113

3. If the Commissioner of Environmental Protection approves the plan to which reference is made in No. 2 above, the defendant shall begin implementation thereof within fifteen (15) days of its receipt of written notice of such approval. If the Commissioner, after reviewing the plan, proposes to reject it or to accept it only with modifications, he shall notify the defendant in writing of such proposed actions and within fifteen (15) days of the receipt of this notice by the defendant, the Commissioner or his representatives shall meet with the defendant so that the defendant may be heard with respect to the proposed actions. Following this meeting, and after considering the comments of the defendant, the Commissioner shall notify the defendant in writing of its final action on the plan. Within fifteen (15) days of its receipt of this notice, the defendant shall commence to undertake the remedial actions called for by the notice.

4. On or before the sixtieth (60th) day following the initiation of plan implementation, defendant will verify to the Commissioner that all necessary construction of the remedial actions have been completed and that all best management practices have been implemented.

5. For good cause shown, the time limitations contained in this order may be extended by the Court pursuant to an appropriate motion and the Court shall have continuing jurisdiction to monitor this order for this purpose.

SOROKIN & SOROKIN, P.C.
ONE CORPORATE CENTER • HARTFORD, CONNECTICUT 06103 • (203) 525 6645 • JURIS NO. 60113

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

CHANGE INFORMATION FORM

IF THERE ARE ANY CHANGES/CORRECTIONS IN YOUR FACILITY INFORMATION PLEASE FILL OUT THE FOLLOWING:

FACILITY NAME: Bovano Industries Inc

FACILITY ADDRESS: 830 So. Main St.

MAILING NAME: P.O Box 250

MAILING ADDRESS:

CONTACT PERSON: David Flood

PHONE NUMBER: 203-272-3208

STATUS OF FACILITY: 3

1. ACTIVE 2. OUT OF BUSINESS 3. NO LONGER DISCHARGING

DISCHARGES: [Please indicate DISCHARGE SERIAL NUMBER(s)]

ADDED:

ELIMINATED:

PERMIT NUMBER: SP 0000 210 MI

DEP/WPC NUMBER:

APPLICATION NUMBER:

David Flood 8/26/88

CONTACT PERSON DATE

PLEASE RETURN TO:

TERRI NELSON
PERMIT PROCESSING TECHNICIAN
DEP/WATER COMPLIANCE
122 WASHINGTON STREET
HARTFORD, CONN. 06106

07/15/88

STATE OF CONNECTICUT ** DEPARTMENT OF ENVIRONMENTAL PROTECTION

MINOR DISCHARGE MONITORING REPORT

LOGGED: _____

ACILITY NAME: BOVANO OF CHESIRE TOWN: CHESHIRE STATE PERMIT: SP0000210 MI
ISSUED: 781208 EXPIRES: 831208

DDRESS: 830 SOUTH MAIN ST. CHESHIRE CT 06410 CONTACT: DAVID FLOOD PHONE: -

STATEMENT OF ACKNOWLEDGEMENT

CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN CCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. ASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE NFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE AND COMPLETE. I AM AWARE HAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT OR KNOWING VIOLATIONS.

AUTHORIZED OFFICIAL: David W. Flood TITLE: Vice President

SIGNATURE: David W. Flood DATE: 8/25/88

LEASE TYPE RESULTS BELOW ATTACHING ADDITIONAL SHEETS AS NECESSARY

02500900 REPORTING MONTH _____ 19_____

DISCHARGE NUMBER	PARAMETER	MINIMUM	MAXIMUM	AVERAGE	UNITS	SAMPLE DATE(S)

Discharge Terminated Oct. 1984
Sludge Pit Removed Dec. 1985
Judgement Satisfied June 1987 Copy attached

TRC Environmental Consultants, Inc.

800 Connecticut Boulevard
East Hartford, Connecticut 06108
(203) 289-8631

September 17, 1986

Copy to Elm Grove 9/22/86

Mr. James A. Flood
Bovano of Cheshire
P.O. Box 230
Cheshire, CT 06410

RE: TRC Project No. 2661-N51-00
Soil Sampling Results

Dear Mr. Flood:

This letter serves as TRC's report of the soil samples collected and analyzed for trichloroethylene (TCE) and copper. Sampling was conducted on two separate days and is explained as follows.

On July 1, 1986, a TRC geologist sampled the soil in the chemical storage area. The final composite sample taken represented five (5) individual samples, one from each corner of the excavation and one from the center using a laboratory cleaned stainless steel bowl and spoon. The samples were taken from the bottom of the excavated area, which is ten (10) inches below ground level. Once the soil was thoroughly mixed, the soil was placed into 30 milliliter reaction vials and taken to TRC's laboratory in East Hartford, Connecticut.

On August 28, 1986, a TRC geologist sampled the soil from the bottom of the re-excavated copper sludge lagoon, and collected a background soil sample located upgradient of monitoring well B. TRC used a four (4) inch inside diameter hand auger to collect both samples. These individual samples were thoroughly mixed and placed into one (1) liter glass jars. TRC performed and E.P. Toxicity Test for copper on both samples. The sampling of the copper sludge lagoon was required by the Connecticut State Department of Environmental Protection (DEP) due to the results of the previous copper samples collected during the initial excavation on December 18, 1985. The results of the E.P. Toxicity Tests and TCE analysis are summarized in Table 1.

These data show that the concentrations of TCE and copper have significantly decreased when compared to the initial soil sample results.

Since the usage of TCE at Bovano was discontinued in 1982, it appears the concentration of TCE in the ground water has significantly decreased as indicated in Table 2. The results presented in Table 2 are representative of ground water samples collected from monitoring well B next to the source of the TCE contamination.

Results of copper analysis of ground water completed in 1982 show levels of 10.2 mg/l in monitoring well B. It is unknown if copper concentrations have improved at well B, however, monitoring well A located down gradient of the sludge lagoon revealed copper concentrations of only 0.09 mg/l. This suggests that copper contamination was limited only to the immediate source proximity (well B) and relatively immobile as stated in the November 1982 TRC report to Bovano Industries.

It is TRC's recommendation that the following steps be conducted by Bovano Industries in order to remain in compliance with DEP regulations:

- The TCE storage area should have a new concrete floor installed to prohibit infiltration.
- Initiate a semi-annual ground water monitoring program at wells A, B and F shown in Figure 1. The monitoring program will help determine if the existing conditions at Bovano Industries will continue to improve.
- A meeting be held including representatives of Bovano Industries, TRC and the DEP to discuss the above recommendations and decide whether these remedial techniques are acceptable or make revisions as necessary.

Although the above recommended steps are subject to the DEP's approval, TRC feels that the DEP should review and consider Bovano Industries as a unique case, and when the above steps are implemented would satisfy all environmentally concerned parties.

If you should have any questions or comments regarding this report, please do not hesitate to call me or Curt Kraemer.

Very truly yours,

TRC ENVIRONMENTAL CONSULTANTS, INC.

Andrew R. Zlotnick

Andrew R. Zlotnick
Assistant Project Scientist

ARZ:sms

TABLE 1

SUMMARY OF ANALYTICAL RESULTS

Sample No.	SS-1	SS-1	SS-2	SS-2	SS-3
Sample Date	05/07/85	07/01/86	12/18/85	08/28/86	08/28/86
Laboratory	DEP	TRC	TRC	TRC	TRC
Depth	Surface	0.8'-1.0'	7'-7.5'	10.5'-11'	2'-3'
Units	µg/g	µg/g	µg/g	µg/g	µg/g
PARAMETER					
Trichloroethylene	70	1.57	-	-	-
E.P. Toxicity Copper	-	-	10.6	1.13	<.08

DEP = Connecticut State Department of Health, Environmental Research Laboratory

TRC = TRC Laboratory

SS-1 = Chemical Storage Area

SS-2 = Copper Sludge Lagoon

SS-3 = Upgradient Background Sample

\- = Not Analyzed

TABLE 2

SUMMARY OF TCE CONCENTRATIONS IN GROUND WATER

Sampling Date	09/82	06/84	05/85
Laboratory	TRC	SCC	DEP
Units	µg/l	µg/l	µg/l
PARAMETER			
Trichloroethylene	1,220	34	6.1

TRC = TRC Laboratory

SCC = South Central Connecticut Regional Water Authority

DEP = Connecticut State Department of Health, Environmental Research Laboratory

Note: The Connecticut State Department of Health Services has issued an actional level of 25 µg/l for Trichloroethylene and referenced from the Public Health Code Regulation 19-13-B102

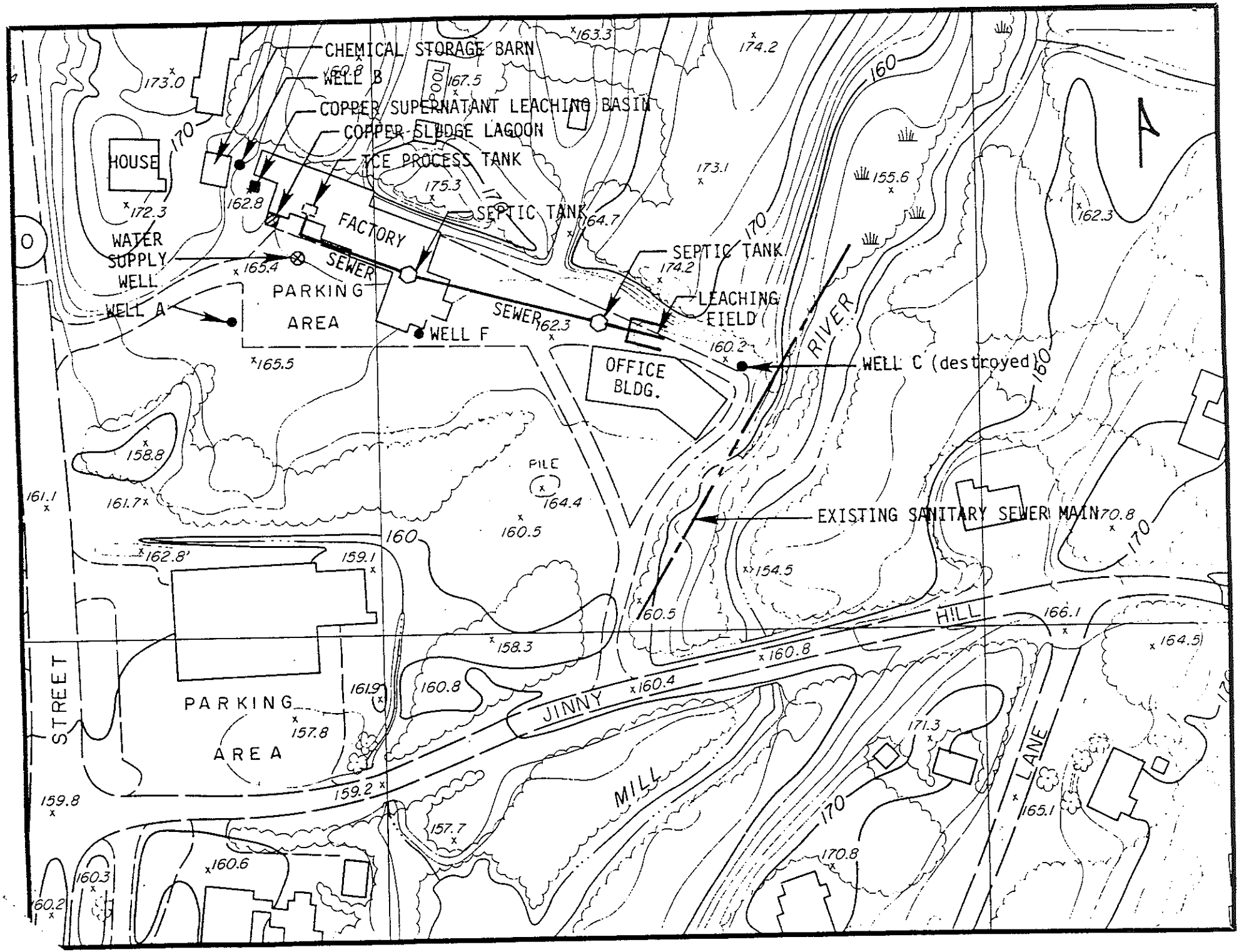


Figure 1. General Site Map - Bovano Industries, Cheshire, Connecticut.

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

December 12, 1986

DEC 18 1986

BOVANO IND., I.

TRC Environmental
Consultants, Inc.
800 Connecticut Boulevard
East Hartford, CT 06108

Attention Andrew Zlothick
Assistant Project Scientist

RE: Bovano Industries
Stipulated Judgement
May 23, 1984

Dear Mr. Zlotnick:

The Department of Environmental Protection has reviewed the actions taken by Bovano Industries as required under the May 23, 1984 Stipulated Judgement. T.R.C. Environmental Consultants have verified that all contaminated soil has been excavated from the on-site lagoon and chemical storage area, however no sample results are reported for the limit of excavation at the catch basin dry well. Verification of excavation of the dry well is necessary in order to be in compliance with the Stipulated Judgement.

In regards to implementation of Best Management Practices, a containment berm must be constructed around the concrete slab in order to prevent further groundwater contamination.

TRC's proposal for semi-annual groundwater monitoring at wells A, B and F as the remedial action is unacceptable to the Department of Environmental Protection. The minimum requirements for monitoring will be quarterly for one year to determine if levels are decreasing. If the levels are shown to be decreasing then monitoring may be reduced to semi-annually for two years. Upon review of the results a determination will be made for the need of future monitoring. The monitoring must include analysis of monitor wells A, B and F for volatile organics and monitor wells B and F for copper.

Phone:
165 Capitol Avenue • Hartford, Connecticut 06106

An Equal Opportunity Employer

If you wish to discuss this matter please call me at 566-7295.

Sincerely yours,

Eileen Gunn

Eileen Gunn
Environmental Analyst
WATER COMPLIANCE UNIT

EG/lmm

cc: Mr. Kevin Walsh, South Central Regional Water Authority

Mr. James Flood, Bovano of Cheshire

DEPARTMENTAL USAGE
201 REV. 4/85
Stock No. 6938-051-01)

STATE OF CONNECTICUT

Obtain "STATE EMPLOYEE SUGGESTION" forms from, and send your ideas to: Employee's Suggestion Awards Program, 165 Capitol Avenue Hartford, Ct, 06106.

To	NAME, TITLE Eileen Gunn, Environmental Analyst AGENCY, ADDRESS	DATE 10/16/86
From	NAME, TITLE Dale Maretsky, Field Inspector AGENCY, ADDRESS	TELEPHONE

Subject: Inspection at Barano Industries, Cheshire

On 10/1/86 I did an inspection at Barano Industries in Cheshire. The purpose of this inspection was to assure that all contaminated soil had been excavated from their on-site lagoon, to verify that Barano had adopted best management practices with regard to their wastes and to inspect the waste storage area.

The former lagoon had been excavated to a depth of 12 feet. There did not appear to be any stained or discolored soil in the lagoon and it seemed that all contaminated soil had been removed. On 10/9/86 I spoke with Mr. Flood on the phone and gave him approval to fill in the former lagoon with clean fill.

Regarding their present waste handling, the company no longer utilizes trichloroethylene and generates only two waste streams - metal hydroxide sludge from the wastewater treatment system and ferric chloride etchant. Both the sludge and waste etchant are taken off-site by EWR of Waterbury. The former waste storage shed is no longer used and the contaminated soil which was present was removed. At the present time there are no plans to use the shed for waste storage. The ferric chloride

waste are stored outside on a concrete slab. At the time of my inspection there were about 30-40 (55) gal drums stored on the slab. The slab is located near a catch basin and there was no containment berm present. I advised Mr. Flood to construct a containment berm to prevent further groundwater contamination problems from waste spillage into the nearby catchbasin.

You may consider a follow-up letter advising Mr. Flood of the need for better waste containment in this area.

In summation it appears that all contamination in the lagoon has been cleaned up and the only problem with Bovanos present use & handling is the lack of proper containment around the waste storage area

Bovano of Cheshire

830 SOUTH MAIN STREET • CHESHIRE, CONNECTICUT 06410 • TELEPHONE 203/272-3208

February 7, 1984

Steps taken to Eliminate
Water Polution at Bovano Industries, Inc.

2/23/76 Order #2036 received to abate polution

7/15/76 Hired Engineered Environments, Consulting Engineers

1/3/77 Plans approved by D.E.P.

12/8/78 Permit received.

Results: Copper Hydroxide treatment system installed to collect approximately one cubic foot of dry sludge per year into a 1,000 cubic foot pit in the ground. System still in operation at Bovano. No indication received from D.E.P. or consultants that T.C.E. being used at that time was considered hazardous.

3/17/82 As a result of T.C.E. contamination in the South Cheshire well of S.C.C.Water Company, D.E.P. tested rinse water at Bovano up to 1900 parts per billion.

4/30/82 Order #3242 was received to abate polution

6/1/82 Bovano eliminated use of all T.C.E. and Water Displacing liquid from operation.

8/30/82 Hired T.R.C. Consulting Engineers.

12/13/82 Submitted T.R.C. report to D.E.P. as requested indicating a maximum polution level of 1200 parts per billion-a 46% reduction from 3/17/82.

5/19/83 Additional comments of D.E.P. received on their report dated 1/21/83 requesting additional wells and sewer connection.

6/8/83 Shipped all remaining drums of T.C.E. per D.E.P.manifests.

7/5/83 Turned over to Attorney General by D.E.P.

9/13/83 Applied for Sewer Permit to D.E.P.

10/83 Constructed sewer line from street to plant and connected sanitary waste. Still waiting for D.E.P.approval to connect acid treated waste.

10/26/83 S.C.C.Water Company tested our sampling wells. Results- Maximum 203 parts per billion-89% reduction over 3/17/82.

12/9/83 Sent Certified letter to D.E.P. with copy of sewer permit requesting their action.

12/15/83 Received letter requesting piping diagram from D.E.P.

Financial

Bovano Industries has spent considerable time and money to eliminate our pollution problems, and we will continue until all problems are solved as fast as money will allow.

Our financial report is available and shows $103,000 loss in 1982. We are working hard to keep from going bankrupt and at the same time solve these new problems.

David W. Flood

David W. Flood
President

Note:
3/19/82 well water 95 ft. Deep
3 Parts per billion TCE

November 12, 1986

Mr. Stanley J. Pac
Dept of Environmental Protection
State Office Building
Hartford, Ct. 06103

Dear Mr. Pac:

I believe Bovano Industries has met the requirements of the motion for stipulated judgement #CV83-0288646S, and I am asking that this jusgement be removed.

This letter will summarize action taken by Bovano Industries to meet the requirements of the judgement.

1. Two additional monitoring wells were installed and tests were done. Refer to TRC Environmental Consultants report dated July 3, 1984.
2. Extent of contamination was determined in TRC report dated July 31, 1986.
3. Remedial action has been taken including:
   a. Both the use and storage of trichlorethylene solvent has been discontinued. Bovano no longer uses the solvent in its manufacturing process.
   b. Treated water from metal hydroxide precipitation is being discharged to Town of Cheshire sewer system under a Town of Cheshire permit dated June 29, 1984. No process water is being discharged to the ground.
   c. Removal of metal hydroxide sludge from a sludge pit has been completed. In addition, soil surrounding the sludge pit has been removed.

c. Contiminated soil in the chemical storage area has been removed. Refer to TRC report dated September 17, 1986.

d. The chemical storage area is no longer used to store any chemicals.

If any additional information is needed to remove this judgement, please contact me.

Sincerely,

James A. Flood

JAF:ja

Rec'd
Letter Mailed on 6/24/87

June 24, 1987

Stephen W. Hitchcock, Director
DEP-Hazardous Materials Mgnt.Unit
Hartford, Ct, 06106

Dear Mr. Hitchcock:

I have taken specific action in response to your notice of violation #307. I will list the steps taken to comply:

1. Scheduled removal of one drum of unusable lacquer and one drum of used water displacing fluid to be removed by EWR before August 1, 1987. Sample analysis by EWR being done now. Transferred water displacing fluid to drum for transport.

2. Established weekly inspection and log. First inspection started 5/26/87.

3. Established logs for waste shipped offsite, treatment schedule, accumulation schedule.

4. Met 90 day requirement for all waste generated this year. Second manifest scheduled before August 1, 1987.

5. Moved storage of waste ferric chloride inside cinder-block wall building (high traffic area). Ordered "pigs" for secondary containment inside building. "Pigs" received June 10, 1987.

6. Eliminated storage of both muriatic acid and waste FeCl on loading dock area. Storage is now done inside cinderblock building. Ordered & received wood dollies to transport drums of waste etchant inside building.

7. Have posted emergency phone numbers and action to be taken in the event of spills in the waste treatment and storage area.

8. Attended one day seminar sponsored by DEP and reviewed days activities with two key personnel as part of training.

9. Conducted training session with two employees included.

10. Established contingency plan to contain spills and leaks.

11. Applied for change to generator status.

I would like to discuss any additional steps that your unit believes I must take to comply. Please call me.

Sincerely,

James A. Flood

JAF:ja

No. CV 83-0288646S	:	SUPERIOR COURT
STANLEY J. PAC, COMMISSIONER OF ENVIRONMENTAL PROTECTION	:	JUDICIAL DISTRICT OF HARTFORD/NEW BRITAIN
	:	AT HARTFORD
vs.		
BOVANO INDUSTRIES, INCORPORATED	:	JUNE 25, 1987

SATISFACTION OF JUDGMENT

On or about May 22, 1984, the court entered judgment in this matter in accordance with a stipulation of the parties. The judgment required the defendant to perform certain tasks. The defendant has performed these tasks and, therefore, this is to certify that the judgment has been fully satisfied.

PLAINTIFF

By JOSPEH I. LIEBERMAN
ATTORNEY GENERAL

Richard F. Webb
Assistant Attorney General
Environmental Protection
P. O. Box 120
Hartford, Connecticut 06101

RECEIVED
JUL 3 1987
BOVANO IND, INC.

APPENDIX C

DEP RCRA INSPECTIONS

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

December 23, 1981

Mr. David Flood
Bovano of Cheshire
830 South Main Street
Cheshire, Connecticut 06410

Dear Mr. Flood:

Enclosed for your review and information is a copy of the report of our inspection of Bovano of Cheshire made on December 14, 1981. The items checked on this report indicate operational deficiencies and require corrective action.

If you should have any questions or comments after reviewing the enclosure, please contact Joseph Faryniarz at 566-4869.

Sincerely,

Patrick F. Bowe
Senior Environmental Analyst
Hazardous Waste Management Section

PFB:JAF:et
Enclosure

Site ID # CTD001179316

Part A Application Yes ✓ No ___

RCRA INSPECTION CHECKLIST

Site Name: Bovano of Chesire

Inspection Date: 12/14/81

Site Location: 830 S. Main St. Chesire

Type of Facility: ___

Generator: ✓ (small quan.?)

Phone No: ( ) ___

Transporter: ___

Inspectors:

TSD: ✓ (UIC)

EPA: ___

Permits Issued: ___

State: Paul Hassler

Industry: ___

In Compliance Yes ___ No ___

I. Generator with Temp. Storage or TSD Facility

Likely to be small quantity.

A. Pre-Inspection Meeting

1. General Information (Process Description, etc.) Est. 1954

Employ 53 on 2 shifts. Private well water & sanitary septic system. Manufacture glass enamel coatings on copper objects - ornamental objects. Processes include pickling (H_2SO_4), solvent cleaning (trichloroethylene), enamel (glass "dust") sprinkled on, then baked on (4 batch ovens). UIC covers a dug-out pit (6x8 ft. x 6 ft. deep), walls of concrete block with limestone floor. Located immediately outside the building housing the treatment holding tank, and receives sludge generated from this tank - currently approx. one inch of CuOH sludge in pit. Pit is covered manually. Have state 25-54i permit for treated effluent discharge. May have Air Comp. permit for ventilation system over copper pickling tanks, with scrubber rinsedown going to treatment tank. Treatment is done indoors in above-ground septic tank, use NaOH dry flake.

also nitric acid

see pg. 11

2. Hazardous Waste Profile

Type of Waste	Amt. of Waste kg/mo	Onsite Temp. Storage/ TSD	Transporter	Offsite TSD

1.) CuOH sludge; under 10 lbs/mo.; to lined pit; have ~~2~~ 6-yr. accumulation which appears less than 10 ft.^{2} (no depth measurement taken).

2.) waste trichloroethylene; 100 lbs/mo.; drums outdoors; Hubbard-Hall. Claim 1980 total solvent usage was 1200 lbs. (EPA notification states 3000 lbs)

3.) sulfuric + nitric acids from pickling tanks (small tanks, series of 5) going into treatment tank: total 1500 gal./year. Neutralized with NaOH dry flake: 60 lbs/week. Treatment tank also receives scrubber rinse. (volume?)

No waste oils. Appear to be small quantity generator, but are filed as TSDF for borderline UIC (pit is as wide as it is deep).

3. Records

262.21 a.) Manifest — Manifests may be checked ahead of time by state personnel who have them on file - otherwise, random selection of some during inspection for review. Must be kept for 3 years.

This is the only 1981 shipment, currently have on-site 1000 lbs. waste trichlor accumulated since 2/81. Will use Ct. manifests henceforth.

1) Document No.: Hubbard Hall manifest CTHH3305

2) Generator ID, name, address: CTD001179316 Bovano of Chesire, Chesire

3) Transporter(s) ID, name, address: CTD055452637 Hubbard Hall Chem. Co., Waterbury

4) TSD Facility ID, name, address: MAD053452637 Recycling Industries, Braintree, MA.

5) Waste Type of Quantity: 1000 lbs. (2 drums) waste trichloroethylene mixed with oil.

6) Date of Acceptance: 2/12/81

262.50 i) International Shipping Manifest: —

262.42 ii) Exception Report: —

265.13 b.) Waste Analysis Plan NONE

1. Plan on site: NO

2. Plan should include (a) parameters: _____

(b) test methods: _____

(c) sampling method: _____

(d) frequency: _____

3. Copy of Results _____

265.15 c.) Inspection Schedule and log NONE, given suggested format and told to amend, pending possible status as small quantity generator.

1) Are inspections conducted _____

2) *Written inspection schedule _____

3) Inspection Log _____

(A) Daily - loading and unloading of areas subject to spills: _____
- discharge control equipment in tanks: _____
- incinerator system, thermal treatment equilpment,
- chem/phys/biol treatment equipment: _____
- freeboard level of surface impoundments: _____

(B) Weekly - physical conditions of containers: _____
- " tanks: _____
- " surface impoundments: _____
- " chem/phys/bio. treatment facility: _____

265.16 *d.) Personnel Training Records NONE.

1.) Job titles/position descriptions and name of employee

_____

_____

2.) Description of training: _____

3.) Records of Training: _____

4.) Training completed: _____

* Required for Temporary Storage

e.) Contingency Plan NONE

265.53 1. Plan on site: _____

265.53 2. Plan to local authorities: _____

265.52 3. Content of Plan: _____

a) Emergency plan: _____

b) Local authority arrangements: _____

c) Identify emergency coordinator: _____

d) List of emergency plans: _____

e) Evacuation plans: _____

f.) Closure and Post-closure Plans; Cost Estimates

265.112, .113, .114, .115 1. Closure Plan (TSD Facilities) - NONE

a) Plan on site:

b) Does plan include:

1) Schedule of partial closure if applicable: _____

2) Estimate of maximum inventory of waste in storage or treatment at given time: _____

3) Schedule for final closure & an estimate of the expected year of closure: _____

4) Description of steps needed to decontaminate facility equipment: _____

5) Total time required for closure: _____

6) Certification of closure: _____

265.117, .118 2. Post-closure Plan (disposal facilities only) NONE

a) Plan on site: _____

b) Does plan identify and include frequency of: _____

o planned ground water monitoring: _____
o planned maintenance & security activities: _____
o name, address and phone number of Post-closure contact: _____

c) Length of Post-closure period identified: _____

* Required for Temporary Storage

265.142 3. Closure Cost Estimate (TSD facilities)

a) Estimate on site: Amount of estimate:

b) Estimate adjusted annually on 11/19 for inflation:

c) Has Closure Plan changed?

d) If answer to 3 is yes, has cost estimate changed?

265.144 4. Post-closure Cost Estimate (disposal facilities only)

a) Estimate on site: Amount of estimate:

b) Estimate adjusted annually on 11/19 for inflation:

c) Has Post-closure plan changed?

d) If answer to 3 is yes, has cost estimate changed?

265.73 ✓ g) Operating Records NONE

1. Records on site _____

2. Description, quantity, method and dates of disposal: _____

_____

3. Location onsite and manifest number: _____

_____

4. Results of waste analysis: _____

5. Record of any incidents requiring use of contingency plan: ____

_____

6. Records and results of inspections: _____

7. Closure and post-closure cost estimates if needed: _____

B. Inspection

265.14 1. Site Security

a) 24 hour surveillance system: burglar alarm

✓ b) or Artificial or natural barrier: no

✓ c) and Means to control entry: building locked, drums accessible.

✓ d) Danger sign posted at each entrance legible at 25': NO

265.30-.37 **2. Site Preparedness/Prevention

a) Internal communication/alarm: yes

b) Telephone/2-way radio: yes

c) Portable fire control equipment: yes

d) Adequate water for fire control: well water

e) Testing and Maintenance of equipment: —

f) Adequate aisle spare: yes

g) Access to equipment: yes

265,170-.177 3. Containers OK

Leaks NO

Ruptures NO

Corrosion NO

Closed Except in use

Heat/Pressure NO

50' bufferzone for I and R wastes: N/A

I = Ignitable ; R = Reactive

No smoking signs near I or R waste

Separation of incompatible wastes —

Evidence of spills NO

262.30-.34 Pretransport requirements: packaging

labelling need labels

marking OK

placarding

Date of Waste Accumulation —

*NYR Check for impermeable base under containers, any drains, secondary containment

*NYR - Not yet regulated
**Required for Temporary Storage

265.190-.199 4. Tanks Treatment tank is a 6 ft. septic tank, manual treatment (batches).

Leaks NO

Ruptures NO

Corrosion: Check valves, piping controls for signs of corrosion NO

≥ 2' freeboard or containment YES

Heat/pressure NO

Evidence of spills NO

Inflow and outflow controls ?

Continuous Inflow _____ Means to stop flow? _____

Special Requirements for I and R wastes N/A

265.220-.230 5. Surface Impoundments (Pits, Ponds and lagoons) UIC may be waste pit instead.

Protective Cover on Dikes YES

≥ 2' freeboard YES

Special requirements for I and R waste N/A

Evidence of fire, explosion - leak NO

*NYR Liner claim one foot of limestone rock.

265.90-.94 **Groundwater Monitoring NO

265.250-.257 6. Waste Piles N/A

Wind erosion control _____

**Prevention of leachate from pile (if hazardous) _____

Special requirements for I and R waste _____

Evidence of fire, explosion, leak _____

Separation of incompatible wastes _____

Waste analysis _____

*NYR - Not yet regulated

**November 19, 1981

265.340
265.382

7. Incinerators/Thermal Treatment N/A

a) Steady State conditions _____

b) Inspect combustion and emission control instruments every 15 minutes _____

c) Observe stack plume hourly _____

d) Waste analysis:

1) Heating value of waste _____

2) Organic halogen content _____

3) Sulfur content _____

4) Lead concentrations _____

5) Mercury concentrations _____

e) Evidence of leaks of spills (pumps, valves, conveyors and pipes) _____

f) Daily Inspection of Emergency shutdown controls and Alarm systems _____

g) Special Requirements for incompatible wastes _____

265.272 -
265.282

8. Phys/Chem/Bio. Treatment N/A (see Tanks previous page).

a) Leaks _____

b) Ruptures _____

c) Corrosion _____

d) Waste cut off _____

e) Waste analysis _____

f) Special Requirements for I and R waste _____

g) Special Requirements for incompatible wastes _____

265.272 –
265.282 9. Land Treatment N/A

a) Approval document _____

*b) Run-on diversion _____

*c) Run-off collection; Treat if necessary _____

d) Waste Analysis _____

e) Presence of food chain crops, if so, refer to 265.276 _____

f) Unsaturated zone monitoring plan _____

g) Unsaturated zone waste analysis _____

h) Records of application dates, rates, quantities and location of waste _____

i) Special requirements for I and R wastes _____

j) Special requirements for incompatible wastes _____

265.90-.94 *k) Groundwater Monitoring _____

265.302-.315 10. Landfills N/A

*a) Run-on diversion _____

*b) Run-off collection; Treat if necessary _____

c) Wind dispersion controlled _____

d) Records of all dimensions, locations, and contents _____

e) Special Requirements for I and R wastes _____

f) Special Requirements for Incompatible Wastes _____

*g) Special Requirements for liquids _____

*h) Reduction in volume of empty containers _____

265.90-.94 *i) Groundwater Monitoring _____

Subpart R 11. Underground Injection have a waste pit that is filed as UIC, contains small quantity of solid CuOH sludge.

Consult appropriate subparts.

*November 19, 1981

C. Requests for Information

Told to contact EPA for clarification as small quantity generator, although UIC is borderline. Gave out suggested formats for contingency plan, personnel training records and inspection log.

D. Photos Taken

NONE

E. Sampling Inspection Needed

None, although the scrubber rinse volume is unknown (Air Comp. permits). Groundwater monitoring may be desired for the waste pit, pending determination of small quantity gen. status.

F. Potential for Imminent Hazard, Air, or Water Discharge Violations

None apparent; waste drums are stored outdoors on loading dock, no warning signs posted, drums need labelling but are marked. May desire groundwater monitoring at waste pit, but discharged volumes are small + neutralized.

G. Proximity to Residential Area, Surface Water, Recharge Zone, etc.

Area commercial, some businesses + stores + homes along South Main Street, Cheshire. Area wooded + lightly residential immediately behind Bovano (North + East of company). No surface water immediately visible.

H. Additional Notes or Comments:

UIC notification covers the treated effluent discharged to a waste pit (6ft. x 6ft. x 8ft.), where a small quantity of CuOH collects on the bottom (limestone rock bottom). State 25-54i permits this discharge, and since it seeps out of a shallow ground pit rather than to a sewer or septic system, it is defined as UIC. This appears to be the only reason this facility is listed as a TSDF, as their total waste quantity is less than 1000 kg/mo. Because of their small quantity, and because the waste pit is permitted by state Water Comp. under 25-54i, and because the pit is physically suitable as a pit rather than UIC (width + depth the same), the company may be exempt from RCRA. This must be determined by EPA.

DEBRIEFING MEMO Date:

To: From: IWS

Bovano of Chesire — 8/22/83 — RCRA (M)

Name of Site — Inspection Date — Type of Inspection (RCRA, Inv,

Chesire — CTD001179316 — Hassler

Town — EPA ID # — Inspector's Name

Status: Small-Q (GEN) TRANS CT-Permitted-Hauler TSD: Treatment (Storage) Disposal
Does operation agree with notification? __yes ✓no. Status change required? ✓yes __no.

Type of Waste: __organics ✓corrosives __inorganics __reactives ✓solvents ?ignitables ✓heavy metals ✓waste oil - min. spirit flash pt. ? __other:

Type of Facility: ✓containers __inc/therm. __tanks __phys/chem/b ✓surf.imp. __land trt __waste pile __secure L.F. ✓wwts __engineered

PROBLEMS: List ALL violations, deficiencies, etc:

in compliance — not in compliance — (If not applicable, indicate N/A is compliance column)

__ ✓ Manifests - Copy #6 obtained during inspection (1 manifest)
Any Exception, Discrepancy or Unmanifested Waste Reports? ✓no __yes.

✓ __ Using Permitted Haulers and TSDF's?

__ ✓ Proper Haz. Waste Disposal? - Dry well & by-pass off treatment system.

__ ✓ Haz. Waste Determinations - needed for min. spirit flash pt. & for NaOH sludge pumped on-site

__ ✓ Waste Analysis Plan

__ ✓ Personnel Training

__ ✓ Contingency Plan

__ ✓ Inspection Schedule & Log

__ ✓ Operating Records

__ ✓ Security/ Prep & Prev.

__ ✓ Closure/Post-Closure

have none, told to devise c. change status (see below)

__ ✓ Cost Estimate

✓ __ Groundwater Monitoring - 4 wells, one yields 1 ppm trichlora

__ ✓ Actual storage, treatment and disposal: 2 dr. spent etchant but gets reclaimed (exempt). 1 drum no labels, hauler uncertain. Dump sm NaOH sludge on-site or to dumpster.

General comments: Under Water Comp. order. Possible small q

Potential for groundwater contamination? __no ✓yes. If yes, comment: trichl

Problem is: Serious(Order) Intermed.(NOV) Routine/Minor(NOD) None(no resp

Recommended Response by Reviewer:

Any contact since inspection? ✓no __yes. If yes, document on STATUS SUMMAR

Any referrals necessary? __no ✓yes. If yes: Water Comp. but order issued already

Copies to: File✓ Enforcement Officer✓ ONCR folder✓ Other

HAZARDOUS WASTE INSPECTION CHECKLIST

Site:

Name: Bovano of Chesire

Location: 830 S. Main St.
Chesire 06410

Phone No: ( ) 272-3208

ID No: CTD001179316

Contact & Title: David Flood, owner

Mailing Address (if different from location):
P.O. Box 250

Inspector(s): Hassler

Inspection Date: 8/22/83

Inspection Category:

RCRA Notifier as:

Generator: ✓ (small quantity ?)

Transporter:

TSDF: ✓

Part A Application ___No, ___Yes

UIC:

Inventory:

Complaint No:

Other (describe): currently under order from Water Comp., referred to A.G.

CHARACTERIZATION OF SITE ACTIVITY

A) Date Established at Present Location: 1954

B) No. of Employees, Shifts: 38, one shift.

C) Type of Activity: Glass enamel coatings on copper objects.

D) Products: Ornamental items, gifts.

E) Processes: Pickling with H_2SO_4 + nitric; clean parts with NaOH + detergents - these replace trichloroethylene in May '82.
Enamelling: glass dust applied + baked on (4 batch ovens).
3 small spray booths: 2 for applying glass/water slurry, one for applying lacquer coatings. Clean gun w/acetone - purchased 5 gal. in '83.
Silk screening, clean with xylol (also 5 gal. in '83 so far).
Buffing; welding; mix + spin clay for pots; small tool room for machining (little-to-no oil used, no floor drains).
One dip tank for water-displacement liquid (like mineral spirit) to prevent oxiding on Cu parts. One wet scrubber, over acid tank.
Wastewater treatment is simple neutralization + sludge settling.
See pg. 12 regarding by-pass + discharges. Also Cu etchant machine.

F) Water Supply (if well(s) give approx. location): One well.

G) Septic System(s), Municipal Sewer(s), Drywell(s): 3 leach fields; one cement-block pit (CuOH); and one drywell. - see pg. 12.
- also 2 small ball mills mix glass slurry; and 2 small tumblers, wet.

Waste	Amount/Frequency	On-Site, Temporary Storage/TSD	Transporter	Off-site TSD

1.) spent pickling solution (nitric + H_2SO_4); batch treat 1200 gal./10 days. Generates CuOH sludge (< 10 lbs/month), stored in concrete seepage pit, none ever shipped off. ≈ 3 ft.^{3} accumulated (10'x 7'x 1' deep).

2.) Alkaline detergents (CB-1, by Hubbard Hall. Contains NaOH); sludge placed in fiberboard drum, water seeps out to ground, sludge then to dumpster (done 2/yr., small vol.).

3.) spent Ferric chloride etchant; 2 dr/3 mo.; back to supplier for reclaim- Philip Hunt Chem. Corp., N.J. Hauler uncertain, ~~not~~ manifested.

4.) waste mineral spirit, one drum now stored (unsure of flash pt.); hauler unknown. Told to determine whether haz. or not. Enthone produ

(cont. below)

III INVENTORY

1) Has this site notified EPA under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 PL 96-510 (commonly known as Superfund): ✓ No, ___ Yes: (Attach copy of Notification, if available)

2) Prior to the November 19, 1980 Implementation of RCRA Where; When; What type; Amount/ Frequency; How long; and by Who (Transporters, Facilities, Etc.) were wastes disposed of Off-site: _____

3) Is there any evidence of On-site disposal? ___ No, ✓ Yes.

Give Approximate Location; Type; Amount/Frequency; Length of Time On-site disposal has been used, etc. (Specify any historical On-site disposal): _____

Non-haz. glass dust to ground behind bldg. (North side). Also dry well receives etchant rinses, drag-out from pickling (via floor troth) and supernatant off treatment tank. Currently under Water Comp order on this. Some NaOH sludge to ground.

IV RECORDS

52.11/ 5-54cc(c)- (a)(3)(A)-7, -9(3)(3)

aa) Hazardous Waste Determination

1) Performed: YES, but eliminated trichloroethylene. Need to check min. spirit flash pt. Also have

2) Records Maintained: waste resin mix in need of haz. determinati

5.) one drum unused resin mix, can't use it. Not sure what they'll do with it. → non-haz.

6.) Glass dust from spray booths dumped on ground behind bldg. + to dumpst. Also see pg. 12 for drywell discharges.

IV RECORDS

.21/ .54cc(c)-5 a) Manifest — Copy #6 obtained, see attached:

1) Document No.: CT0029622

The degreaser was emptied & discontinued in May '82, but these drums were stored for 11 months till 6/8/83.

2) Generator ID, name, address: CTD001179316 — Bayuno of Chesire, 830 S. Main St., Chesire

3) Transporter(s) ID, name, address: CTD055310759 — Hubbard Hall Chem., 563 Leonard St., W.H.

4) Continuing Transporter ID, Name, Address: MAD019371079 — General Chemical, Framingham, MA

5) TSD Facility ID, name, address: Same as cont. trans.

Only 2 other manifests used in 3 yrs, total 5 drums waste trichlor.

6) Waste Type/ Quantity: 3 dr. waste trichloroethylene/oil

7) Date Shipped: 6/8/83

8) Delivered: 6/8/83

262.50/ 25-54cc(c)- i) International Shipping Manifest: _____

262.42/ 25-54cc(c)-6 ii) Exception Report: _____

265.13/ 25-54cc(c)-26 b) Waste Analysis Plan — NONE, told to devise or change status

1) Plan on site: _____

2) Plan should include (a) parameters: _____

(b) test methods: _____

(c) sampling methods: _____

(d) frequency: _____

3) Copy of Results: _____

265.15/ 25-54cc(c)-28 c) Inspection Schedule and Log — NONE, told to devise

1) Are inspections conducted: _____

2)* Written inspection schedule: _____

3) Inspection Log: _____

(A) Daily - loading and unloading of areas subject to spills: _____

- discharge control equipment in tanks: _____
- incinerator system, thermal treatment equipment,
- chem/phys/bio. treatment equipment: _____
- freeboard level of surface impoundments: _____

* Required for Temporary Storage

.15/
25-54cc(c)-28

c) Inspection Schedule and Log (continued) NONE, told to devise

(B) Weekly - physical conditions of containers: _____

- physical conditions of tanks: _____
- physical conditions of surface impoundments: _____
- physical conditions of chem/phys/bio. treatment facility: _____

265.16/
25-54cc(c)-29

*d) Personnel Training Records NONE, told to devise.

1) Job titles/position description and name of employee

_____

_____

2) Description of training: _____

3) Records of training: _____

4) Training completed: _____

*e) Contingency Plan NONE, told to devise.

265.53/
25-54cc(c)-31

1) Plan on site: _____

265.53/
25-54cc(c)-31

2) Plan to local authorities: _____

265.52/
25-54cc(c)-31

3) Content of Plan: _____

a) Emergency plan: _____

b) Local authority arrangements: _____

c) Identify emergency coordinator: _____

d) List of emergency equipment _____

e) Evacuation plans: _____

f) Closure and Post-closure Plans; Cost Estimates NONE, told to devise or change status.

265.112, .113, .114, .115/
25-54cc(c)-34

1) Closure Plan (TSD Facilities) -

a) Plan on site:

b) Does plan include:

1) Schedule of partial closure if applicable: _____

2) Estimate of maximum inventory of waste in storage or treatment at given time: _____

3) Schedule for final closure & an estimate of the expected year of closure: _____

4) Description of steps needed to decontaminate facility equipment: _____

5) Total time required for closure: _____

6) Certification of closure: _____

*Required for Temporary Storage

.17, .118/ 54cc(c)-34 2) Post-closure Plan (disposal facilities only) N/A

a) Plan on site: _____

b) Does plan identify and include frequency of: _____

o planned groundwater monitoring: _____

o planned maintenance & security activities: _____

o name, address and phone number of Post-closure contact: _____

_____

c) Length of Post-closure period identified: _____

265.142/ 25-54cc(c)-35 3) Closure Cost Estimate (TSD facilities) NONE, told to devise or change status.

a) Estimate on site: Amount of estimate:

b) Estimate adjusted annually on 11/19 for inflation:

c) Has Closure Plan changed?

d) If answer toc is yes, has cost estimate changed?

265.144/ 25-54cc(c)-35 4) Post-closure Cost Estimate (disposal facilities only) N/A

a) Estimate on-site: Amount of estimate:

b) Estimate adjusted annually on 11/19 for inflation:

c) Has Post-closure plan changed?

d) If answer toe is yes, has cost estimate changed?

265.73/ 25-54-cc(c)-32 g) Operating Records NONE, told to devise or change stat.

1) Records on site: _____

2) Description, quantity, method and dates of disposal: _____

_____

3) Location on-site and manifest number: _____

_____

4) Results of waste analysis: _____

5) Record of any incidents requiring use of contingency plan: _____

_____

6) Records and results of inspections: _____

_____

7) Closure and post-closure cost estimates if needed: _____

B. Inspection

.14/
-54cc(c)-27

1) Site Security

a) 24 hour surveillance system: burglar alarm only

b) or Artificial or natural barrier: NO

c) and Means to control entry: NO

d) Danger sign posted at each entrance legible at 25': NO

265.30-.37/
25-54cc(c)-30

**2) Site Preparedness/Prevention

a) Internal communication/alarm: ?

b) Telephone/2-way radio: phones

c) Portable fire control equipment: YES

d) Adequate water for fire control: Well water

e) Testing and Maintenance of equipment: ?

f) Adequate aisle space: OK

g) Access to equipment: ?

265.170-177/
25-54cc(c)-38

3) Containers 2 dr spent etchant, 1 dr. waste min. spirit.

Etchant gets reclaimed. Need spec. sheet for min. spirit.

Leaks NO

Ruptures NO

Corrosion NO

Closed Except in use YES

Heat/Pressure NO

50' bufferzone for I and R wastes: N/A unless min. spirit has low flash pt.

I = Ignitable _____; R = Reactive _____

No smoking signs near I or R waste NO

Separation of incompatible wastes N/A

Evidence of spills NO, but occassional dumping of NaOH sludge.

262.30-.34/
25-54cc(c)-8

Pretransport requirements: packaging YES

labelling NO

marking NO

placarding NO

Date of waste Accumulation NO

*NYR Check for impermeable base under containers, any drains, secondary containment

*NYR - Not yet regulated by EPA, however, required by 25-54cc(c)-38(c)(3)

**Required for Temporary Storage

265.190-.199/ 25-54cc(c)-39 4) Tanks N/A

Leaks _____

Ruptures _____

Corrosion: Check valves, piping controls for signs of corrosion _____

_____

2' freeboard or containment _____

Heat/pressure _____

Evidence of spills _____

Inflow and outflow controls _____

Continuous Inflow _____ Means to stop flow? _____

Special Requirements for I and R wastes _____

265.220-.230/ 25-54cc(c)-40 5) Surface Impoundments (Pits, Ponds and Lagoons) 10'x 7'x 4' deep pit, concrete wall, dirt bottom. } rec Cu slu

Protective Cover on Dikes YES

2' freeboard YES

Special requirements for I and R waste N/A

Evidence of fire, explosion - leak NO, but is seepage pit.

*NYR Liner NO

265.90-.94/ 25-54cc(c)-33 Groundwater Monitoring YES, 4 wells in place. - see pg. 12, bottom.

265.250-.257/ 25-54cc(c)-41 6) Waste Piles N/A

Wind erosion control _____

Prevention of leachate from pile (if hazardous) _____

Special requirements for I and R waste _____

Evidence of fire, explosion, leak _____

Separation of incompatible wastes _____

Waste analysis _____

265.340/ 25-54-cc(c)-45 265.382/ 25-54cc(c)-48 7) Incinerators/Thermal Treatment N/A

a) Steady State conditions _____

b) Inspect combustion and emission control instruments every 15 minutes _____

_____

c) Observe stack plume hourly _____

d) Waste analysis _____

*NYR - Not yet regulated

7) Incinerators/Thermal Treatment (continued) N/A

1) Heating value of waste _____

2) Organic halogen content _____

3) Sulfur content _____

4) Lead concentrations _____

5) Mercury concentrations _____

e) Evidence of leaks or spills (pumps, valves, conveyors and pipes) _____

f) Daily Inspection of Emergency shutdown controls and Alarm systems _____

g) Special Requirements for incompatible wastes _____

265.272-
265.282/
25-54cc(c)-47

8) Phys/Chem/Bio. Treatment N/A

a) Leaks _____

b) Ruptures _____

c) Corrosion _____

d) Waste cut-off _____

e) Waste analysis _____

f) Special Requirements for I and R waste _____

g) Special Requirements for incompatible wastes _____

265.272-
265.282/
25-54cc(c)-42

9) Land Treatment N/A

a) Approval document _____

*b) Run-on diversion _____

*c) Run-off collection; Treat if necessary _____

d) Waste Analysis _____

e) Presence of food chain crops, if so, refer to 265.276 _____

f) Unsaturated zone monitoring plan _____

g) Unsaturated zone waste analysis _____

h) Records of application date, rates, quantities and location of waste _____

i) Special requirements for I and R wastes _____

j) Special requirements for incompatible wastes _____

265.90-.94/
25-54cc(c)-33

*k) Groundwater Monitoring _____

*November 19, 1981

265.302-.315/ 25-54cc(c)-43 10) Secured Landfills N/A

*a) Run-on diversion _____

*b) Run-off collection; Treat if necessary _____

c) Wind dispersion controlled _____

d) Records of all dimensions, locations, and contents _____

e) Special Requirements for I and R wastes _____

f) Special Requirements for Incompatible Wastes _____

*g) Special Requirements for liquids _____

*h) Reduction in volume of empty containers _____

265.90-.94/ 25-54cc(c)-33 *i) Groundwater Monitoring _____

25-54cc(c)-44 11) Engineered Landfills N/A

a) Minimum area exposed to direct precipitation: _____

b) Run-on diversion: _____

c) Run-off collections; Treat if necessary: _____

d) Wind dispersion controlled: _____

e) Prohibited Materials: present: _____

f) Surveying and Recordkeeping: _____

_____

25-54cc(c)-33 g) Groundwater Monitoring: _____

Subpart R/ 25-54cc(c)-48 12) Underground Injection

Prohibited, for hazardous waste, in Connecticut.

historically, could've received degreaser drag-out also, via floor trath.

One dry well beneath catch basin at loading dock, receives spent etchant rinses, drag-out from pickling line, and condensate from wet scrubber.

Also, sludge pit (10'x 7'x 4') has dirt/stone bottom to allow seepage, thus drying out CuOH slurry.

See pg. 12 for more details.

*November 19, 1981

FINANCIAL REQUIREMENTS

*(TSDF's Only)

13. Financial Assurance:

NONE, told to devise or change status.

(Fed) 265.143 a. Closure

Type of mechanism _____
(trust fund, surety bond, letter of credit, insurance, financial test)

Amount of coverage $_____
(should be ≥ cost estimate)

Comments:

265.145 b. Post-Closure

Type of mechanism _____

Amount of coverage $_____

Comments:

14. Liability Insurance:

265.147 a. Sudden (all TSD facilities)

Type of mechanism _____
(insurance, financial test)

Amount of coverage $_____

Comments:

b. Nonsudden (surface impoundments, landfills, and land treatment facilities)

Type of mechanism _____

Amount of coverage $_____

Comments:

* Incorporated by reference into the Connecticut regulations in section 35 of 25-54cc(c).
Federally owned facilities are exempt from financial requirements.

C. Requests for Information

Told to revise permit status or devise all paperwork. Flood wonders if volumes into treatment system count towards 1000 kg/mo. cutoff. If not, Bovano might be small quantity gen. if min. spirit non-haz. & if spent etchant (reclaimed) is exempt.

D. Photos Taken

NONE

E. Samples Taken

NONE

F. Potential for Imminent Hazard, Air, or Water Discharge Violations

Dry well & seepage pit, with by-pass off treatment tank to dry well. Possibly some NaOH sludge mixed in with CuOH sludge pit. G.W. monitoring well yields 1 ppm trichloroethylene.

G. Proximity to Residential Area, Surface Water, Recharge Zone, etc.

Area commercial, not densely developed. Private wells & homes to N & E. No surface water on-site. New Haven Water Co. well 2 miles South has trichlor. contam. Bovano is suspect - see Water Comp. files & order, also Ellen Harrison. Well shut down early '82, Bovano received Water Comp. Order in 4/82.

H. ADDITIONAL NOTES

Bovano originally notified for UIC :

Neutralization + settling of CuOH done indoors in septic tank. This tank has a bottom drain for sludge, discharged directly to a pit (concrete-walled, 7'x10'x4' deep) for seepage of water. Pit now has ≈1 ft. CuOH sludge, and has never been pumped out since being installed in 1976. No flocculants are used.

The indoor treatment tank also has four valved pipes which draw off supernatant at different levels. These come together at common drain, a vertical standpipe (5" diameter) beneath treatment tank. This drain goes to a dry well at the catch basin at loading dock (ie. drain pipes into catch basin, which goes "nowhere" - seeps). Two other pipes discharge to this drywell, via the same 5" vertical standpipe : both come off Cu etching machine. Are supposedly etch rinses (untreated) and rinseate from cleaning the Ferric chloride etch tank - cleaned 4/yr. This 2nd pipe is off the conc. acid tank (not rinse tank), so untreated conc. acid could get accidentally discharged.

Behind the pickling tanks (next room) is a floor troth which receives drag-out spillage + wet scrubber water. It discharges to the same drywell (though Mr. Flood uncertain of this). The trichloroethylene degreaser is located next to this troth, so traces might have also gone to drywell. The degreaser has been unused since May '82, and is now empty.

Historically, one leach field used to receive acid wastes, and the floor troth in pickling area may have gone here. Discharge was discontinued in 1976 when treatment system installed. This leach field is located NE, behind plant (not paved over).

The other two leach fields, which receive only sanitary effluent, are still active : one west of gift shop, under pavement, other one further west, next to sludge pit.

4 Test wells for g.w. monitoring - one at loading dock (15' deep) yields 1 ppm trichloroethylene. Other 3 wells are clean. Wells are dug wells, by back-hoe (not drilled).

NAME	MAILING ADDRESS
GENERATOR Dovano of Cheshire	P.O.Box 250 830 S.Main St., Cheshire, Ct.06410
PRIMARY TRANSPORTER Hubbard Hall Chemical Co.	563 Leonard St., Waterbury, Ct.06708
CONTINUING TRANSPORTER GENERAL CHEM	FRAMINGHAM MA 01701
H.W.F. General Chemical	P.O.Box 608, Framingham, Mass.01701

COMPLETES

IF MORE THAN ONE MANIFEST / SHIPPING PAPER IS USED: TOTAL NO. OF FORMS ARE 1; THIS FORM NO. IS 1 MANIFEST NO. OF FIRST FORM CT 0029622 DATE SHIPPED

GENERAT

U.S. D.O.T. SHIPPING NAME	D.O.T. HAZARD CLASS	U.N. / N.A. NO.	WT./VOL.	UNITS	UNIT CODE
1 Waste Trichlorethylene N.O.S.	ORM-A	UN1710	1,500	lb.	P
2.					
3.					
4.					
5.					
6.					

SPECIAL HANDLING INSTRUCTIONS INCLUDING ANY CONTAINER EXEMPTION; AND EMER

~~To Be Told~~

IN THE EVENT OF A SPILL, CONTACT THE NATIONAL RESPONSE CENTER, U.S. COA

TRANSPORTER COMPLETES

REQUIRED LABELS: ☒ YES ☐ NO

PLACARDS REQUIRED: DANGEROUS

THIS IS TO CERTIFY THAT I AM THE PRIMARY TRANSPORTER AND HAVE ACCEPTED THE DESCRIBED SHIPMENT IN PROPER CONDITION FOR TRANSPORT TO THE IDENTIFIED H.W.F.

ED. SHERMAN
SIGNATURE OF TRANSPORTER

THIS IS TO CERTIFY THAT I AM THE CONTINUING TRANSPORTER AND HAVE ACCEPTED THE DESCRIBED SHIPMENT IN PROPER CONDITION FOR TRANSPORT TO THE IDENTIFIED H.W.F.

SIGNATURE OF TRANSPORTER

INDICATE ANY DIFFERENCES BETWEEN MANIFEST AND SHIPMENT AND LIST REJECTED MATERIALS, INDIC

H.W.F. COMPLETES

I CERTIFY THAT THE DESCRIBED WASTE(S) WAS DELIVERED BY THE AFOREMENTIONED DELIVERING TRANSP

MANIFEST IS CORRECT TO THE BEST OF MY KNOWLEDGE.

SIGNATURE

HAZARDOUS WASTE INSPECTION CHECKLIST

ite:

Name: Rovano of Cheshire

Location: 830 S. Main Street
Cheshire, Conn 06410

Phone No: (203) 272-3208

ID No: CTD001179316

Contact & Title: Jim Flood- Owner
David Flood- Owner

Mailing Address (if different from location):
PO Box 250

Inspector(s): Caren Spieske

Inspection Date: 2-18-87

Inspection Category:

RCRA Notifier as: Status change to generator needed

Generator: ✓

Transporter:

TSDF: ✓ (see last pg)

Part A Application ___ No, ___ Yes

UIC:

Inventory:

Complaint No:

Other (describe):
Company wants a status change to generator

CHARACTERIZATION OF SITE ACTIVITY

Date Established at Present Location: 1954

No. of Employees, Shifts: 40 emp, one shift

Type of Activity: mfg - glass enamel onto copper

Products: small scale ornaments; gifts
Copper and some brass used:

Processes: Stamping, pressing, shaping, forming and we
Etching with ferric chloride two rinses. Bright Dip
and sulfic acid with five rinses (which include an c
rinse), dryers. Wet scrubber is over acid tanks. Ena
in six booths: glass powder applied by hand to wet copper
or brass, three ovens for baking. after air pollution control,
glass dust accumulates in box outside behind building, dust never removed.
Lacquer - one booth with spray gun; acetone/xylene used
in small amounts to clean guns, per contact no waste generated.
left-over enamels are reused in two spray booths to paint the
underside of ornaments. See Last Page for additional
processes

Water Supply (if well(s) give approx. location): well water

Septic System(s), Municipal Sewer(s), Drywell(s): Town sewer. Treated Water from
collection tank to sewer; (One drywell (per contact) well cleaned
in mid June, 1986 and not used since).

II WASTE PROFILE

Waste	Amount/Frequency	On-Site, Temporary Storage/TSD	Transporter	Off-site TSD
D006-Copper hydroxide sludge	(shipped/twice per YR) 1600 gal/YR	EWR pumps from collection tank	EWR	EWR
post etching ferric chloride	one dm/month	Drum	EWR	EWR

Glass dust from enamel - partial reused, about 100 lbs/YR → landfill

mineral spirits - no longer used since 1982

trichloroethylene - no longer used since 1982

rinses, scrubber discharge and possible tumbling waste (contact unsure) all piped into collection tank treated with sodium hydroxide and discharged to town sewer.

III INVENTORY

A) Has this site notified EPA under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 PL 96-510 (commonly known as Superfund): X No, ___ Yes: (Attach copy of Notification, if available)

B) Prior to the November 19, 1980 Implementation of RCRA Where; When; What type; Amount/Frequency; How long; and by Who (Transporters, Facilities, Etc.) were wastes disposed of Off-site:

See Paul Hassler's original report

C) Is there any evidence of On-site disposal? ___ No, ? Yes. possible

Give Approximate Location; Type; Amount/Frequency; Length of Time On-site disposal has been used, etc. (Specify any historical On-site disposal): Copper hydroxide sludge pit cleaned out and soil removed (12/85 and 6/86). Dry well also cleaned in 6/86 but final approval on clean-up from dry well not given from WCU.

IV RECORDS

711/ 54cc(c)-1(3)(A)-7, 3)(3)

aa) Hazardous Waste Determination.

1) Performed: yes, need removal for one drum of resin mixture no longer able to use

2) Records Maintained: yes.

IV RECORDS - 1986 reviewed

.21/ 54cc(c)-5 a) Manifest

1) Document No.: CTB 0021815

2) Generator ID, name, address: Bovano of Cheshire Cheshire, CT 06410 - CTD001179316

3) Transporter(s) ID, name, address: EWR Waterbury, CT - CTD072138969

4) Continuing Transporter ID, Name, Address: n/A

5) TSD Facility ID, name, address: EWR Waterbury, CT - CTD072138969

6) Waste Type/ Quantity: Waste ferric solution - 19 drums - D002 (1045 G)

7) Date Shipped: 10-29-86

8) Delivered: 10-29-86

.50/ 54cc(c)- i) International Shipping Manifest: none

.42/ 54cc(c)-6 ii) Exception Report:

.13/ 54cc(c)-26 b) Waste Analysis Plan - none, need to develop or change status.

1) Plan on site:

2) Plan should include (a) parameters:

(b) test methods:

(c) sampling methods:

(d) frequency:

3) Copy of Results:

.15/ 54cc(c)-28 c) Inspection Schedule and Log

1) Are inspections conducted: no

2)* Written inspection schedule: yes

3) Inspection Log: yes

(A) Daily - loading and unloading of areas subject to spills: yes

- discharge control equipment in tanks: n/A

- incinerator system, thermal treatment equipment,

- chem/phys/bio. treatment equipment: n/A

- freeboard level of surface impoundments: n/A - clean out pit date 1985.

*required for Temporary Storage

265.15/
25-54cc(c)-28

c) Inspection Schedule and Log (continued)

(B) Weekly - physical conditions of containers: yes
- physical conditions of tanks: n/A
- physical conditions of surface impoundments: n/A
- physical conditions of chem/phys/bio. treatment facility: n/A

265.16/
25-54cc(c)-29

*d) Personnel Training Records

1) Job titles/position description and name of employee
yes job titles and descriptions

2) Description of training: yes

3) Records of training: yes

4) Training completed: only documented training - 1984

*e) Contingency Plan

65.53/
5-54cc(c)-31

1) Plan on site: partial plan

65.53/
5-54cc(c)-31

2) Plan to local authorities: no

65.52/
5-54cc(c)-31

3) Content of Plan: needs more info

a) Emergency plan: minor, need additional info

b) Local authority arrangements: yes

c) Identify emergency coordinator: yes and alternate

d) List of emergency equipment: partial list

e) Evacuation plans: minor, need evacuation plan

f) Closure and Post-closure Plans; Cost Estimates none, need to devise or change status.

5.112, .113,
14, .115/
-54cc(c)-34

1) Closure Plan (TSD Facilities) -

a) Plan on site:

b) Does plan include:

1) Schedule of partial closure if applicable:

2) Estimate of maximum inventory of waste in storage or treatment at given time:

3) Schedule for final closure & an estimate of the expected year of closure:

4) Description of steps needed to decontaminate facility equipment:

5) Total time required for closure:

6) Certification of closure:

quired for Temporary
Storage

65.117, .118/ 6-54cc(c)-34

2) Post-closure Plan (disposal facilities only) n/A

a) Plan on site: _____

b) Does plan identify and include frequency of: _____

o planned groundwater monitoring: _____

o planned maintenance & security activities: _____

o name, address and phone number of Post-closure contact: _____

_____

c) Length of Post-closure period identified: _____

65.142/ 6-54cc(c)-35

3) Closure Cost Estimate (TSD facilities) none, need to devise or change status.

a) Estimate on site: Amount of estimate:

b) Estimate adjusted annually on 11/19 for inflation:

c) Has Closure Plan changed?

d) If answer to 3 is yes, has cost estimate changed?

65.144/ 6-54cc(c)-35

4) Post-closure Cost Estimate (disposal facilities only) n/A

a) Estimate on-site: Amount of estimate:

b) Estimate adjusted annually on 11/19 for inflation:

c) Has Post-closure plan changed?

d) If answer to 3 is yes, has cost estimate changed?

65.73/ 6-54-cc(c)-32

g) Operating Records need to complete, or change status.

1) Records on site: _____

2) Description, quantity, method and dates of disposal: _____

_____

3) Location on-site and manifest number: _____

_____

4) Results of waste analysis: _____

5) Record of any incidents requiring use of contingency plan: _____

_____

6) Records and results of inspections: _____

_____

7) Closure and post-closure cost estimates if needed: _____

B. Inspection

65.14/
5-54cc(c)-27

1) Site Security (N/A if status change to generator)

a) 24 hour surveillance system: alarm system

b) or Artificial or natural barrier: no

c) and Means to control entry: no

d) Danger sign posted at each entrance legible at 25': no

65.30-.37/
5-54cc(c)-30

**2) Site Preparedness/Prevention

a) Internal communication/alarm: alarm system

b) Telephone/2-way radio: phone

c) Portable fire control equipment: yes

d) Adequate water for fire control: well water

e) Testing and Maintenance of equipment: yearly - outside Co.

f) Adequate aisle space: yes

g) Access to equipment:

5.170-177/
-54cc(c)-38

3) Containers - See Last Page

Leaks no

Ruptures no

Corrosion no

Closed Except in use yes

Heat/Pressure no

50' bufferzone for I and R wastes: N/A

I = Ignitable ; R = Reactive

No smoking signs near I or R waste N/A

Separation of incompatible wastes N/A

Evidence of spills none evident, unable to determine, due to snow covering.

2.30-.34/
-54cc(c)-8

Pretransport requirements: packaging yes

labelling yes

marking yes

placarding

Date of waste Accumulation yes

*NYR Check for impermeable base under containers, any drains, secondary containment waste stored outside on concrete near dry well, no secondary containment

YR - Not yet regulated by EPA, however, required by 25-54cc(c)-38(c)(3)

equired for Temporary Storage

65.190-.199/
5-54cc(c)-39

4) Tanks no hazardous waste stored in tanks

Leaks _____

Ruptures _____

Corrosion: Check valves, piping controls for signs of corrosion _____

_____

2' freeboard or containment _____

Heat/pressure _____

Evidence of spills _____

Inflow and outflow controls _____

Continuous Inflow _____ Means to stop flow? _____

Special Requirements for I and R wastes _____

.5.220-.230/
-54cc(c)-40

5) Surface Impoundments (Pits, Ponds and Lagoons) copper hydroxide pit cleaned and soil removed on 12/85 and 6/86

Protective Cover on Dikes _____

2' freeboard _____

Special requirements for I and R waste _____

Evidence of fire, explosion - leak _____

*NYR Liner none

5.90-.94/
-54cc(c)-33

Groundwater Monitoring 4 wells on-site

5.250-.257/
-54cc(c)-41

6) Waste Piles n/A

Wind erosion control _____

Prevention of leachate from pile (if hazardous) _____

Special requirements for I and R waste _____

Evidence of fire, explosion, leak _____

Separation of incompatible wastes _____

Waste analysis _____

.340/
54-cc(c)-45
382/
4cc(c)-48

7) Incinerators/Thermal Treatment n/A

a) Steady State conditions _____

b) Inspect combustion and emission control instruments every 15 minutes _____

_____

c) Observe stack plume hourly _____

d) Waste analysis _____

- Not yet regulated

7) Incinerators/Thermal Treatment (continued) n/A

1) Heating value of waste _____

2) Organic halogen content _____

3) Sulfur content _____

4) Lead concentrations _____

5) Mercury concentrations _____

e) Evidence of leaks or spills (pumps, valves, conveyors and pipes) _____

f) Daily Inspection of Emergency shutdown controls and Alarm systems _____

g) Special Requirements for incompatible wastes _____

5.272-
5.282/
54cc(c)-47

8) Phys/Chem/Bio. Treatment n/A

a) Leaks _____

b) Ruptures _____

c) Corrosion _____

d) Waste cut-off _____

e) Waste analysis _____

f) Special Requirements for I and R waste _____

g) Special Requirements for incompatible wastes _____

.272-
.282/
54cc(c)-42

9) Land Treatment n/A

a) Approval document _____

*b) Run-on diversion _____

*c) Run-off collection; Treat if necessary _____

d) Waste Analysis _____

e) Presence of food chain crops, if so, refer to 265.276 _____

f) Unsaturated zone monitoring plan _____

g) Unsaturated zone waste analysis _____

h) Records of application date, rates, quantities and location of waste _____

i) Special requirements for I and R wastes _____

j) Special requirements for incompatible wastes _____

.90-.94/
54cc(c)-33

*k) Groundwater Monitoring _____

vember 19, 1981

65.302-.315/ 10) Secured Landfills n/A
5-54cc(c)-43

*a) Run-on diversion _____

*b) Run-off collection; Treat if necessary _____

c) Wind dispersion controlled _____

d) Records of all dimensions, locations, and contents _____

e) Special Requirements for I and R wastes _____

f) Special Requirements for Incompatible Wastes _____

*g) Special Requirements for liquids _____

*n) Reduction in volume of empty containers _____

5.90-.94/ *i) Groundwater Monitoring _____
-54cc(c)-33

-54cc(c)-44 11) Engineered Landfills n/A

a) Minimum area exposed to direct precipitation: _____

b) Run-on diversion: _____

c) Run-off collections; Treat if necessary: _____

d) Wind dispersion controlled: _____

e) Prohibited Materials: present: _____

f) Surveying and Recordkeeping: _____

_____

-54cc(c)-33 g) Groundwater Monitoring: _____

part R/ 12) Underground Injection
-54cc(c)-48

Prohibited, for hazardous waste, in Connecticut.

vember 19, 1981

FINANCIAL REQUIREMENTS

*(TSDF's ONLY)

13. FINANCIAL ASSURANCE: none, need to devise or change status

(Fed) 265.143 a. Closure

Type of mechanism _____
(trust fund, surety bond, letter of credit, insurance, financial test)

Amount of coverage $ _____
(should be ≥ cost estimate)

Comments:

265.145 b. Post-Closure

Type of mechanism _____

Amount of coverage $ _____

Comments:

14. Liability Insurance:

265.147 a. Sudden (all TSD facilities)

Type of mechanism _____
(insurance, financial test)

Amount of coverage $ _____

Comments:

b. Nonsudden (surface impoundments, landfills, and land treatment facilities

Type of mechanism _____

Amount of coverage $ _____

Comments:

* Incorporated by reference into the Connecticut regulations in section 35 of 25-54cc(c). Federally owned facilities are exempt from financial requirements.

C. Requests for Information

Told contact to revise permit status, explained the different requirements in detail, contact wants to become sqg, but have partially developed generator requirements. Sent contact status change form.

D. Photos Taken

none

E. Samples Taken (List sample numbers & describe technique.)

none

F. Potential for Imminent Hazard, Air, or Water Discharge Violations

possible; a copper hydroxide sludge pit was on-site for 10 yrs. Pit and soil removed on December-1985 and additional soil-7/86.

G. Proximity to Residential Area, Surface Water, Recharge Zone, etc.

commercial area, home nearby.

Processes Continued: Wastewater Treatment (WWT). Rinses are piped into a collection tank inside. Waste is treated with sodium hydroxide. Sludge settles and is pumped out twice per year by EWR. Supernatant discharged to town sewer.

Until 1985 waste waters were treated as follows:

Waste was pumped to collection tank (same one as mentioned above). The indoor tank has a bottom drain which discharged the sludge to a pit located outside. The pit was unlined and had concrete walls. The indoor tank also has pipes which draw off the supernatant to the dry well on-site. For a more detailed description of past disposal practices see Paul Hassler's report August 22, 1983.

To date the sludge pit and surrounding soil were removed by EWR (15 yards). An Order from the Water Compliance Unit, Department of Environmental Protection was issued for this removal. The original excavation was in December, 1985. In June, 1986 additional soil was removed. Also in June the dry well was clean out. The soil was taken to the Landfill. Contact unsure of amounts removed from dry well.

Containers Continued: Waste on-site:

Four (4) drums of waste ferric chloride. The drums were stored outside on a loading dock without any secondary containment. All drums were marked and dated.

Manifests for 1986 indicate that waste was stored more than ninety (90) days. Contact thought he notified for storage of all waste. Only storage for trichloroethylene was noted on the original notification.

Company Status: Originally Bovano notified to EPA as a Treatment, Storage and Disposal Facility:

1) S01 - Trichloroethylene in drums. The use of trichloroethylene was discontinued in 1982.

2) T01 - Treatment in tanks. Contact mis-notified. (Adding sodium hydroxide to waste store in collection tank)

3) S02 - Storage in tanks. Contact mis-notified. (Copper Hydroxide waste settling in collection tank, waste currently pumped from tank by EWR).

D80 Landfill:

Indoor collection tank had a bottom drain which discharged the copper hydroxide sludge to an outside pit. The pit was not lined and had concrete walls. Tested were performed on the Copper hydroxide sludge waste and Kevin Vidmar, former Department of Environmental Protection Engineer (see letters in file) determined the waste was non-hazardous.

In June 1985, the pit and surrounding soil was removed and disposed of by EWR.

Bovano is currently acting as a generator of hazardous waste. As mentioned previously, the Copper hydroxide sludge was determined to be non-hazardous according to data submitted in 1984, however the last shipment was manifested as D006 by EWR. If this waste continues to be determined as a hazardous waste, Bovano will need to change their status from a facility to a generator.

Mr. Flood informed me that the etching process has increased over the past three years. Due to the increase, a higher count of cadmium has showed up in the copper hydroxide sludge, making this waste stream hazardous.

CSH:jab

HAZARDOUS WASTE INSPECTION REPORT

4/89

Site Name Bovano Ind. Inc.
Location 830 So. Main St.
Cheshire, CT 06410

AKA: Bovano of Cheshire
Phone No 272-3208
ID No CTD001179316

Contact &
Title James Flood-President
Mailing Address:
(if different from location)
P.O. Box 250, Cheshire Ct. 06410
Property Owned/Leased

Inspection Date 11/29/89
Inspector(s) Chernauskas / Harder
Notified as:
Generator ✓
Transporter
TSDF ✓ Storage
Burner/Blender
CT. Reg. Facility
Previous Inspection 2/18/87 - Spieske
Inventory
Complaint No
Compliance w/NOV # 307
Other (describe)
Status Change Request: yes: filed on 3/8/87; TSDF → Generator

CHARACTERIZATION OF SITE ACTIVITY

a) Date Established at Present Location 1954
b) No. of Employees, Shifts ≈28 employees, 1 shift.
c) Type of Activity Manufacturing
d) Products glass enameling on copper ornaments, some brass sculpting & pottery
e) Processes Pressing, Stamping, shaping & forming. Etching - self contained etching machine (installed 8/88), etchant is cupric chloride, the piece is manually fed into the machine, rinsing is also done in the machine with the waste discharged into 1 of 2 - 1000 gal plastic tanks; water, HCl & hydrogen oxide are fed into the etching machine automatically thru 3 lines. Bright Dip - nitric & sulfuric acid w/ 2 rinses (one rinse alkaline) & a dryer, rinse waters are discharged to the 2-1000 gal waste holding tanks, wet scrubber over acid tanks. Enameling - 8 boothes, glass powder is applied by hand to wet copper or brass, three ovens for baking; each booth is attached to a new baghouse (installed ≈10/88) located on roof, previously vented to a wooden baffled box at ground level at the rear of building (outside), no waste has been removed from the baghouse yet according to the contact. Lacquering - 1 dry booth with spray gun, the process only operates ≈ 1/2 hr/wk & does not generate any waste (ie: no gun cleaning) according to the contact.

(PROCESSES cont. pg 13)

f) Water Supply (if well(s) give approx. location) well water

g) Type of Wastewater Discharges Sewer for sanitary waste, all process rinse waters discharged to 2-1000gal above ground holding tanks located inside building

Comments

II WASTE PROFILE

Type of Waste	Amount/Frequency	Handling Method	Transporter	Designated Facility
*Rinse Water	≈1750gal/1/4yr.	2-1000gal tanks	EWR	EWR
Dodge Counter Enamel	2dr/yr.	drum	EWR	EWR
Baghouse Dust	1dr/yr	drum	EWR	EWR - none yet removed.
Waste Flam Liq.	330gal/one time event	- Underground Fuel Tank removed.		

Comments * Rinse water are from bright dip rinses, tumbling water & etchant rinse w/≈ 10gals of cupric chloride a week.

a) Is there any evidence of On-Site Disposal/Spills? No____ Yes ✓

Identify: Location; Type; Amount/Frequency; Length of Time disposal site(s) used, etc.

At the rear of the plant there is a wooden box on the ground, open on one side with a top & bottom baffle inside. This unit is connected to the two counter enamel spray booths. We observed a light covering of white powder ≈ an area 2'x10' on the ground. This box has been in place ≈ 10 years according to the contact. Due to snow cover during the last inspection the inspector was unable to determine the area of the fall out. No hazardous waste determination has been performed on the material according to the contact.

f) Water Supply (if well(s) give approx. location) well water

g) Type of Wastewater Discharges Sewer for sanitary waste, all process rinse waters discharged to 2-1000gal above ground holding tanks located inside building

Comments

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Notifications

a) Part "A" (TSDF only): Yes ✓ /No ____ Part "B" Application: Yes ____ /No ✓

- Any discrepencies, Part A and actual operations Yes ✓ /No ____

Comments See "Company Status" from Caren Spieske's 1987 report (attached).

Hazardous Waste262.11/

22a-449(c)-7 Hazardous Waste Determination

a) Performed needed on fallout material from baffled box located at the ~~Comments~~ rear of the building.

265.170-177/

22a-449(c)-33 Containers

a) Approx. # of containers 3 drums of.

b) Condition of containers good.

c) Leaks, Ruptures, Corrosion none

d) Containers open/closed Closed.

e) Heat/Pressure none observed

f) 50' Bufferzone for I and R wastes N/A

g) Separation of incompatible wastes N/A

h) Evidence of Spills No container spill

i) Greater than 90 day storage (generator on Ship it's waste in < 90 days, though ~~Comments~~ for up to a year. The drum were dated & marked to identi

focus on

Step B

262.30-.34/ - Pretransport Requirements

22a-449(c)-7,8,33

a) Packaging yes

b) Labelling ~~yes~~ N/A

c) Marking yes

d) Accumulation Dates yes on spec accumulation drums of enamels.

Comments

22a-449(c)-32,33/ Storage Area (containers only)

a) Impermeable Base (specific type) yes - cement floor

b) Secondary Containment inside building (waste is in solid state)

Comments

265.190-.199/

22a-449(c)-34 Waste Tanks

Description/Inventory (list each hazardous waste tank, capacity, waste type, inground/ aboveground) 2-1000 gal plastic above ground tanks located inside building, collecting waste rinse waters.

a) Markings both tanks marked "Bright Dip & Etchant Water" *

b) Leaks none observed

c) Ruptures none observed

d) Corrosion none observed

e) 2' freeboard or containment both tanks bermed.

f) Heat/pressure none observed

g) Evidence of spills none observed

h) Inflow and outflow controls yes

Continuous Inflow NO Means to stop flow? yes.

i) Special requirements for I and R wastes N/A

j) Greater than 90 day storage (generator only); explain appears to be shipped in < 90 days.

Comments * Told contact that tank must display the prefix "Waste", he added the designation before we left. Both tanks are hard piped together though they are filled one at a time.

262.21/

22a-449(c)-5/ Manifests

a) Are Manifest used for all hazardous waste and Ct. regulated waste shipments? Yes ✓ No(explain)

b) Appropriate Copies On-site? Yes ✓ No(explain)

c) Observations (discrepancies, proper waste I.D., landban restrictions etc.) Had copies of land ban notifications attached to appropriate manifests.

Comments

265.15/

22a-449(c)-28/ Inspection Schedule and Log

a) Are inspections conducted yes - see comment below

b) Written inspection schedule yes

c) Inspection Log (date, time, inspector and corrective actions) yes.

(1) Daily;

loading/unloading of areas subject to spills no

discharge control equip., waste level in tanks no

incinerator system, thermal treatment equip. N/A

chem/phys/bio treatment equip. N/A

freeboard level of surface impoundments N/A

2) Weekly; physical conditions of: (containment system, if applicable)

containers yes

tanks yes

surface impoundments N/A

chem/phys/bio treatment facility N/A

3) Safety and Emergency Equipment yes

Comments Had some gaps in inspection log, since Feb. 1989 weekly inspection were performed ≈ once a month.

265.16/

22a-449(c)-24/ Personnel Training Records

a) Job titles/position description and name of employee

yes

b) Adequate written description of training yes.

c) Records of training yes - certificates

d) Training completed yes 1/6/89

1. New Employees no new employees.

2. Last Annual Training 1/6/89, update will be conducted ≈ 1/90

~~Comments~~ according to contact

265.50-56

22a-449(c)-26/ Contingency Plan

a) Plan on site yes Date of Plan HRP

b) Plan to local authorities yes

c) Emergency procedures yes; fire, explosion, spills

d) Identify emergency coordinator(s) Jim Flood-Primary; Chris Havell-Alt.

e) Identify, locate and describe emergency equipment capabilities (incl. spill, fire, alarm, communication, decon, protective equipment)

yes.

f) Evacuation plans yes.

Comments need to update plan to include the 2 new waste tanks & need to delete WWTS in present plan.

265.30-.37/ Site Preparedness/Prevention

22a-449(c)-25

a) Internal communication/alarm yes

b) Telephone/2-way radio yes

c) Portable fire control, spill & decon equipment yes

d) Adequate water for fire control well water

e) Testing and Maintenance of equipment yes - outside contractor

f) Adequate aisle space yes

g) Access to equipment appeared good

h) No smoking signs (for I & R waste) N/A

Comments

Facility Requirements

22a-449(c)-21/ Waste Analysis Plan Company appears to be operating as a generator, shipping waste in < 90 days.

Facility Requirement

a) Plan on site _____

b) Plan must include

1) Parameters _____

2) Test Methods _____

3) Sampling Methods _____

4) Frequency _____

c) Copy of results _____

Comments _____

265.73/ Operating Records Company appears to be operating as a generator, shipping waste in <90 days.

22a-449(c)-27

a) Are the following written records maintained on-site:

1) Waste received from: off-site_____; on-site _____

2) Waste

a. description _____

b. quantity _____

3) Methods/Dates of: storage_____ treatment _____

disposal_____

b) Waste inventory (including type(s), volume(s), and location(s)):

1) In storage _____

2) Disposal on-site (recorded on map) _____

3) Does inventory cross reference specific manifest _____

c) Analytical records for:

1) All waste _____

2) Monitoring wells _____

3) Trial test (to assure compatibility with tanks, surface impoundments, waste piles) _____

d) Report/Summary of any incident requiring implementation of Contingency Plan

_____

e) Records and results of inspection _____

f) Closure/Post Closure cost estimates _____

Comments _____

265.112-115 Closure Plan Company has applied for status change from TSDF → Ge.
22a-449(c)-29 Company appears to be operating as a generator, shipping waste in < 90 days.

a) Plan on site? Yes____ No____ Date of Plan_____

b) Does plan include: Prepared by_____

1) Schedule of partial closure if applicable _____

2) Estimated maximum waste in inventory _____

3) Schedule and total time required for final closure _____

4) Estimated expected year of closure_____

5) Description of steps needed to decontaminate facility/equipment _____

6) Are there any regulated units closed, if yes are they certified by owner and P.E._____

Comments_____

_____

265.142/ Closure Cost Estimate - see comment above
22a-449(c)-30

a) Estimate on site _____Amount of estimate _____

b) Estimate adjusted annually _____

Comments_____

_____

265.117,.118/ Post-Closure Plan (disposal facilities only) N/A
22a-449(c)-29

a) Plan on site _____ Date of Plan_____

b) Does plan identify and include frequency of:

1) planned groundwater monitoring/and reporting _____

2) planned maintenance & security acitivies _____

3) name, address, phone # of Post-closure contact _____

c) Length of Post-closure period identified _____

Comments_____

265.144/ Post-Closure Cost Estimate (disposal facilities only) N/A
22a-449(c)-30

a) Estimate on site _____Amount of estimate _____

b) Estimate adjusted annually on 11/19 for inflation _____

_____

Comments_____

FINANCIAL REQUIREMENTS

Company has applied for status change from TSDF → (
Generator. Company appears to be operating as a generat
shipping waste in < 90 days.

22a-449(c)-30

12) Financial Assurance:

(Fed) 265.143 A. Closure

Type of mechanism_____

(trust fund, surety bond, letter of credit, insurance, financial test)

Amount of coverage $_____

(should be ≥ cost estimate)

Comments _____

265.145 B. Post-Closure

Type of mechanism_____

Amount of coverage $_____

Comments _____

13) Liability Insurance:

265.147 A. Sudden (all TSD facilities)

Type of mechanism_____

(insurance, financial test)

Amount of coverage $_____

Comments _____

B. Nonsudden (surface impoundments, landfills, and land treatment facilities)

Type of mechanism_____

Amount of Coverage $_____

Comments _____

Federally owned facilities are exempt from financial requirements.

22a-449(c)-22 Site Security

a) 24 hour surveillance system, or in process of installing new alarm system

b) Means to control entry yes - inside storage

c) Danger sign posted at each entrance legible at 25' no

Comments Company appears to be operating as a generator, shipping waste in < 90 days.

265.220-.230/ Surface Impoundments (Pits, Ponds and Lagoons) N/A

22a-449(c)-35 Sump pit cleaned & removed 12/85, see last page for details.

a) Number and Type

b) Protective Cover on Dikes

c) 2' freeboard

d) Special requirements for I and R waste

e) Evidence of fire, explosion - leak

f) Liner

Comments

265.90-.94/

22a-449(c)-28/Groundwater Monitoring 4 non RCRA GWM wells, not being monitored, refer to WCU.

265.250-.257/ Waste Piles N/A

22a-449(c)-36

a) Approx. type and size

b) Wind erosion control

c) Impermeable base

d) Run-On/Run-Off control and prevention

e) Special requirements for I and R waste

f) Evidence of fire, explosion, leak

g) Separation of incompatible waste

h) Waste analysis

Comments

Miscellaneous Information

Told contact that he must conduct weekly inspections of containers & containment structure, also informed contact that the waste tanks needed to be inspected daily for waste levels.

Told contact that he must update his contingency plan to identify new processes & equipment & to delete discontinued processes & equipment. Told contact that fallout from baffle box need haz. waste determination.

Photos Taken (number and a brief description)

None

Samples Taken (number)

None

Potential Hazard, Air, or Water Discharge Violations

Possible, a copper hydroxide sludge pit was on-site for ≈10 yrs. Pit & soil removed 12/85 w/ additional soil removed 7/86. On this inspection we noted white powder from a baffled wooden box connected to the counter enamel spray booths, requested haz waste determination of the fallout material.

Proximity to Residential Area, Surface Water, Recharge Zone, etc.

Commercial area, some homes nearby. A McDonald's restaurant is situated in front of the Bovano property.

11/29/89

Bovano Ind Inc. CTD001179316
830 So. Main St.
Cheshire, CT. 06410

(continued from pg. 1)

PROCESSES: Counter Enameling - left over enamels are reused in two spray booths to coat the underside of the ornaments, booths exhausted to a wooden structure on the ground at the rear of the building. The structure contained 2 baffles & an open side. Fallout from the box was evident on the ground surrounding the structure. The fall out material was a light white powder that covered an area ≈ 2' X 10', the contact describe the material as 'frit' (clay & glass crystal). The amount of material & the area it covered was not indicated on the previous inspection report, due to snow cover.

WWTS - as of 7/89 use of the waste water treatment system had been discontinued. The company now collects all rinses from the bright dip operation, tumbling & etching processes in 2-1000 gal above ground plastic tanks located inside the building. The waste in the tanks will be removed ≤ 90 days by EWR.

This information was copied from Caren Spieske's 11/29/8 inspection report.

Until 1985 waste waters were treated as follows:

Waste was pumped to collection tank (same one as mentioned above). The indoor tank has a bottom drain which discharged the sludge to a pit located outside. The pit was unlined and had concrete walls. The indoor tank also has pipes which draw off the supernatant to the dry well on-site. For a more detailed description of past disposal practices see Paul Hassler's report August 22, 1983.

To date the sludge pit and surrounding soil were removed by EWR (15 yards). An Order from the Water Compliance Unit, Department of Environmental Protection was issued for this removal. The original excavation was in December, 1985. In June, 1986 additional soil was removed. Also in June the dry well was clean out. The soil was taken to the Landfill. Contact unsure of amounts removed from dry well.

D80 Landfill:

Indoor collection tank had a bottom drain which discharged the copper hydroxide sludge to an outside pit. The pit was not lined and had concrete walls. Tested were performed on the Copper hydroxide sludge waste and Kevin Vidmar, former Department of Environmental Protection Engineer (see letters in file) determined the waste was non-hazardous.

In June 1985, the pit and surrounding soil was removed and disposed of by EWR.

Bovano is currently acting as a generator of hazardous waste. As mentioned previously, the Copper hydroxide sludge was determined to be non-hazardous according to data submitted in 1984, however the last shipment was manifested as D006 by EWR. If this waste continues to be determined as a hazardous waste, Bovano will need to change their status from a facility to a generator.

Company Status: Originally Bovano notified to EPA as a Treatment, Storage and Disposal Facility:

1) S01 - Trichloroethylene in drums. The use of trichloroethylene was discontinued in 1982.

2) T01 - Treatment in tanks. Contact mis-notified. (Adding sodium hydroxide to waste store in collection tank)

3) S02 - Storage in tanks. Contact mis-notified. (Copper Hydroxide waste settling in collection tank, waste currently pumped from tank by EWR).

APPENDIX D

WASTE DISPOSAL DOCUMENTATION

EPA ID# CTD001179316

OPERATING LOG

Waste Shipped Offsite

TE	DATE MANIFEST RET'D	No. OF CONTAINERS	QUANTITY per CONTAINER	TOTAL AMOUNT	REF. NUMBER	TRANSPORTER	EPA ID #
					Manifest #		
83/87	7/6/87	1	1000 g	1000 gallons	00007	EWR	CTD072138969
31/87	8/3/87	2	55 gallons	110 gallons	0008	EWR	CTD072138969
83/87	11/13/87	8	55 gallons	440 gallons	0009	EWR	"
2/22/87	12/22/87	1	1000 g	1000 g.	0010	EWR	"
3/8/88	3/8/88	4	55 g	220 g	0011	EWR	"
3/31/88	3/31/88	1	600 g	600 g	0012	EWR	"
6/19/88	6/19/88	1	1000 g	1000 g	0013	EWR	"
7/5/88	7/5/88	3	55 g	165 g	0014	EWR	"
7/20/88	7/20/88	1	330 g	330 g	0015	~~EWR~~ EWR	"
9/26/88	9/26/88	1	600 g	600 g	0016	~~EWR~~ Am. Environmental Tech	"
12/30/88	12/30/88	1	750 g	750 g	0017	EWR	"
3/15/89	3/15/89	1	1000 g	1000 g	0018	EWR	"
6/2/89	6/2/89	1	1854	1854 g	0019	EWR	"
9/12/89	9/12/89	1	2000 g	2000 g	0020	EWR	"
12/4/89	12/4/89	1	1500 g	1500 g	0021	EWR	"
3/12/90	3/12/90	1	2000 g	2000 g	0022	EWR	"
6/27/90	6/27/90	1	2,000 g	2000 g	0023	EWR	"
10/24/90	10/24/90	1	2,000 g	2000 g	0024	EWR	"
11/1/90	11/1/90	5	55 g	275 g	0025	EWR	"
1/8/91	1/8/91	1	1300 g	1300 g	0026	EWR	"
4/11/91	4/11/91	1	1980 g	1980 g	0027	EWR	"
7/23/91	7/23/91	1	1600 g	1600 g	0028	EWR	"
10/30/91	10/30/91	1	1800 g	1800 g	0029	Frontier Chem	NY0982790894
1/8/92	1/8/92	1	15.5 T	15.5 T	0030	EWR	CTD072138969
1/8/92	1/8/92	1	2.0 T	2.0 T	0031	EWR	"
2/7/92	2/7/92	1	1730 G	1730 G	0032	Frontier Chem	NY0982791812
5/21/92	5/21/92	1	1750 G	1750 G	00033	EWR	CTD072138969
8/14/92	8/14/92	1	1060 G	1060 G	0034	EWR	"
11/11/92	11/11/92	1	1600 G	1600 G	0035	EWR	"
2/10/93	2/10/93	1	1475 G	1475 G	00036	Tri-S	CTD016424010
5/4/93	5/4/93	5	2500 lbs	2500 lbs	00038	Buckman Transport	CTD982194942
8/10/93	[illegible]	1	1007 G	1007 G	0037	Buckman Transport	CTD981194942

OPERATING LOG

EPA ID# CTD001179316

Waste Shipped Offsite

TE	DATE MANIFEST RET'D	No. OF CONTAINERS	QUANTITY per CONTAINER	TOTAL AMOUNT	REF Manifest NUMBER	TRANSPORTER	EPA ID #
-21-93	7-21-93	1	2,000 g	2,000 g.	00039	Bechem	CTD982191942
7-30-93	9-30-93	1	1850 g	1850 g	93093	Bechem	CTD982191942
12-16-93	12-17-93	1	1900 g	1900 g	00041	Bechem	CTD982191942
03-04-94		1	2422 g	2422 g	00042	Bechem	
4-12-94		6		2400 lb	00093	Bechem	
-09-94		1		1975 g	44	"	
7-7-94		1	2250 g	2250 g	45	"	
7-7-94		1	1800 g	1800 g	46	"	
10-94		1	2250 g	2250 g	47	EWR	
31-95		1	2000 g	2000 g	98239	EWR	
1-13-95		1	1755 g	1755 g	26351	EWR	
-17-95		7		2800 lb	04943	Bechem	

STATE OF RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
Division of Waste Management
291 Promenade Street, Providence, RI 02908-5767
(401) 277-2797

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039 Expired 9-30-96

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CTD001179310 Manifest Document No. 04943
2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but may be required by state law.

3. Generator's Name and Mailing Address
Bovano of Cheshire 830 South Main Street
Cheshire, CT 06410-

4. Generator's Phone 203 272-3208

5. Transporter 1 Company Name: BECHEM TRANSPORT, INC.
6. US EPA ID Number: CTD982191942

7. Transporter 2 Company Name
8. US EPA ID Number

9. Designated Facility Name and Site Address
NORTHLAND ENVIRONMENTAL, INC.
275 ALLENS AVENUE
PROVIDENCE, RI 02905-
10. US EPA ID Number: RID040098352

A. State Manifest Document Number: RIS 0004943
B. Generator/Site Address: SAME
C. State Transporter ID/License Plate: RI-643 9UP444
D. Transporter's Phone: 203/568-1200
E. State Transporter ID/License Plate
F. Transporter's Phone
G. Facility Mailing Address: SAME
H. Facility's Phone: (401) 781-6340

GENERATOR

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ HAZARDOUS WASTE, SOLID, N.O.S., H.C. 9, NA3077, Contains (LEAD), (D008) (ERG#31), PG III	007	DM	02800	P	D008
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above
(a) a. PROFILE NO. 23310 - SILICA
c. d.

K. Handling Codes for Wastes Listed Above

	Interim	Final	Interim	Final
(a) a.	S01		g.	
b.			d.	

15. Special Handling Instructions and Additional Information
EMERGENCY PHONE : (401) 781-6340 EMERGENCY CONTACT : Northland Environ

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment: or, if I am a small quantity, I have made good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: JAMES FLOOD Signature: James Flood Date: Month Day Year 05/17/95

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: John G MATHEIS JR Signature: [signature] Date: Month Day Year 05/17/95

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name Signature Date: Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: Elaine Tolraunt Signature: Elaine Tolraunt Date: Month Day Year 05/17/95

EPA Form 8700-22 (3-84)

COPY 3: Facility Mails To Generator

COPY 3: Facility Mails To Generator

ALL 8 COPIES MUST BE LEGIBLE!!

RIS 0004943

W-2A REV. 11/94

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Hazardous Waste MANIFEST PROGRAM
79 Elm St., Hartford, CT 06106-5127

Please type (or print) (Form designed for use on elite (12 pitch) typewriter.)

FOR STATE USE ONLY

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No: CT 5 0 0 1 1 7 9 3 1 6 — Manifest Document No.:
2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but may be required by State law.

3. Generator's Name and Mailing Address
Ovano Industries Inc.
P.O. Box 350
Cheshire,CT 06410 (203) 272-3208

4. Generator's Phone ( )

A. State Manifest Document Number: CT F 0398239

B. G.S.I. (Gen. Site Address)
830 South Main St.
Cheshire,CT

5. Transporter 1 Company Name: Environmental Waste Resources, Inc.
6. US EPA ID Number: CT 0 0 7 2 1 3 9 9 6 9

7. Transporter 2 Company Name
8. US EPA ID Number

C. S.T.I. (Trans. Lic. Plate #) 5X465 (CT)
D. Tran. Phone (203) 755-2283
E. S.T.I. (Trans. Lic. Plate #)
F. Tran. Phone ( )

9. Designated Facility Name and Site Address
Environmental Waste Resources, Inc.
130 Freight Street
Waterbury, CT 06702
10. US EPA ID Number: CT 0 0 7 2 1 3 9 9 6 9

G. State Facility's ID (Not Required)
H. Facility's Phone 203-755-2283

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, Waste Corrosive Liquids, N.O.S. (Sulfuric Acid, Nitric Acid) (D002,D008) 8,UN1760,PGII	001	TP	2000	G	EPA D002,D008 STATE None
b.					EPA STATE
c.					EPA STATE
d.					EPA STATE

J. Additional Descriptions for Materials Listed Above
A27534-bright dip rinse water

a. c.
b. d.

K. Handling Codes for Wastes Listed Above

	Interim	Final		Interim	Final
a.			c.		
b.			d.		

15. Special Handling Instructions and Additional Information
Emergency Contact: Jim Flood (203) 272-3208
Prq160,11A

Point of Departure:

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

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Printed/Typed Name	Signature	Month	Day	Year
Jim Flood	[signature]			

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Leo Fleet	[signature]			

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

Form 8700-22 (Rev. 9/91) Form Approved OMB No. 2050-0039. Expires 9/30/96. Previous edition is obsolete.

COPY 8: GENERATOR RETAINS

COPY 8: GENERATOR RETAINS

CT F 0398239

PHM-2A REV. 11/94

STATE OF CONNECTICUT

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Hazardous Waste MANIFEST PROGRAM
79 Elm St., Hartford, CT 06106-5127

Please type (or print) *(Form designed for use on elite (12 pitch) typewriter.)*

FOR STATE USE ONLY

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No: C.T.D.0.0.1.1.7.9.1.6. Manifest Document No.
2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but may be required by State law.

3. Generator's Name and Mailing Address
Devano Industries, Inc.
P.O. Box 250 Cheshire, CT 06410

4. Generator's Phone (203) 272-3208

A. State Manifest Document Number: CT F 0409484

B. G.S.I. (Gen. Site Address): 630 South Main St. Cheshire, CT

5. Transporter 1 Company Name: Environmental Waste Resources, Inc.
6. US EPA ID Number: CT0072136969

7. Transporter 2 Company Name
8. US EPA ID Number

C. S.T.I. (Trans. Lic. Plate #): 137 [illegible]
D. Tran. Phone (203) 755-2283
E. S.T.I. (Trans. Lic. Plate #)
F. Tran. Phone ( )

9. Designated Facility Name and Site Address
Environmental Waste Resources, Inc.
130 Freight Street
Waterbury, CT 06702
10. US EPA ID Number: CT0072136969

G. State Facility's ID (Not Required)
H. Facility's Phone: 203-755-2283

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	Waste No.
a. RQ, Waste Corrosive Liquids N.O.S. (Sulfuric Acid, Nitric Acid) 8, UN1760, PGII (D002)	[illegible]	F	01756	P	EPA D002, D008 / STATE None
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials Listed Above
a. A27536-bright dip rinse water
b.
c.
d.

K. Handling Codes for Wastes Listed Above

	Interim	Final		Interim	Final
a.			c.		
b.			d.		

15. Special Handling Instructions and Additional Information
Emergency Contact: Richard Foster (203) 272-3208
Erg160, 11a

Point of Departure:

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

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Printed/Typed Name	Signature	Month Day Year
[illegible]	[illegible]	04/13/95

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month Day Year
ALBERT [illegible]	[illegible]	04/13/95

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month Day Year

GENERATOR

TRANSPORTER

FACILITY

COPY 8: GENERATOR RETAINS

CT F 0409484

EPA Form 8700-22 (Rev. 9/91) Form Approved OMB No. 2050-0039. Expires 9/30/96. Previous edition is obsolete.

COPY 8: GENERATOR RETAINS

STATE OF RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
Division of Air and Hazardous Materials
291 Promenade Street, Providence, RI 02908-5767

...rm designed for use on elite (12-pitch) typewriter.) (401) 277-2797 Form Approved. OMB No. 2050-0039 Expired 9-30-94

...M HAZARDOUS ...STE MANIFEST

1. Generator's US EPA ID No. CTD001179316 Manifest Document No. 00045

2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but may be required by state law.

...tor's Name and Mailing Address
...and of Cheshire 830 South Main Street
Generator's Phone 203 272-3200 Cheshire, CT 06410-

A. State Manifest Document Number RIS0001651

B. Generator/Site Address SAME

5. Transporter 1 Company Name: BECHEM TRANSPORT, INC.
6. US EPA ID Number: CTD982191942

7. Transporter 2 Company Name
8. US EPA ID Number

C. State Transporter ID/License Plate: ME M62506

9. Designated Facility Name and Site Address
NORTHLAND ENVIRONMENTAL, INC.
275 ALLENS AVENUE
PROVIDENCE, RI 02905-
10. US EPA ID Number: RID040009352

D. Transporter's Phone: 603/868-1200
E. State Transporter ID/License Plate
F. Transporter's Phone
G. Facility Mailing Address SAME
H. Facility's Phone (401) 781-6340

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	Waste No.
a. RQ WASTE CORROSIVE LIQUID, N.O.S., H.C.B, UN1760, Contains(LEAD), (D002\D008) (ERG#60), PG II	01	1	02250	P	D002, D008
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above
(a) AMLNBOVC01 ETCHANT & BRITE DIP
c. d.

K. Handling Codes for Wastes Listed Above

	Interim	Final	Interim	Final
(a) a.	7D		c.	
b.			d.	

15. Special Handling Instructions and Additional Information
EMERGENCY PHONE : (401) 781-6340 EMERGENCY CONTACT : Northland Environ

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
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Printed/Typed Name: JAMES FLOOD Signature: James Flood Date (Month Day Year): 7 7 94

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: ROBERT KENYON Signature: Robert Kenyon Date (Month Day Year): 07 07 94

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name Signature Date (Month Day Year)

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: Beth Lattanzio Signature: Beth Lattanzio Date (Month Day Year): 7 7 94

GENERATOR
TRANSPORTER
FACILITY

COPY 3: Facility Mails To Generator

ALL 8 COPIES MUST BE LEGIBLE!!

RIS 0001651

...Form 8700-22 (Rev. 9-88) COPY 8: Generator Retains

EPHM-2 REV. 9/91

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Hazardous Waste MANIFEST PROGRAM, State Office Building
Hartford, CT 06106

Please type (or print) *(Form designed for use on elite (12-pitch) typewriter.)*

FOR STATE USE ONLY

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. C.T.D.0.7.2.1.3.879.6.9 | Manifest Document No. 00.0.36

2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but may be required by State law.

3. Generator's Name and Mailing Address
Bowano Industries, Inc.
830 South Main Street, Cheshire, CT 06410

4. Generator's Phone (203) 272-3208

A. State Manifest Document Number CT F 0175628

B. G.S.I. (Gen. Site Address) SAME

5. Transporter 1 Company Name TRI-S INC | 6. US EPA ID Number CT.D.0.1.6.4.2.4.2.1.0

7. Transporter 2 Company Name | 8. US EPA ID Number

C. S.T.I. (Trans. Lic. Plate #) [illegible]

D. Tran. Phone (203) [illegible]

9. Designated Facility Name and Site Address
Northland Environmental, Inc.
275 Allens Avenue
Providence, RI 02905-5003

10. US EPA ID Number R.I.D.0.4.0.0.9.8.3.5.2

E. S.T.I. (Trans. Lic. Plate #)

F. Tran. Phone ( )

G. State Facility's ID (Not Required)

H. Facility's Phone [illegible]

11. US DOT Description *(Including Proper Shipping Name, Hazard Class, and ID Number)*	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	
a. RQ WAste Corrosive Liquid, n.o.s. (hydrochloric acid), Corrosive Material; NA1760 (D002, D008) ERG#60	001	TT	1475	G	[illegible]
b.					[illegible]
c.					STATE
d.					EPA STATE

J. Additional Descriptions for Materials Listed Above
AHLNBOVCOT
a. water 93%, copper 3%, cadmium 1%, lead 1%, hydrochloric acid 3%
b.
c.
d.

K. Handling Codes for Wastes Listed Above
a. T01
b.
c.
d.

15. Special Handling Instructions and Additional Information

Emergency Phone Number: 203/272-3208 Point of Departure:

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

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Printed/Typed Name: James A. Flood | Signature | Month Day Year: 02 10 93

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Joseph King | Signature | Month Day Year: 02 10 93

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Richard T. Belcourt | Signature | Month Day Year: 02 10 93

GENERATOR

TRANSPORTER

FACILITY

COPY 3: FACILITY TO GENERATOR

CT F 0175628

EPA Form 8700-22 (Rev. 9/91) Form Approved OMB No.2050-0039. Expires 9/30/94. Previous edition is obsolete.

COPY 3: FACILITY TO GENERATOR

STATE OF CONNECTICUT

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Hazardous Waste MANIFEST PROGRAM
79 Elm St., Hartford, CT 06106-5127

e type (or print) *(Form designed for use on elite (12-pitch) typewriter.)*

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UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. C T D 0 0 1 1 7 9 3 1 6 — Manifest Document No. 0 0 0 4 7

2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but may be required by State law.

Generator's Name and Mailing Address
Bovano Industries, Inc.
P.O. Box 250
Cheshire, CT 06410 (203) 272-3208
Generator's Phone ( )

A. State Manifest Document Number: CT F 0372282

B. G.S.I. (Gen. Site Address): 830 South Main Street, Cheshire, CT 06410

Transporter 1 Company Name: Environmental Waste Resources, Inc. — 6. US EPA ID Number: C T D 0 7 2 1 3 8 9 6 9

Transporter 2 Company Name — 8. US EPA ID Number

C. S.T.I. (Trans. Lic. Plate #): CT 868.35

D. Tran. Phone (203) 755-2283

Designated Facility Name and Site Address
Environmental Waste Resources, Inc.
130 Freight Street
Waterbury, CT 06702

10. US EPA ID Number: C T D 0 7 2 1 3 8 9 6 9

E. S.T.I. (Trans. Lic. Plate #)

F. Tran. Phone ( )

G. State Facility's ID (Not Required)

H. Facility's Phone: 203-755-2283

US DOT Description *(Including Proper Shipping Name, Hazard Class, and ID Number)*	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	15. Waste No.
RQ, Waste Corrosive Liquid, N.O.S. (Nitric Acid, UN1760, PGII (D002,D008) Sulfuric Acid)	001	T	02250	G	EPA D002,D008 STATE NONE
					EPA STATE
					EPA STATE
					EPA STATE

Additional Descriptions for Materials Listed Above
131080-Bright Dip Rinse Water
c.
d.

K. Handling Codes for Wastes Listed Above
a. D02, T40, 23, 30 — Interim — Final
b. 91, 36, 45, 65 — Interim — Final
d.

Special Handling Instructions and Additional Information

11a. ERG #60 Emergency Contact: Jim Flood (203) 272-3208

Point of Departure:

GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

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Printed/Typed Name: Jim Flood — Signature: [signature] — Month Day Year: 1 1 1994

Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Tom Ashe — Signature: [signature] — Month Day Year: 1 11 1994

Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name — Signature — Month Day Year

Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Ron Hopkins — Signature: [signature] — Month Day Year: 1 10 94

8700-22 (Rev. 9/91) Form Approved OMB No.2050-0039. Expires 9/30/94. Previous edition is obsolete.

COPY 3: FACILITY TO GENERATOR

COPY 3: FACILITY TO GENERATOR

CT F 0372282

STATE OF RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
Division of Air and Hazardous Materials
291 Promenade Street, Providence, RI 02908-5767

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Form Approved. OMB No. 2050-0039 Expired 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. | Manifest Document No.

2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but may be required by state law.

3. Generator's Name and Mailing Address
[illegible]

4. Generator's Phone ( ) [illegible]

5. Transporter 1 Company Name
[illegible]

6. US EPA ID Number

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address
[illegible]

10. US EPA ID Number

A. State Manifest Document Number
RIS0001926

B. Generator/Site Address
[illegible]

C. State Transporter ID/License Plate
[illegible]

D. Transporter's Phone [illegible]

E. State Transporter ID/License Plate

F. Transporter's Phone

G. Facility Mailing Address

H. Facility's Phone (401) [illegible]

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. [illegible]	[illegible]	[illegible]	01800	[illegible]	[illegible]
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above
[illegible] ETCHANT & ABITE DIP
a. b.
c. d.

K. Handling Codes for Wastes Listed Above

Interim	Final	Interim	Final
a.		c.	
b.		d.	

15. Special Handling Instructions and Additional Information
[illegible]

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable International and national government regulations.
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Printed/Typed Name [illegible] | Signature | Date Month Day Year [illegible]

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name ROBERT KENYON | Signature [illegible] | Date Month Day Year [illegible]

18. Transporter 2 Acknowledgement or Receipt of Materials

Printed/Typed Name | Signature | Date Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name | Signature | Date Month Day Year

COPY 8: Generator Retains

ALL 8 COPIES MUST BE LEGIBLE!!

RIS 0001926

'A Form 8700-22 (3-84)

COPY 8: Generator Retains

STATE OF RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
Division of Air and Hazardous Materials
291 Promenade Street, Providence, RI 02908-5767

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UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CTD001179316 Manifest Document No. 100044
2. Page 1 of 1
Information in the shaded areas is not required by Federal law, but may be required by state law.

3. Generator's Name and Mailing Address
Bayano of Cheshire 830 South Main Street
4. Generator's Phone 203 272-3200 Cheshire, CT 06410
5. Transporter 1 Company Name: BECHEM TRANSPORT, INC.
6. US EPA ID Number: CTD981919422
7. Transporter 2 Company Name
8. US EPA ID Number
9. Designated Facility Name and Site Address
NORTHLAND ENVIRONMENTAL, INC.
275 ALLENS AVENUE
PROVIDENCE, RI 02905
10. US EPA ID Number: RID040098352

A. State Manifest Document Number: RIS0001297
B. Generator/Site Address: SAME
C. State Transporter ID/License Plate: M62506 ME
D. Transporter's Phone: 203/782-1280
E. State Transporter ID/License Plate
F. Transporter's Phone
G. Facility Mailing Address: SAME
H. Facility's Phone: (401) 781-6340

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ WASTE CORROSIVE LIQUID, N.O.S., 11.C.8, UN1760, Contains(LEAD), (D002\D008) (EPB160), PG II	001	T T	01995	G	D002, D008
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above
(a) AMLNBDVC01 ETCHANT & BRITE DIP
c. d.

K. Handling Codes for Wastes Listed Above

Interim	Final	Interim	Final
(a) a. T01		c.	
b.		d.	

15. Special Handling Instructions and Additional Information
EMERGENCY PHONE : (401) 781-6340 EMERGENCY CONTACT : Northland Environ

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
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Printed/Typed Name: James R. Flood Signature: Date: Month 05 Day 06 Year 94

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: ROBERT KENYON Signature: Robert Kenyon Date: Month 05 Day 09 Year 94

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name Signature Date: Month Day Year

19. Discrepancy Indication Space
Rcvd 3090

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: ROBERT E POITRAS Signature: Date: Month 05 Day 19 Year 94

COPY 3: Facility Mails To Generator

ALL 8 COPIES MUST BE LEGIBLE!!

RIS 0001297

A Form 8700-22 (3-84)

COPY 3: Facility Mails To Generator

STATE OF RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
Division of Air and Hazardous Materials
291 Promenade Street, Providence, RI 02908-5767
(401) 277-2797

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039 Expired 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: CTD001179316 — Manifest Document No.: 00042
2. Page 1 of 1
Information in the shaded areas is not required by Federal law, but may be required by state law.

3. Generator's Name and Mailing Address
Bovaré of Cheshire — 330 South Main Street
4. Generator's Phone 203 272-3200 — Cheshire, CT 06410

A. State Manifest Document Number: RIS0000851
B. Generator/Site Address: SAME

5. Transporter 1 Company Name: BECHEM TRANSPORT, INC.
6. US EPA ID Number: CTD982191942

7. Transporter 2 Company Name
8. US EPA ID Number

C. State Transporter ID/License Plate: R35644 ME
D. Transporter's Phone: 203/562-1280
E. State Transporter ID/License Plate
F. Transporter's Phone
G. Facility Mailing Address: SAME
H. Facility's Phone: (401) 781-6340

9. Designated Facility Name and Site Address
NORTHLAND ENVIRONMENTAL, INC.
275 ALLENS AVENUE
PROVIDENCE, RI 02905
10. US EPA ID Number: RID040098352

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	Waste No.
a. RQ, WASTE CORROSIVE LIQUID, N.O.S., H.C.B, UN1760, Contains(lead, hydrochloric acid), (D002\D008) (ERG#60), PG II	001	T T	02422*	P	D002, D008
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above
(a) a. AMLNDDVC01 3% Hydrochloric Acid b. (b) a. c. d.

K. Handling Codes for Wastes Listed Above

Interim	Final	Interim	Final
a.		c.	
b.		d.	

15. Special Handling Instructions and Additional Information
EMERGENCY PHONE : (401) 781-6340 EMERGENCY CONTACT : Northland Environ

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; or, if I am a small quantity, I have made good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: JAMES FLOOD — Signature: James Flood — Date (Month Day Year): 030494

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: SUSAN P. GRATHWOHL — Signature: Susan P. Grathwohl — Date (Month Day Year): 030494

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Date (Month Day Year)

19. Discrepancy Indication Space
2422 gals

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: Michael Alve — Signature: Michael Alve — Date (Month Day Year): 030494

GENERATOR — TRANSPORTER — FACILITY

COPY 3: Facility Mails To Generator

ALL 8 COPIES MUST BE LEGIBLE!!

RIS 0000851

EPA Form 8700-22 (3-84)

COPY 3: Facility Mails To Generator

STATE OF RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
Division of Air and Hazardous Materials
291 Promenade Street, Providence, RI 02908-5767

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) (401) 277-2797 Form Approved. OMB No. 2050-0039 Expired 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CTD001179316 Manifest Document No. 00041
2. Page 1 of 1
Information in the shaded areas is not required by Federal law, but may be required by state law.

3. Generator's Name and Mailing Address
Bovano of Cheshire 830 South Main Street
4. Generator's Phone (203) 272-3208 Cheshire, CT 06410-

A. State Manifest Document Number RIS0000514
B. Generator/Site Address SAME

5. Transporter 1 Company Name BECHEN TRANSPORT, INC.
6. US EPA ID Number CTD982191942
7. Transporter 2 Company Name
8. US EPA ID Number

C. State Transporter ID/License Plate M62306 ME
D. Transporter's Phone (203)262-1200
E. State Transporter ID/License Plate
F. Transporter's Phone
G. Facility Mailing Address SAME
H. Facility's Phone (401) 781-6340

9. Designated Facility Name and Site Address
NORTHLAND ENVIRONMENTAL, INC.
275 ALLENS AVENUE
PROVIDENCE, RI 02905-
10. US EPA ID Number RID040098352

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	Waste No.
a. RQ, WASTE CORROSIVE LIQUID, N.O.S., H.C.8, UN1760, Contains(lead, hydrochloric acid), (D002\D008) (ERG#60), PG II	1	TT	01900	G	D002, D008
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above
(a) AMLNBOVC01 3X Hydrochloric Acid
c. d.

K. Handling Codes for Wastes Listed Above

	Interim	Final		Interim	Final
(a)	T01		c.		
b.			d.		

15. Special Handling Instructions and Additional Information
EMERGENCY PHONE : (401) 781-6340 EMERGENCY CONTACT : Northland Environ

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; or, if I am a small quantity, I have made good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name JAMES FLOOD Signature James F Flood Date Month Day Year 12 16 93

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name ROBERT KENYON Signature Robert Kenyon Date Month Day Year 12 16 93

18. Transporter 2 Acknowledgement or Receipt of Materials
Printed/Typed Name Signature Date Month Day Year

19. Discrepancy Indication Space
Rec 1900 gl

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name RICHARD J. BeCAUNT Signature Date Month Day Year 12 16 93

EPA Form 8700-22 (3-84)

COPY 3: Facility Mails To Generator

COPY 3: Facility Mails To Generator

ALL 8 COPIES MUST BE LEGIBLE!!

RIS 0000514

EPHM-2 REV. 9/91

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Hazardous Waste MANIFEST PROGRAM, State Office Building
Hartford, CT 06106

Please type (or print) *(Form designed for use on elite (12-pitch) typewriter.)*

FOR STATE USE ONLY

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CTD001179316 Manifest Document No. 93093

2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but may be required by State law.

3. Generator's Name and Mailing Address
Bovano Industries
830 South MainStreet
Cheshire, Ct. 06410

4. Generator's Phone (203) 272-3208

A. State Manifest Document Number CT F 0288802

B. G.S.I. (Gen. Site Address) Same

5. Transporter 1 Company Name: Bechem Transport
6. US EPA ID Number: CTD982194942

C. S.T.I. (Trans. Lic. Plate #) M6206N

7. Transporter 2 Company Name
8. US EPA ID Number

D. Tran. Phone (203) 562-1290

9. Designated Facility Name and Site Address
Northland Environmental, Inc.
275 Allens avenue
Providence, RI 02905-5003
10. US EPA ID Number: RID040098352

E. S.T.I. (Trans. Lic. Plate #)

F. Tran. Phone ( )

G. State Facility's ID (Not Required)

H. Facility's Phone (401) 781-6340

11. US DOT Description *(Including Proper Shipping Name, Hazard Class, and ID Number)*	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	Waste No.
a. RQ, Waste Corrosive Liquid, n.o.s. (Lead, Hydrochloric Acid) H.C.8, UN1760, PG II, (D002 D008) ERG# 60	1	TT	01850	G	EPA D002 D008 STATE
b.					EPA STATE
c.					EPA STATE
d.					EPA STATE

J. Additional Descriptions for Materials Listed Above
a. AWL30VC01 3% Hydrochloric Acid
b.
c.
d.

K. Handling Codes for Wastes Listed Above
a. 101 Interim Final
b. Interim Final
d. Interim Final

15. Special Handling Instructions and Additional Information

Emergency Tel. (203)272-3208 Contact Richard Foster

Point of Departure:

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: JAMES FLOOD Signature: James Flood Month Day Year: 9 30 93

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: ROBERT KENYON Signature: Robert Kenyon Month Day Year: 09 30 93

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name Signature Month Day Year

19. Discrepancy Indication Space
1 ea 1850 gal. (ef)

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: Elaine Johnson Signature: Elaine Johnson Month Day Year: 09 30 93

GENERATOR

COPY 3: FACILITY TO GENERATOR

CT F 0288802

EPA Form 8700-22 (Rev. 9/91) Form Approved OMB No.2050-0039. Expires 9/30/94. Previous edition is obsolete.

COPY 3 - FACILITY TO GENERATOR

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Hazardous Waste MANIFEST PROGRAM, State Office Building
Hartford, CT 06106

Please type (or print) *(Form designed for use on elite (12-pitch) typewriter.)*

FOR STATE USE ONLY

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. C.T.D.0.0.1.7.9.3.1.6 Manifest Document No. 00039

2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but may be required by State law.

3. Generator's Name and Mailing Address
Bovano Industries Inc.
830 South Main Street
Cheshire, Ct. 06410

4. Generator's Phone (203 272-3208

A. State Manifest Document Number CT F 0288661

B. G.S.I. (Gen. Site Address) Same

5. Transporter 1 Company Name: Bechem Transport

6. US EPA ID Number: C.T.D.9.8.2.1.9.1.9.4.2

C. S.T.I. (Trans. Lic. Plate #) M62506 MS

7. Transporter 2 Company Name

8. US EPA ID Number

D. Tran. Phone (203 662-1280

9. Designated Facility Name and Site Address
Northland Environmental Inc.
275 Allens Av.
Providence, RI 02905-5003

10. US EPA ID Number: R I D 0 4 0 0 9 8 3 5 2

E. S.T.I. (Trans. Lic. Plate #)

F. Tran. Phone ( )

G. State Facility's ID (Not Required)

H. Facility's Phone (401)781-6340

11. US DOT Description *(Including Proper Shipping Name, Hazard Class, and ID Number)*	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	Waste No.
a. RQ, Waste Corrosive Liquid, N.O.S.(Hydrochloric Acid, Lead) H.C. 8 UN 1760 PG I ERG# 60	1	TT	02000	G	EPA D002 D008 STATE
b.					EPA STATE
c.					EPA STATE
d.					EPA STATE

J. Additional Descriptions for Materials Listed Above
a. ANLNBOVC01 3% Hydrochloric Acid
b.
c.
d.

K. Handling Codes for Wastes Listed Above
a. T01
b.
c.
d.

15. Special Handling Instructions and Additional Information

Emergency Tel. (203)272-3208 Richard Foster

Point of Departure:

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: JAMES FLOOD Signature: James Flood Month 7 Day 21 Year 93

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: ROBERT KENYON Signature: Robert Kenyon Month 07 Day 21 Year 93

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name Signature Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: Richard J. Belmont Signature: Month 07 Day 22 Year 93

Form 8700-22 (Rev. 9/91) Form Approved OMB No.2050-0039. Expires 9/30/94. Previous edition is obsolete.

COPY 3: FACILITY TO GENERATOR

CT F 0288661

COPY 3: FACILITY TO GENERATOR

HM-2 REV. 9/91

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Hazardous Waste MANIFEST PROGRAM, State Office Building
Hartford, CT 06106

Please type (or print) *(Form designed for use on elite (12-pitch) typewriter.)*

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UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator's US EPA ID No. C.T.D.0.7.2.1.3.8.7 9 6 Manifest Document No. 00037	2. Page 1 of 1	Information in the shaded areas is not required by Federal law, but may be required by State law.

3. Generator's Name and Mailing Address: Bovano Industries Inc, 830 South Main Street, Cheshire, Ct. 06410

4. Generator's Phone (203) 272-3208

A. State Manifest Document Number: CT F 0287004

B. G.S.I. (Gen. Site Address): Same

5. Transporter 1 Company Name: Bechem Transport, Inc.

6. US EPA ID Number: C.T.D.9.8.2.1.9.1.9.4.2

C. S.T.I. (Trans. Lic. Plate #): WH207 MC

7. Transporter 2 Company Name:

8. US EPA ID Number:

D. Tran. Phone (203) 582-1280

9. Designated Facility Name and Site Address: Northland Environmental, Inc, 275 Allens Avenue, Providence, RI 02905-5008

10. US EPA ID Number: R I D 0 4 0 0 9 8 3 5 2

E. S.T.I. (Trans. Lic. Plate #):

F. Tran. Phone ( )

G. State Facility's ID (Not Required):

H. Facility's Phone (401)781-6340

11. US DOT Description *(Including Proper Shipping Name, Hazard Class, and ID Number)*	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	Waste No.
a. Waste Corrosive Liquid, N.O.S. (Hydrochloric Acid) Corrosive Material, UN1760 (D002,D008) ERG#60	001	TT	02007	G	EPA D002 D008 STATE
b.					EPA STATE
c.					EPA STATE
d.					EPA STATE

J. Additional Descriptions for Materials Listed Above
a. ANNBOVCOI 95% Water, 3% Hydrochloric Acid
b.
c.
d.

K. Handling Codes for Wastes Listed Above

	Interim	Final		Interim	Final
a.		T01	c.		
b.			d.		

15. Special Handling Instructions and Additional Information
Emergency Tel. (203)272-3208 James Flood

Point of Departure:

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Month Day Year
James A. Flood		05 10 93

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month Day Year
SUSAN P. GRATHWOHL	Susan P. Grathwohl	05 10 93

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month Day Year
Richard J. Belmont		05 10 93

Form 8700-22 (Rev. 9/91) Form Approved OMB No.2050-0039. Expires 9/30/94. Previous edition is obsolete.

COPY 3: FACILITY TO GENERATOR

CT F 0287004

COPY 3: FACILITY TO GENERATOR

12 REV. 9/91

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Hazardous Waste MANIFEST PROGRAM, State Office Building
Hartford, CT 06106

ise type (or print) *(Form designed for use on elite (12-pitch) typewriter.)*

FOR STATE USE ONLY

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. C·T·D·0·7·2·1·3·8·9·6·9 Manifest Document No. 00038

2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but may be required by State law.

3. Generator's Name and Mailing Address
Bovano Industries Inc.
830 South Main Street
Cheshire, Ct. 06410

A. State Manifest Document Number CT F 0287005

B. G.S.I. (Gen. Site Address) Same

4. Generator's Phone (203)272-3208

5. Transporter 1 Company Name: Bechem Transport
6. US EPA ID Number: C T D 9 8 2 1 9 1 9 4 2

7. Transporter 2 Company Name
8. US EPA ID Number

C. S.T.I. (Trans. Lic. Plate #) 4203A CT

D. Tran. Phone (203) 562-130

9. Designated Facility Name and Site Address
Northland Environmental
275 Allens Avenue
Providence, RI 02905-5003

10. US EPA ID Number: R I D 0 4 0 0 9 8 3 5 2

E. S.T.I. (Trans. Lic. Plate #)

F. Tran. Phone ( )

G. State Facility's ID (Not Required)

H. Facility's Phone (401)781-6340

11. US DOT Description *(Including Proper Shipping Name, Hazard Class, and ID Number)*	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	Waste No.
a. RQ, Environmentally Hazardous Solid,N.O.S. H.C.9, ORM-E NA9189 (D008) ERG#31	003	DF	015.00	P	D008
b. RQ Enviromentaly Haz Solid N.O.S, H.C.9, ORM-E NA9189 (D008) ERG#31	002	DM	010.00	P	D008
c.					
d.					

J. Additional Descriptions for Materials Listed Above
BMSNBOVC01 Lead Glass Waste
a.
b. BMSNBOVC01 Lead Glass waste
c.
d.

K. Handling Codes for Wastes Listed Above
a. Interim Final
b. Interim Final

15. Special Handling Instructions and Additional Information
Emergency Tel. (203)272-3208 James flood

Point of Departure:

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

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Printed/Typed Name: James A. Flood — Signature: [signature] — Month Day Year: 05 05 93

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Thomas Owen — Signature: Thomas Owen — Month Day Year: 05 05 93

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: Elaine Johnson — Signature: Elaine Johnson — Month Day Year: 05 05 93

Form 8700-22 (Rev. 9/91) Form Approved OMB No.2050-0039. Expires 9/30/94. Previous edition is obsolete.

COPY 3: FACILITY TO GENERATOR

CT F 0287005

COPY 3: FACILITY TO GENERATOR

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Hazardous Waste MANIFEST PROGRAM, State Office Building
Hartford, CT 06106

Bovano

Please type (or print) *(Form designed for use on elite (12-pitch) typewriter.)* CTD001179316

FOR STATE USE ONLY

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. C.T.D.0.7.2.1.3.8.2.9.6.9 Manifest Document No. 00036

2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but may be required by State law.

3. Generator's Name and Mailing Address
Fusano Industries, Inc.
330 South Main Street, Cheshire, CT 06410

4. Generator's Phone (203) 272-3208

A. State Manifest Document Number CT F 0175628

B. G.S.I. (Gen. Site Address)

5. Transporter 1 Company Name TRI-S INC

6. US EPA ID Number CTD016424210

7. Transporter 2 Company Name

8. US EPA ID Number

C. S.T.I. (Trans. Lic. Plate #) 0203710C

D. Tran. Phone (2038752710

9. Designated Facility Name and Site Address
Northland Environmental, Inc.
275 Allens Avenue
Providence, RI 02903-5003

10. US EPA ID Number RID004009835 2

E. S.T.I. (Trans. Lic. Plate #)

F. Tran. Phone ( )

G. State Facility's ID (Not Required)

H. Facility's Phone 401/781-6340

11. US DOT Description *(Including Proper Shipping Name, Hazard Class, and ID Number)*	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	Waste No.
a. RQ Waste Corrosive Liquid, n.o.s. (hydrochloric acid), Corrosive Material, NA1760 (D002, D008) ERG#60	001	TT	1475	G	EPA D002, D008 STATE
b.					EPA STATE
c.					EPA STATE
d.					EPA STATE

J. Additional Descriptions for Materials Listed Above
ANALYSIS: a. water 93%, copper 3%, cadmium 0.1%, lead 1%, hydrochloric acid 3%
c.
b.
d.

K. Handling Codes for Wastes Listed Above

	Interim	Final		Interim	Final
a.			c.		
b.			d.		

15. Special Handling Instructions and Additional Information

Emergency Phone Number: 203/272-3208

Point of Departure:

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: James A. Flood | Signature | Month 0 4 | Day 1 3 | Year 1 3

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Month 0 4 | Day 1 3 | Year 1 3

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Month | Day | Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name | Signature | Month | Day | Year

GENERATOR — TRANSPORTER — FACILITY

COPY 6: GENERATOR MAILS TO DESTINATION STATE

CT F 0175628

EPA Form 8-90-22 (Rev. 9/91) Form Approved OMB No.2050-0039. Expires 9/30/94. Previous edition is obsolete.

COPY 6: GENERATOR MAILS TO DESTINATION STATE

HM-2 REV. 4/88

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Hazardous Waste MANIFEST PROGRAM, State Office Building
Hartford, CT 06106

Use type (or print) *(Form designed for use on elite (12-pitch) typewriter.)* FOR STATE USE ONLY

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CTD001179316 — Manifest Document No. 00034
2. Page 1 of 1
Information in the shaded areas is not required by Federal law, but may be required by State law.

3. Generator's Name and Mailing Address
Bovano Industries Inc.
PO Box 250 Cheshire CT 06410 (203) 272-3208
4. Generator's Phone ( )

A. State Manifest Document Number CT C 023609
B. State Gen. ID (Site Address) 830 South Main St.

5. Transporter 1 Company Name: Environmental Waste Resources
6. US EPA ID Number: CTD072138969
C. State Tran. ID CT 02507
D. Tran. Phone (203) 753-2282

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Tran. ID
F. Tran. Phone ( )

9. Designated Facility Name and Site Address
Environmental Waste Resources
130 Freight St.
Waterbury CT 06702
10. US EPA ID Number: CTD072138969
G. State Facility's ID PO Box 10008
H. Facility's Phone (203) 753-2282

11. US DOT Description *(Including Proper Shipping Name, Hazard Class, and ID Number)*	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Waste Acid Liquid NOS (D002) Corrosive Material NA 1760	001	TT	0100	G	D002
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above
a. Bright Dip Rinse Water
b. d.

K. Handling Codes for Wastes Listed Above
a. 002

15. Special Handling Instructions and Additional Information
Environmental Waste Resources Stream No. A27534

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

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Printed/Typed Name: James A. Flood — Signature — Month Day Year

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Tom Abe — Signature — Month Day Year 081472

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name — Signature — Month Day Year

COPY 8:

CT C 023609

EPA Form 8700-22 (Rev. 4/88) Form Approved OMB No. 2050-0039. Expires 9/30/91. Previous edition is obsolete.

COPY 8: Generator retains

2 REV. 4/88

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Hazardous Waste MANIFEST PROGRAM, State Office Building
Hartford, CT 06106

e type (or print) *(Form designed for use on elite (12-pitch) typewriter.)*

FOR STATE USE ONLY

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CTD001179316 — Manifest Document No. 00038 5
2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but may be required by State law.

3. Generator's Name and Mailing Address
Bovano Industries Inc.
PO Box 250 Cheshire CT 06410 (203) 272-3208

4. Generator's Phone ( )

A. State Manifest Document Number: CT C 0236098
B. State Gen. ID (Site Address): [illegible]
C. State Tran. ID: [illegible]
D. Tran. Phone: 203 [illegible]
E. State Tran. ID:
F. Tran. Phone ( )

5. Transporter 1 Company Name: Environmental Waste Resources
6. US EPA ID Number: CTD072138969
7. Transporter 2 Company Name:
8. US EPA ID Number:

9. Designated Facility Name and Site Address
Environmental Waste Resources
130 Freight St.
Waterbury CT 06702
10. US EPA ID Number: CTD072138969

G. State Facility's ID: PO Box 10009
H. Facility's Phone: 203-755-2203

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	
a. Waste Acid Liquid NOS (D002) Corrosive Material NA 1760	001	TT	01600	G	[illegible]
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above
a. Bright Dip Rinse Water
b.
c.
d.

K. Handling Codes for Wastes Listed Above
a. D02 T01
b.
c.
d.

15. Special Handling Instructions and Additional Information
Environmental Waste Resources Stream No. A27534
Net 15620

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

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Printed/Typed Name	Signature	Month Day Year
James A. Flood	[signature]	11 11 92

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month Day Year
DONALD MANGINI	[signature]	11 11 92

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month Day Year
Michael Mart	[signature]	11 12 92

COPY 3

CT C 0236098

EPA Form 8700-22 (Rev. 4/88) Form Approved OMB No. 2050-0039. Expires 9/30 91. Previous edition is obsolete.

COPY 3: Facility mails to generator

HM-2 REV. 4/88

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Hazardous Waste MANIFEST PROGRAM, State Office Building
Hartford, CT 06106

10157
65800

Use type (or print) (Form designed for use on elite (12-pitch) typewriter.)

FOR STATE USE ONLY

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CTD001179316 | Manifest Document No. 00033

2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but may be required by State law.

3. Generator's Name and Mailing Address
Bovano Industries Inc.
PO Box 250 Cheshire CT06410 (203)272-3208

A. State Manifest Document Number CT C 0236090

B. State Gen. ID

5. Transporter 1 Company Name: Environmental Waste Resources
6. US EPA ID Number: CTD072138969

C. State Tran. ID

D. Tran. Phone

7. Transporter 2 Company Name
8. US EPA ID Number

E. State Tran. ID

F. Tran. Phone

9. Designated Facility Name and Site Address
Environmental Waste Resources
130 Freight St
Waterbury CT 06702
10. US EPA ID Number: CTD072138969

4 1500

G. State Facility's ID: PO Box 10605

H. Facility Phone: (203) 755-2188

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Waste Acid Liquid NOS (D002) Corrosive Material NA 1760	001	TT	01750	G
b.				
c.				
d.				

J. Additional Descriptions for Materials Listed Above
a. Bright dip rinse water
c.
b.
d.

K. Handling Codes for Wastes Listed Above
a. S02
b.
d.

15. Special Handling Instructions and Additional Information
Environmental Waste Resources Stream No. A27534

Not 16340

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

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Printed/Typed Name: James A. Flood | Signature | Month Day Year: 05 8 92

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Tom Ashe | Signature | Month Day Year: 05 2 92

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: Antoinette Buchina | Signature: Antoinette Buchina | Month Day Year: 05 2 92

COPY 3

CT C 0236090

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COPY 3: Facility mails to generator

HM-2 REV. 4/88

STATE OF CONNECTICUT

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Hazardous Waste MANIFEST PROGRAM, State Office Building
Hartford, CT 06106

11501

60050

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FOR STATE USE ONLY

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CTD001179316 | Manifest Document No. 00034 | 2. Page 1 of 1 | Information in the shaded areas is not required by Federal law, but may be required by State law.

3. Generator's Name and Mailing Address
Bovano Industries Inc.
PO Box 250 Cheshire CT 06410

4. Generator's Phone (203) 272-3208

A. State Manifest Document Number: CT C 0236091

B. State Gen. ID (Site Address): 830 South Main St.

5. Transporter 1 Company Name: Environmental Waste Resources | 6. US EPA ID Number: CTD072138969

C. State Tran. ID: CT 4250-8

D. Tran. Phone: 203 755-2283

7. Transporter 2 Company Name | 8. US EPA ID Number

E. State Tran. ID

F. Tran. Phone ( )

9. Designated Facility Name and Site Address
Environmental Waste Resources
130 Freight St.
Waterbury CT 06702

10. US EPA ID Number: CTD072138969

G. State Facility's ID: PO Box 10009

H. Facility's Phone: 203-755-2283

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Waste Acid Liquid NOS (D002) Corrosive Material NA 1760	001	TT	01060	G	D002 D008
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above
a. Bright Dip Rinse Water
b.
c.
d.

K. Handling Codes for Wastes Listed Above
a. S02 / T01
b.
c.
d.

15. Special Handling Instructions and Additional Information
NET 10,300
Environmental Waste Resources Stream No. A27534

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

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Printed/Typed Name: James A. Flood | Signature | Month Day Year: 08 14 92

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Tom Ashe | Signature | Month Day Year: 08 14 92

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: Antoinette Barbina | Signature: Antoinette Barbina | Month Day Year: 08 14 92

COPY 3

CT C 0236091

EPA Form 8700-22 (Rev. 4/88) Form Approved OMB No. 2050-0039 Expires 9-30-91 Previous edition is obsolete.

COPY 3: Facility mails to generator

48-14-1 (3/89)—7f

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS SUBSTANCES REGULATION

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please print or type. Do not Staple.

Form Approved. OMB No. 2050-0039. Expires 9-30-91

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No.: CTD 001 179 316
Manifest Document No.: 09032

2. Page 1 of 1

Information in the shaded areas is not required by Federal Law. T/L 0215

3. Generator's Name and Mailing Address
BOVABO INDUSTRIES
830 South Main Street, Cheshire, CT 06410

4. Generator's Phone (203) 272-3708

A. State Manifest Document No. NY B 244597 5

B. Generator's ID SITE ADDRESS
830 South Main St.
Cheshire, CT 06410

5. Transporter 1 (Company Name) Franks Vacuum

6. US EPA ID Number NYD 982 792 814

C. State Transporter's ID

D. Transporter's Phone (716) 284-2132

7. Transporter 2 (Company Name)

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone ( )

9. Designated Facility Name and Site Address
FRONTIER CHEMICALS
4626 Royal Avenue
Niagara Falls, NY 14302

10. US EPA ID Number NYD 043 815 703

G. State Facility's ID

H. Facility's Phone (716) 285-8208

GENERATOR

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ. Waste Corrosive Liquid N.O.S. (water, copper nitrate, copper sulfate) Corrosive Material Liquid UN 1760		TT		G	EPA D002,D007 / STATE
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above
a 2568-
b
c
d

K. Handling Codes for Wastes Listed Above
a
b
c
d

15. Special Handling Instructions and Additional Information
24 hour EMERGENCY NAME AND NUMBERJim Flood (203)272-3708

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

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Printed/Typed Name | Signature | Mo. Day Year

TRANSPORTER

17. Transporter 1 (Acknowledgement of Receipt of Materials)
Printed/Typed Name | Signature | Mo. Day Year

18. Transporter 2 (Acknowledgement of Receipt of Materials)
Printed/Typed Name | Signature | Mo. Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name | Signature | Mo. Day Year

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete

In case of emergency or spill immediately call the National Response Center (800) 424-8802 and the N.Y. Dept. of Environmental Conservation (518) 457-7362.

NY B 244597 5

HM-2 REV. 4/88

8116

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Hazardous Waste MANIFEST PROGRAM, State Office Building
Hartford, CT 06106

63963

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UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CTD001179316 — Manifest Document No. 00031

2. Page 1 of 1 — Information in the shaded areas is not required by Federal law, but may be required by State law.

3. Generator's Name and Mailing Address
Bovano Industries Inc.
PO Box 250 Cheshire CT 06410

4. Generator's Phone (203) 272-3208

A. State Manifest Document Number: CT C 0236099

B. State Gen. ID (Site Address): [illegible]

5. Transporter 1 Company Name: Environmental Waste Resources — 6. US EPA ID Number: CTD072138969

C. State Tran. ID: [illegible]

D. Tran. Phone: [illegible]

7. Transporter 2 Company Name — 8. US EPA ID Number

E. State Tran. ID

F. Tran. Phone

9. Designated Facility Name and Site Address
Environmental Waste Resources
130 Freight St
Waterbury Ct 06702

10. US EPA ID Number: CTD072138969

G. State Facility's ID: PO 002 10009

H. Facility's Phone: 203-755-[illegible]

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	Waste No.
a. RQ Hazardous Waste Solid (D008,D006) ORM-E NA 9189	1	CM	00002	T	[illegible]
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above
a. Contaminated Soil
b.
c.
d.

K. Handling Codes for Wastes Listed Above
a. T04
b.
d.

15. Special Handling Instructions and Additional Information
5 yrds. Net 7520
Environmental Waste Resources Stream No. A32949
Profile Code 3B

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

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Printed/Typed Name: James A. Flood — Signature — Month Day Year: 01 08 92

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Salvatore R. Guerrera — Signature — Month Day Year: 01 08 92

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: Michael [illegible] — Signature — Month Day Year: 01 08 92

COPY 3

CT C 0236099

EPA Form 8700-22 (Rev. 4/88) Form Approved OMB No. 2050-0039. Expires 9/30/91. Previous edition is obsolete.

COPY 3: Facility mails to generator

M-2 REV. 4/88

STATE OF CONNECTICUT 63957

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Hazardous Waste MANIFEST PROGRAM, State Office Building
Hartford, CT 06106

8134

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UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CTD001179316 — Manifest Document No. 00030
2. Page 1 of 1 — Information in the shaded areas is not required by Federal law, but may be required by State law.

3. Generator's Name and Mailing Address
Bovanex Industries Inc.
PO Box 250 Cheshire CT 06410

A. State Manifest Document Number: CT C 0236089
B. State Gen. ID (Site Address): [illegible]

4. Generator's Phone: (203) 272-3208
5. Transporter 1 Company Name: Environmental Waste Resources
6. US EPA ID Number: CTD072138969
C. State Tran. ID: CT V 7332
D. Tran. Phone: (203) [illegible]
7. Transporter 2 Company Name
8. US EPA ID Number
E. State Tran. ID
F. Tran. Phone
9. Designated Facility Name and Site Address
Environmental Waste Resources
130 Freight Street
Waterbury CT 06702
10. US EPA ID Number: CTD072138969
G. State Facility's ID: PO Box 10009
H. Facility's Phone: 203-755-2373

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	Waste No.
a. RQ Hazardous Waste Solid (D002, D006) ORM-E NA 9189	001	CM	00 15.5	T	D002
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above
a. Contaminated Mix Soil D002 - D004
b. c. d.

K. Handling Codes for Wastes Listed Above
a. D4 b. c. d.

15. Special Handling Instructions and Additional Information
16 yds. Per code C720 3B
Environmental Waste Resources Stream No. A32949 Net: 32740

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

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Printed/Typed Name: James A. Fiore — Signature: [signature] — Month Day Year: 6 10 92

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Salvatore R. Guercera — Signature: [signature] — Month Day Year: 6 10 92

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: Antoinette Bucheri — Signature: [signature] — Month Day Year: 6 10 92

COPY 3

CT C 0236089

EPA Form 8700-22 (Rev. 4/88) Form Approved OMB No. 2050-0039. Expires 9/30/91. Previous edition is obsolete.

COPY 3: Facility mails to generator

PHM-2 REV. 4/88

STATE OF CONNECTICUT

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Hazardous Waste MANIFEST PROGRAM, State Office Building
Hartford, CT 06106

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UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: CTD001179316 — Manifest Document No.: 00028
2. Page 1 of 1
Information in the shaded areas is not required by Federal law, but may be required by State law.

3. Generator's Name and Mailing Address
Bovano Industries Inc.
PO Box 250 Cheshire CT 06410

A. State Manifest Document Number: CT C 0236094

B. State Gen. ID (Site Address): 830 South Main Street

4. Generator's Phone (203) 272-3208

5. Transporter 1 Company Name: Environmental Waste Resources
6. US EPA ID Number: CTD072138969

C. State Tran. ID: CT 8[illegible]

D. Tran. Phone: (203) 755-2281

7. Transporter 2 Company Name
8. US EPA ID Number

E. State Tran. ID

F. Tran. Phone

9. Designated Facility Name and Site Address
Environmental Waste Resources
130 Freight Street
Waterbury CT 06702
10. US EPA ID Number: CTD072138969

G. State Facility's ID: PO Box 10009

H. Facility's Phone: 203-755-2281

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)

	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	
a. Waste Acid Liquid NOS (D002) Corrosive Material NA 1760 DOT 28408	001	TT	01600	G	D002
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above
a. APPENDIX IV LAB PACK (ORGANIC/INORGANIC)
b. Bright Dipper Water

K. Handling Codes for Wastes Listed Above
a. S02
b.

15. Special Handling Instructions and Additional Information
Net 1940
Environmental Waste Resources Stream No. A27534
PMA Code 085

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

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Printed/Typed Name: James A. Flood — Signature: [signature] — Month Day Year: 07 24 91

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: ALBERT V TATRO — Signature: [signature] — Month Day Year: 07 24 91

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space
Lead 55 ppm D008 (W)

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: MARK — Signature: [signature] — Month Day Year: 07 24 91

COPY 3

CT C 0236094

EPA Form 8700-22 (Rev. 4/88) Form Approved OMB No. 2050-0039. Expires 9-30-91. Previous edition is obsolete.

COPY 3: Facility mails to generator

PHM-2 REV. 4/88

STATE OF CONNECTICUT

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Hazardous Waste MANIFEST PROGRAM, State Office Building
Hartford, CT 06106

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FOR STATE USE ONLY

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CTD001179316 — Manifest Document No. 00027
2. Page 1 of 1 — Information in the shaded areas is not required by Federal law, but may be required by State law.

3. Generator's Name and Mailing Address
Bovano Industries Inc.
P.O. Box 250 Cheshire CT 06410

4. Generator's Phone (203) 272-3208

A. State Manifest Document Number GT C 0236088

B. State Gen. ID (Site Address) 830 South Main St

5. Transporter 1 Company Name — 6. US EPA ID Number
Environmental Waste Resources CTD072138969

C. State Tran. ID CT 4324

D. Tran. Phone (203) 755-2263

7. Transporter 2 Company Name — 8. US EPA ID Number

E. State Tran. ID

F. Tran. Phone

9. Designated Facility Name and Site Address — 10. US EPA ID Number
Environmetal Waste Resources
130 Freight Street
Waterbury CT 06702
CTD072138969

G. State Facility's ID P.O. Box 10009

H. Facility's Phone 203-755-2263

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Waste Acid Liquid NOS (D002) Corrosive Material NA 1760	001	TT	01980	G	D002 D007
b. DOT 8408					
c.					
d.					

MAY 20 1991
BOVANO IND.

J. Additional Descriptions for Materials Listed Above
a. Bright Rinse Water
b. d.

K. Handling Codes for Wastes Listed Above
a. S02
b.

15. Special Handling Instructions and Additional Information
Environmental Waste Resources Stream No. A27534

Not regulated 18988 and code 051

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

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Printed/Typed Name	Signature	Month	Day	Year
CHRISTOPHER H. HANELL		04	11	91

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
ALBERT V TATRO		04	11	91

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
RICHARD MARK		04	11	91

COPY-3

CT C 0236088

EPA Form 8700-22 (Rev. 4/88) Form Approved OMB No. 2050-0039. Expires 9/30/91. Previous edition is obsolete.

COPY 3: Facility mails to generator

PHM-2 REV. 4/88

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Hazardous Waste MANIFEST PROGRAM, State Office Building
Hartford, CT 06106

55470

Please type (or print) (Form designed for use on elite (12-pitch) typewriter.) 00026 FOR STATE USE ONLY

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CTD001179316 — Manifest Document No. 00026
2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but may be required by State law.

3. Generator's Name and Mailing Address
Bovano Industries Inc
PO box 250 Cheshire CT 06410
4. Generator's Phone (203) 272-3208

A. State Manifest Document Number: CT C 0236085
B. State Gen. ID
C. State Tran. ID
D. Tran. Phone
E. State Tran. ID
F. Tran. Phone
G. State Facility's ID
H. Facility Phone 203-755-2283

5. Transporter 1 Company Name: Environmental Waste Resources — 6. US EPA ID Number: CTD072138969
7. Transporter 2 Company Name — 8. US EPA ID Number

9. Designated Facility Name and Site Address
Environmental WAste Resources
130 Freight ST
Waterbury CT 06702
10. US EPA ID Number: CTD072138969

24160

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	Waste No.
a. Waste Acid Liquid NOS (D002) (D008) Corrosive Material NA 1760	001	TT	01250	G	D002 D008
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above
a. Bright Dip Rinse water
b. c. d.

K. Handling Codes for Wastes Listed Above
a. 502 b. d.

15. Special Handling Instructions and Additional Information
In Emergency Call 203-755-2283
EWR Stream no. A 31485
#10,980 prod code 051

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

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Printed/Typed Name: Jancy A Flor — Signature — Month Day Year: 01 09 91

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Tom Ashe — Signature — Month Day Year: 01 09 91

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space
Chrome 35 ppm D007 FO

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: Patty Lisi — Signature — Month Day Year: 01 09 91

GENERATOR — TRANSPORTER — FACILITY

COPY 3

CT C 0236085

EPA Form 8700-22 (Rev. 4/88) Form Approved OMB No. 2050-0039. Expires 9-30-91. Previous edition is obsolete.

COPY 3: Facility mails to generator

IM-2 REV. 4/88

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Hazardous Waste MANIFEST PROGRAM, State Office Building
Hartford, CT 06106

se type (or print) *(Form designed for use on elite (12-pitch) typewriter.)* FOR STATE USE ONLY

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CTD001179316 | Manifest Document No. 0025
2. Page 1 of 1 | Information in the shaded areas is not required by Federal law, but may be required by State law.

3. Generator's Name and Mailing Address
Bovano Industries Inc.
P.O. Box 250 Cheshire CT 06410

4. Generator's Phone (203) 272-3208

5. Transporter 1 Company Name: EWR | 6. US EPA ID Number: CTD0072138969

7. Transporter 2 Company Name | 8. US EPA ID Number

9. Designated Facility Name and Site Address
EWR
130 Freight Street
Waterbury, CT 06702

10. US EPA ID Number: CTD0072138969

A. State Manifest Document Number: CT C 0236087
B. State Gen. ID: 830 S. Main Street Cheshire
C. State Tran. ID
D. Tran. Phone: (203) 272-3208
E. State Tran. ID
F. Tran. Phone
G. State Facility's ID: P.O. Box 10009
H. Facility's Phone: 203-[illegible]

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. [illegible]	0.25	DM	110	G	[illegible]
b. RQ, Hazardous Waste Solid, NOS, (D001-E, D007)	[illegible]	DM	110	G	[illegible]
c.					
d.					

J. Additional Descriptions for Materials Listed Above
a. [illegible]
b. d.

K. Handling Codes for Wastes Listed Above
a. [illegible]
b. [illegible]

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

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Printed/Typed Name | Signature | Month Day Year

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: LYNN MONTANYE | Signature | Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name | Signature | Month Day Year

COPY 8:

CT C 0236087

PA Form 8700-22 (Rev. 4/88) Form Approved OMB No. 2050-0039. Expires 9/30/91. Previous edition is obsolete.

COPY 8: Generator retains

PHM-2 REV. 4/88

STATE OF CONNECTICUT

52324

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Hazardous Waste MANIFEST PROGRAM, State Office Building
Hartford, CT 06106

Please type (or print) (Form designed for use on elite (12-pitch) typewriter.)

FOR STATE USE ONLY

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CTD001179318 Manifest Document No. 00024
2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but may be required by State law.

3. Generator's Name and Mailing Address
Bovano Industries Inc
PO Box 250 Cheshire CT 06410

4. Generator's Phone (203) 272-3208

5. Transporter 1 Company Name: ~~EWR~~ Environmental Waste Resources
6. US EPA ID Number: CTD072138969

7. Transporter 2 Company Name
8. US EPA ID Number

9. Designated Facility Name and Site Address: ~~EWR~~ Environmental Waste Resources
130 Freight St
Waterbury CT 06702
10. US EPA ID Number: CTD072138969

A. State Manifest Document Number: CT C 0236086
B. State Gen. ID (Site Address): 830 S. Main St Cheshire
C. State Tran. ID: 97822
D. Tran. Phone: (203) [illegible]
E. State Tran. ID
F. Tran. Phone
G. State Facility's ID: PO Box 10009
H. Facility's Phone: 203-[illegible]

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Waste Acid Liquid NOS (D002) Corrosive Material NA 1760 DOT E 8408	001	TT	02150	G	[illegible]
b.					
c.					
d.					

RECEIVED
NOV 7 1990
BOVANO IND., INC.

J. Additional Descriptions for Materials Listed Above
a. Bright Mine Water
b.
c.
d.

K. Handling Codes for Wastes Listed Above
a. S02
b.
c.
d.

15. Special Handling Instructions and Additional Information
EWR Stream No. A27534
Net 18740
prod. code 051

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

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Printed/Typed Name: James A. Flood | Signature | Month Day Year: 10 24 90

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: ALBERT Y TATRO | Signature | Month Day Year: 10 24 90

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: PATRICIA DISY | Signature | Month Day Year: 10 24 90

TRANSPORTER

FACILITY

COPY 3

CT C 0236086

EPA Form 8700-22 (Rev. 4/88) Form Approved OMB No. 2050-0039. Expires 9/30/91. Previous edition is obsolete.

COPY 3: Facility mails to generator

M-2 REV. 4/88

55328

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Hazardous Waste MANIFEST PROGRAM, State Office Building
Hartford, CT 06106

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FOR STATE USE ONLY

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: CTD001179316 — Manifest Document No.: 00023
2. Page 1 of 1 — Information in the shaded areas is not required by Federal law, but may be required by State law.

3. Generator's Name and Mailing Address
Bovano Industries, Inc.
P.O. Box 250
Cheshire, CT 06410

4. Generator's Phone: 203-272-3208

A. State Manifest Document Number: CT C 0236084
B. State Gen. ID (Site Address): 830 S. Main Street, Cheshire
C. State Tran. ID: CT 8[illegible]
D. Tran. Phone: 203-[illegible]

5. Transporter 1 Company Name: Environmental Waste Resources — 6. US EPA ID Number: CTD072138969
7. Transporter 2 Company Name — 8. US EPA ID Number:
E. State Tran. ID:
F. Tran. Phone:

9. Designated Facility Name and Site Address
Environmental Waste Resources, Inc.
130 Freight Street
Waterbury, CT 06702
10. US EPA ID Number: CTD072138969

G. State Facility's ID: P.O. Box 1[illegible]
H. Facility's Phone: 203-[illegible]

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Waste Acid Liquid NOS (D002) Corrosive Material NA 1760	001	TT	02000	G	[illegible]
b. ~~RQ Hazardous Waste Solid, ORM-E NA 9189~~ D008 PG. DOT E8408		DM		G	
c.					
d.					

JUL 0[illegible]

J. Additional Descriptions for Materials Listed Above
a. Copper Etching & Bright Dip Rinse Water
b. ~~Sodium Alum Powder~~ PG.
c.
d.

BOVANO IND., INC

K. Handling Codes for Wastes Listed Above
a. [illegible]
b.
c.
d.

15. Special Handling Instructions and Additional Information
EWR Strean No. A27534
~~EWR Stream No. A22128~~ PG

PWL Code - 051

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

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Printed/Typed Name: James A Flood — Signature: [signature] — Month Day Year: 06 27 90

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Albert Y Tatro — Signature: [signature] — Month Day Year: 06 27 90

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: Susan Lethen — Signature: [signature] — Month Day Year: 06 27 90

COPY 3

CT C 0236084

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COPY 3: Facility mails to generator

IM-2 REV. 4/88

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Hazardous Waste MANIFEST PROGRAM, State Office Building
Hartford, CT 06106

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UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: CTD001179316 — Manifest Document No.: 00022
2. Page 1 of 1 — Information in the shaded areas is not required by Federal law, but may be required by State law.

3. Generator's Name and Mailing Address
Bovano Industries, Inc. (203)272-3208
P.O. Box 250 Cheshire, CT 06410

A. State Manifest Document Number: CT C 0236083
B. State Gen. ID (Site Address): [illegible]

4. Generator's Phone (203) 272-3208

5. Transporter 1 Company Name: Environmental Waste Resources — 6. US EPA ID Number: CTD072138969
C. State Tran. ID: [illegible]
D. Tran. Phone: [illegible]

7. Transporter 2 Company Name — 8. US EPA ID Number
E. State Tran. ID
F. Tran. Phone

9. Designated Facility Name and Site Address
Environmental Waste Resources, Inc.
130 Freight Street
Waterbury, CT 06702
10. US EPA ID Number: CTD072138969
G. State Facility's ID: P.O. Box 10009
H. Facility's Phone: (203) [illegible]

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Waste Acid Liquid NOS (D002) Corrosive Material NA 1760 DOT E8408	001	TT	02000	G	D002 D007
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above
Copper Etching & Bright dip Rinse Water
N 17,660

K. Handling Codes for Wastes Listed Above
a. T01
b. d.

15. Special Handling Instructions and Additional Information
EWR Stream NO. A27534

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

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Printed/Typed Name: James A. Floyd — Signature: [signature] — Month Day Year: 03 12 90

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: ALBERT V TATRO — Signature: Albert V Tatro — Month Day Year: 03 12 90

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space
Rej. Code A-110

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: JANET E [illegible] — Signature: [signature] — Month Day Year: 03 12 90

Form 8700-22 (Rev. 4/88) Form Approved OMB No. 2050-0039. Expires 9-30-91. Previous edition is obsolete.

COPY 3: Facility mails to generator

COPY 3

CT C 0236083

2 REV. 4/88

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Hazardous Waste MANIFEST PROGRAM, State Office Building
Hartford, CT 06106

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UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CTD001179316 — Manifest Document No. 00621
2. Page 1 of 1 — Information in the shaded areas is not required by Federal law, but may be required by State law.

Generator's Name and Mailing Address
Bovano Industries, Inc.
P.O. Box 250 Cheshire, CT 06410 (203) 272-3208
Generator's Phone (203) 272-3208

A. State Manifest Document Number: CT C 0236082
B. State Gen. ID (Site Address): 630 S.Main st. Cheshire
C. State Tran. ID: 07-6
D. Tran. Phone (203) 761-1263

Transporter 1 Company Name: Environmental Waste Resources — 6. US EPA ID Number: CTD072138969
Transporter 2 Company Name — 8. US EPA ID Number
E. State Tran. ID
F. Tran. Phone

Designated Facility Name and Site Address: Environmental Waste Resources, Inc.
30 Freight Street
Waterbury, CT 06702
10. US EPA ID Number: CTD072138969
G. State Facility's ID: P.O. Box 10009
H. Facility's Phone: (203) 755-2291

US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	Waste No.
Waste Acid Liquid NOS (D002) Corrosive Material NA 1760	001	TT	1760	G	D002 D007

Additional Descriptions for Materials Listed Above
☐ The above waste, as generated, [illegible]
Copper Etching & Bright Dip Rinse Water

K. Handling Codes for Wastes Listed Above
a. [illegible] b. c. d.

Special Handling Instructions and Additional Information
SWR Stream NO. A27834
5

GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

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Printed/Typed Name — Signature — Month Day Year

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Dennis O'Hanlon — Signature — Month Day Year: 12 04 89

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name — Signature — Month Day Year

Form 8700-22 (Rev. 4/88) Form Approved OMB No. 2050-0039. Expires 9/30/91. Previous edition is obsolete.

COPY 8: Generator retains

COPY 8:

CT C 0236082

IM-2 REV. 4/88

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Hazardous Waste MANIFEST PROGRAM, State Office Building
Hartford, CT 06106

50059

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FOR STATE USE ONLY

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CTD001179316 — Manifest Document No. 00029
2. Page 1 of 1 — Information in the shaded areas is not required by Federal law, but may be required by State law.

3. Generator's Name and Mailing Address
Bovano Industries, Inc.
P.O.Box 250
Cheshire, CT 06410

A. State Manifest Document Number: CT C 0236100
B. State Gen. ID (Site Address): 830 So. Main St., Cheshire

4. Generator's Phone (203) 272-3208

5. Transporter 1 Company Name: Environmental Waste Resources — 6. US EPA ID Number: CTD072138969
C. State Tran. ID
D. Tran. Phone

7. Transporter 2 Company Name — 8. US EPA ID Number
E. State Tran. ID
F. Tran. Phone

9. Designated Facility Name and Site Address
Environmental Waste Resources, Inc
130 Freight Street
Waterbury, Ct. 06702 — 10. US EPA ID Number CTD072138969
G. State Facility's ID: P.O. BOX 1088
H. Facility's Phone: (203) 755-[illegible]

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	
a. Waste Acid Liquid NOS (D002) Corrosive Material NA 1760 DOT E8408	001	TT	02000	G	D-007 D-002
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above
a. Copper Etching & Bright Dip Rinse Water — c. NET 7.8520
b. — d.

K. Handling Codes for Wastes Listed Above
a. T01 — c.
b. — d.

15. Special Handling Instructions and Additional Information
EWR Stream NO. A27534

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

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Printed/Typed Name: ~~JAMES FLOOD OR CHAS HAVELL~~ — Signature: [signature] — Month Day Year: 09 12 89

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: ALBERT V TATRO — Signature: [signature] — Month Day Year: 09 12 89

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: Leonard Wesley — Signature: Leonard Wesley — Month Day Year: 09 12 89

COPY 3

CT C 0236100

EPA Form 8700-22 (Rev. 4/88) Form Approved OMB No. 2050-0039. Expires 9/30 91. Previous edition is obsolete.

COPY 3: Facility mails to generator

M-2 REV. 4/88

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Hazardous Waste MANIFEST PROGRAM, State Office Building
Hartford, CT 06106

Mailed to State 6/2/89

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UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CTD001179316 — Manifest Document No. 00019
2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but may be required by State law.

3. Generator's Name and Mailing Address: Bowers Industries Inc.
P.O. Box 250
Cheshire, CT 06410 (203) 272-3208

A. State Manifest Document Number: CT C 0236081

B. State Gen. ID: 836 So. Main St., Cheshire

4. Generator's Phone ( )

5. Transporter 1 Company Name: Environmental Waste Resources — 6. US EPA ID Number: CTD072138969

C. State Tran. ID:

D. Tran. Phone: 203 [illegible]

7. Transporter 2 Company Name — 8. US EPA ID Number

E. State Tran. ID:

F. Tran. Phone:

9. Designated Facility Name and Site Address: Environmental Waste Resources, Inc.
130 Freight Street
Waterbury, CT 06702 — 10. US EPA ID Number: CTD072138969

G. State Facility's ID: [illegible]

H. Facility's Phone: [illegible]

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	
a. Waste Acid Liquid NOS (D002) Corrosive Material NA 1760	001	TT	01854	G	
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above
a. Copper Etching & Bright Dip Rinse Water
b.
c.
d.

K. Handling Codes for Wastes Listed Above
a.
b.
c.
d.

15. Special Handling Instructions and Additional Information
EWR Stream NO. A27534

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway *according to applicable international and national government regulations, and all applicable State laws and regulations.*

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Printed/Typed Name: James A. Flood — Signature: [signature] — Month Day Year: 06 02 89

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Vincent V Tirto — Signature: [signature] — Month Day Year: 06 02 89

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name — Signature — Month Day Year

COPY 8:

CT C 0236081

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COPY 8: Generator retains

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
Hazardous Waste MANIFEST PROGRAM, State Office Building, Hartford, CT 06106

se print or type. *(Form designed for use on elite (12-pitch) typewriter.)*

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CTD001179316 — Manifest Document No. 00018
2. Page 1 of 1 — Information in the shaded areas is not required by Federal law, but may be required by State law.

3. Generator's Name and Mailing Address
Bovano Industries, Inc.
P. O. Box 250
Cheshire, CT 06410
4. Generator's Phone (203) 272-3208

A. State Manifest Document Number: CT C 01819739
B. State Gen. ID: 830 [illegible]
C. State Tran. ID: CT [illegible]
D. Tran. Phone: (203) 753-[illegible]
E. State Tran. ID:
F. Tran. Phone:
G. State Facility ID: PO Box [illegible]
H. Facility Phone: [illegible]

5. Transporter 1 Company Name: Environmental Waste Resources, Inc.
6. US EPA ID Number: CTD072138969
7. Transporter 2 Company Name
8. US EPA ID Number

9. Designated Facility Name and Site Address
Environmental Waste Resources, Inc
130 Freight Street
Waterbury CT 06702
10. US EPA ID Number: CTD072138969

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Hazardous Waste Solid NOS (F006) Orm-E-NA 9189	001	TT	01000	G
b.				
c.				
d.				

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MAR 21 1989
BOVANO IND., INC.

J. Additional Descriptions for Materials Listed Above
a. Sodium Hydroxide Sludge
b.

K. Handling Codes for Wastes Listed Above
a. T01
b.

15. Special Handling Instructions and Additional Information
Stream No A13123
JW
n 10,080

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

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Printed/Typed Name: James A. Flood — Signature: [signature] — Month Day Year: 03 15 89

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Mike Pilon — Signature: [signature] — Month Day Year: 03 15 89

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: John West — Signature: John West — Month Day Year: 03 15 89

COPY 3: GENERATOR COMPLETED COPY

CT C 0151079

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COPY 3: GENERATOR COMPLETED COPY

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Mail to Sta. 1/4/88

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
Hazardous Waste MANIFEST PROGRAM, State Office Building, Hartford, CT 06106

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UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: CTD001179316 — Manifest Document No.: 00017
2. Page 1 of 1 — Information in the shaded areas is not required by Federal law, but may be required by State law.

3. Generator's Name and Mailing Address
Bovano Industries Inc.
PO Box 250
4. Cheshire CT 06410 (203) 272-3208

A. State Manifest Document Number: CT C 0151078
B. State Gen. ID
C. State Tran. ID
D. Tran. Phone
E. State Tran. ID
F. Tran. Phone
G. State Facility's ID
H. Facility's Phone

5. Transporter 1 Company Name: Environmental Waste Resources — 6. US EPA ID Number: CTD072138969
7. Transporter 2 Company Name — 8. US EPA ID Number:
9. Designated Facility Name and Site Address: Environmental Waste Resources Inc., 130 Freight Street, Waterbury CT 06702 — 10. US EPA ID Number: CTD072138969

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Hazardous Waste Solid NOS (F006) ORM-E-NA9189	001	TT	00750	G
b.				
c.				
d.				

J. Additional Descriptions for Materials Listed Above
a. Sodium Hydroxide XXX Sludge

K. Handling Codes for Wastes Listed Above
a. T01
b. d.

15. Special Handling Instructions and Additional Information
Stream No. A13123

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

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Printed/Typed Name	Signature	Month Day Year
James A. Flood		1 2 3 0 8 8

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month Day Year
Donald H. Sprague	Donald H. Sprague	1 2 3 0 8 8

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month Day Year

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CT C 0151078

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43219

ease print or type. *(Form designed for use on elite (12-pitch) typewriter.)*

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CTD001179316 — Manifest Document No. 00016
2. Page 1 of 1 — Information in the shaded areas is not required by Federal law, but may be required by State law.

3. Generator's Name and Mailing Address
Bovano Industries, Inc.
P.O.Box 250
Cheshire, CT 06410
4. Generator's Phone (203) 272-3208

A. State Manifest Document Number CT C 0151076
B. State Gen. ID 830 So.Main, Cheshire
C. State Tran. ID
D. Tran. Phone
E. State Tran. ID
F. Tran. Phone
G. State Facility's ID
H. Facility's Phone

5. Transporter 1 Company Name: Environmental Waste Resources — 6. US EPA ID Number: CTD072138969
7. Transporter 2 Company Name — 8. US EPA ID Number

9. Designated Facility Name and Site Address
Environmental Waste Resources, Inc.
130 Freight Street
Waterbury, CT 06702
10. US EPA ID Number: CTD072138969

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	Waste No.
a. Hazardous Waste Solid NOS (F006) ORM-E-NA9189	001	TT	00600	G	
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above — K. Handling Codes for Wastes Listed Above
a. Sodium hydroxide sludge — c.
b. — d.

15. Special Handling Instructions and Additional Information
Stream No. A13123

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

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Printed/Typed Name: James A. Flood — Signature — Month Day Year: 09 26 88

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: ROBERT WALKINSHAW — Signature — Month Day Year: 09 26 88

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name — Signature — Month Day Year: 09 26 88

GENERATOR — TRANSPORTER — FACILITY

COPY 3: GENERATOR COMPLETED COPY

CT C 0151076

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Hazardous Waste MANIFEST PROGRAM, State Office Building, Hartford, CT 06106

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UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. C T P0 0 00 0 78 4 8 — Manifest Document No.
2. Page 1 of

Information in the shaded areas is not required by Federal law, but may be required by State law.

A. State Manifest Document Number: CT C 0172151

3. Generator's Name and Mailing Address
Boyano Industries
630 South Main St,
Cheshire, Ct. 06410

4. Generator's Phone 203-272-3208

B. State Gen. ID: Same

5. Transporter 1 Company Name: American Environmental Tech.
6. US EPA ID Number: CT 09821 94996

C. State Tran. ID: [illegible]
D. Tran. Phone: [illegible]

7. Transporter 2 Company Name
8. US EPA ID Number

E. State Tran. ID
F. Tran. Phone

9. Designated Facility Name and Site Address
Hitchcock Gas Engine
50 Cross St.
Bridgeport, Ct. 06606
10. US EPA ID Number: CT D 00 25 9 3 88 7

G. State Facility's ID: Same
H. Facility's Phone: 203-[illegible]

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Waste Flammable Liquid NOS Flammable Liquid UN 1993	001	H	330	G
b.				
c.				
d.				

J. Additional Descriptions for Materials Listed Above: Diesel/gasoline water mixture

K. Handling Codes for Wastes Listed Above: a. b. c. d.

15. Special Handling Instructions and Additional Information
No Smoking
Dike off In case of Spill

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable International and national government regulations, and all applicable State laws and regulations.

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Printed/Typed Name: James R. Flood — Signature: [signature] — Month Day Year: 07 20 88

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: JAY E. Brundage — Signature: Jay E. Brundage — Month Day Year: 07 20 88

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Walter Flynn — Signature: [signature] — Month Day Year: 07 20 88

COPY 3: GENERATOR COMPLETED COPY

CT C 0172151

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M-2 REV. 9/86

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
Hazardous Waste MANIFEST PROGRAM, State Office Building, Hartford, CT 06106

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UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CTD001179316 — Manifest Document No. 00014
2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but may be required by State law.

3. Generator's Name and Mailing Address
Bovaso Industries, Inc.
830 So.Main St
Cheshire, Ct. 06410 (203) 272-3208

4. Generator's Phone ( )

A. State Manifest Document Number: CT C 0151075
B. State Gen. ID: 830 So. Main St
C. State Tran. ID
D. Tran. Phone (203 [illegible]
E. State Tran. ID
F. Tran. Phone
G. State Facility's ID
H. Facility's Phone 203 [illegible]

5. Transporter 1 Company Name: Environmental WasterResources
6. US EPA ID Number: CTD072128969
7. Transporter 2 Company Name
8. US EPA ID Number
9. Designated Facility Name and Site Address
Environmental Waste Resources, Inc.
130 Freight Street
Waterbury, CT 06702
10. US EPA ID Number: CTD072138969

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. RQ Waste Ferric Chloride Solution (D002) Corrisive UN2582	8	DM	165	G
b.				
c.				
d.				

J. Additional Descriptions for Materials Listed Above
a. RQ 100/454 Stream A13120
b.
d.

K. Handling Codes for Wastes Listed Above
a. H01
b.
d.

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

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Printed/Typed Name: James A. Flood — Signature — Month Day Year

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name — Signature — Month Day Year

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CT C 0151075

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M-2 REV. 9/86

6/14/88

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
Hazardous Waste MANIFEST PROGRAM, State Office Building, Hartford, CT 06106

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UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CTD 001179316 — Manifest Document No. 00013
2. Page 1 of 1
Information in the shaded areas is not required by Federal law, but may be required by State law.

3. Generator's Name and Mailing Address
Bovano Industries, Inc.
830 So.Main St., P.O.Box 250
Cheshire, Ct.06410
4. Generator's Phone (203) 272-3208

A. State Manifest Document Number CT C 0151074
B. Generator's ID 830 So.Main,Cheshire,Ct
C. State Tran. ID
D. Tran. Phone (203) 751-1767

5. Transporter 1 Company Name: Environmental Waste Resources
6. US EPA ID Number: CTD 072138969
7. Transporter 2 Company Name
8. US EPA ID Number

E. State Tran. ID
F. Tran. Phone

9. Designated Facility Name and Site Address
Environmental Waste Resources, Inc.
130 Freight Street
Waterbury, CT 06702
10. US EPA ID Number

G. State Facility's ID
H. Facility Phone

11. US DOT Description *(Including Proper Shipping Name, Hazard Class, and ID Number)*	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. RQ Hazardous Waste Solid ORM-E-NA 9189	001	TT	1200	G
b.				
c.				
d.				

J. Additional Descriptions for Materials Listed Above
a. CuON Sludge
b.
c.
d.

K. Handling Codes for Wastes Listed Above
a. T01
b.
c.
d.

15. Special Handling Instructions and Additional Information
Stream NO. A13123

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

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Printed/Typed Name: James A. Flood — Signature — Month Day Year

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name — Signature — Month Day Year

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CT C 0151074

CT C 0151074

2 REV 9/86

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UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CTD001179316 — Manifest Document No. 00612
2. Page 1 of

Information in the shaded areas is not required by Federal law, but may be required by State law.

3. Generator's Name and Mailing Address
Bovano Industries, Inc.
~~630 So. Main St.~~ P.O.Box 280
Cheshire, CT 06410 (203) 272-3208

4. Generator's Phone

A. State Manifest Document Number CT C 0151073
B. State Gen. ID 630 South Main St. Cheshire
C. State Trans. ID 031
D. Trans. Phone 201
E. State Trans. ID
F. Trans. Phone
G. State Facility's ID CTD054
H. Facility's Phone

5. Transporter 1 Company Name: Environmental Waste Resources — 6. US EPA ID Number: CTD072138969
7. Transporter 2 Company Name — 8. US EPA ID Number

9. Designated Facility Name and Site Address
Environmental Waste Resources, Inc.
130 Freight Street
Waterbury, CT 06702
10. US EPA ID Number: CTD072138969

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. RQ Hazardous Waste Solid ~~Sludge~~ NM N.O.S., (FCOW) ORM-E-NA9189	001	TT	00600	G
b.				
c.				
d.				

J. Additional Descriptions for Materials Listed Above
a. Sodium Hydroxide Sludge
b. c. d.

K. Handling Codes for Wastes Listed Above
a. T01
b. c. d.

15. Special Handling Instructions and Additional Information
Scream No A13123

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

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Printed/Typed Name: James A. Flood — Signature — Month Day Year: 03 21 88

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Donald H Sprague — Signature: Donald H Sprague — Month Day Year: 03 21 88

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: Thomas J. Telesco — Signature: Thomas J. Telesco — Month Day Year: 03 21 88

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COPY 3: GENERATOR COMPLETED COPY

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CT C 0151073

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39312

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CTD001179316 — Manifest Document No. 00011
2. Page 1 of 1
Information in the shaded areas is not required by Federal law, but may be required by State law.

3. Generator's Name and Mailing Address
Bovano Industries, Inc.
830 South Main Street
Cheshire, CT 06410 (203) 272-3208

4. Generator's Phone ( )

A. State Manifest Document Number: CT C 0151072
B. State Gen. ID: 830 So. Main St. Cheshire
C. State Tran. ID: 272-3208
D. Tran. Phone: (203) 755-2[illegible]
E. State Tran. ID
F. Tran. Phone
G. State Facility ID: 720730X[illegible]
H. Facility Phone: 203-[illegible]-2[illegible]

5. Transporter 1 Company Name: Environmental Waste Resources
6. US EPA ID Number: CTD072138969
7. Transporter 2 Company Name
8. US EPA ID Number

9. Designated Facility Name and Site Address
Environmental Waste Resources, Inc.
130 Freight Street
Waterbury, CT 06702
10. US EPA ID Number: CTD072138969

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol.
a. RQ Waste Ferric Chloride Solution (D002) Corrisive UN2582	4	DM	220	G
b.				
c.				
d.				

J. Additional Descriptions for Materials Listed Above
a. RQ 300/454 Stream [redacted] A13120
b. d.

K. Handling Codes for Wastes Listed Above
a. 2
b. d.

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: James A. Flood — Signature: James A. Flood — Month Day Year: 03 08 88

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Lyle Montanye — Signature: [illegible] — Month Day Year: 03 08 88

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: William Barbato — Signature: William Barbato — Month Day Year: 03 08 88

EPA Form 8700-22 (Rev. 9-86) Form Approved OMB No. 2050-0039 Expires 9-30-88 Previous edition is obsolete

COPY 3: GENERATOR COMPLETED COPY

COPY 3: GENERATOR COMPLETED COPY

CT C 0151072

HM-2 REV. 5/85

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Hazardous Waste MANIFEST SECTION, State Office Building, Hartford, CT 06106

38079

PLEASE PRINT OR TYPE *(Form designed for use on elite (12-pitch) typewriter.)*

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CTD001179316 | Manifest Document No. 00010

2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but may be required by State law.

3. GENERATOR'S Name and Mailing Address
Bovano of Cheshire
P.O.Box 250, 830 S.Main St., Cheshire, CT 06410

A. State Manifest Document Number CT B 0021808

B. State Gen. ID. SAME

4. GENERATOR'S Phone (203) 272-3208

5. TRANSPORTER 1 Company Name: Environmental Waste Resources | 6. US EPA ID Number: CT 0072138968

C. State Tran. ID CT 423806

D. Tran. Phone (203 755 2283

7. TRANSPORTER 2 Company Name | 8. US EPA ID Number

E. State Tran. ID

F. Tran. Phone ( )

9. DESIGNATED FACILITY Name and Site Address
Environmental Waste Resources
130 Freight St
Waterbury Ct 06725

10. US EPA ID Number: CT D072138968

G. State Facility's ID PO Box 10009

H. Facility's Phone (203 755 2283

11. US DOT Description *(Including Proper Shipping Name, Hazard Class, and ID Number)*

	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	Waste No.
a. RQ Hazardous Waste Solid (~~Sludge Tank~~ N.O.S.) (D006), ORM-E-NA9189	001	TT	01009		D006
b.					
c.					
d.					

Should have been F006 RQR

J. Additional Descriptions for Materials Listed Above
a. Sludge Tank

K. Handling Codes for Wastes Listed Above
a. T01

15. SPECIAL HANDLING Instructions and Additional Information
Stream No A13123

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

Unless I am a small quantity generator who has been exempted by statute or regulation from the duty to make a waste minimization certification under Section 3002(b) of RCRA, I also certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment.

Printed/Typed Name	Signature	Date Month Day Year
James A. Flood		12 2 8

17. TRANSPORTER 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month Day Year
Oscar T Bartlett Jr	Oscar T Bartlett	12 2 88

18. TRANSPORTER 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month Day Year

DISCREPANCY Indication Space

FACILITY OWNER OR OPERATOR: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Date Month Day Year
Janet Fitzpatrick		12 2 88

COPY 3: GENERATOR COMPLETED COPY

CT B 0021808

EPA 8700 22 (Rev. 5-85) Form Approved. OMB No. 2000-0404

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Hazardous Waste MANIFEST SECTION, State Office Building, Hartford, CT 06106

37445

PRINT OR TYPE *(Form designed for use on elite (12-pitch) typewriter.)*

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CTD001179316. . . . | Manifest Document No. 00009.

2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but may be required by State law.

GENERATOR'S Name and Mailing Address
Bovano Industries, Inc.
830 So.Main Street
Cheshire, CT 06410
GENERATOR'S Phone ( ) (203)272-3208

A. State Manifest Document Number: CT B 0021807
B. State Gen. ID: 830 S.Main St Cheshire, CT 06410

TRANSPORTER 1 Company Name: Environmental Waste Resources
6. US EPA ID Number: CTD072138969. . . .
C. State Tran. ID: CT/3394
D. Tran. Phone: (203) 755-2283

TRANSPORTER 2 Company Name:
8. US EPA ID Number: . . . . . .
E. State Tran. ID:
F. Tran. Phone: ( )

DESIGNATED FACILITY Name and Site Address
Environmental Waste Resources, Inc.
130 Freight Street
Waterbury, CT 06702
10. US EPA ID Number: CTD072138969. . . .
G. State Facility's ID: PO BOX 10009
H. Facility's Phone: (203) 755-2283

11. US DOT Description *(Including Proper Shipping Name, Hazard Class, and ID Number)*	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	Waste No.
RQ, Hazardous Waste Solid NOS (D008) ORM-E NA 9189	. . 1	DM	. . . 55	G	D008
RQ Waste Flammable Liquid NOS(D001) Flammable Liquid, UN1993	. . 2	DM	. . . 55	G	D001
RQ Waste Flammable Liquid NOS(D001) Flammable Liquid UN1993	. . 1	DM	. . . 55	G	D001
Waste Ferric Chloride Solution (D006) Corrosive UN2582	. . 4	DM	. . . 55	G	D002 ~~D006~~

J. Additional Descriptions for Materials Listed Above
a. Leaded Glass Powder
c. Lacquer & Water
b. ~~WWXX~~ Water Displacement Liquid RQ100/454 A13120

K. Handling Codes for Wastes Listed Above
a. ~~22128~~ 22C
c. ~~22126~~ 22C
b. ~~22127~~ 22C
d. ~~S01~~ 2 MM

L. SPECIAL HANDLING Instructions and Additional Information
1A. 22128 11C 22126 A. S01 C. S01
1B. 22127 11d. 13120 B S01 D. S01

M. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

Unless I am a small quantity generator who has been exempted by statute or regulation from the duty to make a waste minimization certification under Section 3002(b) of RCRA, I also certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment.

Printed/Typed Name: James A. Flood | Signature: | Date Month Day Year: 11 13 87

N. TRANSPORTER 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: KYLE MONTANYE | Signature: | Date Month Day Year: 11 13 87

O. TRANSPORTER 2 Acknowledgement of Receipt of Materials
Printed/Typed Name: | Signature: | Date Month Day Year: . . . .

P. DISCREPANCY Indication Space

Q. FACILITY OWNER OR OPERATOR: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19
Printed/Typed Name: Sherri L. Carleton | Signature: Sherri L Carleton | Date Month Day Year: 11 13 87

Form 8700-22 (Rev. 5-85) *Form Approved. OMB No. 2000-0404. Expires 7-31 86* Previous edition is obsolete.

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CT B 0021807

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Hazardous Waste MANIFEST SECTION, State Office Building, Hartford, CT 06106

35634

PRINT OR TYPE (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CTD001179316 | Manifest No. 00008

2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but may be required by State law.

3. GENERATOR'S Name and Mailing Address
Bovano Industries Inc.
830 s. Main St, PO Box 250
Cheshire CT 06410
4. Generator's Phone (203) 272-3208

A. State Manifest Document Number: CT B 0021811
B. State Gen. ID: 830 s main st Cheshire, CT. 06410

5. TRANSPORTER 1 Company Name: Environmental Waste Resources
6. US EPA ID Number: CTD072138969

C. State Tran. ID: ~~CTD072138969~~ 53371
D. Tran. Phone: (203) 755-2283

7. TRANSPORTER 2 Company Name
8. US EPA ID Number

E. State Tran. ID
F. Tran. Phone ( )

9. DESIGNATED FACILITY Name and Site Address
Environmental Waste Resources Inc
130 Freight St
Waterbury CT 06702
10. US EPA ID Number: CTD072138969

G. State Facility's ID: Po Box 10009
H. Facility's Phone: (203) 755-2283

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
RQ Waste Ferric Chloride Solution (D006) Corrosive UN2582 MM	02	DM	110	G	D006

J. Additional Descriptions for Materials Listed Above
a. R.Q. - 1000/454

K. Handling Codes for Wastes Listed Above
a. SO_2

15. SPECIAL HANDLING Instructions and Additional Information
EWR Stream no. A13120

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

Unless I am a small quantity generator who has been exempted by statute or regulation from the duty to make a waste minimization certification under Section 3002(b) of RCRA, I also certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment.

Printed/Typed Name: James A Blood | Signature | Date Month Day Year: 07 31 87

17. TRANSPORTER 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: ROBERT WALKINSHAW | Signature | Date Month Day Year: 07 31 87

18. TRANSPORTER 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Date Month Day Year

19. DISCREPANCY Indication Space

20. FACILITY OWNER OR OPERATOR: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19
Printed/Typed Name: William Barbato | Signature: William Barbato | Date Month Day Year: 08 03 87

Form 8700-22 (Rev. 5-85) Form Approved. OMB No. 2000-0404. Expires 7-31-86 Previous edition is obsolete.

COPY 3: GENERATOR COMPLETED COPY

CT B 0021811

COPY 3: GENERATOR COMPLETED COPY

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Hazardous Waste MANIFEST SECTION, State Office Building, Hartford, CT 06106

PLEASE PRINT OR TYPE (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CTD001179316 — Manifest No. 00004
2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but may be required by State law.

3. GENERATOR'S Name and Mailing Address
NOVANO OF CHESHIRE INC
PO BOX 250 830 SOUTH MAIN ST CHESHIRE CT 06410

4. GENERATOR'S Phone (203) 272-3208

A. State Manifest Document Number: CT B 0021814

B. State Gen. ID: 830 S MAIN ST CHESHIRE CT 06410

5. TRANSPORTER 1 Company Name: EWR INC
6. US EPA ID Number: CTD072138969

C. State Tran. ID: CT 1563206

D. Tran. Phone (203) 7552283

7. TRANSPORTER 2 Company Name:
8. US EPA ID Number:

E. State Tran. ID:

F. Tran. Phone ( )

9. DESIGNATED FACILITY Name and Site Address
EWR INC
130 FREIGHT ST WATERBURY CT 06702
10. US EPA ID Number: CTD072138969

G. State Facility's ID: SAME

H. Facility's Phone (203) 755-2283

GENERATOR

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. HAZARDOUS WASTE SOLID NORMNA9189	121	TT	21500	G	D006
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above
a. c.
b. d.

K. Handling Codes for Wastes Listed Above
a. c.
b. d.

15. SPECIAL HANDLING Instructions and Additional Information
STREAM NO. A13123

Mailed 9/15/88

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

Unless I am a small quantity generator who has been exempted by statute or regulation from the duty to make a waste minimization certification under Section 3002(b) of RCRA, I also certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment.

Printed/Typed Name: JAMES A FLOOD — Signature: — Date (Month Day Year):

TRANSPORTER

17. TRANSPORTER 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: ALBERT V TATRO — Signature: Albert V Tatro — Date (Month Day Year): 9 15 88

18. TRANSPORTER 2 Acknowledgement of Receipt of Materials
Printed/Typed Name: — Signature: — Date (Month Day Year):

FACILITY

19. DISCREPANCY Indication Space

20. FACILITY OWNER OR OPERATOR: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19
Printed/Typed Name: — Signature: — Date (Month Day Year):

EPA Form 8700-22 (Rev. 9-85) Form Approved. OMB No. 2000-0404. Expires 7-31-86 Previous edition is obsolete.

HM-2 REV. 5/85

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Hazardous Waste MANIFEST SECTION, State Office Building, Hartford, CT 06106

Rec'd back 7/1/87

35064

PLEASE PRINT OR TYPE *(Form designed for use on elite (12 pitch) typewriter.)*

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CTD001179316 — Manifest Document No. 00007

2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but may be required by State law.

3. GENERATOR'S Name and Mailing Address
Bovano Industries, Inc.
P.O.Box 250, 830 So.Main St., Cheshire, Ct.06410

4. GENERATOR'S Phone (203) 272-3208

A. State Manifest Document Number: CT B 0021810

B. State Gen. ID: 830 S.Main St. Cheshire, Ct.06410

5. TRANSPORTER 1 Company Name: Environmental Waste Resources

6. US EPA ID Number: CTD072138969

C. State Tran. ID: CT3[illegible]4AF791

D. Tran. Phone (203) 755-2283

7. TRANSPORTER 2 Company Name

8. US EPA ID Number

E. State Tran. ID

F. Tran. Phone ( )

9. DESIGNATED FACILITY Name and Site Address
Environmental Waste Resources Inc.
130 Freight Street
Waterbury, Ct. 06702

10. US EPA ID Number: CTD072138969

G. State Facility's ID: 10009 ~~Solid~~ PO Box

H. Facility's Phone (203) 755-2283

11. US DOT Description *(Including Proper Shipping Name, Hazard Class, and ID Number)*	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	Waste No.
a. Hazardous Waste Solid #ORMNA9189	1	TT	01000	G	D006 F006
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above
a. Metal Hydroxide Sludge
b. d.

K. Handling Codes for Wastes Listed Above
a. T01 c.
b. d.

15. SPECIAL HANDLING Instructions and Additional Information

Stream No. A13123

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

Unless I am a small quantity generator who has been excepted by statute or regulation from the duty to make a waste minimization certification under Section 3002(b) of RCRA, I also certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment.

Printed/Typed Name: James A. Flood — Signature: [signature] — Date (Month Day Year): 06 25 87

17. TRANSPORTER 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: ROBERT WARKINSLAW — Signature: [signature] — Date (Month Day Year): 06 25 87

18. TRANSPORTER 2 Acknowledgement of Receipt of Materials

Printed/Typed Name — Signature — Date (Month Day Year)

19. DISCREPANCY Indication Space

20. FACILITY OWNER OR OPERATOR: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19

Printed/Typed Name: STERLING CARDS — Signature: [signature] — Date (Month Day Year): 06 25 87

GENERATOR — TRANSPORTER — FACILITY

COPY 3: GENERATOR COMPLETED COPY

CT B 0021810

EPA Form 8700-22 (Rev. 5-85) *Form Approved. OMB No. 2000-0404, Expires 7-31-86* Previous edition is obsolete.

COPY 3: GENERATOR COMPLETED COPY

EPHM-2 REV. 5/85

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Hazardous Waste MANIFEST SECTION, State Office Building, Hartford, CT 06106

PLEASE PRINT OR TYPE *(Form designed for use on elite (12-pitch) typewriter.)*

33546

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CTD001179316 | Manifest Document No. 00006 | 2. Page 1 of 1 | Information in the shaded areas is not required by Federal law, but may be required by State law.

3. GENERATOR'S Name and Mailing Address
Bovano Industries, Inc.
P.O.Box 250, ~~830 So.Main St~~ Cheshire, Ct.

4. GENERATOR'S Phone (203) 27203298

A. State Manifest Document Number: CT B 0021813
B. State Gen. ID: 830 S.Main St Cheshire, Ct. 06410

5. TRANSPORTER 1 Company Name: Environmental Waste Resources
6. US EPA ID Number: CTD072138969
C. State Tran. ID: CT37854
D. Tran. Phone (203) 755-2283

7. TRANSPORTER 2 Company Name
8. US EPA ID Number
E. State Tran. ID
F. Tran. Phone ( )

9. DESIGNATED FACILITY Name and Site Address
Environmental Waste Resources
130 Freight St
Waterbury, Ct.
10. US EPA ID Number: CTD072138969

G. State Facility's ID: WP ~~Same~~ BOX P.O. 10009
H. Facility's Phone (203) 755-2283

11. US DOT Description *(Including Proper Shipping Name, Hazard Class, and ID Number)*	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	Waste No.
a. Waste Ferric Chloride Solution Corrosive ~~[illegible]~~ ~~1000/454~~ (R.Q.) C.H. UN 2582	5	WP CF	275	G	WP D002
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above
a. R.Q. - 1000/454
b.
c.
d.

K. Handling Codes for Wastes Listed Above
a. SO_2
b.
c.
d.

15. SPECIAL HANDLING Instructions and Additional Information
EWR Stream No. A13120

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

Unless I am a small quantity generator who has been exempted by statute or regulation from the duty to make a waste minimization certification under Section 3002(b) of RCRA, I also certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment.

Printed/Typed Name: James A. Flood | Signature | Date Month Day Year: 3/27/87

17. TRANSPORTER 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Willie J. Parker | Signature: Willie J. Parker | Date Month Day Year: 3/27/87

18. TRANSPORTER 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Date Month Day Year

RECEIVED MAR 30 1987

19. DISCREPANCY Indication Space

20. FACILITY OWNER OR OPERATOR: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19
BOVANO IND. INC.
Printed/Typed Name: Roy Laudate | Signature: Roy Laudate | Date Month Day Year: 3/25/87

GENERATOR / TRANSPORTER / FACILITY

COPY 3: GENERATOR COMPLETED COPY

CT B 0021813

EPA Form 8700-22 (Rev 5-85) *Form Approved. OMB No. 2000-0404. Expires 7-31 86* Previous edition is obsolete.

COPY 3: GENERATOR COMPLETED COPY

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STATE OF CONNECTICUT

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Hazardous Waste MANIFEST SECTION, State Office Building, Hartford, CT 06106

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3144

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UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CTD001179316 . . . | Manifest Document No. 00005.

Page 1 of 1

Information in the shaded areas is not required by Federal law, but may be required by State law.

3. GENERATOR'S Name and Mailing Address
Bovano IND. INC.
Bovano of Cheshire inc
PO Box 250 Cheshire CT 06410 203-272-3208

4. GENERATOR'S Phone ( )

5. TRANSPORTER 1 Company Name
Environmental Waste Resources
~~EWR~~ Inc.

6. US EPA ID Number CTD072138969 . . .

7. TRANSPORTER 2 Company Name

8. US EPA ID Number . . . . . .

9. DESIGNATED FACILITY Name and Site Address
Environmental Waste Resources
~~EWR Inc~~
130 Freight St Waterbury CT

10. US EPA ID Number CTD072138969 . . .

A. State Manifest Document Number CT B 0021815

B. State Gen. ID 830 S Main St Cheshire CT 06410

C. State Tran. ID [redacted] CT 7834

D. Tran. Phone (203) 755-2283

E. State Tran. ID

F. Tran. Phone ( )

G. State Facility's ID SAME

H. Facility's Phone (203) 755-2283

11. US DOT Description *(Including Proper Shipping Name, Hazard Class, and ID Number)*	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Waste Ferric Chloride Solution Corrosive UN2582	19	DM	1045	G	D002
b.					
c. ACCT. NO. POSTING					
d. DATE PAID CHECK NO.					

J. Additional Descriptions for Materials Listed Above
APPV'D. R.Q. - 1000/454

K. Handling Codes for Wastes Listed Above
a. S02

15. SPECIAL HANDLING Instructions and Additional Information
EWR Stream no. A13120

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

Unless I am a small quantity generator who has been exempted by statute or regulation from the duty to make a waste minimization certification under Section 3002(b) of RCRA, I also certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment.

Printed/Typed Name: James A Flood | Signature | Date: Month 10 Day 29 Year 86

17. TRANSPORTER 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: JOHN W ARCHAMBEAULT JR | Signature | Date: Month 10 Day 29 Year 86

18. TRANSPORTER 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Date: Month Day Year

19. DISCREPANCY Indication Space

20. FACILITY OWNER OR OPERATOR: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19
Printed/Typed Name: BRUCE HILLMAN | Signature | Date: Month 10 Day 29 Year 86

Form 8700-22 (Rev. 5-85) *Form Approved. OMB No. 2000-0404. Expires 7-31 86* Previous edition is obsolete.

COPY 3: GENERATOR COMPLETED COPY

COPY 3: GENERATOR COMPLETED COPY

C B 0021815

STATE OF CONNECTICUT 26574

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Hazardous Waste MANIFEST SECTION, State Office Building, Hartford, CT 06106

USE 00003 NEXT

(TYPE (Form designed for use on elite (12-pitch) typewriter.)

FORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. .CTD 001179316. . . | Manifest Document No. . . . . | 2. Page 1 of 1 | Information in the shaded areas is not required by Federal law, but may be required by State law.

GENERATOR'S Name and Mailing Address
BOVANO IND. INC.
830 SOUTH MAIN ST. CHESHIRE, CT. 06410

A. State Manifest Document Number: CT B 0007548

B. State Gen. ID: SAME

GENERATOR'S Phone (203) 272-3208

TRANSPORTER 1 Company Name: SEALAND ENVIRONMENTAL | 6. US EPA ID Number: CTD 980521280. . .

C. State Tran. ID: CT 1469 A

D. Tran. Phone (203) 735-1817

TRANSPORTER 2 Company Name | 8. US EPA ID Number: . . . . . .

E. State Tran. ID

F. Tran. Phone ( )

DESIGNATED FACILITY Name and Site Address
E. W. R. INC.
130 FREIGHT ST.
WATERBURY, CT. 06702

10. US EPA ID Number: CTD 072138969. . .

G. State Facility's ID: SAME

H. Facility's Phone (203) 755-2283

US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	Waste No.
HAZARDOUS WASTE SOLID N.O.S. ORM-E NA 9189	001	CM	15	Y	F006

Additional Descriptions for Materials Listed Above
METAL HYDROXIDE SLUDGE AND SOIL

K. Handling Codes for Wastes Listed Above
a. T04 b. c. d.

BLENDED/CHEMICALLY FIXATED PRIOR TO LANDFILL SHIPMENT

SPECIAL HANDLING Instructions and Additional Information
STREAM #A13122

GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

Unless I am a small quantity generator who has been exempted by statute or regulation from the duty to make a waste minimization certification under Section 3002(b) of RCRA, I also certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment.

Printed/Typed Name	Signature	Date (Month Day Year)
DAVID W. FLOOD	David W. Flood	12 19 85

TRANSPORTER 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)
James T Schwitz	[illegible]	12 19 85

TRANSPORTER 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)

DISCREPANCY Indication Space
TICKETED FOR OVERWEIGHT-REASON FOR TRANSFERING LOAD ONTO ANOTHER TRUCK-AS PER MARK ECSADY, E.W.R., NO WEIGHT TICKET-AS PER DAVE GREEN

FACILITY OWNER OR OPERATOR: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19

Printed/Typed Name	Signature	Date (Month Day Year)
JANet ENGHoffer	[illegible]	12 19 85

COPY 3: GENERATOR COMPLETED COPY

CT B 0007548

700-22 (Rev. 5-85) Form Approved. OMB No. 2000-0404. Expires 7-31 86 Previous edition is obsolete.

COPY 3: GENERATOR COMPLETED COPY

HM-2 REV. 3/84

STATE OF CONNECTICUT

25484

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Hazardous Waste MANIFEST SECTION, State Office Building, Hartford, CT 06106

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

13123

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. C.T.D.0.0.1.1.7.9.3.1.6 — Manifest Document No. 0.0.0.2

2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but may be required by State law.

3. Generator's Name and Mailing Address
Bovano of Cheshire
P.O.Box 250, 830 So.Main St., Cheshire, Ct.06410

4. Generator's Phone (203) 272-3208

A. State Manifest Document Number: CT A 0078820

B. State Gen. ID: 830 S. Main St. Cheshire CT 06410

5. Transporter 1 Company Name: EWR, Inc

6. US EPA ID Number: CTD072138969. . . .

C. State Tran. ID: CT/E63204

D. Tran. Phone: (203) 755-2283

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Tran. ID

F. Tran. Phone

9. Designated Facility Name and Site Address
EWR, Inc.
130 Freight St. Waterbury, Ct. 06702

10. US EPA ID Number: CTD072138969. . . .

G. State Facility's ID: Same

H. Facility's Phone: (203) 755-2283

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	Waste No.
a. Hazardous waste solid, n.o.s. ORM, NA9189 E 70	001	TT	00800	G	D006
b.					
c.					
d.					

J. Additional Description for Materials Listed Above
a. cadmium CD 6.5
b.
c.
d.

K. Handling Codes for Waste Listed Above
a. T01
b.
c.
d.

15. Special Handling Instructions and Additional Information
A13123 I have signed waste minimization statement

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations, and all applicable State laws and regulations.

Printed/Typed Name: James A Blood — Signature: [signature] — Date: Month 09 Day 30 Year 85

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: ALBERT V TATRO — Signature: [signature] — Date: Month 09 Day 30 Year 85

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Date: Month . Day . Year .

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: JANET EDIGHOFFER — Signature: [signature] — Date: Month 09 Day 30 Year 85

COPY 3: GENERATOR COMPLETED COPY

CT A 0078820

Form 8700-22 (3-84) Form Approved. OMB No. 2000-0404. Expires 7-31-86

COPY 3: GENERATOR COMPLETED COPY

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

FACILITY ANNUAL REPORT

(This information is required pursuant to Section 25-54cc(c) of Connecticut's Hazardous Waste Management Regulations)

RECEIVED
MAR 29 1983
HAZARDOUS MATERIALS MANAGEMENT UNIT

This report is for the year ending December 31, 19 82.

Installation EPA I.D. Number: CTD001179316.

I. Name of Installation: Bovano Ind. Inc.

Installation Mailing Address: P.O. Box 250
Street Name and Number
Cheshire | Ct. | 06410
Town | State | Zip Code

Location of Installation: 830 So. Main St.
Street Name and Number
Cheshire | Ct. | 06410
Town | State | Zip Code

Installation Contact:

Name: David W. Flood

Title: President Phone: 203-272-3208

I. Cost Estimates for Facilities:

A. Closure: $200 - Post Closure: None

II. Ground Water Monitoring:

A. Did any of the ground water analyses indicate levels of parameters above drinking water standards? Yes____ No X.

If yes, please list parameters of concern and highest levels found:____.

B. Did any of the statistical comparisons required pursuant to 40 CFR 265.93(b) indicate a significant increase (or pH decrease) in any of the monitoring wells?

Yes____ No X. If yes, please list parameters of concern and highest levels found:____.

(. Owner/Operator Certification:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents pertaining thereof and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

David W. Flood A. Owner Signature	David W. Flood President B. Name & Official Title (type or print)	3/28/83 Date Signed
David W. Flood A. Operator Signature	David W. Flood President B. Name & Official Title (type or print)	3/28/83 Date Signed

Phone:
165 Capitol Avenue • Hartford, Connecticut 06106

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EPHM 2 REV. 3/84

opies 7+8 Mailed to State 4/11/85

STATE OF CONNECTICUT T# 23193

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Hazardous Waste MANIFEST SECTION, State Office Building, Hartford, CT 06106

Please print

lease print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CT D 0 0 1 1 7 9 3 1 6. Manifest Document No. 0 0 0 1

2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but may be required by State law.

3. Generator's Name and Mailing Address
BOVANO OF CHESHIRE
PO BOX 250 CHESHIRE CT 06410

4. Generator's Phone (203) 272-3208

A. State Manifest Document Number CT A 0054253

B. State Gen. ID 830 E MAIN ST CHESHIRE CT 06410

5. Transporter 1 Company Name: EWR INC.

6. US EPA ID Number: CTD072138969

C. State Tran. ID E 1965 7 CT

D. Tran. Phone 203 755-2283

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Tran. ID

F. Tran. Phone

9. Designated Facility Name and Site Address
EWR INC.
130 FREIGHT ST WATERBURY, CT 06702

10. US EPA ID Number: CTD072138969

G. State Facility's ID: SAME

H. Facility's Phone 203 755-2283

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)

	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	Waste No.
a. WASTE FERRIC CHLORIDE SOLUTION CORROSIVE UN2582 RQ	18	DM	990	G	D002
b.					
c.					
d.					

J. Additional Description for Materials Listed Above
a. R.Q. - 1000/454
b.
c.
d.

K. Handling Codes for Waste Listed Above
a. S02
b.
b.
d.

15. Special Handling Instructions and Additional Information
A13120

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations, and all applicable State laws and regulations.

Printed/Typed Name: JAMES A. FLOOD — Signature — Date: Month 04 Day 10 Year 85

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: JOHN W ARCHAMBEAULT JR — Signature: John W Archambeault Jr. — Date: Month 04 Day 10 Year 85

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Date: Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: Michelle Dykers — Signature — Date: Month 04 Day 10 Year 85

GENERATOR

TRANSPORTER

FACILITY

FOR SPILLS WITHIN CONNECTICUT

COPY 3: GENERATOR COMPLETED COPY

CT A

FACILITY ANNUAL REPORT

FORM HW-5
Jan. 1983

State of Connecticut
Department of Environmental Protection
Hazardous Waste Management Section
State Office Building
Hartford, Connecticut 06106

FACILITY NAME: Bovano Ind Inc

EPA I.D.# CT D00 1179316 YEAR OF 1982

Generator Name Bovano Ind Inc

Generator Address: 830 So. Main St.

City, State, Zip Code: Cheshire, ct. 06410

Generator EPA I.D. #: CT D00 1179316

Note: Photocopy this page before completing if more space is required.

X. Waste Identification

Proper U.S. DOT Shipping Name and Description if Waste is N.O.S.	B. Waste Number	C. Volume and/or Weight	D. Units	E. Handling Method
Copper Hydroxide	F001	35-40 gal	/Year	Sludge Pit Storage S04

COMMENTS:

(Enter "A", "B", "C", etc. behind the "2" to identify photocopied pages)

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

FACILITY ANNUAL HAZARDOUS WASTE REPORT FOR 1984

Read all instructions carefully before making any entries on form.

RECEIVED
JUN 5 1985
HAZARDOUS MATERIALS MANAGEMENT UNIT

I. NON-REGULATED STATUS

This facility did not treat, store, or dispose of regulated quantities of hazardous waste at any time during 1984..... _____

Explain your NON-REGULATED STATUS in the space to the right above.

This Facility's NON-REGULATED STATUS is expected to apply: _____ For 1984 only _____ Permanently _____ Other (explain in Comment Section)

II. FACILITY EPA I.D. NUMBER
CTD 001179316

III. NAME OF FACILITY
Bovano Ind. Inc.

IV. FACILITY MAILING ADDRESS
P. O. Box 250
Street or Post Office Box
Cheshire, Ct. 06410
City or Town State Zip Code

V. LOCATION OF FACILITY
830 South Main St.
Street or Route Number
Cheshire, Ct. 06410
City or Town State Zip Code

VI. FACILITY CONTACT
David Flood Phone 272-3208

VII. COST ESTIMATE FOR FACILITIES
A. Closure $500 B. Post-Closure _____ C. Financial Assurance Updated ____
Put X if YES - Leave Blank if NO

VIII. ANNUAL GROUNDWATER MONITORING REPORT SUBMITTED
Put X if YES - Leave Blank if NO _____

IX. TOTAL WASTE IN STORAGE ON DECEMBER 31, 1984

	AMOUNT	UOM		AMOUNT	UOM		AMOUNT	UOM
S01	8,000	P	S02			S03		
S04	2,000	P	S05					

X. CERTIFICATION
I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Print/Type Name	Title	Signature of Authorized Representative	Date Signed
David W. Flood	President	David W. Flood	5/31/85

Phone:
165 Capitol Avenue • Hartford, Connecticut 06106

An Equal Opportunity Employer

Do not make entries in shaded area

OMB #: 2050-0024 Expires: 12-31-86

ENVIRONMENTAL PROTECTION AGENCY

FACILITY BIENNIAL HAZARDOUS WASTE REPORT FOR 1983

This report is for the calendar year ending December 31, 1983.
Read All Instructions Carefully Before Making Any Entries on Form

I. NON-REGULATED STATUS

See instructions before completing this section.

This facility did not treat, store, or dispose of regulated quantities of hazardous waste at any time during 1983. . . . . ☐

Explain your non-regulated status in the space below.

Please print/type with elite type (12 characters per inch)

II. FACILITY EPA I.D. NUMBER

FCTD [redacted] 001179316 TAC 1

This Facility's Non-Regulated Status is Expected to Apply:

☐ For 1983 Only ☐ Permanently

☐ Other (explain in comment section)

C303 ENTRY (OFFICIAL USE ONLY): ☐

III. NAME OF FACILITY

Bovano of Cheshire

IV. FACILITY MAILING ADDRESS

3 P. O. Box 250

Street or P.O. Box

4 Cheshire, Ct. 06410 — CT — 06410

City or Town — State — Zip Code

V. LOCATION OF FACILITY (if different than section IV above)

5 830 South Main Street

Street or Route number

6 Cheshire, Ct. 06410 — CT — 06410

City or Town — State — Zip Code

RECEIVED APR 5 1984 HAZARDOUS MATERIALS MANAGEMENT UNIT

VI. FACILITY CONTACT

2 Flood, David W.

Name (last and first)

203 – 272 – 3208

Phone No. (area code & no.)

VII. COST ESTIMATES FOR FACILITIES

$ _____ A. Cost Estimate for Facility Closure

$ _____ B. Cost Estimate for Post Closure Monitoring and Maintenance (disposal facilities only)

VIII. CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

David W. Flood, President — David W. Flood — 4/3/84

Print Type Name — Title — Signature of Authorized Representative — Date Signed

EPA Form 8700-13B(5-80) (Revised 11-83)

Tear out here

ake entries in shaded area

ENVIRONMENTAL PROTECTION AGE

'lity Biennial Hazardous Waste Report for 1983 (cont.)

This report is for the calendar year ending December 31, 1983.

ate rec'd: _____ Rec'd by: _____

IX. FACILITY'S EPA I.D. NO.

F CTD 001179316 (TAC 11)

X. GENERATOR'S EPA I.D. NO.

G CTD001179316 [redacted]

XI. GENERATOR NAME (specify generator from whom all wastes on this page were received)

Bovano of Cheshire

ON-SITE ☐

XII. GENERATOR ADDRESS

XIII. TOTAL WASTE IN STORAGE ON DECEMBER 31, 1983 (complete this section only once for your facility)

S01 [redacted] 4117 AMOUNT OF WASTE, P UOM

S02 AMOUNT OF WASTE, UOM

S03 AMOUNT OF WASTE, UOM

S04 AMOUNT OF WASTE, UOM

S05 AMOUNT OF WASTE, UOM

XIV. WASTE IDENTIFICATION

Sequence #	A. Description of Waste	B. EPA Hazardous Waste No. (see instructions)	C. Handling Method	D. Amount of Waste	E. Unit of Measure
1	Spent Ferric Chloride Copper Etching Solution Philip Hunt HCE 838383 NA2582	D002	S01	[redacted] 4117	P
2	Waste Trichlorethylene N.O.S. from degreasing Operation	F001 VN 1710	S01	[redacted] 1500	P
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

XV. COMMENTS (enter information by section number—see instructions)

RECEIVED
APR 5
HAZARDOUS
MANAGE

Tear out here

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

FACILITY ANNUAL HAZARDOUS WASTE REPORT FOR 1984 (continued)

XI. FACILITY's EPA I.D. NO. CTD 001179316	XIII. GENERATOR NAME Bovano Ind. Inc. ON-SITE x
XII. GENERATOR's EPA I.D. NO. CTD 001179316	XIV. GENERATOR ADDRESS 830 So. Main St. (Street or Route Number) Cheshire, Ct. 06410 (City or Town State Zip Code)

XV. WASTE IDENTIFICATION

Line #	A. Description of Waste	B. Waste Number	C. Handling Method	D. Amount of Waste	E. Unit of Measure
1	Spent Ferric Chloride copper etching solution. P. Hunt HCE 838383 NA 2582	D002	S01	8,000	P
2	Copper Hydroxide sludge from treated acid rinse water	D002	T01 D80	2,000	P
3					
4					
5					
6					
7					
8					
9					
10					

RECEIVED JUN 5 1985 HAZARDOUS MATERIALS MANAGEMENT UNIT

XVI. COMMENTS (enter information by Section Number - see instructions)

CPD

RECEIVED

MAR - 3 1986

CONNECTICUT HAZARDOUS WASTE MANAGEMENT SERVICE

HAZARDOUS WASTE GENERATOR REPORT FOR 1985

This report is for the calendar year ending December 31, 1985.
Read all instructions carefully before making any entries on the form.

CTD001179316

BOVANO INDS INC
FLOOD DAVID W PRESIDENT
830 SOUTH MAIN STREET
CHESHIRE CT 06410

CORRECTIONS TO MAILING LABEL:
(Note any changes to name, address or contact name here.)

I. NON-REGULATED STATUS

Complete this section only if you did not generate regulated quantities of hazardous waste at any time during 1985. Circle one code at right that best describes your status during the entire year (see instructions for explanation of codes).

1 Non-handler

2 Small Quantity Generator

This establishment's non-regulated status is expected to apply:

☐ For 1985 only ☐ Permanently ☐ Other

RECEIVED
FEB 18 1986
HAZARDOUS MATERIALS MANAGEMENT UNIT

IIa. GENERATOR'S EPA I.D. NUMBER: CTD 001 179 316

IIb. GENERATOR'S SIC CODE: 3 1 4 9 1 9

III. NAME OF ESTABLISHMENT: Bovano Industries, Inc.

IV. ESTABLISHMENT MAILING ADDRESS: P. O. Box 250
Street or P.O. Box

Cheshire CT 06410
City or Town State Zip Code

V. ESTABLISHMENT LOCATION: (If different from Mailing Address. If same, enter "SAME")
830 South Main Street
Street or P.O. Box

Cheshire CT 06410
City or Town State Zip Code

VI. ESTABLISHMENT CONTACT NAME: (last, then first) Flood, David W.

Phone Number (including area code): (203) 272-3208

VII. CERTIFICATION:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are substantial penalties for submitting false information, including the possibility of fine and imprisonment.

David W. Flood
Print/Type Name

President
Title

David W. Flood
Signature

2/12/86
Date signed

HAZARDOUS WASTE GENERATOR REPORT FOR 1985 (Cont.)

This report is for the calendar year ending December 31, 1985

VIII. GENERATOR'S EPA ID NO.: CTD 001 179 316

IX. FACILITY NAME : EWR Inc.
(specify facility to which all wastes on this page were shipped.)

X. FACILITY'S EPA ID NO.: CTD 0721 38969

XI. FACILITY ADDRESS: 130 Freight Street
(Location) (Street Address)

Waterbury CT. 06702
(City or Town) State Zip Code

XII. TRANSPORTATION SERVICES USED: (Name and EPA ID Number)
Sealand Environmental Services CTD 980 521 280
E.W.R. CTD 0721 389 69

XIII. WASTE IDENTIFICATION

Line #	A. Description of Waste	B. DOT Hazard Code *	C. EPA Hazardous Waste No.	D. Amount of Waste	E. Unit of Measure	F. % Solids for Wastewater Treatment Sludges
1.	Spent Ferric Chloride-Copper etching solution. P.Hunt HCE 83838 UN 2582	3 02	D002	11,700	P	
2.	Copper Hydroxide Sludge From Copper Cleaning & Etching	15	F006	30	T	
3.	Copper Hydroxide Sludge From Copper Cleaning & Etching	13	D006	800	G	11
4.						
5.						
6.						
7.						
8.						
9.						
10.						

RECEIVED FEB 18 1986 HAZARDOUS MATERIALS MANAGEMENT UNIT

* See Table on Page 7 for DOT Hazard Codes. Refer to Appendix for EPA Hazardous Waste Numbers.

XIV. COMMENTS AND ONE-TIME EVENTS: (Include Section or Line number.)
Line 2 - One time closure of sludge pit per E.P.A. request.

___ Check if the wastes listed on this page were generated after October 1, 1985, but were not treated or stored for more than 90 days as of December 31, 1985, and were not disposed of or shipped off-site during 1985.

HAZARDOUS WASTE GENERATOR REPORT FOR 1985

This report is for the calendar year ending December 31, 1985

PAGE THREE:

SECTION XV. WASTE MINIMIZATION

A. GENERATOR'S EPA ID NO.: CTD 001 179 316

B. WASTE MINIMIZATION EFFORTS: Describe below:

1) the efforts undertaken during 1985 to reduce the volume and toxicity of the hazardous waste which your business generates,

2) the change in your waste volume (amount of increase or decrease) from 1983,

3) and for any volume changes identified, indicate the reason for the change.

1. Efforts to reduce hazardous waste
   A. Eliminated use of trichlorethylene degreasing.
   B. Compacted sludge by multiple treatments in same tank.
   C. Investigated possibility of changing from ferric chloride to cupric chloride etchant with regeneration unit.

2. Waste volume of spent etchant increased approximately 75% since 1983.

3. Increased usage of etching operation.

RECEIVED
FEB 18 1986
HAZARDOUS MATERIALS
MANAGEMENT UNIT

This report is for the calendar year ending December 31, 1986.
Read all instructions carefully before making any entries on the form.

MAILING LABEL:

BOVANO INDS. INC.
CTD001179316
FLOOD DAVID W ~~PRESIDENT~~
830 SOUTH MAIN ST.
CHESHIRE, CT. 06410

CORRECTIONS TO MAILING LABEL:
(Note corrections to name, address or contact name here, if any.)
Name:
Address:
Name, Title: Vice President
Number:

I. NON-REGULATED STATUS - Complete Items a, b & c, and Sections II - VI & X and return Page One to DEP.

__ a. This facility did not treat, store, or dispose of regulated quantities of hazardous waste at any time during 1986.
b. Explain your non-regulated status in the space below:

__ c. This facility would like to RETAIN its interim status or permit.
X d. This facility would like to PERMANENTLY change its status so that it does not have interim status or a permit.
e. If "d" above is checked, has a status change request already been submitted? X Yes __ No.
If yes, date submitted: 3/8/87. Returned with this form

Inspected 2/18/87 by Caren Spieske
Requested status change to generator
Company had this not. fic.

II. FACILITY'S EPA ID NUMBER: CTD _ _ _ _ _ _ _ _ _ _

IIIa. NAME OF FACILITY: _____

IIIb. (AKA: _____)

IV. FACILITY MAILING ADDRESS: _____
Street or P.O. Box
_____
City or Town State Zip Code

V. FACILITY LOCATION: _____
(If different from mailing address. If same, enter "SAME")
Street or Route Number
_____
City or Town State Zip Code

VI. FACILITY CONTACT NAME: _____ Phone No.: (____) _____
(last, then first)

VII. FINANCIAL REQUIREMENTS

A. Closure $_____ B. Post-Closure $_____
C. Financial Assurance Update? __ Yes __ No.
D. Sudden & Accidental Insurance: $ _____ per occurrence $ _____ annual aggregate

E. Non-sudden & Accidental Insurance $ _____ per occurrence $ _____ annual aggregate ___N/A.

RECEIVED
MAR 10 1987
HAZARDOUS MATERIALS MANAGEMENT UNIT

VIII. ANNUAL GROUNDWATER MONITORING REPORT SUBMITTED? __ Yes __ No __N/A.

IX. TOTAL WASTE STILL IN STORAGE ON DECEMBER 31, 1986:

	Amount	Unit		Amount	Unit		Amount	Unit		Amount	Unit		Amount	Unit
S01			S02			S03			S04			S05		

David W. Flood — Print/Type Name
Vice President — Title
3/8/87 — Date signed

David W. Flood
Signature of Authorized Representative

X. CERTIFICATION
I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are substantial penalties for submitting false information, including the possibility of fine and imprisonment.

1986 FACILITY HAZARDOUS WASTE ANNUAL REPORT (Continued)

This report is for the calendar year from January 1 - December 31, 1986

I. FACILITY'S EPA ID NO.: C T D _ _ _ _ _ _ _ _ _

II. GENERATOR'S EPA ID NO.: _ _ _ _ _ _ _ _ _ _ _ _

III. GENERATOR NAME: ____________________ OR ☐ ON-SITE.
(Specify generator from which all wastes listed on this page were received.)

IV. GENERATOR ADDRESS: ______________________________
(Mailing) Street or P.O. Box

____
City or Town State Zip Code

V. WASTE IDENTIFICATION AND MANAGEMENT

#	A. Description of Waste	B. EPA Hazardous Waste Number	C. Handling Method #	D. Amount of Waste	E. Unit of Measure	F. % Solids for Wastewater Treatment Sludges	G. Density (for G/L)
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							

RECEIVED
MAR 10 1987
HAZARDOUS MATERIALS MANAGEMENT UNIT

See 40 CFR 261 for EPA Hazardous Waste #'s. See Table on Page 10 for Handling Codes, & Page 9 for Unit of Measure codes.

VI. COMMENTS: (Include cross-reference Section or Line number)

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

HAZARDOUS WASTE MANAGEMENT SECTION

OK 4/2/7

Bovano Inds. Inc.
CTD001179316
Flood David W. Vice President
830 South Main St.
Cheshire, Ct. 06410

NOTICE

DATE: 3/19/87

RE: SUBMITTAL OF INCOMPLETE OR INCORRECT 1986 FACILITY ANNUAL REPORT

Dear Sir/Madam:

In January 1987 we mailed a 1986 FACILITY Hazardous Waste Report form to your establishment. We received the report you submitted, however some of the required information is missing or incorrect. The areas in question are marked in red. Refer to the instructions you received with the report for additional information. Please correct these items and return the report within 15 days of receipt of this notice to the following address:

State of Connecticut DEP
HAZARDOUS WASTE MANAGEMENT SECTION
165 Capitol Avenue, Hartford, CT 06106

PROBLEM: __ **Fill in items marked in red.**

__X Other: Please fill out page 1 of your report.

If you have any questions regarding this information request, please contact Inga Rubecka, of the Hazardous Waste Management staff, at (203) 566-5712/4869.

Sincerely,

Edward C. Parker
Assistant Director
Hazardous Waste Management Section

cc: ECP:EF:ef
Enclosure: Original Facility report form.

1987 LARGE & SMALL QUANTITY GENERATOR HAZARDOUS WASTE REPORT

This report is for waste generated from Jan. 1 - Dec. 31, 1987.
Read all instructions carefully before making any entries on the form.

MAILING ADDRESS LABEL:

CT000117931b
BOVANO INDS INC
FLOOD DAVID VICE PRES
830 SOUTH MAIN STREET
CHESHIRE CT 06410

CORRECTIONS TO MAILING LABEL:
(Note changes here)

RECEIVED
MAR 4 1988
Hazardous Materials
Management Unit

SITE ADDRESS LABEL:

BOVANO INDS INC
830 SOUTH MAIN ST
CHESHIRE CT 06410
CPD CT000117931b
FLOOD DAVID VICE PRES

CORRECTIONS TO SITE ADDRESS LABEL:
(Note changes here)

1. STATUS. Check the box that describes what you operated as during 1987.

a. X Large Generator: >1000 kg per month or accumulates over 1000 kg on-site

b. ____ Small Quantity Generator (100-1000 kg per month)

c. ____ Conditionally Exempt SQG (less than 100 kg per month)

d. ____ Facility which managed all waste on-site, and did not ship any waste off-site during 1987.

e. ____ Generated hazardous waste but did not ship any waste off-site during 1987. (Also check applicable generator status a, b or c.)

NON-HANDLER:

f. ____ Still at this site, did not generate haz. waste in 1987 but will generate in the future

g. ____ Still at this site, no longer generate hazardous waste

h. ____ Out of business since 19____

i. ____ Moved in 19____ to: (provide complete address):

j. ____ Never generated hazardous waste (mis-notified/protective filer).

k. ____ Other (explain):

1b. The status checked above is expected to apply (check one):

____ Permanently ____ During 1987 Only X Other (explain): Trying to reduce to Small quantity

2. GENERATOR'S EPA ID NUMBER: C T _ _ _ _ _ _ _ _ _ _

3. GENERATOR'S SIC CODE: 3479 1 3499 1

4. SITE NAME: Bovano Ind. Inc

5. ALSO KNOWN AS: Bovano of Cheshire

6. SITE LOCATION: 830 So. Main St.
Street Address
Cheshire CT 06410
City/Town State Zip Code

7. SITE MAILING ADDRESS: ☐ Same as above, or: P.O. Box 250
Street or P.O. Box
Cheshire CT 06410
City/Town State Zip Code

8. SITE CONTACT NAME: Flood, David W. Phone No. (203) 272-320
Last Name, then first

9. ACCUMULATION TANKS FOR HAZ. WASTE: ___NO. X YES:

TYPE	NUMBER	TOTAL CAPACITY (in gallons)
Above ground	1	1500 gal.
Underground	____	____ gal.

10. CERTIFICATION: I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are substantial penalties for submitting false information, including the possibility of fine and imprisonment.

David W. Flood — Type/Print Name
Vice President — Title
David W. Flood — Signature
3/1/88 — Date signed

1. GENERATOR'S EPA ID NUMBER: CTD001179316

2. FACILITY NAME: Environmental Waste Resources
(where waste listed on this page was shipped)

3. FACILITY'S EPA ID NUMBER: CTD072138969

4. FACILITY'S SITE ADDRESS: 130 Freight St. Waterbury Ct. 06702
Street City/Town State

1987 LARGE & SMALL QUANTITY GENERATOR HAZARDOUS WASTE REPORT
Please refer to the instructions before making any entries on this form.

HAZARDOUS WASTE MANIFESTED OFF-SITE/RECYCLED ON-SITE DURING 1987

5. WASTE IDENTIFICATION (See instructions for clarification on each column)

Line No.	A. Describe Waste & Process	B. Origin of Waste	C. Amount	D. Unit of Measure	E. EPA Waste Number	F. Physical State	G. Chemical State	H. Low-level Radioactive	I. Density/%	J. Average % Water	K. Ultimate Disposition
	Spent Ferric Chloride Etchant from Etching of Copper	X Primary generation __ Treatment residue __ Transfer __ One-time event __ Other (comment)	605	G	D002 D002	X Liquid (very liquid) __ Sludge (pumpable slurry) __ Solid (not fluid)	__ Organic X Inorganic __ Mixture	__ Yes X No	11	95	__ Landfill X Treatment __ Burned for disposal __ Burned for energy __ Recycled __ Other(comment) __ Unknown
		__ Primary generation __ Treatment residue __ Transfer __ One-time event __ Other (comment)				__ Liquid (very liquid) __ Sludge (pumpable slurry) __ Solid (not fluid)	__ Organic __ Inorganic __ Mixture	__ Yes __ No			__ Landfill __ Treatment __ Burned for disposal __ Burned for energy __ Recycled __ Other(comment) __ Unknown
		__ Primary generation __ Treatment residue __ Transfer __ One-time event __ Other (comment)				__ Liquid (very liquid) __ Sludge (pumpable slurry) __ Solid (not fluid)	__ Organic __ Inorganic __ Mixture	__ Yes __ No			__ Landfill __ Treatment __ Burned for disposal __ Burned for energy __ Recycled __ Other(comment) __ Unknown
		__ Primary generation __ Treatment residue __ Transfer __ One-time event __ Other (comment)				__ Liquid (very liquid) __ Sludge (pumpable slurry) __ Solid (not fluid)	__ Organic __ Inorganic __ Mixture	__ Yes __ No			__ Landfill __ Treatment __ Burned for disposal __ Burned for energy __ Recycled __ Other(comment) __ Unknown
		__ Primary generation __ Treatment residue __ Transfer __ One-time event __ Other (comment)				__ Liquid (very liquid) __ Sludge (pumpable slurry) __ Solid (not fluid)	__ Organic __ Inorganic __ Mixture	__ Yes __ No			__ Landfill __ Treatment __ Burned for disposal __ Burned for energy __ Recycled __ Other(comment) __ Unknown

RECEIVED MAR 4 1989 Hazardous Materials Management Unit

6. Is the amount and type of waste reported on this form representative of what you normally generate over a 12 month period? X Yes. __ No.

7. COMMENTS: (Include Section and Line Number. Explain one-time events here).

Page __ of __.

BEFORE COPYING FORM, ATTACH SITE IDENTIFICATION LABEL OR ENTER:

SITE NAME: Bovano Ind. Inc
830 So. Main St
Cheshire, CT. 06410

EPA ID NO. CTD001179316

U.S. ENVIRONMENTAL PROTECTION AGENCY

1987 Hazardous Waste Report

FORM WM

WASTE MINIMIZATION

PART I

WHO MUST COMPLETE THIS FORM? Form WM Part I, describing efforts undertaken to implement waste minimization programs, must be completed by all generators required to file an Annual/Biennial Report. This requirement was *established in response to statutory provisions included in the Hazardous and Solid Waste* Amendments of 1984 (HSWA).

NOTE: Generators shipping hazardous waste off site are required to certify, on Item 16 of the Uniform Hazardous Waste Manifest, that they have a program in place to reduce, to the degree determined economically practicable, the volume and toxicity of hazardous waste generated. A similar certification must also be made by generators who have obtained a RCRA treatment, storage, or disposal permit. Consistent with these certification requirements, generators must report, on Form WM Part I, the efforts undertaken to implement waste minimization programs.

INSTRUCTIONS: Please read the detailed instructions on page 8 of the 1987 Hazardous Waste Report Instruction booklet before completing this form.

Answer questions 1 through 10. Throughout this form enter "DK" if the information requested is not known or is not available; enter "NA" if the information requested is not applicable.

1. Did this site create or expand a source reduction and recycling program?

	1987		1986		Prior Years	
	Yes	No	Yes	No	Yes	No
Create	X		X		X	
Expand	X		X		X	

2. Did this site have a written policy or statement that outlined goals, objectives and methods for source reduction and recycling of hazardous waste?

	1987	1986	Prior Years
Yes			
No	X	X	X

3. What was the dollar amount of capital expenditures (plant and equipment) and operating costs devoted to source reduction and recycling of hazardous waste? ENTER ZERO (0) IF NONE.

	1987	1986	Prior Years
Capital expenditures	$ DK	$ DK	$ DK
Operating costs	$ DK	$ DK	$ DK

4. Did this site have an employee training program or provide incentives (bonuses, awards, personal recognition, etc.) to identify and implement source reduction and recycling opportunities and activities?

	1987		1986		Prior Years	
	Yes	No	Yes	No	Yes	No
Training	X		X		X	
Incentives		X		X		X

OVER —>

5. Did this site conduct a source reduction and/or recycling opportunity assessment or audit? Note: an opportunity assessment or audit is a procedure that identifies practices that can be implemented to reduce the generation of hazardous waste or the quantity which must subsequently be treated, stored or disposed.

	1987		1986		Prior Years	
	Yes	No	Yes	No	Yes	No
Site-Wide	X		X		X	
Process-Specific	X		X		X	

6. Did this site identify or implement new SOURCE REDUCTION opportunities to reduce the volume and/or toxicity of hazardous waste generated at this site?

	1987		1986		Prior Years	
	Yes	No	Yes	No	Yes	No
Identify	X		X		X	
Implement	X		X		X	

7. What factors have delayed or prevented implementation of SOURCE REDUCTION opportunities. MARK ☒ NEXT TO ALL THAT APPLY.

- ☒ a. Insufficient capital to install new source reduction equipment or implement new source reduction practices.
- ☒ b. Lack of technical information on source reduction techniques, applicable to my specific production processes.
- ☐ c. Source reduction is not economically feasible: cost savings in waste management or production will not recover the capital investment.
- ☒ d. Concern that product quality may decline as a result of source reduction.
- ☒ e. Technical limitations of the production processes.
- ☐ f. Permitting burdens.
- ☒ g. Other (SPECIFY) Time + Talent

8. Did this site identify or implement new RECYCLING opportunities to reduce the volume and/or toxicity of hazardous waste generated at this site or subsequently treated, stored, or disposed of on site or off site?

	1987		1986		Prior Years	
	Yes	No	Yes	No	Yes	No
Identify	X		X		X	
Implement	X		X		X	

9. What factors have delayed or prevented implementation of on-site or off-site RECYCLING opportunities. MARK [X] NEXT TO ALL THAT APPLY.

- [ ] a. Insufficient capital to install new recycling equipment or implement new recycling practices.
- [ ] b. Lack of technical information on recycling techniques applicable to this site's specific production processes.
- [ ] c. *Recycling is not economically feasible: cost savings in waste management or production* will not recover the capital investment.
- [X] d. Concern that product quality may decline as a result of recycling.
- [ ] e. Requirements to manifest wastes inhibit shipments off site for recycling.
- [ ] f. Financial liability provisions inhibit shipments off site for recycling.
- [X] g. Technical limitations of product processes inhibit shipments off site for recycling.
- [X] h. Technical limitations of production processes inhibit on-site recycling.
- [ ] i. Permitting burdens inhibit recycling.
- [ ] j. Lack of permitted off-site recycling facilities.
- [ ] k. Unable to identify a market for recyclable materials.
- [X] l. Other (SPECIFY) Time & Talent

10. Has this site requested or received technical information or financial assistance on source reduction and/or recycling practices from any of the following sources? MARK [X] NEXT TO ALL THAT APPLY.

	1987		1986		Prior Years	
	Technical	Financial	Technical	Financial	Technical	Financial
a. Local government	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
b. State government	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
c. Federal government	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
d. Trade associations	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
e. Educational institutions	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
f. Suppliers	[X]	[ ]	[X]	[ ]	[X]	[ ]
g. Other parts of your firm	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
h. Other firms/consultants	[X]	[ ]	[X]	[ ]	[X]	[ ]
i. No request made	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
j. Other (conferences, literature, etc.) Bank	[ ]	[X]	[ ]	[X]	[ ]	[X]

Comments: As a result of our studies we have placed an order for improved processing Equipment.

BEFORE COPYING FORM, ATTACH SITE IDENTIFICATION LABEL OR ENTER:

SITE NAME: Bovano Ind. Inc.
830 So Main St.
Cheshire, Ct. 06410

EPA ID NO. CTD001179316

FORM **IC**

U.S. ENVIRONMENTAL PROTECTION AGENCY

1987 Hazardous Waste Report

IDENTIFICATION AND CERTIFICATION

WHO MUST COMPLETE THIS FORM? Form IC must be completed by every site that received this package.

INSTRUCTIONS: Please read the detailed instructions beginning on page 4 of the 1987 Hazardous Waste Report Instruction booklet before completing this form.

Complete Sections I through IV and Sections VI through IX immediately. Complete Section V, certification, after you have finished the full report package.

SEC. I. Site name and physical location which may differ from the mailing address. Complete items A through G.
Mark [X] for items A, B, C, D, F, and G if same as label; if different, enter corrections. If label is absent, enter information.

A. Site/company name — Same as label [X] — or →
B. EPA ID No. — Same as label [X] — or →
C. Address number and street name of physical location - if not known, enter industrial park, building name or other physical location description — Same as label [X] — or →
D. City, town, village, etc. — Same as label [X] — or →
E. County: New Haven
F. State — Same as label [X] — or →
G. Zip Code — Same as label [X] — or →

SEC. II. Mailing address of site.
Mark [X] for A, B, C, and D if same as label; if different, enter corrections.

A. Number and street name of mailing address — Same as label [ ] — or → P.O. Box 250
B. City, town, village, etc. — Same as label [X] — or →
C. State — Same as label [X] — or →
D. Zip Code — Same as label [X] — or →

SEC. III. Name, title, and telephone number of the person who should be contacted if questions arise regarding this report.

A. Please print: Last name	First name	M.I.	B. Title	C. Telephone
Flood,	David	W	Vice Pres.	203 272-3208 Extension

SEC. IV. Enter the Standard Industrial Classification (SIC) Code that describes the principal products, group of products, produced or distributed, or the services rendered at the site's physical location. Enter more than one SIC Code only if no one industry description includes the combined activities of the site. SIC codes are listed beginning on page 1 of the 1987 Hazardous Waste Report Codebook.

A.	B.	C.	D.	E.	F.
3479	3499	NA	NA	NA	NA

SEC V. I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. Please print: Last name	First name	M.I.	Title
Flood	David	W.	Vice President

B. Signature: David W. Flood

Date of signature: 03 (Mo.) 01 (Day) 88 (Yr.)

OVER -->

SEC. VI. Does this site's EPA ID authorize hazardous waste generation?

- [ ] NO → SKIP TO SECTION VII.
- [x] YES → Did this site generate any hazardous waste during 1987?
  - [x] YES → READ DETAILED INSTRUCTION ON PAGE 5 OF THE 1987 HAZARDOUS WASTE REPORT INSTRUCTIONS BOOKLET FOR ACUTE AND ACCUMULATION LIMITS. MARK [X] NEXT TO THE HAZARDOUS WASTE GENERATION QUANTITY CATEGORY THAT APPLIED TO THIS SITE DURING 1987.
    - [x] Category 1: More than 1000 kg (2,200 lb) in one or more months
    - [ ] Category 2: More than 100 kg (220 lb) but no more than 1000 kg (2,200 lb) in any single month
    - [ ] Category 3: No more than 100 kg (220 lb) in any single month
      - [ ] Mark [X] if this site changed from Category 1 to Category 2 or 3 due to waste minimization activity conducted during 1986 or 1987.
  - [ ] NO → CONTINUE BELOW, MARK [X] NEXT TO ALL THAT APPLY.
    - [ ] Generated, excluded or delisted wastes
    - [ ] Generated hazardous waste prior to 1987 but do not expect to generate in the future - MARK [X] FOR REASON IN ONE BOX BELOW
      - [ ] Waste was from one-time event(s) (e.g. spills, remedial actions, etc.)
      - [ ] Waste minimization activity undertaken during 1986 or 1987
      - [ ] Out of business
    - [ ] Generated hazardous waste prior to 1987 and expect to generate in the future
    - [ ] Never generated before but expect to generate in the future
    - [ ] Never generated and do not expect to generate in the future - MARK [X] FOR REASON IN ONE BOX BELOW
      - [ ] Protective notifier only
      - [ ] Misunderstood the requirements
      - [ ] Notified to secure transportation services
      - [ ] Other EXPLAIN REASON FOR GENERATOR NOTIFICATION IN COMMENTS

SEC. VII. Does this site have RCRA Interim Status or a RCRA permit to treat, store, or dispose hazardous waste?

- [ ] NO → SKIP TO SECTION VIII
- [x] YES → *Did the site treat, store, or dispose (T/S/D) hazardous waste in RCRA-regulated units during 1987?*
  - [ ] YES → SKIP TO SECTION VIII
  - [ ] NO → CONTINUE BELOW, MARK [X] NEXT TO ALL THAT APPLY
    - [ ] T/S/D excluded waste during 1987
    - [ ] T/S/D hazardous waste in exempt units during 1987
    - [ ] T/S/D hazardous waste prior to 1987 but did not T/S/D waste during 1987. MARK [X] IN ONE BOX BELOW
      - [ ] T/S/D will resume in the future
      - [ ] Have notified of planned closure
      - [ ] Site is in closure or post closure
    - [ ] Never T/S/D hazardous waste prior to 1987 but: MARK [X] IN ONE BOX BELOW
      - [ ] Expect to T/S/D hazardous waste in the future
      - [ ] Do not expect to T/S/D hazardous waste in the future - EXPLAIN REASON FOR INTERIM STATUS OR PERMIT IN COMMENTS

SEC. VIII. Do you wish to withdraw this site's generator notification or EPA Part A permit application?

Withdraw generator notification	[ ] Yes	[x] No
Withdraw Part A permit application	[ ] Yes	[x] No

SEC. IX. Does this site have an area not requiring a RCRA Part A or Part B permit that is used exclusively for the short term accumulation of hazardous waste?

- [ ] NO
- [x] YES → DOES THE AREA HAVE:

			ENTER THE NUMBER OF TANKS AND THEIR TOTAL CAPACITY IN GALLONS.
Containers	[ ] No	[x] Yes	
Tanks	[ ] No	[x] Yes →	001 Number; 1500 Gallon capacity

Comments:

1988 HAZARDOUS WASTE FACILITY REPORT

This report is for activities from January 1, 1988 - December 31, 1988.
Please read all instructions carefully before making any entries on the form.

Facility's EPA ID Number: CTD 0 0 1 1 7 9 3 1 6 _ _

Facility's SIC Code: 13479 13499

Name of Facility: Bovano Ind. Inc.

AKA: Bovano of Cheshire

Site Address Label

BOVANO INDS INC
830 SOUTH MAIN STREET
CHESHIRE CT 06410
CTD001179316
DAVID FLOOD VICE PRES

Corrections to Site Address Label

State Zip Code

BOVANO INDS INC
830 SOUTH MAIN STREET
CHESHIRE CT 06410
CTD001179316
DAVID FLOOD VICE PRES

(Zone to Mailing Label Corrections here)

7. FACILITY MAILING ADDRESS: ☐ SAME AS LOCATION OR: P.O. Box 250 (Street or P.O. Box)
Cheshire (City or Town) Ct. (State) 06410 (Zip Code)

8. Facility Contact Name: Flood, David W. (last, then first) Phone No: (203) 272-3208

9. Financial Requirements

A. Cost Estimates: Closure $ N/A Post-Closure $ N/A
B. Financial Assurance Update? __ Yes X No.
C. Sudden & Accidental Insurance: $ 10,000 Per occurrence $ 10,000 Annual aggregate

D. Non-sudden & Accidental Insurance $ _____ Per Occurrence $ _____ Annual aggregate X N/A

10. ANNUAL GROUNDWATER MONITORING REPORT SUBMITTED? __Yes __No X N/A.

11. STORAGE INVENTORY ON DECEMBER 31, 1988:

SO1		SO2		SO3		SO4		SO5	
Amount	Unit	Amount	Unit	Amount	Unit	Amount	Unit	Amount	Unit
0		0		0		0		0	

Status Update (Complete either 1A OR 1B, not both).

1A. REGULATED STATUS

This site operated as a hazardous waste facility during 1988, and the following types of hazardous waste handling occurred on-site)

X Treatment __ Storage __ Land Disposal __ Non-Land Disposal

__ Recycle/Reclaim/Reuse

1B NON-REGULATED STATUS (Complete items 1,2, and 3 below).

1. __ This facility did not treat, store, or dispose of regulated quantities of hazardous waste at any time during 1988.

2. Explain your non-regulated status in the space below:
__ Land Disposal Unit(s) certified closed on _____ (date).

__ Treatment/Storage Unit(s) certified closed on _____ (date)

__ Other (explain):

3a. __ This facility would like to RETAIN its interim status or permit.
OR
3b. __ This facility would like to PERMANENTLY change its status so that it does not have interim status or a permit. (ALSO check (i) OR (ii) below):
(i) If you want to change status, have you already submitted a status change request to DEP? __ YES. __NO.
(ii) If "yes", date submitted: _____.

12. Certification: : I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted infotmation is true, accurate and complete. I am aware that there are substantial penalties for submitting false information, including the possibility of fine and imprisonment.

David W. Flood (Print/Type Name) Vice President (Title)

David W. Flood (Signature of Authorized Representative) 3/22/89 (Date signed)

1988 Hazardous Waste Facility Report (Continued)
This report is for the calendar year from January 1 - December 31, 1988
Important: Please refer to instructions before making any entries on this form.

13. FACILITY'S EPA ID NO.: C T D 0 0 1 1 7 9 3 1 6

14. GENERATOR'S EPA ID NO.: C T D 0 0 1 1 7 9 3 1 6

15. GENERATOR NAME: Bowano Ind. Inc. OR [X] ON-SITE
(Specify generator from whom all wates listed on this page were received.)

16. GENERATOR ADDRESS (Site address) Street: 830 So Main St. City/Town: Cheshire State: Ct.

HAZARDOUS WASTE MANAGED ON-SITE

17. WASTE IDENTIFICATION AND MANAGEMENT
(See instructions for clarification of columns)

Line No.	A. Describe Waste	B. Origin of Waste	C. Amount	D. Unit of Measure	E. EPA Waste No.	F. Handling Method Sequence	G. Physical State	H. Chemical State	I. Low-Level Radioactive Mixed Waste	J. Density	K. Average % Water
1	Copper Hydroxide Sludge from treatment of Pickling rinse water	Generated on-site: X Primary Generation; __ Treatment residue; __ One-time event; __ Other. Generated off-site: __ Storage for transfer; __ Managed on-site	3,150	G	F006	S02, T01; T31, T23; T38; Trucked off Site	__ Liquid (very fluid); X Sludge (pumpable slurry); __ Solid (not fluid)	__ Organic; X Inorganic; __ Mixture	__ Yes; X No	?	60%
2	Spent Ferric Chloride Etchant from Etching of Copper	Generated on-site: X Primary Generation; __ Treatment residue; __ One-time event; __ Other. Generated off-site: __ Storage for transfer; __ Managed on-site	385	G	D002	S01	X Liquid (very fluid); __ Sludge (pumpable slurry); __ Solid (not fluid)	__ Organic; X Inorganic; __ Mixture	__ Yes; __ No	?	?
3	Fuel Oil & Water	Generated on-site: __ Primary Generation; __ Treatment residue; X One-time event; __ Other. Generated off-site: __ Storage for transfer; __ Managed on-site	330	G	D001	S01	X Liquid (very fluid); __ Sludge (pumpable slurry); __ Solid (not fluid)	X Organic; __ Inorganic; __ Mixture	__ Yes; X No	?	?
4		Generated on-site: __ Primary Generation; __ Treatment residue; __ One-time event; __ Other. Generated off-site: __ Storage for transfer; __ Managed on-site					__ Liquid (very fluid); __ Sludge (pumpable slurry); __ Solid (not fluid)	__ Organic; __ Inorganic; __ Mixture	__ Yes; __ No		

J. Comments (Include Section and Line Number. Explain one-time events).

3 - Removed from absolete Underground Storage Tanks before removal of Tanks

SITE NAME: Bovano of Cheshire
TOWN: Cheshire
FILE TYPE: CPD

Bovano of Cheshire

South Main Street • Cheshire, Connecticut • Telephone 203-272-3208

RECEIVED
JUN 9 - 1992
DEP- Waste Management Bureau
Waste Engineering & Enforcement
Enforcement-District 3

June 1, 1992

David Nash
Waste Engineering & Enforcement
DEP
165 Capitol Avenue
Hartford, CT 06106

Dear David;

Please find enclosed a copy of a manifest indicating hazardous waste held at Bovano under a 30 day extension period was removed prior to June 6, 1992.

Thank you for your cooperation in this matter. I am relieved to feel this difficult situation is behind us.

Sincerely;

James A. Flood
President

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Hazardous Waste MANIFEST PROGRAM, State Office Building
Hartford, CT 06106

Please type (or print) *(Form designed for use on elite (12-pitch) typewriter.)*

FOR STATE USE ONLY

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CTD001179316 — Manifest Document No. 00033
2. Page 1 of 1 — Information in the shaded areas required by Federal law but not required by State law.

3. Generator's Name and Mailing Address
Bovaro Industries Inc.
PO Box 250 Cheshire CT06410 (203)272-3208

4. Generator's Phone

5. Transporter 1 Company Name: Environmental Waste Resources
6. US EPA ID Number: CTD072138969

7. Transporter 2 Company Name
8. US EPA ID Number

9. Designated Facility Name and Site Address
Environmental Waste Resources
130 Freight St
Waterbury CT 06702
10. US EPA ID Number: CTD072138969

4 1500

A. State Manifest Document Number: CT C
B. State Generator's ID
C. State Transporter's ID
D. Transporter Phone
E. State Transporter's ID
F. Transporter Phone
G. State Facility's ID
H. Facility Phone

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	Total Quantity	Unit Wt/Vol
a. Waste Acid Liquid NOS (D002) Corrosive Material NA 1760	001	TT	01750	G
b.				
c.				
d.				

J. Additional Descriptions for Materials Listed Above
a. Brass dip rinsewater
b. d.

K. Handling Codes for Wastes Listed Above
a. S02
b. d.

15. Special Handling Instructions and Additional Information
Environmental Waste Resources Stream No. A27534

Net 16340

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: James A. Flood — Signature — Month Day Year

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Tom Abe — Signature — Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: Antoinette Buchina — Signature: Antoinette Buchina — Month Day Year

EPA Form 8700-22 (Rev. 4/88) Form Approved OMB No. 2050-0039, Expires 9/30/91. Previous edition is obsolete.

COPY 3: Facility mails to generator

HAZARDOUS WASTE MANIFEST AND SHIPPING PAPER

EPHM-2, REV. 4-81

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

CT 0029621
MANIFEST NUMBER

GENERATOR COMPLETES

NAME	MAILING ADDRESS	PHONE NUMBER	STATE / E.P.A. I.D. NO.
GENERATOR Bovano of Cheshire	830 S.Main St., Cheshire, Ct.06410	(203) 272-3208	CT CTD001178316
PRIMARY TRANSPORTER Hubbard Hall Chemical Co.	563 Leonard St., Waterbury, Ct.06708	(203) 756-5521	CT CTD055310759
CONTINUING TRANSPORTER ~~Solvents Recovery~~ Lear Blanx	~~Lazy Lane, Southington, Ct. 06489~~	~~(203) 628-8084~~	~~CT~~ ~~CTD009717604~~
H.W.F. ~~Solvents Recovery~~ General Chemical	~~Lazy Lane, Southington, Ct. 06489~~ P.O. Box 608 Framingham Mass 01701	~~(203) 628-8084~~ (617) 872-5000	~~CT~~ ~~CTD009717604~~ MAD 019 371 079

IF MORE THAN ONE MANIFEST / SHIPPING PAPER IS USED: TOTAL NO. OF FORMS ARE 1; THIS FORM NO. IS 1 MANIFEST NO. OF FIRST FORM CT 0029621

DATE SHIPPED MONTH 12 DAY 21 YEAR 81

EXPECTED ARRIVAL DATE MONTH 12 DAY 21 YEAR 81

	U.S. D.O.T. SHIPPING NAME	D.O.T. HAZARD CLASS	U.N. / N.A. NO.	WT./VOL.	UNITS	UNIT CODE	CONTAINER NO.	CONTAINER TYPE	E.P.A. WASTE NO.	DESCRIPTION OR WASTE ANALYSIS IF WASTE IS N.O.S.
1.	Waste Trichlorethylene N.O.S.	ORM-A	UN1710	~~1,000~~ 1,570	lb.	P	~~2~~ 3	DR	F001	Mixed with Oil
2.										
3.										
4.										
5.										
6.										

SPECIAL HANDLING INSTRUCTIONS INCLUDING ANY CONTAINER EXEMPTION; AND EMERGENCY RESPONSE INFORMATION:

To be Told

IN THE EVENT OF A SPILL, CONTACT THE NATIONAL RESPONSE CENTER, U.S. COAST GUARD 1-800-424-8802

THIS IS TO CERTIFY THAT THE ABOVE NAMED MATERIALS ARE PROPERLY CLASSIFIED, DESCRIBED, PACKAGED, MARKED AND LABELED AND ARE IN PROPER CONDITION FOR TRANSPORTATION ACCORDING TO THE APPLICABLE REGULATIONS OF THE DEPARTMENT OF TRANSPORTATION AND THE U.S. ENVIRONMENTAL PROTECTION AGENCY.

GENERATOR'S EMERGENCY PHONE (IF DIFFERENT FROM ABOVE)

DATE 12/18/81

GENERATOR SIGNATURE

TRANSPORTER COMPLETES

REQUIRED LABELS: [X] YES [ ] NO

PLACARDS REQUIRED: DANGEROUS

THIS IS TO CERTIFY THAT I AM THE PRIMARY TRANSPORTER AND HAVE ACCEPTED THE DESCRIBED SHIPMENT IN PROPER CONDITION FOR TRANSPORT TO THE IDENTIFIED H.W.F.

SIGNATURE OF TRANSPORTER: Ed Sherman

DATE SHIPMENT ACCEPTED: MONTH 12 DAY 21 YEAR 81

VEHICLE I.D. STATE: ME COMPANY NO. FOR TRAILER, MARINE OR RAIL: 17665

DATE OF DELIVERY: MONTH DAY YEAR

THIS IS TO CERTIFY THAT I AM THE CONTINUING TRANSPORTER AND HAVE ACCEPTED THE DESCRIBED SHIPMENT IN PROPER CONDITION FOR TRANSPORT TO THE IDENTIFIED H.W.F.

SIGNATURE OF TRANSPORTER

DATE SHIPMENT ACCEPTED: MONTH DAY YEAR

VEHICLE I.D. STATE COMPANY NO. FOR TRAILER, MARINE OR RAIL

DATE OF DELIVERY: MONTH DAY YEAR

H.W.F. COMPLETES

INDICATE ANY DIFFERENCES BETWEEN MANIFEST AND SHIPMENT AND LIST REJECTED MATERIALS, INDICATE DISPOSITION OF REJECTED SHIPMENT

HANDLING METHOD

1. S01 2. T03 3. 4. 5. 6.

I CERTIFY THAT THE DESCRIBED WASTE(S) WAS DELIVERED BY THE AFOREMENTIONED DELIVERING TRANSPORTER AND THAT THE INFORMATION ON THIS MANIFEST IS CORRECT TO THE BEST OF MY KNOWLEDGE.

SIGNATURE

12 21 81

HAZARDOUS WASTE MANIFEST AND SHIPPING PAPER

CO 13795-1

CT HH 3305 (MANIFEST NUMBER)

	NAME	MAILING ADDRESS	PHONE NUMBER	STATE	E.P.A. I.D. NO
GENERATOR	Bovano of Cheshire	830 So. Main St. Cheshire Ct. 06410	(203) 272-3208	CT	D001179316
PRIMARY TRANSPORTER	THE HUBBARD-HALL CHEMICAL CO.	563 SO. LEONARD ST., WATERBURY, CT. 06708	(203) 756-5521	CT	D055310759
CONTINUING TRANSPORTER	RECYCLING INDUSTRIES	385 Quincy Ave Braintree MA. 02186	(617) 848-0612	MA	D053452637
H.W.F.	Recycling Industries	385 Quincy Ave Braintree, Ma. 02186	(617) 848-0612	MA	D053452637

IF MORE THAN ONE MANIFEST/SHIPPING PAPER IS USED: TOTAL NO. OF FORMS ARE 1 — THIS FORM NO. IS CTHH 3305 — MANIFEST NO. OF FIRST FORM

DATE SHIPPED: MONTH 02 DAY 02 YEAR 81

EXPECTED ARRIVAL DATE: MONTH 02 DAY 12 YEAR 81

GENERATOR COMPLETES

	U.S. D.O.T. SHIPPING NAME	D.O.T. HAZARD CLASS	U.N./N.A. NO.	WT./VOL.	UNITS	UNIT CODE	CONTAINER NO.	CONTAINER TYPE	E.P.A. WASTE NO.	DESCRIPTION OR WASTE ANALYSIS IF WASTE IS N.O.S.
1	Waste Trichlorethylene N.O.S.	T	UN1710	~~110 Gal~~		~~P~~	2	DR	F001	Mixed with oil
2		NONE		1000	LBS.	P				
3		ORM-A								
4										
5										
6										

RECEIVED MAR 2 1981 BOVANO IND. INC.

SPECIAL HANDLING INSTRUCTIONS INCLUDING ANY CONTAINER EXEMPTION AND EMERGENCY RESPONSE INFORMATION:

TO BE TOLD

IN THE EVENT OF A SPILL, CONTACT THE NATIONAL RESPONSE CENTER, U.S. COAST GUARD 1-800-424-8802

THIS IS TO CERTIFY THAT THE ABOVE NAMED MATERIALS ARE PROPERLY CLASSIFIED, DESCRIBED, PACKAGED, MARKED AND LABELED AND ARE IN PROPER CONDITION FOR TRANSPORTATION ACCORDING TO THE APPLICABLE REGULATIONS OF THE DEPARTMENT OF TRANSPORTATION AND THE U.S. ENVIRONMENTAL PROTECTION AGENCY.

GENERATOR'S EMERGENCY PHONE NUMBER ABOVE (203) 272-3208

DATE 1/14/81

GENERATOR'S SIGNATURE

TRANSPORTER COMPLETES

REQUIRED LABELS: YES ☑ NO ☐

THIS IS TO CERTIFY THAT I AM THE PRIMARY TRANSPORTER AND HAVE ACCEPTED THE DESCRIBED SHIPMENT IN PROPER CONDITION FOR TRANSPORT TO THE IDENTIFIED H.W.F.

Ed Sherman — SIGNATURE OF TRANSPORTER

DATE SHIPMENT ACCEPTED: MONTH 02 DAY 02 YEAR 81

STATE: VEHICLE I.D. ME — COMPANY NO. FOR TRAILER, MARINE OR RAIL: 17665

DATE OF DELIVERY: MONTH 02 DAY 12 YEAR 81

PLACARDS REQUIRED: dangerous

THIS IS TO CERTIFY THAT I AM THE CONTINUING TRANSPORTER AND HAVE ACCEPTED THE DESCRIBED SHIPMENT IN PROPER CONDITION FOR TRANSPORT TO THE IDENTIFIED ~~H.W.F.~~

[illegible] — SIGNATURE OF TRANSPORTER

DATE SHIPMENT ACCEPTED: MONTH 02 DAY 12 YEAR 81

STATE: VEHICLE I.D. MA — COMPANY NO. FOR TRAILER, MARINE OR RAIL: 000T129840

DATE OF DELIVERY: MONTH 02 DAY 12 YEAR 81

H.W.F. COMPLETES

INDICATE ANY DIFFERENCES BETWEEN MANIFEST AND SHIPMENT AND LIST REJECTED MATERIALS, INDICATE DISPOSITION OF REJECTED SHIPMENT

HANDLING METHOD: 1. 2. 3. 4. 5. 6.

I CERTIFY THAT THE DESCRIBED WASTE(S) WAS DELIVERED BY THE AFOREMENTIONED DELIVERING TRANSPORTER AND THAT THE INFORMATION ON THIS MANIFEST IS CORRECT TO THE BEST OF MY KNOWLEDGE.

[illegible] — SIGNATURE

MONTH 2 DAY 12 YEAR 81

HAZARDOUS WASTE MANIFEST AND SHIPPING PAPER

EPHM-2, REV. 4-81

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

MANIFEST NUMBER: CT 0029622

GENERATOR COMPLETES

NAME	MAILING ADDRESS	PHONE NUMBER	STATE / E.P.A. I.D. NO.
GENERATOR: Bovano of Cheshire	P.O.Box 250 830 S.Main St., Cheshire, Ct.06410	(203) 272-3208	CT D001179316
PRIMARY TRANSPORTER: Hubbard Hall Chemical Co.	563 Leonard St., Waterbury, Ct.06708	(203) 756-5521	CT D055310759
CONTINUING TRANSPORTER: GENERAL CHEM	FRAMINGHAM MA 01701	(617) 872-5000	MA D019371079
H.W.F.: General Chemical	P.O.Box 608, Framingham, Mass.01701	(617) 872-5000	MA D019371079

IF MORE THAN ONE MANIFEST / SHIPPING PAPER IS USED: TOTAL NO. OF FORMS ARE 1; THIS FORM NO. IS 1 CT 0029622 MANIFEST NO. OF FIRST FORM

DATE SHIPPED: MONTH 06 DAY 08 YEAR 83 — EXPECTED ARRIVAL DATE: MONTH 06 DAY 09 YEAR 83

	U.S. D.O.T. SHIPPING NAME	D.O.T. HAZARD CLASS	U.N. / N.A. NO.	WT./VOL.	UNITS	UNIT CODE	CONTAINER NO.	CONTAINER TYPE	E.P.A. WASTE NO.	DESCRIPTION OR WASTE ANALYSIS IF WASTE IS N.O.S.
1.	Waste Trichlorethylene N.O.S.	ORM-A	UN1710	1,500	lb.	P	3	DR	F001	Mixed with Oil
2.										
3.										
4.										
5.										
6.										

SPECIAL HANDLING INSTRUCTIONS INCLUDING ANY CONTAINER EXEMPTION; AND EMERGENCY RESPONSE INFORMATION:

~~To Be Told~~

IN THE EVENT OF A SPILL, CONTACT THE NATIONAL RESPONSE CENTER, U.S. COAST GUARD 1-800-424-8802

THIS IS TO CERTIFY THAT THE ABOVE NAMED MATERIALS ARE PROPERLY CLASSIFIED, DESCRIBED, PACKAGED, MARKED AND LABELED AND ARE IN PROPER CONDITION FOR TRANSPORTATION ACCORDING TO THE APPLICABLE REGULATIONS OF THE DEPARTMENT OF TRANSPORTATION AND THE U.S. ENVIRONMENTAL PROTECTION AGENCY.

GENERATOR'S EMERGENCY PHONE IF DIFFERENT FROM ABOVE ( )

DATE: 6 8 83

GENERATOR SIGNATURE: [signature]

TRANSPORTER COMPLETES

REQUIRED LABELS: [X] YES [ ] NO

PLACARDS REQUIRED: DANGEROUS

THIS IS TO CERTIFY THAT I AM THE PRIMARY TRANSPORTER AND HAVE ACCEPTED THE DESCRIBED SHIPMENT IN PROPER CONDITION FOR TRANSPORT TO THE IDENTIFIED H.W.F.

SIGNATURE OF TRANSPORTER: ED. SHERMAN — DATE SHIPMENT ACCEPTED: MONTH 06 DAY 08 YEAR 83 — VEHICLE I.D. STATE: ME — COMPANY NO. FOR TRAILER, MARINE OR RAIL: 449965 — DATE OF DELIVERY: MONTH 06 DAY YEAR 83

THIS IS TO CERTIFY THAT I AM THE CONTINUING TRANSPORTER AND HAVE ACCEPTED THE DESCRIBED SHIPMENT IN PROPER CONDITION FOR TRANSPORT TO THE IDENTIFIED H.W.F.

SIGNATURE OF TRANSPORTER: Roger Vinano — DATE SHIPMENT ACCEPTED: MONTH 06 DAY 09 YEAR 83 — VEHICLE I.D. STATE: MA — COMPANY NO. FOR TRAILER, MARINE OR RAIL: 118427 — DATE OF DELIVERY: MONTH 06 DAY 09 YEAR 83

H.W.F. COMPLETES

INDICATE ANY DIFFERENCES BETWEEN MANIFEST AND SHIPMENT AND LIST REJECTED MATERIALS, INDICATE DISPOSITION OF REJECTED SHIPMENT

HANDLING METHOD: 1. S01 2. T63 3. 4. 5. 6.

I CERTIFY THAT THE DESCRIBED WASTE(S) WAS DELIVERED BY THE AFOREMENTIONED DELIVERING TRANSPORTER AND THAT THE INFORMATION ON THIS MANIFEST IS CORRECT TO THE BEST OF MY KNOWLEDGE.

SIGNATURE: Patricia Santoro — MONTH 06 DAY 09 YEAR 83

APPENDIX E

NOV 307

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

NOTICE OF VIOLATION
NV No. 307
DEP/HW No.

April 28 , 1987

David W. Flood
Vice President
Bovano of Cheshire
830 South Main Street
Cheshire, CT 06410

Dear Mr. Flood:

During an inspection on February 18, 1987, it was noted that your company is in violation of Connecticut's Hazardous Waste Management Regulations. Therefore, we are enclosing the following for your immediate attention and action:

1. Notice of Violation No. 307;

2. A copy of our inspection report dated February 18, 1987; and

3. A copy of the Connecticut Hazardous Waste Management Regulations.

Should you have any questions, please contact Susan L. Zampaglione at 566-8843/8844.

Sincerely,

Stephen W. Hitchcock
Director
Hazardous Materials Management Unit

SWH:SLZ:jab

Phone:
165 Capitol Avenue • Hartford, Connecticut 06106
An Equal Opportunity Employer

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

HAZARDOUS WASTE MANAGEMENT SECTION
NOTICE OF VIOLATION

RECEIVED
MAY - 4 1987
BOVANO IND. INC.

NOV No. 307 DEP/HW No.

TO: David W. Flood
Vice President
Bovano of Cheshire
830 South Main Street
Cheshire, CT 06410

You are hereby notified of violations of Connecticut Hazardous Waste Management Regulations and/or State Statutes (referenced below).

Within ninety (90) days after receipt of this Notice, you must verify that the violations have been corrected.

In addition, you must submit a written report to the Department that details the specific corrective actions you have implemented to achieve compliance. Failure to do so may result in additional enforcement action.

You are invited to confer with us about this Notice in order to ensure that the corrective actions initiated satisfactorily address the violations. Please contact Susan L. Zampaglione of the Hazardous Waste Management Section at 566-8843 or 566-8844 should you have any questions.

Stephen W. Hitchcock, Director
Hazardous Materials Management Unit Date: April 28, 1987

VIOLATIONS OF STATE REGULATIONS AND/OR STATUTES:

Hazardous Waste Determinations	22a-449(c)-7	p.22
General Inspection Requirements	22a-449(c)-23	p.39
Personnel Training	22a-449(c)-24	p.40
Contingency Plan and Emergency Procedures	22a-449(c)-26	p.41
Use and Management of Containers	22a-449(c)-33	p.62

A copy of Connecticut Hazardous Waste Management Regulations are attached for your reference.

Return of Service

A COPY OF THE FOREGOING NOTICE WAS SUBMITTED TO THE ABOVE-NAMED INDIVIDUAL AS INDICATED BELOW:

( )Personally delivered to _____ on _____
(XX)Certified Mail to the usual place of business or residence.
Registration No.: P03 3559655

Revised 6-86

HAZARDOUS WASTE INSPECTION CHECKLIST

Site:
Name: Bovano of Cheshire
Location: 830 S. Main Street
Cheshire, Conn 06410

Phone No: (203) 272-3208
ID No: CTD001179316
Contact & Title: Jim Flood- Owner
David Flood- Owner

RECEIVED
MAY - 4 1987
BOVANO IND. INC.

Mailing Address (if different from location):
PO Box 250

Inspector(s): Caren Spieske

Inspection Date: 2-18-87
Inspection Category:
RCRA Notifier as: Status change to generator needed
Generator: ✓
Transporter:
TSDF: ✓ (see last pg)
Part A Application ___ No, ___ Yes
UIC:
Inventory:
Complaint No:
Other (describe): Company wants a status change to generator

CHARACTERIZATION OF SITE ACTIVITY

Date Established at Present Location: 1954
No. of Employees, Shifts: 40 Emp, one shift
Type of Activity: mfg- glass enamel onto copper
Products: small scale ornaments; gifts
copper and some brass used.
Processes: Stamping, pressing, shaping, forming and welding. Etching with ferric chloride, two rinses. Bright Dip- nitric and sulfric acid with five rinses (which include an alkaline rinse), dryers. Wet scrubber is over acid tanks. Enameling in six booths: glass powder applied by hand to wet copper or brass, three ovens for baking. After air pollution control, glass dust accumulates in box outside behind building, dust never removed. Lacquer- one booth with spray gun; acetone/xylene used in small amounts to clean guns per contact no waste generated. left-over enamels are reused in two spray booths to paint the underside of ornaments. See Last Page for additional processes.
Water Supply (if well(s) give approx. location): well water

Septic System(s), Municipal Sewer(s), Drywell(s): Town sewer. Irrigated Water from collection tank to sewer. (One drywell (per contact) well cleaned

II WASTE PROFILE

Waste	Amount/Frequency	On-Site, Temporary Storage/TSD	Transporter	Off-site TSD
D006-Copper hydroxide sludge	(shipped/twice per YR) 1600 gal/YR	EWR pumps from collection tank	EWR	EWR
Etching chloride	one drum/month	Drum	EWR	EWR
dust from enamel- partial reused, about 100 lbs/YR → landfill				
- no longer used since 1982				
lorethylene- no longer used since 1982				
rinses, scrubber discharge and possible tumbling waste (contact unsure) all piped into collection tank, treated with sodium hydroxide and discharged to town sewer.				

III INVENTORY

this site notified EPA under the Comprehensive Environmental Response, Compensation Liability Act of 1980 PL 96-510 (commonly known as Superfund): X No. ___ Yes: tach copy of Notification, if available)

or to the November 19, 1980 Implementation of RCRA Where; When; What type; Amount/ quency; How long; and by Who (Transporters, Facilities, Etc.) were wastes disposed Off-site:

See Paul Hassler's original report

here any evidence of On-site disposal? ___ No. ? Yes. possible

Approximate Location; Type; Amount/Frequency; Length of Time On-site disposal has used, etc. (Specify any historical On-site disposal): Copper hydroxide dge pit cleaned out and soil removed (12/85 and /86). Dry well also cleaned in 6/86. Dit final pproval on clean-up from dry well not given from WCV.

IV RECORDS

aa) Hazardous Waste Determination.

)-
)-7.

1)Performed: yes, need removal for one drum of resin mixture no longer able to use

2)Records Maintained: yes.

IV RECORDS - 1986 reviewed

1/ c(c)-5 a) Manifest

1) Document No.: CTB 0021815

2) Generator ID, name, address: Bovano of Cheshire Cheshire, CT 06410 - CTD001179316

3) Transporter(s) ID, name, address: EWR Waterbury, CT - CTD072138969

4) Continuing Transporter ID, Name, Address: n/A

5) TSD Facility ID, name, address: EWR Waterbury, CT - CTD072138969

6) Waste Type/ Quantity: Waste ferric solution - 19 drums (1045 G) - D002

7) Date Shipped: 10-29-86

8) Delivered: 10-29-86

/ c(c)- i) International Shipping Manifest: none

/ c(c)-6 ii) Exception Report:

/ c(c)-26 b) Waste Analysis Plan - none, need to develop or change status.

1) Plan on site:

2) Plan should include (a) parameters:

(b) test methods:

(c) sampling methods:

(d) frequency:

3) Copy of Results:

/ c(c)-28 c) Inspection Schedule and Log

1) Are inspections conducted: no

2)* Written inspection schedule: yes

3) Inspection Log: yes

(A) Daily - loading and unloading of areas subject to spills: yes

- discharge control equipment in tanks: n/A
- incinerator system, thermal treatment equipment,
- chem/phys/bio. treatment equipment: n/A
- freeboard level of surface impoundments: n/A - clean out pit date

265.15/
25-54cc(c)-28

c) Inspection Schedule and Log (continued)

(B) Weekly - physical conditions of containers: yes
- physical conditions of tanks: n/A
- physical conditions of surface impoundments: n/A
- physical conditions of chem/phys/bio. treatment facility: n/A

265.16/
25-54cc(c)-29

*d) Personnel Training Records

1) Job titles/position description and name of employee: yes job titles and descriptions

Annually

2) Description of training: yes
3) Records of training: yes
4) Training completed: only documented training - 1984

*e) Contingency Plan

265.53/
25-54cc(c)-31

1) Plan on site: partial plan

265.53/
25-54cc(c)-31

2) Plan to local authorities: no

265.52/
25-54cc(c)-31

3) Content of Plan: needs more info
a) Emergency plan: minor, need additional info
b) Local authority arrangements: yes
c) Identify emergency coordinator: yes and alternate
d) List of emergency equipment: partial list
e) Evacuation plans: minor, need evacuation plan

f) Closure and Post-closure Plans; Cost Estimates: none, need to devise or change status.

265.112, .113, .114, .115/
25-54cc(c)-34

1) Closure Plan (TSD Facilities) -
a) Plan on site:
b) Does plan include:
1) Schedule of partial closure if applicable:
2) Estimate of maximum inventory of waste in storage or treatment at given time:
3) Schedule for final closure & an estimate of the expected year of closure:
4) Description of steps needed to decontaminate facility equipment:
5) Total time required for closure:
6) Certification of closure:

Required for Temporary

65.117, .118/ 5-54cc(c)-34

2) Post-closure Plan (disposal facilities only) n/A

a) Plan on site: _____

b) Does plan identify and include frequency of: _____

o planned groundwater monitoring: _____

o planned maintenance & security activities: _____

o name, address and phone number of Post-closure contact: _____

_____

c) Length of Post-closure period identified: _____

65.142/ 5-54cc(c)-35

3) Closure Cost Estimate (TSD facilities) none, need to devise or change status.

a) Estimate on site: Amount of estimate:

b) Estimate adjusted annually on 11/19 for inflation:

c) Has Closure Plan changed?

d) If answer to 3 is yes, has cost estimate changed?

65.144/ 5-54cc(c)-35

4) Post-closure Cost Estimate (disposal facilities only) n/A

a) Estimate on-site: Amount of estimate:

b) Estimate adjusted annually on 11/19 for inflation:

c) Has Post-closure plan changed?

d) If answer to 3 is yes, has cost estimate changed?

65.73/ 5-54-cc(c)-32

g) Operating Records need to complete, or change status. (A)

1) Records on site: _____

2) Description, quantity, method and dates of disposal: _____

_____

3) Location on-site and manifest number: _____

_____

4) Results of waste analysis: _____

5) Record of any incidents requiring use of contingency plan: _____

_____

6) Records and results of inspections: _____

_____

7) Closure and post-closure cost estimates if needed: _____

B. Inspection

5.14/
-54cc(c)-27

1) Site Security (N/A if status change to generator)

a) 24 hour surveillance system: alarm system

b) or Artificial or natural barrier: no

c) and Means to control entry: no

d) Danger sign posted at each entrance legible at 25': no

5.30-.37/
-54cc(c)-30

**2) Site Preparedness/Prevention

a) Internal communication/alarm: alarm system

b) Telephone/2-way radio: phone

c) Portable fire control equipment: yes

d) Adequate water for fire control: well water

e) Testing and Maintenance of equipment: yearly - outside Co.

f) Adequate aisle space: yes

g) Access to equipment:

5.170-177/
-54cc(c)-38

3) Containers - See Last Page

Leaks no

Ruptures no

Corrosion no

Closed Except in use yes

Heat/Pressure no

50' bufferzone for I and R wastes: N/A

I = Ignitable ; R = Reactive

No smoking signs near I or R waste N/A

Seperation of incompatible wastes N/A

Evidence of spills none evident, unable to determine, due to snow covering.

.30-.34/
54cc(c)-8

Pretransport requirements: packaging yes

labelling yes

marking yes

placarding

Date of waste Accumulation yes

*HYR Check for impermeable base under containers, any drains, secondary containment waste stored outside on concrete near dry well, no secondary containment

R - Not yet regulated by EPA, however, required by 25-54cc(c)-38(c)(3)

quired for Temporary Storage

65.190-.199/
5-54cc(c)-39

4) Tanks no hazardous waste stored in tanks

Leaks _____

Ruptures _____

Corrosion: Check valves, piping controls for signs of corrosion _____

2' freeboard or containment _____

Heat/pressure _____

Evidence of spills _____

Inflow and outflow controls _____

Continuous Inflow _____ Means to stop flow? _____

Special Requirements for I and R wastes _____

5.220-.230/
-54cc(c)-40

5) Surface Impoundments (Pits, Ponds and Lagoons) copper hydroxide pit cleaned and soil removed on 12/85 and 6/86

Protective Cover on Dikes _____

2' freeboard _____

Special requirements for I and R waste _____

Evidence of fire, explosion - leak _____

*NYR Liner none

5.90-.94/
-54cc(c)-33

Groundwater Monitoring 4 wells on-site

5.250-.257/
-54cc(c)-41

6) Waste Piles n/A

Wind erosion control _____

Prevention of leachate from pile (if hazardous) _____

Special requirements for I and R waste _____

Evidence of fire, explosion, leak _____

Separation of incompatible wastes _____

Waste analysis _____

.340/
54-cc(c)-45
382/
4cc(c)-48

7) Incinerators/Thermal Treatment n/A

a) Steady State conditions _____

b) Inspect combustion and emission control instruments every 15 minutes _____

c) Observe stack plume hourly _____

d) Waste analysis _____

* Not yet promulgated

7) Incinerators/Thermal Treatment (continued) n/A

1) Heating value of waste _____
2) Organic halogen content _____
3) Sulfur content _____
4) Lead concentrations _____
5) Mercury concentrations _____

e) Evidence of leaks or spills (pumps, valves, conveyors and pipes) _____

f) Daily Inspection of Emergency shutdown controls and Alarm systems _____

g) Special Requirements for incompatible wastes _____

.272-
.282/
54cc(c)-47

8) Phys/Chem/Bio. Treatment n/A

a) Leaks _____
b) Ruptures _____
c) Corrosion _____
d) Waste cut-off _____
e) Waste analysis _____
f) Special Requirements for I and R waste _____
g) Special Requirements for incompatible wastes _____

.272-
.282/
54cc(c)-42

9) Land Treatment n/A

a) Approval document _____
*b) Run-on diversion _____
*c) Run-off collection; Treat if necessary _____
d) Waste Analysis _____
e) Presence of food chain crops, if so, refer to 265.276 _____
f) Unsaturated zone monitoring plan _____
g) Unsaturated zone waste analysis _____
h) Records of application date, rates, quantities and location of waste _____

i) Special requirements for I and R wastes _____
j) Special requirements for incompatible wastes _____

90-.94/
54cc(c)-33

*k) Groundwater Monitoring _____

5.302-.315/ -54cc(c)-43 10) Secured Landfills n/A

*a) Run-on diversion _____

*b) Run-off collection; Treat if necessary _____

c) Wind dispersion controlled _____

d) Records of all dimensions, locations, and contents _____

e) Special Requirements for I and R wastes _____

f) Special Requirements for Incompatible Wastes _____

*g) Special Requirements for liquids _____

*n) Reduction in volume of empty containers _____

.90-.94/ 54cc(c)-33 *i) Groundwater Monitoring _____

54cc(c)-44 11) Engineered Landfills n/A

a) Minimum area exposed to direct precipitation: _____

b) Run-on diversion: _____

c) Run-off collections; Treat if necessary: _____

d) Wind dispersion controlled: _____

e) Prohibited Materials: present: _____

f) Surveying and Recordkeeping: _____

_____

54cc(c)-33 g) Groundwater Monitoring: _____

part R/ 54cc(c)-48 12) Underground Injection

Prohibited, for hazardous waste, in Connecticut.

FINANCIAL REQUIREMENTS

*(TSDF's ONLY)

FINANCIAL ASSURANCE: none, need to devise or change status

d) 265.143 a. Closure

Type of mechanism _____
(trust fund, surety bond, letter of credit, insurance, financial test)

Amount of coverage $ _____
(should be ≥ cost estimate)

Comments:

265.145 b. Post-Closure

Type of mechanism _____

Amount of coverage $ _____

Comments:

Liability Insurance:

265.147 a. Sudden (all TSD facilities)

Type of mechanism _____
(insurance, financial test)

Amount of coverage $ _____

Comments:

b. Nonsudden (surface impoundments, landfills, and land treatment facilities

Type of mechanism _____

Amount of coverage $ _____

Comments:

Incorporated by reference into the Connecticut regulations in section 35 of 25-54cc(c). Federally owned facilities are exempt from financial requirements.

C. Requests for Information

Told contact to revise permit status, explained the different requirements in detail, contact wants to become sqg, but have partially developed generator requirements. Sent contact status change form.

D. Photos Taken

none

E. Samples Taken (List sample numbers & describe technique.)

none

F. Potential for Imminent Hazard, Air, or Water Discharge Violations

possible, a copper hydroxide sludge pit was on-site for 10 yrs. Pit and soil removed on December 1985 and additional soil - 7/86.

G. Proximity to Residential Area, Surface Water, Recharge Zone, etc.

commercial area, home nearby.

Processes Continued: Wastewater Treatment (WWT). Rinses are piped into a collection tank inside. Waste is treated with sodium hydroxide. Sludge settles and is pumped out twice per year by EWR. Supernatant discharged to town sewer.

Until 1985 waste waters were treated as follows:

Waste was pumped to collection tank (same one as mentioned above). The indoor tank has a bottom drain which discharged the sludge to a pit located outside. The pit was unlined and had concrete walls. The indoor tank also has pipes which draw off the supernatant to the dry well on-site. For a more detailed description of past disposal practices see Paul Hassler's report August 22, 1983.

To date the sludge pit and surrounding soil were removed by EWR (15 yards). An Order from the Water Compliance Unit, Department of Environmental Protection was issued for this removal. The original excavation was in December, 1985. In June, 1986 additional soil was removed. Also in June the dry well was clean out. The soil was taken to the Landfill. Contact unsure of amounts removed from dry well.

Containers Continued: Waste on-site:

Four (4) drums of waste ferric chloride. The drums were stored outside on a loading dock without any secondary containment. All drums were marked and dated.

Manifests for 1986 indicate that waste was stored more than ninety (90) days. Contact thought he notified for storage of all waste. Only storage for trichloroethylene was noted on the original notification.

Company Status: Originally Bovano notified to EPA as a Treatment, Storage and Disposal Facility:

1) S01 - Trichloroethylene in drums. The use of trichloroethylene was discontinued in 1982.

2) T01 - Treatment in tanks. Contact mis-notified. (Adding sodium hydroxide to waste store in collection tank)

3) S02 - Storage in tanks. Contact mis-notified. (Copper Hydroxide waste settling in collection tank, waste currently pumped from tank by EWR).

D80 Landfill:

Indoor collection tank had a bottom drain which discharged the copper hydroxide sludge to an outside pit. The pit was not lined and had concrete walls. Tested were performed on the Copper hydroxide sludge waste and Kevin Vidmar, former Department of Environmental Protection Engineer (see letters in file) determined the waste was non-hazardous.

In June 1985, the pit and surrounding soil was removed and disposed of by EWR.

Bovano is currently acting as a generator of hazardous waste. As mentioned previously, the Copper hydroxide sludge was determined to be non-hazardous according to data submitted in 1984, however the last shipment was manifested as D006 by EWR. If this waste continues to be determined as a hazardous waste, Bovano will need to change their status from a facility to a generator.

Mr. Flood informed me that the etching process has increased over the past three years. Due to the increase, a higher count of cadmium has showed up in the copper hydroxide sludge, making this waste stream hazardous.

CSH:jab

May 27, 1987

Ms. Caren Spiesko
DEP - Hazardous Waste Mgnt.Unit
Hartford, Ct. 06106

Dear Caren:

In an attempt to address specific action taken in response to your notice of violation 307, I will list our efforts made:

1. Scheduled removal of one drum of unusable lacquer and one drum of used water displacing fluid to be removed by EWR.

2. Established weekly inspection and log. First inspection started 5/26/87. Copies enclosed.

3. Established logs for waste shipped offsite, treatment schedule, accumulation schedule. Copies enclosed.

4. Met 90 day requirement for all waste generated this year. Second manifest scheduled before July 15.

5. Moved storage of waste ferric chloride inside cinderblock wall building (high traffic area). Ordered "pigs" for secondard containment inside building.

6. Eliminated storage of both muriatic acid and waste FeCl on loading dock area.

7. Have posted emergency phone numbers and action to be taken in the event of spills in the waste treatmnet and storage area.

8. Attended one day seminar sponsored by DEP and reviewed days activities with two key personnel as part of training. Additional training and schedule of training not yet addressed.

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

June 5, 1992

SITE NAME: Bovano of Cheshire
TOWN: Cheshire
FILE TYPE: ENF

CERTIFICATE OF COMPLIANCE

Bovano of Cheshire
830 South Main Street
Cheshire, Conn. 06410

Attn: James A. Flood, President

Re: Order No. HM-688 Notice of Violation No. 307

Dear Mr. Flood:

On April 22, 1992 a compliance inspection of Bovano of Cheshire located at 830 South Main Street, Cheshire, Connecticut was conducted by staff from the Department of Environmental Protection's Waste Management Bureau. As a result of the site inspection and a review of the documents submitted to this office, the Department has determined that Bovano of Cheshire has satisfied the substantive requirements of Steps A - E in the schedule of compliance in Order No. HM-688, entered on the 10th day of May, 1990 and the substantive requirements of Notice of Violation No. 307, entered on the 28th day of April, 1987.

Nothing in this letter shall affect the Commissioner's authority to institute any proceeding to prevent or abate pollution, to recover costs and natural resources damages, or to impose penalties for violations of the law. If at any time the Commissioner determines that the remedial actions implemented by Bovano of Cheshire at this site pursuant to Order No. HM-688 and Notice of Violation No. 307 have not successfully abated or prevented pollution, the Commissioner may institute any proceeding to require further investigation or further action ot abate or prevent pollution, specifically with respect to an evaluation of the possible impact on groundwater due to Bovano of Cheshire's past operations and disposal practices.

In addition, nothing in this letter shall relieve any person of obligations under Federal, State and, to the extent local law is consistent with this notice, local law.

Sincerely,

Timothy R.E. Keeney
Commissioner

TREK:PMP:je

cc: Town of Cheshire
Darlene Sage, DEP Waste Management, Planning and Standards

APPENDIX F

ORDER HM 688

Appendix F - part 1

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

ORDER NOTIFICATION LETTER

May 16, 1990

James Flood
Bovano Industries Inc.
830 S. Main Street
Cheshire, Connecticut 06410

SITE NAME: BOVANO
TOWN: CHESHIRE
FILE TYPE: ENF

Dear Mr. Flood:

On November 29, 1989, an inspection was conducted by the Waste Engineering and Enforcement Division, at your facility located at 830 South Main Street in Cheshire, Connecticut.

An Abatement Order will be forthcoming that will require corrective action. The Abatement Order will define the specific steps necessary to bring your company into compliance with the Hazardous Waste Management Regulations. While you may wish to initiate corrective action at this time, I must advise you that prior approval from the Department should be received.

Enclosed for your review is a copy of the November 29, 1989 inspection report, with violations highlighted and a copy of the Connecticut Hazardous Waste Management Regulations.

If you have any questions, please contact Margaret M. Cochran at (203) 566-8256

Sincerely,

Patrick F. Bowe
Assistant Director
Waste Engineering and Enforcement Division

PFB:MMC

Enclosures

HAZARDOUS WASTE INSPECTION REPORT

4/89

Site Name Bovano Ind. Inc.
Location 830 So. Main St.
Cheshire, CT 06410

AKA: Bovano of Cheshire
Phone No 272-3208
ID No CTD001179316

Contact &
Title James Flood-President
Mailing Address:
(if different from location)
P.O. Box 250, Cheshire Ct. 06410
Property Owned/Leased

Inspection Date 11/29/89
Inspector(s) Chernauskas / Harder
Notified as:
Generator ✓
Transporter
TSDF ✓ Storage
Burner/Blender
CT. Reg. Facility
Previous Inspection 2/18/87 - Spieske
Inventory
Complaint No
Compliance w/NOV # 307
Other (describe)
Status Change Request: yes: filed on 3/8/87; TSDF → Generator

CHARACTERIZATION OF SITE ACTIVITY

a) Date Established at Present Location 1954
b) No. of Employees, Shifts ≈28 employees, 1 shift.
c) Type of Activity Manufacturing
d) Products glass enameling on copper ornaments, some brass sculpting & pottery
e) Processes Pressing, Stamping, shaping & forming. Etching - self contained etching machine (installed 8/88), etchant is cupric chloride, the piece is manually fed into the machine, rinsing is also done in the machine with the waste discharged into 1 of 2-1000 gal plastic tanks; water, HCl & hydrogen oxide are fed into the etching machine automatically thru 3 lines. Bright Dip - nitric & sulfuric acid w/2 rinses (one rinse alkaline) & a dryer, rinse waters are discharged to the 2-1000 gal waste holding tanks, wet scrubber over acid tanks. Enameling - 8 booths, glass powder is applied by hand to wet copper or brass, three ovens for baking; each booth is attached to a new baghouse (installed ≈10/88) located on roof, previously vented to a wooden baffled box at ground level at the rear of building (outside), no waste has been removed from the baghouse yet according to the contact. Lacquering - 1 dry booth with spray gun, the process only operates ≈ 1/2 hr/wk & does not generate any waste (ie: no gun cleaning) according to the contact.

(PROCESSES cont. pg 13)

f) Water Supply (if well(s) give approx. location) well water

g) Type of Wastewater Discharges Sewer for sanitary waste, all process rinse waters discharged to 2-1000gal above ground holding tanks located inside building

Comments

II WASTE PROFILE

Type of Waste	Amount/Frequency	Handling Method	Transporter	Designated Facility
*Rinse Water	≈1750gal/1/4yr.	2-1000gal tanks	EWR	EWR
Dodge Counter Enamel	2dr/yr.	drum	EWR	EWR
Baghouse Dust	1dr/yr	drum	EWR	EWR - none yet removed.
Waste Flam Liq.	330gal/one time event	- Underground Fuel Tank removed.		

Comments * Rinse water are from bright dip rinses, tumbling water & etchant rinse w/≈ 10gals of cupric chloride a week.

a) Is there any evidence of On-Site Disposal/Spills? No____ Yes ✓

Identify: Location; Type; Amount/Frequency; Length of Time disposal site(s) used, etc.

At the rear of the plant there is a wooden box on the ground, open on one side with a top & bottom baffle inside. This unit is connected to the two counter enamel spray booths. We observed a light covering of white powder ≈ an area 2'x10' on the ground. This box has been in place ≈ 10 years according to the contact. Due to snow cover during the last inspection the inspector was unable to determine the area of the fall out. No hazardous waste determination has been performed on the material according to the contact.

Notifications

a) Part "A" (TSDF only): Yes ✓ /No____ Part "B" Application: Yes____/No ✓

- Any discrepencies, Part A and actual operations Yes ✓ /No____

Comments See "Company Status" from Caren Spieske's 1987 report (attached).

Hazardous Waste262.11/

22a-449(c)-7 Hazardous Waste Determination

a) Performed needed on fallout material from baffled box located at the ~~Comments~~ rear of the building.

265.170-177/

22a-449(c)-33 Containers

a) Approx. # of containers 3 drums of spec. accumulated counter enamel.

b) Condition of containers good.

c) Leaks, Ruptures, Corrosion none

d) Containers open/closed closed.

e) Heat/Pressure none observed

f) 50' Bufferzone for I and R wastes N/A

g) Separation of incompatible wastes N/A

h) Evidence of Spills No container spillage.

i) Greater than 90 day storage (generator only); explain Company appears to ship it's waste in < 90 days, though they reuse counter enamel ~~Comments~~ for up to a year. The drums containing the counter enamel were dated & marked to identify the contents.

262.30-.34/ - Pretransport Requirements

22a-449(c)-7,8,33

a) Packaging yes

b) Labelling ~~yes~~ N/A

c) Marking yes

d) Accumulation Dates yes on spec accumulation drums of enamels.

Comments

22a-449(c)-32,33/ Storage Area (containers only)

a) Impermeable Base (specific type) yes - cement floor

b) Secondary Containment inside building (waste is in solid state)

Comments

265.190-.199/

22a-449(c)-34 Waste Tanks

Description/Inventory (list each hazardous waste tank, capacity, waste type, inground/ aboveground) 2-1000 gal plastic above ground tanks located inside building, collecting waste rinse waters.

a) Markings both tanks marked "Bright Dip & Etchant Water" *

b) Leaks none observed

c) Ruptures none observed

d) Corrosion none observed

e) 2' freeboard or containment both tanks bermed.

f) Heat/pressure none observed

g) Evidence of spills none observed

h) Inflow and outflow controls yes.

Continuous Inflow no Means to stop flow? yes.

i) Special requirements for I and R wastes N/A

j) Greater than 90 day storage (generator only); explain appears to be shipped in < 90 days.

Comments * Told contact that tank must display the prefix "Waste", he added the designation before we left. Both tanks are hard piped together though they are filled one at a time.

262.21/

22a-449(c)-5/ Manifests

a) Are Manifest used for all hazardous waste and Ct. regulated waste shipments? Yes ✓ No(explain)

b) Appropriate Copies On-site? Yes ✓ No(explain)

c) Observations (discrepancies, proper waste I.D., landban restrictions etc.) Had copies of land ban notifications attached to appropriate manifests.

Comments

265.15/

22a-449(c)-28/ Inspection Schedule and Log

a) Are inspections conducted yes - see comment below

b) Written inspection schedule yes

c) Inspection Log (date, time, inspector and corrective actions) yes.

(1) Daily;

loading/unloading of areas subject to spills no

discharge control equip., waste level in tanks no

incinerator system, thermal treatment equip. N/A

chem/phys/bio treatment equip. N/A

freeboard level of surface impoundments N/A

2) Weekly; physical conditions of: (containment system, if applicable)

containers yes

tanks yes

surface impoundments N/A

chem/phys/bio treatment facility N/A

3) Safety and Emergency Equipment yes

Comments Had some gaps in inspection log, since Feb. 1989 weekly inspection were performed ≈ once a month.

265.16/

22a-449(c)-24/ Personnel Training Records

a) Job titles/position description and name of employee

yes

b) Adequate written description of training yes.

c) Records of training yes - certificates

d) Training completed yes 1/6/89

1. New Employees no new employees.

2. Last Annual Training 1/6/89, update will be conducted ≈ 1/90

~~Comments~~ according to contract.

265.50-56

22a-449(c)-26/ Contingency Plan

a) Plan on site yes Date of Plan HRP

b) Plan to local authorities yes

c) Emergency procedures yes; fire, explosion, spills

d) Identify emergency coordinator(s) Jim Flood-Primary; Chris Havell-Alt.

e) Identify, locate and describe emergency equipment capabilities (incl. spill, fire, alarm, communication, decon, protective equipment)

yes.

f) Evacuation plans yes.

Comments need to update plan to include the 2 new waste tanks & need to delete UWTS in present plan.

265.30-.37/ Site Preparedness/Prevention

22a-449(c)-25

a) Internal communication/alarm yes

b) Telephone/2-way radio yes

c) Portable fire control, spill & decon equipment yes

d) Adequate water for fire control well water

e) Testing and Maintenance of equipment yes - outside contractor

f) Adequate aisle space yes

g) Access to equipment appeared good

h) No smoking signs (for I & R waste) N/A

Comments

Facility Requirements

22a-449(c)-21/ Waste Analysis Plan Company appears to be operating as a generator, shipping waste in < 90 days.

Facility Requirement

a) Plan on site _____

b) Plan must include

1) Parameters _____

2) Test Methods _____

3) Sampling Methods _____

4) Frequency _____

c) Copy of results _____

Comments _____

_____

265.73/ Operating Records Company appears to be operating as a generator, shipping waste in < 90 days.

22a-449(c)-27

a) Are the following written records maintained on-site:

1) Waste received from: off-site_____; on-site _____

2) Waste

a. description _____

b. quantity _____

3) Methods/Dates of: storage_____ treatment _____

disposal_____

b) Waste inventory (including type(s), volume(s), and location(s)):

1) In storage _____

2) Disposal on-site (recorded on map) _____

3) Does inventory cross reference specific manifest _____

c) Analytical records for:

1) All waste _____

2) Monitoring wells _____

3) Trial test (to assure compatibility with tanks, surface impoundments, waste piles) _____

d) Report/Summary of any incident requiring implementation of Contingency Plan

_____

e) Records and results of inspection _____

f) Closure/Post Closure cost estimates _____

Comments _____

_____

265.112-115 Closure Plan Company has applied for status change from TSDF → Gen
22a-449(c)-29 Company appears to be operating as a generator, shipping waste in < 90 days.

a) Plan on site? Yes____ No____ Date of Plan_____

b) Does plan include: Prepared by_____

1) Schedule of partial closure if applicable _____

2) Estimated maximum waste in inventory _____

3) Schedule and total time required for final closure _____

4) Estimated expected year of closure_____

5) Description of steps needed to decontaminate facility/equipment _____

6) Are there any regulated units closed, if yes are they certified by owner and P.E._____

Comments_____

265.142/ Closure Cost Estimate - see comment above
22a-449(c)-30

a) Estimate on site _____Amount of estimate _____

b) Estimate adjusted annually _____

Comments_____

265.117,.118/ Post-Closure Plan (disposal facilities only) N/A
22a-449(c)-29

a) Plan on site _____ Date of Plan_____

b) Does plan identify and include frequency of:

1) planned groundwater monitoring/and reporting _____

2) planned maintenance & security acitivies _____

3) name, address, phone # of Post-closure contact _____

c) Length of Post-closure period identified _____

Comments_____

265.144/ Post-Closure Cost Estimate (disposal facilities only) N/A
22a-449(c)-30

a) Estimate on site _____Amount of estimate _____

b) Estimate adjusted annually on 11/19 for inflation _____

Comments_____

FINANCIAL REQUIREMENTS

Company has applied for status change from TSDF → G
Generator. Company appears to be operating as a generator
shipping waste in < 90 days.

22a-449(c)-30

12) Financial Assurance:

(Fed) 265.143 A. Closure

Type of mechanism_____

(trust fund, surety bond, letter of credit, insurance, financial test)

Amount of coverage $_____

(should be ≥ cost estimate)

Comments _____

265.145 B. Post-Closure

Type of mechanism_____

Amount of coverage $_____

Comments _____

13) Liability Insurance:

265.147 A. Sudden (all TSD facilities)

Type of mechanism_____

(insurance, financial test)

Amount of coverage $_____

Comments _____

B. Nonsudden (surface impoundments, landfills, and land treatment facilities)

Type of mechanism_____

Amount of Coverage $_____

Comments _____

Federally owned facilities are exempt from financial requirements.

22a-449(c)-22 Site Security

a) 24 hour surveillance system, or in process of installing new alarm system

b) Means to control entry yes - inside storage

c) Danger sign posted at each entrance legible at 25' no

Comments Company appears to be operating as a generator, shipping waste in < 90 days.

265.220-.230/ Surface Impoundments (Pits, Ponds and Lagoons) N/A

22a-449(c)-35 Sump pit cleaned & removed 12/85, see last page for details.

a) Number and Type

b) Protective Cover on Dikes

c) 2' freeboard

d) Special requirements for I and R waste

e) Evidence of fire, explosion - leak

f) Liner

Comments

265.90-.94/

22a-449(c)-28/Groundwater Monitoring 4 non RCRA GWM wells, not being monitored, refer to WCU.

265.250-.257/ Waste Piles N/A

22a-449(c)-36

a) Approx. type and size

b) Wind erosion control

c) Impermeable base

d) Run-On/Run-Off control and prevention

e) Special requirements for I and R waste

f) Evidence of fire, explosion, leak

g) Separation of incompatible waste

h) Waste analysis

Comments

265.340/ Incinerators/Thermal Treatment N/A
22a-449(c)-38, 39

a) Steady state conditions_____
b) Inspect combustion and emission control instruments every 15 min._____
c) Observe stack plume hourly_____
d) Waste analysis_____
e) Heating value of waste_____
f) Organic halogen content_____
g) Sulfur content_____
h) Lead concentrations_____
i) Mercury concentrations_____
j) Evidence of leaks or spills (pumps, valves, conveyors and pipes_____

k) Daily Inspection of Emergency shutdown controls and Alarm systems_____

l) Special Requirements for incompatible wastes_____

265.302-.315/
22a-449(c1-37e) Landfills N/A

a) Run-on diversion_____
b) Run-off collection; Treat if necessary _____
c) Wind dispersion controlled_____
d) Records of all dimensions, locations and contents_____
e) Special Requirements for I and R wastes_____
f) Special Requirements for Incompatible Wastes_____
g) Special Requirements for liquids _____
h) Reduction in volume of empty containers _____
i) Groundwater Monitoring _____

Miscellaneous Information

Told contact that he must conduct weekly inspections of containers & containment structure, also informed contact that the waste tanks needed to be inspected daily for waste levels.

Told contact that he must update his contingency plan to identify new processes & equipment & to delete discontinued processes & equipment. Told contact that fallout from baffle box need haz. waste determination.

Photos Taken (number and a brief description)

None

Samples Taken (number)

None

Potential Hazard, Air, or Water Discharge Violations

Possible, a copper hydroxide sludge pit was on-site for ≈10 yrs. Pit & soil removed 12/85 w/ additional soil removed 7/86. On this inspection we noted white powder from a baffled wooden box connected to the counter enamel spray booth; requested haz waste determination of the fallout material.

Proximity to Residential Area, Surface Water, Recharge Zone, etc.

Commercial area, some homes nearby. A McDonald's restaurant is situated in front of the Bovano property.

11/29/89

Bovano Ind Inc. CTD001179316
830 So. Main St.
Cheshire, CT 06410

(continued from pg. 1)

PROCESSES: Counter Enameling - left over enamels are reused in two spray booths to coat the underside of the ornaments, booths exhausted to a wooden structure on the ground at the rear of the building. The structure contained 2 baffles & an open side. Fallout from the box was evident on the ground surrounding the structure. The fallout material was a light white powder that covered an area ≈ 2' X 10', the contact describe the material as 'frit' (clay & glass crystal). The amount of material & the area it covered was not indicated on the previous inspection report, due to snow cover.

WWTS - as of 7/89 use of the waste water treatment system had been discontinued. The company now collects all rinses from the bright dip operation, tumbling & etching processes in 2-1000 gal above ground plastic tanks located inside the building. The waste in the tanks will be removed ≤ 90 days by EWR.

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

SITE NAME: BOVANO
TOWN: CHESHIRE
FILE TYPE: ENF

STATE OF CONNECTICUT
VS
BOVANO INDUSTRIES INC.

IN THE MATTER OF AN ORDER TO BOVANO INDUSTRIES INC. TO COMPLY WITH CONNECTICUT'S HAZARDOUS WASTE MANAGEMENT REGULATIONS

ORDER

Having found that Bovano Industries Inc., located at 830 South Main Street in Cheshire, Connecticut, is in violation of Connecticut's Hazardous Waste Management Regulations, under the provisions of Chapter 446K of the Connecticut General Statutes as amended, the Commissioner of Environmental Protection acting under Sections 22a-6 and 22a-449 of the General Statutes, hereby orders Bovano Industries Inc., to take such action as is necessary to:

1. Effect the removal and disposal of all toxic, hazardous, and other industrial waste now stored on-site in a manner approved by the Commissioner of Environmental Protection.

2. Bring all waste handling procedures and facilities into compliance with all applicable Connecticut Hazardous Waste Management Regulations.

Bovano Industries Inc. is further ordered to accomplish the above described program, except as may be revised by the Commissioner of Environmental Protection, in accordance with the following schedule:

A. On or before July 1, 1990, verify to the Commissioner of Environmental Protection that a qualified consultant has been retained or that in-house expertise exists to perform the necessary studies under Directive 1.

B. On or before August 1, 1990, submit to the Commissioner of Environmental Protection for review and approval a detailed report providing an inventory (identify and quantify) and hazardous waste determination for all wastes stored on-site, an identification of all past waste disposal procedures and locations, and an implementation schedule to be executed by a licensed chemical waste disposal firm for the proper disposal of all hazardous substances in accordance with Directive 1.

C. On or before October 1, 1990, verify to the Commissioner of Environmental Protection that all wastes have been removed and properly disposed of in accordance with the plan approved under Step B.

D. On or before August 1, 1990, submit to the Commissioner of Environmental Protection for review and approval a report that details the remedial measures necessary to achieve compliance with Connecticut's Hazardous Waste Management Regulations.

E. On or before October 1, 1990, verify to the Commissioner of Environmental Protection that the remedial measures approved in compliance with Step D have been implemented.

Entered as an Order of the Commissioner of Environmental Protection this 10th day of May, 1990.

Leslie Carothers
Commissioner

Order No. HM-688
Town of Cheshire

Sent Certified Mail
Return Receipt Requested
P 424 478 864

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

M E M O R A N D U M

TO: Leslie Carothers, Commissioner
Environmental Protection, Room 117-State Office Building

FROM: Richard J. Barlow
Waste Management Bureau
18-20 Trinity Street, Hartford X 8475

SUBJ: Bovano Industries Inc.

DATE: May 17, 1990

Enclosed is an Administrative Order for Bovano Industries Inc., of Cheshire, Connecticut. A summary of the violation and the recommended enforcement action is attached.

Richard J. Barlow
Richard J. Barlow

RJB:MMC

enclosures

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

RECOMMENDED ENFORCEMENT ACTION SUMMARY

Facility:

Bovano Industries Inc.
830 South Main Street
Cheshire, Connecticut 06410

Nature of Problem/Violation:

During an inspection on 11/29/89 Bovano was found to be in violation with the following: Hazardous Waste Determinations, Inspection Schedule and Log, Contingency Plan and Storage. These are repeat violations that were also found on an inspection on 2/18/87. This 2/18/87 inspection resulted in the issuance of NOV 307.

Action Proposed:

( ) Referral to Attorney General Office
( ) Withdrawal from Attorney General Office
( ) Criminal Referral
( ) Cease and Desist Order
( ) Civil Penalty
( ) Pollution Abatement Order
(X) Hazardous Waste Order
( ) Consent Order
( ) Order Modification

Justification for Enforcement Action Proposed:

For repeat and Class I violations of the Use and Management of Containers, Inspection Schedule and Log, Preparedness and Prevention and Contingency Plan, the enforcement response policy calls for the issuance of an Administrative Order.

Anticipated Controversy:

Following the 11/29/89 inspection, a letter was sent from Bovano Industries to Philip S. Robertson, Senator of the Thirty-Fourth District of the State of Connecticut. This letter indicated the displeasure of Bovano in receiving an unannounced inspection. A letter was sent from Senator Robertson to the Commissioner on January 3, 1990 regarding this issue. Commissioner Carothers responded on January 13, 1990 with a letter to Senator Robertson addressing the need for unannounced inspections as an effective means to finding hazardous waste violations.

Past Compliance History:

NOV 307 issued on 4/28/87 for the same violations.

Prepared by:

Margaret M. Cochran
Engineering Intern
Waste Engineering and Enforcement Division
Extension 8256
18-20 Trinity Street, Hartford, CT

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Date March 30, 1990

HAZARDOUS WASTE MANAGEMENT SECTION
FINDINGS IN SUPPORT OF ADMINISTRATIVE ABATEMENT ORDER

Site Name: Bovano Industries Inc. Town: Cheshire

DEP Staff Person: Margaret M. Cochran Title: Engineer Phone: 8256

Type of Site

- X RCRA Notifier
- X Generator
- ___ Transporter-Haz.Waste
- ___ Trans. Ct. Reg. Waste
- ___ Treatment Facility
- X Storage Facility
- ___ Disposal Facility
- ___ Commercial TSDF
- ___ Non-Commercial TSDF
- ___ Small Quantity Generator
- ___ Non-Notifier
- ___ Uncontrolled Site
- ___ Other:

Type of Waste — Hazardous Waste

- ___ Chlor. Solvents
- ___ Non-Chlor. Solvents
- ___ Ignitables
- X Corrosives
- ___ Reactives
- X EP Toxic
- ___ PCB's
- ___ Ct. Regulated Waste
- ___ Waste Oil
- X Other: Unknowns

Waste Location

- X Containers
- X Tanks
- ___ Surface Impoundments
- ___ Waste Pile
- ___ Land Treatment
- ___ Landfill-Secure
- ___ Landfill-Engineered
- ___ Incinerator/Thermal Trtmt.
- ___ Chem/Phys/Bio Treatment
- ___ Other

Nature of Problem

- ___ Community Pollution
- X Improper Strge/Hndlng
- ___ Improper Treatment
- ___ Improper Disposal
- ___ Manifest Violations
- X Recordkeeping "
- ___ Non-Compliance with Financial Requirements
- ___ GWM Violation
- ___ Inadequate Security
- X Inadequate Prep. & Prev.
- ___ Permit Violations
- ___ Soil Contaminations
- X Other

ATE OF CONNECT. UT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Basis for Standards:

____	Section 22a-428(CGS)	____	Best Professional Judgement
____	22a-429	____	Performance Standards
____	22a-432	____	EPA Guidelines
____	22a-433	____	Development Document
X	22a-449	X	Department File Info
X	Ct. Haz. Waste Regs	____	Other
____	Permit Requirements		

Environmental and Public Impact

____	Contam. Wells(Actual)	____	Contaminated Soils
____	" "(Potential)	X	Health Problems
____	Surface Water Contam.	X	Safety Problems
____	Poten. Adverse Water Quality Impacts	X	Other

Information Available

X	Field Inspector Rpt.	____	Part A Permit Application
____	Sample Results	____	Part B Permit Application
____	Plans & Specs.	____	Engineer Reports
____	Notification of HW Activity	____	Citizen Complaint
		X	Other

History

____	Existing Permit(s)	____	Previous Orders
____	Expiration Date(s)	X	Previous Notice of Violation
____	HW Determination	____	Referral to Attorney General
____	Civil Penalty	____	Referral to State's Attorney

Comments: Bovano has repeat violations as to the ones found during the 2/18/87 inspection which led to the issuance of NOV 307, as entered on 4/28/87.

Review: RK 4-23-90 Principal Env. Analyst/Sanitary Engineer _____

PB Assistant Director _____

RJB Bureau Chief _____

LAC

Leslie Carothers
Commissioner

Phone:

165 Capitol Avenue • Hartford, Connecticut 06106

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STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

SITE NAME: BOVANO
TOWN: CHESHIRE
FILE TYPE: CPD

MEMORANDUM

TO: FILE
FROM: MARGARET COCHRAN PHONE: X8256
W.E.E.D. 20 TRINITY STREET, HARTFORD

DATE: June 27, 1990

RE: Bovano Industries, Inc.,
830 South Main Street, Cheshire, CT

On 6-26-90 I met with Mr. James Flood, President of Bovano, to go over the issues of Order No. HM-688. We began with Mr. Flood taking samples of a white powder which is evident on the ground outside of the building. The white powder is from a baffled box which is placed beneath an exhaust pipe. The pipe is coming from a counter spray booth used for an enamelling process. Much of the powder was evident on the ground around the box.

Three samples were taken. One sample was taken of the material from the floor of the wooden box. One was a 0-12" composite sample of soil approximately 1 foot in front of the opening from the box alongside the building. The other was also a composite soil sample taken from 0-12" approximately 2 feet from the box to the front left of the opening. The samples were collected in 1 quart jars and were to be brought that day, by Mr. Flood, to EML in Wallingford, for analysis.

We then went over the additional requirements of Order No. HM-688. I indicated to Mr. Flood what I would be looking for in his submittals for Steps B & D of the order and what his primary focuses should be. I told him to focus his work on the violations found during the 11-29-89 inspection as they are denoted in the inspection report.

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

SITE NAME: Bovano
TOWN: Cheshire
FILE TYPE: CRD

July 15, 1990

Christine Adams
Regional Water Authority
90 Sargent Drive
New Haven, CT 06511

Dear Christine:

Here are copies of the documents that you requested during our phone conversation of August 15, 1990. They are :

1) The inspection report generated from our 11/28/89 inspection of Bovano of Cheshire.

2) Order No. HM-688 as issued to Bovano of Cheshire by the Department of Environmental Protection on May 10, 1990, as a result of the 11/29/89 inspection.

3) Part of the report submitted by Bovano of Cheshire towards compliance with Order No. HM-688. (Including sample results, numbers 1 and 2 are soil samples and number 3 is a sample of the actual material.)

If you have any question please contact me at 566-8256.

Sincerely,

Margaret M. Cochran

Margaret M. Cochran
Engineer
Waste Engineering and Enforcement Division

enclosures

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IMAGINATION

Bovano of Cheshire

330 South Main Street • Cheshire, Connecticut • Telephone 203-272-3208

July 30, 1990

Margaret Cochran
Waste Engineering & Enforcement Division
Department of Environmental Protection
165 Capitol Avenue
Hartford, CT 06106

RE: Order # HM-688

Dear Margaret:

On July 25th, 1990, I spoke with you by telephone to review the status of your order # HM-688. During that conversation I reviewed the results of tests done on samples taken in your presence on 6/26/90. In addition, I discussed the steps to be taken to comply with the abatement order schedule and to resolve this situation on a long term basis.

Tests results are enclosed. You have indicated that the classification of our property will be a significant factor in determining the status of the material tested. Test results indicate the metals detected are below the Federal EPA standard of 100 times the drinking water standard. I will be waiting for your assessment of the status of this material based on State DEP standards.

The steps taken to comply with Step B are listed. This action is specifically directed at the compliance deficiencies found when Bovano Industries was inspected on 11/29/90.

1.) Hazardous waste determination of white powder seen at the rear of the building has been started. Test results are enclosed. Classification of material is needed by State DEP.

2.) Daily log of inspection of waste level in tanks has been implemented. Copies of this log through 6/27/90 are also enclosed.

3.) Weekly inspection of premises has been maintained since December of 1989. Copies of weekly inspection log are enclosed.

4.) Contingency plan and compliance documents have been updated to account for these changes:

   a.) Elimination of metal hydroxide treatment system
   b.) Installation of two 1,000 gallon tanks in rubber lined cement berm as storage tanks
   c.) Replacement of Ferric Chloride waste stream with Cupric Chloride waste stream

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Bovano of Cheshire

840 South Main Street • Cheshire, Connecticut • Telephone 203-272-3209

RE: Order # HM-688

As we discussed when you visited Bovano, these actions taken to respond to the inspection report should satisfy compliance with Step B of your order.

Corrective action has been started to address the white powder located at the rear of the building:

1.) Reduction of use of powder in the manufacturing process by changes in our product design.

2.) Review engineering of exhaust booths to consider feasibility of filtration and collection of white powder.

3.) Solicit outside company to access method and costs of removal of any white powder and soil if the material is determined to be hazardous.

Please contact me to discuss this letter if there are any questions or additional information needed.

Sincerely,

James A. Flood
President

Enclosure

cc: Leslie Carothers - Department of Environmental Protection
Richard Robinson - Sorokin Sorokin Gross Hyde & Williams, PC

JAF/bai

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

ORDER STEP APPROVAL

August 21, 1990

James A. Flood
President
Bovano of Cheshire
830 South Main Street
Cheshire, CT 06410

Dear Mr. Flood:

The report dated July 30, 1990, submitted by Bovano of Cheshire, has been reviewed by the Department of Environmental Protection.

This report is hereby approved in accordance with Section 22a-6 and 22a-449 of the Connecticut General Statutes, as amended. This report is approved as fulfilling the requirements of Steps B and D of the Department of Environmental Protection's, Waste Engineering and Enforcement Division Order No. HM-688, entered on May 10, 1990.

This Approval does not relieve the facility of the obligation to obtain any other authorizations as may be required by other provisions of the Connecticut General Statutes, or Regulations of Connecticut State Agencies.

Sincerely,

Richard J. Barlow

Richard J. Barlow
Chief
Waste Management Bureau

RJB:MMC

AUG 2

)VANO IN

Phone:

165 Capitol Avenue • Hartford, Connecticut 06106

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RECEIVED
OCT 1 0 1990
DEP- Waste Management Bureau
Waste Engineering & Enforcement
Enforcement-District 2

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Bovano of Cheshire

830 South Main Street • Cheshire, Connecticut • Telephone 203-272-3208

October 4, 1990

Mr. Tom Crowe
Department of Public Works
Town Hall
Main Street
Cheshire, CT 06410

Dear Tom:

Enclosed is a copy of a letter which will allow me to transport contaminated soil from Bovano Industries to the Cheshire landfill, pending your approval.

You have given me verbal approval by telephone. I would appreciate your sending me written confirmation along with any other requirements including payment terms. Transport of this material will be done by Excavation Technologies, Inc.

Thank you for your help.

Sincerely,

James A. Flood
President

cc: Margaret Cochran
Rick Robinson
Tim Slater

Enclosure

JAF/bai

STATE OF CONNECTICUT
DEPART ENT OF ENVIRONMENTA PROTECTION

September 27, 1990

Mr. James A. Flood
Bovaro of Cheshire
830 South Main Street
Cheshire, CT 06410

Re: Disposal of approximately 20 cubic yards of soil contaminated with glass enamel material utilized in the production of glass coated items from Bovaro Industries, Inc., South Main Street, Cheshire, CT.

Dear Mr. Flood:

The Waste Management Bureau has determined that the above referenced material is suitable for disposal at the Cheshire solid waste disposal area, subject to the following conditions:

1. Material should not contain any free draining liquids.

2. It may be used as cover material at the landfill.

This determination is based on the review of analytical results of soil samples submitted to the Waste Engineering and Enforcement Division Hazardous Waste Section by Bovaro Industries, Inc., Cheshire, CT.

Permission to dispose of this material must also be obtained from the Town of Cheshire, contact the Public Works Director at 271-6650 for proper disposal procedures.

It is the responsibility of Bovaro Industries, Inc. to make a hazardous waste determination on all wastes generated prior to disposal and to frequently reevaluate these determinations. A hazardous waste determination should be repeated annually and when there is a change in manufacturing processes. This is a one time authorization for disposal of this material, any future disposal requests must be submitted to this office for review.

Please contact David McKeegan at 566-5847 if you have any questions.

Sincerely yours,

Richard J. Barlow

Richard J. Barlow
Chief
Waste Management Bureau

RJB/dkm/mdg

cc: Thomas Crowe, Cheshire DPW

Phone:

165 Capitol Avenue • Hartford, Connecticut 06106

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Kovano of Cheshire
[illegible] South Main Street • Cheshire, Connecticut • Telephone 203-272-3208

September 13, 1990

RECEIVED
SEP 19 1990
DEP- Waste Management Bureau
Waste Engineering & Enforcement
Enforcement-District 2

Margaret Cochran
Waste Engineering & Enforcement Division
Department of Environmental Protection
165 Capitol Avenue
Hartford, CT 06106

RE: Order #HM-688

Dear Margaret:

I have received confirmation of my compliance with Steps B and D from Richard Barlow. I can only assume that Step A has also been complied with.

Although Step C is near completion, I cannot complete this step until your department authorizes removal of contaminated soil and transport to landfill. This authorization was requested from Dave McKeeganon on August 29, 1990.

Therefore, I am asking that the October 1st deadline be extended until four (4) weeks after receipt of your authorization to transport. Please confirm this extension.

Sincerely,

James A. Flood
President

cc:Leslie Carothers DEP
Rick Robinson Sorokin,Sorokin, Gross Hyde

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Bovano of Cheshire

830 South Main Street • Cheshire, Connecticut • Telephone 203-272-3208

August 29, 1990

RECEIVED
SEP 07 1990
DEP- Waste Management Bureau
Waste Engineering & Enforcement
Enforcement-District 2

Dave McKeegan
Bureau of Waste Management
165 Capitol Ave.
Hartford, CT 06106

Re: Landfill disposal of contaminated soil

Dear Dave:

As we discussed by telephone 8/20/90, I am requesting a letter from your office which would allow disposal of contaminated soil in a suitable landfill. The results of tests done on this material have been submitted to you already.

The soil is contaminated with a glass enamel material used in the production of glass coated items. The material is a dry white powder consisting primarily of silica and clay. The total amount of contaminated soil to be disposed of is approximately 20 yards.

Because of its proximity, disposal of this material in the Cheshire Landfill would be preferred. The contaminated soil is currently located on the property of Bovano Industries in Cheshire.

Payment of $100.00 for the required letter is enclosed. Thank you for your attention to this matter.

Sincerely,

James A. Flood
President

cc: Margaret Cochran DEP
Tim Slater Excavation Technologies
Rick Robinson Sorokin, Grosshyde

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

ORDER STEP APPROVAL

August 21, 1990

James A. Flood
President
Bovano of Cheshire
830 South Main Street
Cheshire, CT 06410

Dear Mr. Flood:

The report dated July 30, 1990, submitted by Bovano of Cheshire, has been reviewed by the Department of Environmental Protection.

This report is hereby approved in accordance with Section 22a-6 and 22a-449 of the Connecticut General Statutes, as amended. This report is approved as fulfilling the requirements of Steps B and D of the Department of Environmental Protection's, Waste Engineering and Enforcement Division Order No. HM-688, entered on May 10, 1990.

This Approval does not relieve the facility of the obligation to obtain any other authorizations as may be required by other provisions of the Connecticut General Statutes, or Regulations of Connecticut State Agencies.

Sincerely,

Richard J. Barlow

Richard J. Barlow
Chief
Waste Management Bureau

RJB:MMC

Phone:

165 Capitol Avenue • Hartford, Connecticut 06106

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Bovano of Cheshire

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Sent UPS Next Day Letter on 1/23/91

January 23, 1991

Margaret M. Cochran
DEP
Waste Engineering & Enforcement Division
165 Capitol Avenue
Hartford, CT 06106

RE; Soil Removal

Dear Margaret:

I have received your letter regarding the soil removal from Bovano and unfortunately due to unforseen weather conditions the project must once again be granted an extension date. Please be advised that we are not in any way avoiding the compliance and are doing everything we can to resolve this issue. I am happy to inform you that 98% of the soil has been removed and the project is close to completion.

I have been notified by Tim Slater of Excavation Technologies that he has spoken to you on the phone and you have granted us an extension date of February 4th thru February 11th if needed due to the ground being frozen.

Please respond to my letter and inability to meet the January 28th deadline per your letter dated January 14th. Once again, please understand we are not avoiding the initial order but have in fact encountered unfortunate circumstances preventing the project to be completed.

Sincerely,

James A. Flood
President

Appendix F

ETI

Excavation Technologies, Inc.

1074 S. Main St. • Cheshire, Connecticut 06410 • 203-271-2233

February 19, 1991

Mr. Jim Flood
Bovano's
830 South Main St
Cheshire, CT 06410

Dear Jim:

On the week of February 4th, 1991, Excavation Technologies, Inc. removed an exaust system. Visible clay material as well as an additional two (2") of soil was removed from the rear of building and stockpiled under plastic for future disposal to Cheshire Landfill. At that time Margaret Cochran of CT DEP, supervised samplings taken from said area. Sample #1 was a composite sample from the exaust fan to the rock approximately two (2') feet from building. Sample #2 was a composite sample approximately four (4') feet from building. Sample #3 was taken sixteen (16') feet from building, (see enclosed map).

If you require further information, please don't hesitate to call.

Very truly yours,

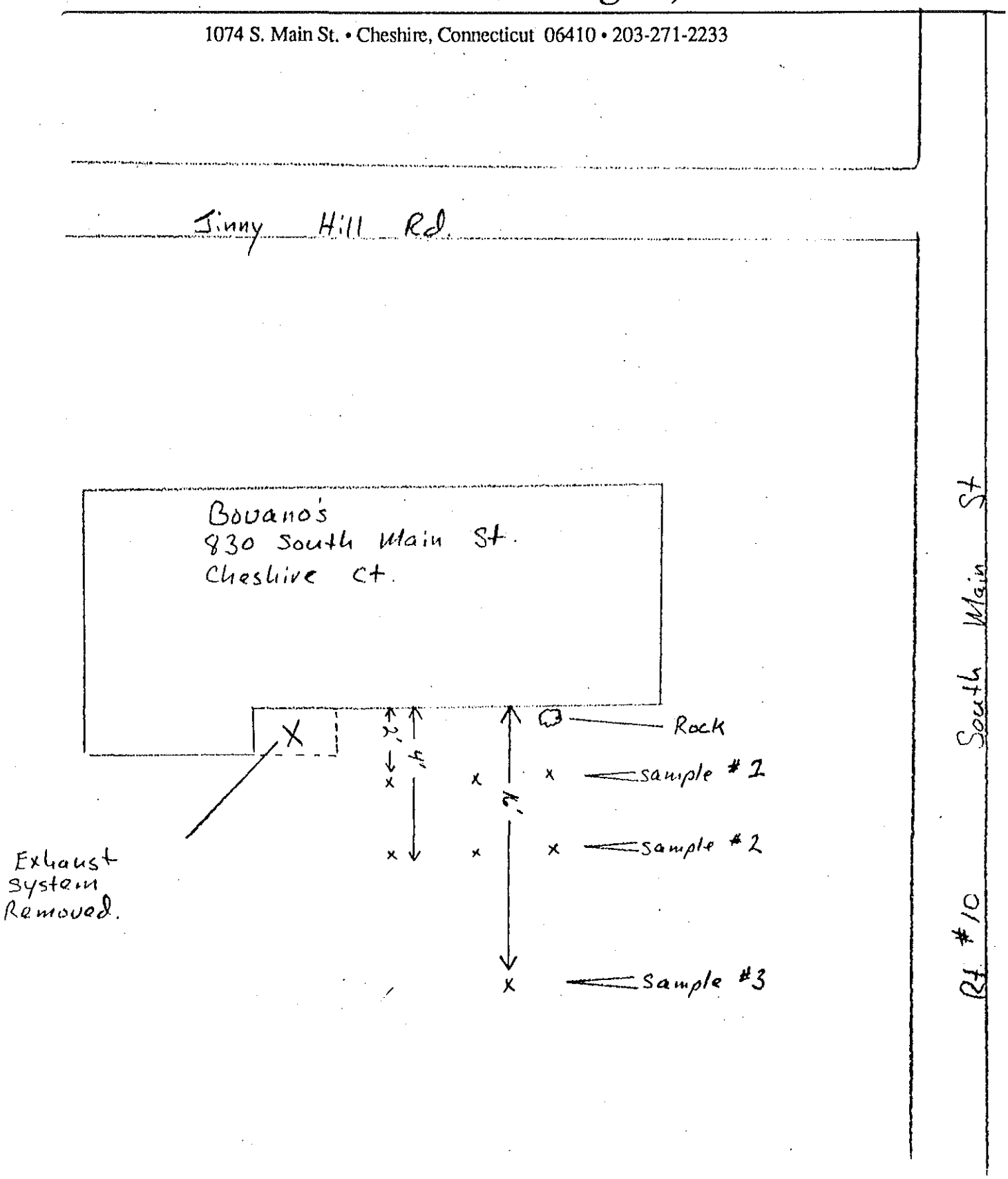
Excavation Technologies, Inc.

Timothy G. Slater
President

TGS/lk
enclosure:

Excavation Technologies, Inc.

1074 S. Main St. • Cheshire, Connecticut 06410 • 203-271-2233



Client : Bovano of Cheshire
Lab No.: 11-465-3
PO No. : 343
Date : 2-11-91

TCLP

RESULTS OF ANALYSIS

CTL Sample No.	855 Composite #1	856 Composite #2	857 Composite #3	
Arsenic-mg/L	0.09	0.27	ND<0.05	
Cadmium-mg/L	0.81	1.18	0.71	
Lead-mg/L	31.6	30.0	13.9	

CONNECTICUT TESTING LABORATORIES, INC.
165 Gracey Avenue / Meriden, CT 06450
(203)-634-3731
Connecticut Certification No. PH-0547

ENAMELS COLOR BEAUTY IMAGINATION

RECEIVED
FEB 27 1991
DEP- Waste Management Bureau
Waste Engineering & Enforcement
Enforcement-District 3

Bovano of Cheshire
850 South Main Street • Cheshire, Connecticut • Telephone 203-272-3208

February 21, 1991

Margaret Cochran
DEP-Hazardous Materials Unit
State Office Building
165 Capitol Avenue
Hartford, CT 06106

Dear Margaret:

Please review the enclosed test results. I would like to speak with you concerning this unexplainable testing. Please contact me as soon as possible after reviewing the enclosed documentation.

Sincerely,

James A. Flood
President

Enclosure

JAF/bai

February 11, 1991

Bovano of Cheshire
Box 250
830 South Main St.
Cheshire, CT 06410

Att: Mr. Jim Flood

RE: LAB. No. 11-465-3
P.O. No. 343
Inv. No. 19079

Dear Mr. Flood :

The attached report are results of analysis for your Purchase Order: 343

Samples were received on : January 30, 1991

All testing methods comply with **EPA Approved Procedures.** Test results with units of **MG/L** (Milligrams per Liter) indicate the final sample matrix to be aqueous.

Results reported in **PPM** (Parts per Million) or **Mg/Kg** (Milligrams per Kilogram) indicate a Mass Analysis.

Test results for organic compounds are generally reported in PPB (Parts per Billion) however, TCLP results are reported in PPM for easy comparison to the regulatory levels.

Please contact us if you have any questions.

Very truly yours,

Stephen J. Franco

Stephen J. Franco
Laboratory Director

SJF:mr

connecticut testing laboratories inc.
WATER ▪ SOIL ▪ AIR

STEPHEN J. FRANCO
Laboratory Director
PHONE ▪ 203/634-3731
165 GRACEY AVENUE ▪ MERIDEN, CT ▪ 06450

Client : Bovano of Cheshire
Lab No.: 11-465-3
PO No. : 343
Date : 2-11-91

TCLP

RESULTS OF ANALYSIS

CTL Sample No.	855 Composite #1	856 Composite #2	857 Composite #3	
Arsenic-mg/L	0.09	0.27	ND<0.05	
Cadmium-mg/L	0.81	1.18	0.71	
Lead-mg/L	31.6	30.0	13.9	

CONNECTICUT TESTING LABORATORIES, INC.
165 Gracey Avenue / Meriden, CT 06450
(203)-634-3731
Connecticut Certification No. PH-0547

ETI

Excavation Technologies, Inc.

1074 S. Main St. • Cheshire, Connecticut 06410 • 203-271-2233

February 19, 1991

Mr. Jim Flood
Bovano's
830 South Main St
Cheshire, CT 06410

Dear Jim:

On the week of February 4th, 1991, Excavation Technologies, Inc. removed an exaust system. Visible clay material as well as an additional two (2") of soil was removed from the rear of building and stockpiled under plastic for future disposal to Cheshire Landfill. At that time Margaret Cochran of CT DEP, supervised samplings taken from said area. Sample #1 was a composite sample from the exaust fan to the rock approximately two (2') feet from building. Sample #2 was a composite sample approximately four (4') feet from building. Sample #3 was taken sixteen (16') feet from building, (see enclosed map).

If you require further information, please don't hesitate to call.

Very truly yours,

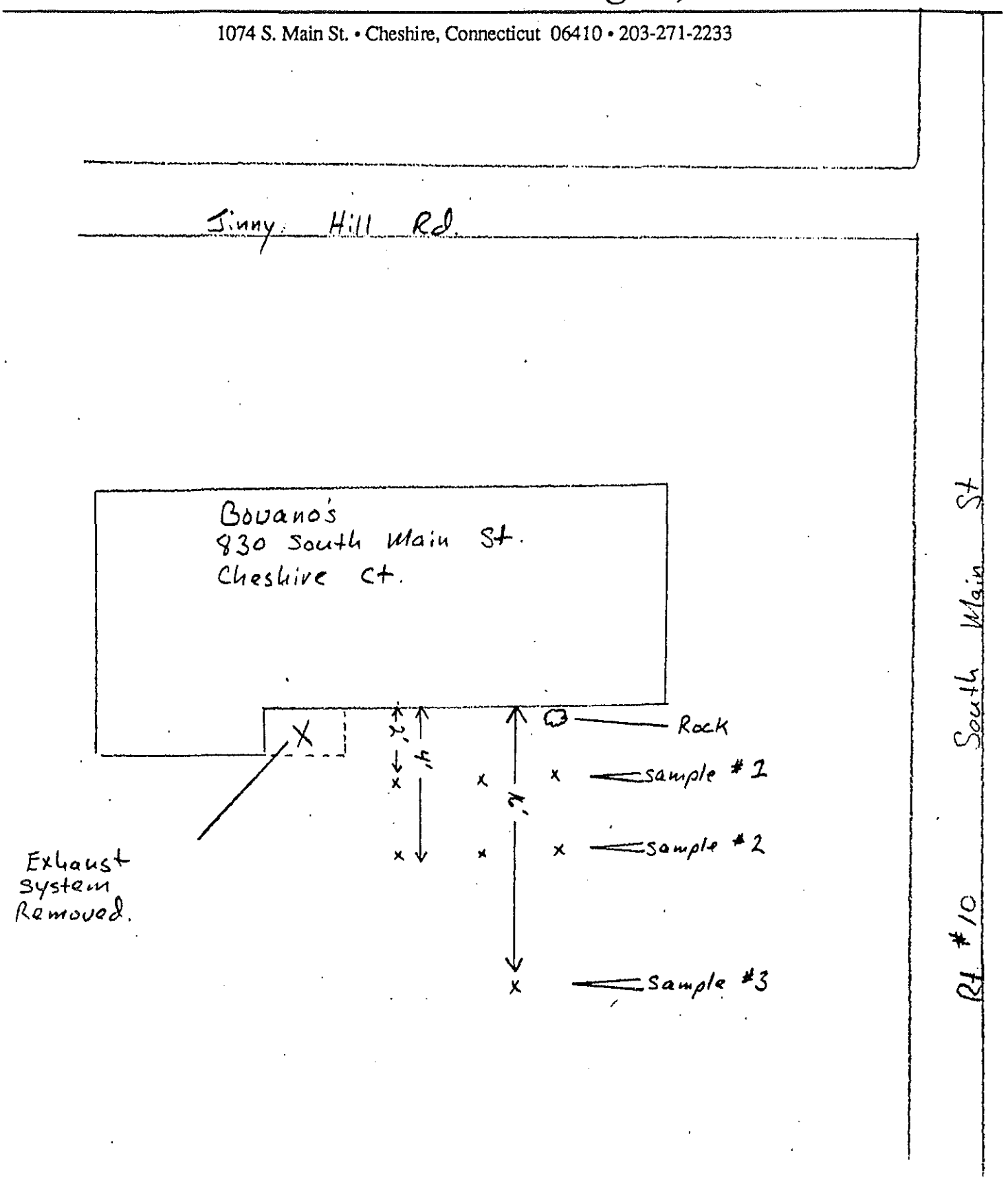
Excavation Technologies, Inc.

Timothy G. Slater
President

TGS/lk
enclosure:

Excavation Technologies, Inc.

1074 S. Main St. • Cheshire, Connecticut 06410 • 203-271-2233



STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

SITE NAME: Bovano
TOWN: Cheshire
FILE TYPE: CPP

PROJECT/VIOLATION REFERRAL

TO: Michael Harder, Director
UNIT: Water Management, Permits and Enforcement
PHONE: X2719

FROM: David A. Nash, Director
UNIT: Waste Management, Waste Engineering and Enforcement
PHONE: X8843

DATE: April 3, 1991

RE: Bovano of Cheshire
830 South Main Street
Cheshire, Connecticut

REASON FOR REFERRAL:

During an inspection by the Waste Engineering and Enforcement Division in November 1989 soil staining was found at the above referenced site. Subsequently, the Department issued Order No. HM-688 to Bovano requiring that a hazardous waste determination be performed on a white powder material that was being discharged outside and causing the soil staining. Bovano took three samples (see attached results), one sample of the material being discharged and two of visibly contaminated soils. These samples showed levels of arsenic, lead and cadmium at levels below hazardous but above drinking water. Bovano is located nearby to the Cheshire well fields. Additionally, the adjacent property is a residence which utilizes a well for drinking water.

Bovano proposed to remove all visibly contaminated soils and dispose of them in the Cheshire landfill. W.E.E.D. approved the disposal in September 1990 for 20 cubic yards of soil (see attached letter). Following the soil excavation in February 1991, confirmation samples were taken (see attached results). These samples revealed elevated levels of lead, >5ppm. Order No. HM-688 was issued under Section 22a-449 of the CGS only and does not include a schedule for remediation.

COMMENTS:

The material being released was a gray powder from an enamelling process. The process has since been changed and the powder is no longer being vented to the outdoors.

Please contact Margaret Cochran at X8256 for additional information regarding this site.

PMP Pete Ploch
3/27/91

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Bovano of Cheshire

830 South Main Street • Cheshire, Connecticut • Telephone 203-272-3208

June 6, 1991

Margaret Cochran
Hazardous Materials Unit
DEP, State Office Bldg.
165 Capitol Avenue
Hartford, CT 06106

Dear Margaret:

Enclosed is information which we discussed by telephone today. Documents enclosed include test results from samples taken on 5/16/91, map showing location of test samples, profile map showing testing levels for all tests, and summation chart of all soil sample tests.

The heavier concentration of lead 12" below the original surface cannot be explained based on the concentration of lead in the raw material. However, this concentration is greatly reduced 24" below the original surface level.

The test samples were collected by Excavation Technologies Inc. Holes were dug to 12" with a post hole digger. Samples were scraped from the bottom of each hole. Sample #10, dated 5/16/91, was a composite of three (3) samples of material taken from the surface of a soil mound which is being stockpiled from the original excavation.

Can we proceed with additional excavation of material to a level which is 12-15" below the current level? What is the status of the material being stockpiled which had originally been classified as contaminated soil by Dave McKeegan based on lead levels of 1.07-3.49 from testing done on 7/12/90? The total quantity of this material is 10-12 yards. Authorization had been received from the Town of Cheshire to move this material to the Cheshire Landfill.

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Bowano of Cheshire

[illegible] South Main Street • Cheshire, Connecticut • Telephone 203-272-3208

6/5/91

Summation of Soil Samples

	Range of Test		
	Arsenic	Lead	Cadium
Original Surface Level	<.05-1.16	1.07-3.47	.40-.66
Excavated Level 12" below original level	<.05-.27	13.9-31.6	.71-.81
Testing Level 12" below excavated level	ND	.14-2.52 (One test 9.5)	.01-.29 (One test 1.19)

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BOVANO of Cheshire

820 South Main Street • Cheshire, Connecticut • Telephone 203-272-3208

What will the status be of additional materials to be excavated? Lead levels show surface concentrations to range from 13.9 - 31.6 and concentrations 12" below the surface to be .14 - 2.52.

Finally, do you know what the background or typical concentration of lead is in soil considering our proximity to old barium and copper mines? Should this be determined??

I will be anticipating your response to these questions.

Sincerely,

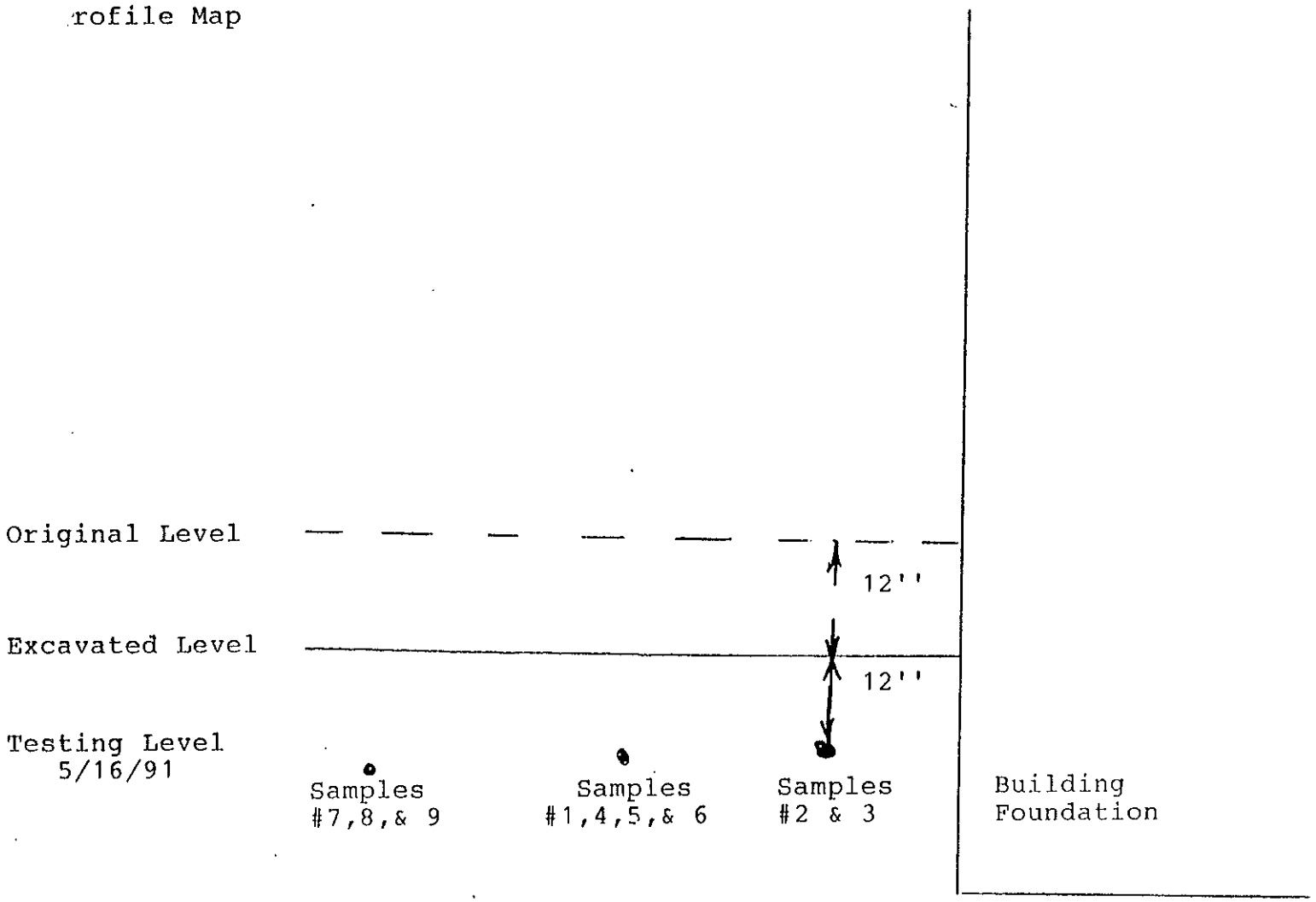
James A. Flood
President

Enclosure

JAF/bai

6/5/91

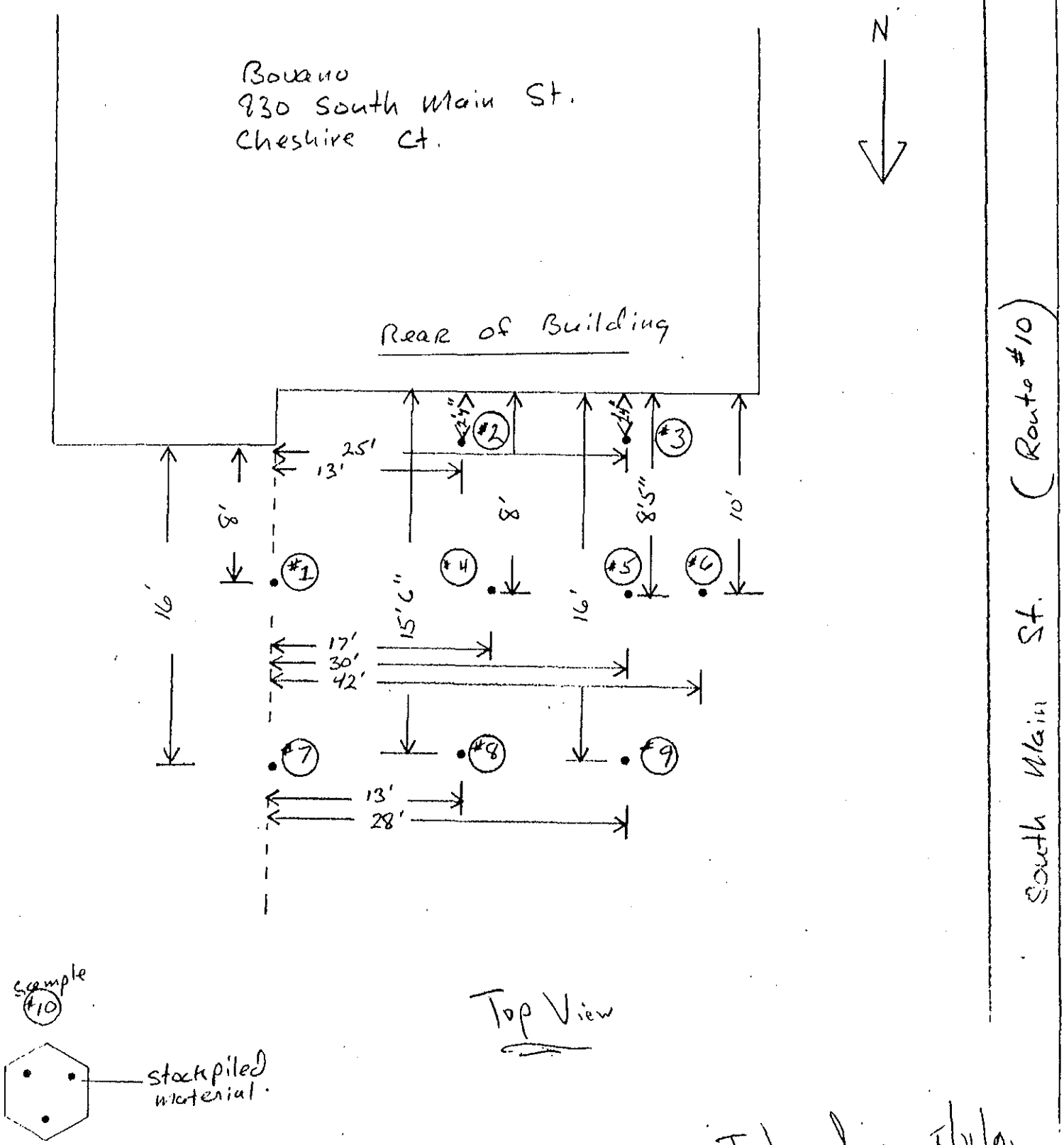
rofile Map



Profile View

Excavation Technologies, Inc.

1074 S. Main St. • Cheshire, Connecticut 06410 • 203-271-2233



Top View

Testing done 5/16/91

Client : Bovano of Cheshire
Lab No.: 51-367-10
PO No. : 343
Date : 5-31-91

Test samples taken 5/16/91

TCLP

RESULTS OF ANALYSIS

CTL Sample No.	4490 1	4491 2	4492 3	4493 4
Arsenic-mg/L	ND<0.05	ND<0.05	ND<0.05	ND<0.05
Lead-mg/L	9.50	1.14	0.98	0.14
Cadmium-mg/L	1.19	0.29	0.06	ND<0.01

CTL Sample No.	4494 5	4495 6	4496 7	4497 8
Arsenic-mg/L	ND<0.05	ND<0.05	ND<0.05	ND<0.05
Lead-mg/L	2.52	0.50	2.92	0.24
Cadmium-mg/L	0.13	ND<0.01	0.18	ND<0.01

CTL Sample No.	4498 9	4499 10		
Arsenic-mg/L	ND<0.05	0.43		
Lead-mg/L	0.28	33.2		
Cadmium-mg/L	ND<0.01	1.66		

Composite of stockpiled material

Received 6/3/91

C Bovano

CONNECTICUT TESTING LABORATORIES, INC.
165 Gracey Avenue / Meriden, CT 06450
(203)-634-3731
Connecticut Certification No. PH-0547

Client : Bovano of Cheshire
Lab No.: 51-367-10
PO No. : 343
Date : 5-31-91

Test samples taken 5/16/91

TCLP

RESULTS OF ANALYSIS

CTL Sample No.	4490 1	4491 2	4492 3	4493 4
Arsenic-mg/L	ND<0.05	ND<0.05	ND<0.05	ND<0.05
Lead-mg/L	9.50	1.14	0.98	0.14
Cadmium-mg/L	1.19	0.29	0.06	ND<0.01

CTL Sample No.	4494 5	4495 6	4496 7	4497 8
Arsenic-mg/L	ND<0.05	ND<0.05	ND<0.05	ND<0.05
Lead-mg/L	2.52	0.50	2.92	0.24
Cadmium-mg/L	0.13	ND<0.01	0.18	ND<0.01

CTL Sample No.	4498 9	4499 10		
Arsenic-mg/L	ND<0.05	0.43		
Lead-mg/L	0.28	33.2		
Cadmium-mg/L	ND<0.01	1.66		

Composite of stockpiled material

Received 6/3/91
C
Bovano

CONNECTICUT TESTING LABORATORIES, INC.
165 Gracey Avenue / Meriden, CT 06450
(203)-634-3731
Connecticut Certification No. PH-0547

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

June 13, 1991

UN 2 ' 1

NO

James Flood
Bovano of Cheshire
830 South Main Street
Cheshire, CT 06410

I am writing at this time in regards to your letter dated June 6, 1991. In response to your inquiries regarding the removal of contaminated soils at your site I have the following comments:

1) Based on the sample results that you have provided, the soils removed in December 1990 and January, 1991, now stockpiled on site, must be handled as hazardous waste.

2) The letter dated September 27, 1990 from Richard Barlow, authorizing Bovano to dispose of 20 cubic yards of contaminated soils at the Cheshire Landfill is still effective. Sample results submitted on June 6, 1991 indicate that there are soils at the site which fall below 5 mg/L for lead. The September 1990 authorization may be used for those soils.

3) One of the deep samples was found to contain 9.50 mg/L Lead and is therefore hazardous. This contamination should be isolated and combined with the hazardous soils already stockpiled on site.

4) Ensure that the soils stockpiled on site are well contained and are being managed in accordance with all applicable regulations.

5) Before any soils are removed from the site as non-hazardous, confirmation samples should be taken to verify the classification of the waste.

Please contact my office prior to initiating any remedial work at this site so that representatives of the Department may be present if deemed necessary. If there are any questions please call my office at 566-8256.

Sincerely,

Margaret M. Cochran

Margaret M. Cochran
Engineer
Waste Engineering and Enforcement Division

cc: David McKeegan

COPPER ENAMELS
COLOR
BEAUTY
IMAGINATION

Bovano of Cheshire

830 South Main Street • Cheshire, Connecticut • Telephone 203-272-3208

FAX COVER SHEET

TO: Margaret Cochran
DEP
Hartford, CT

Fax No: 566-5255

No. pages including this cover: 3

ATTN:

FROM: Jim Flood

Comments:

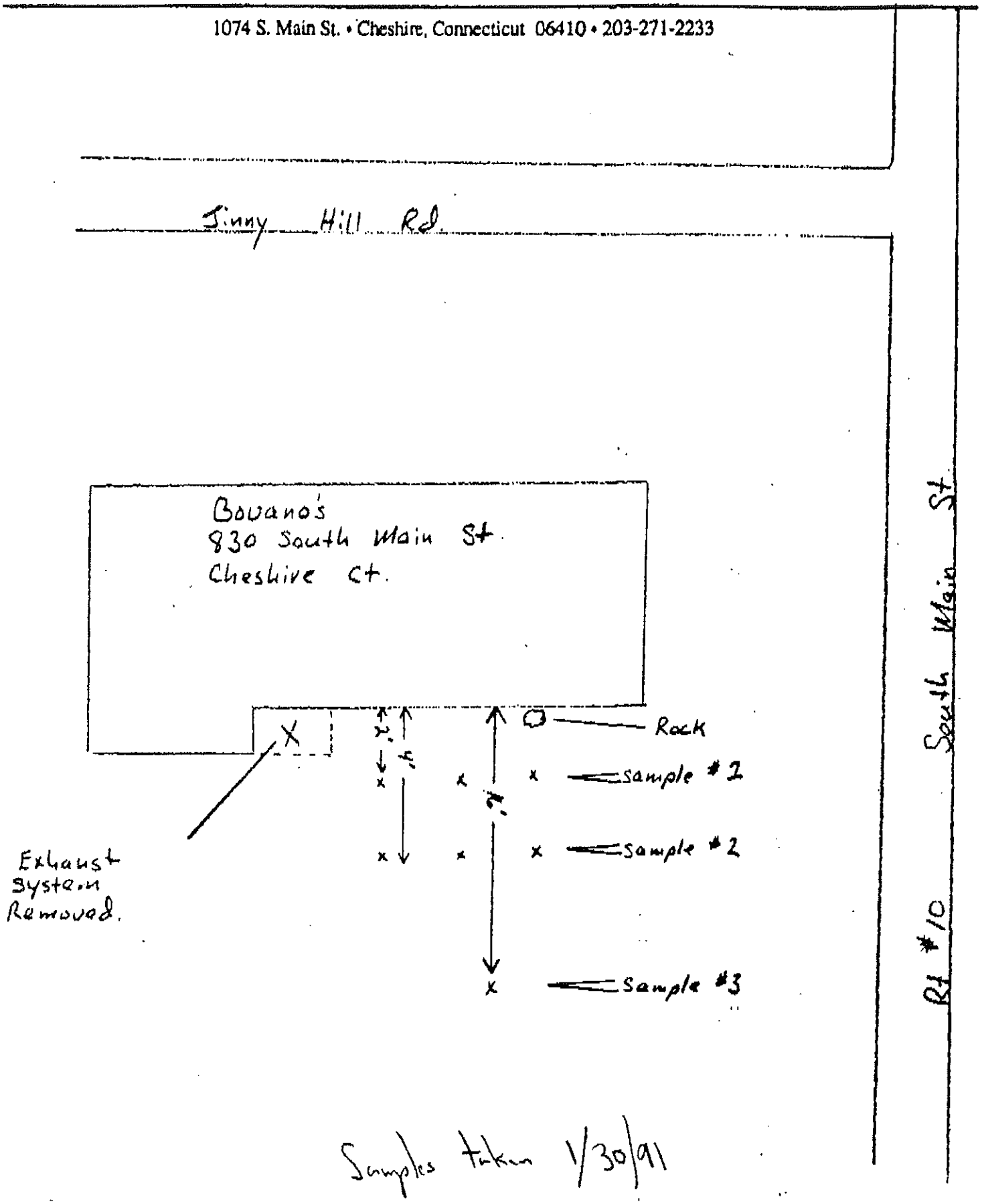
January Test results

If any transmission problems, please call 203-272-3208.

Fax number 203-250-7527

ETI Excavation Technologies, Inc.

1074 S. Main St. • Cheshire, Connecticut 06410 • 203-271-2233



Samples taken 1/30/91

Client : Bovano of Cheshire
Lab No.: 11-465-3
PO No. : 343
Date : 2-11-91

TCLP

RESULTS OF ANALYSIS

CTL Sample No.	855 Composite #1	856 Composite #2	857 Composite #3	
Arsenic-mg/L	0.09	0.27	ND<0.05	
Cadmium-mg/L	0.81	1.18	0.71	
Lead-mg/L	31.6	30.0	13.9	

CONNECTICUT TESTING LABORATORIES, INC.
165 Gracey Avenue / Meriden, CT 06450
(203)-634-3731
Connecticut Certification No. PH-0547

Bovano of Cheshire
[illegible] Main Street • Cheshire, Connecticut • Telephone 203-271-[illegible]

Margaret Cochron
Hazardous Waste Management
DEP
115 Capitol Avenue
Hartford, CT

RECEIVED
OCT 22 1991
DEP- Waste Management Bureau
Waste Engineering & Enforcement
Enforcement-District 3

October 17, 1991

Dear Margaret;

Enclosed you will find four test results and location map for the excavated area at Bovano Industries. The tests indicate that the second excavation has removed material which has been above acceptable levels.

All excavated material currently is contained on site at Bovano. With verbal approval from yourself and Dave McGeegan, we have begun to separate the boulders and gravel from the contaminated soil. This separation is being done to minimize the cost of removal of this material. The gravel and boulders will be left on site when the soil is removed.

Sincerely;

James A. Flood
President

October 2, 1991

Bovano of Cheshire
Box 250 830 South Main St.
Cheshire, CT 06410

Attn: Mr. Jim Flood

RE: LAB. No. 91-384-4
P.O. No. 343
Inv. No. 23708
Cust No. 217

The attached report are results of analysis for your Purchase Order: 343

Samples were received on : September 24, 1991

All testing methods comply with **EPA Approved Procedures.** Test results with units of **MG/L** (Milligrams per Liter) indicate the final sample matrix to be aqueous.

Results reported in **PPM** (Parts per Million) or **Mg/Kg** (Milligrams per Kilogram) indicate a Mass Analysis.

Test results for organic compounds are generally reported in PPB (Parts per Billion) however, TCLP results are reported in PPM for easy comparison to the regulatory levels.

Please contact us if you have any questions.

Very truly yours,

Stephen J. Franco

Stephen J. Franco
Laboratory Director

SJF:mr

connecticut testing laboratories inc.
WATER ■ SOIL ■ AIR

STEPHEN J. FRANCO
Laboratory Director
PHONE ■ 203/634-3731
165 GRACEY AVENUE ■ MERIDEN, CT ■ 06450

Client : Bovano of Cheshire
Lab No.: 91-384-4
PO No. : 343
Date : 10-2-91

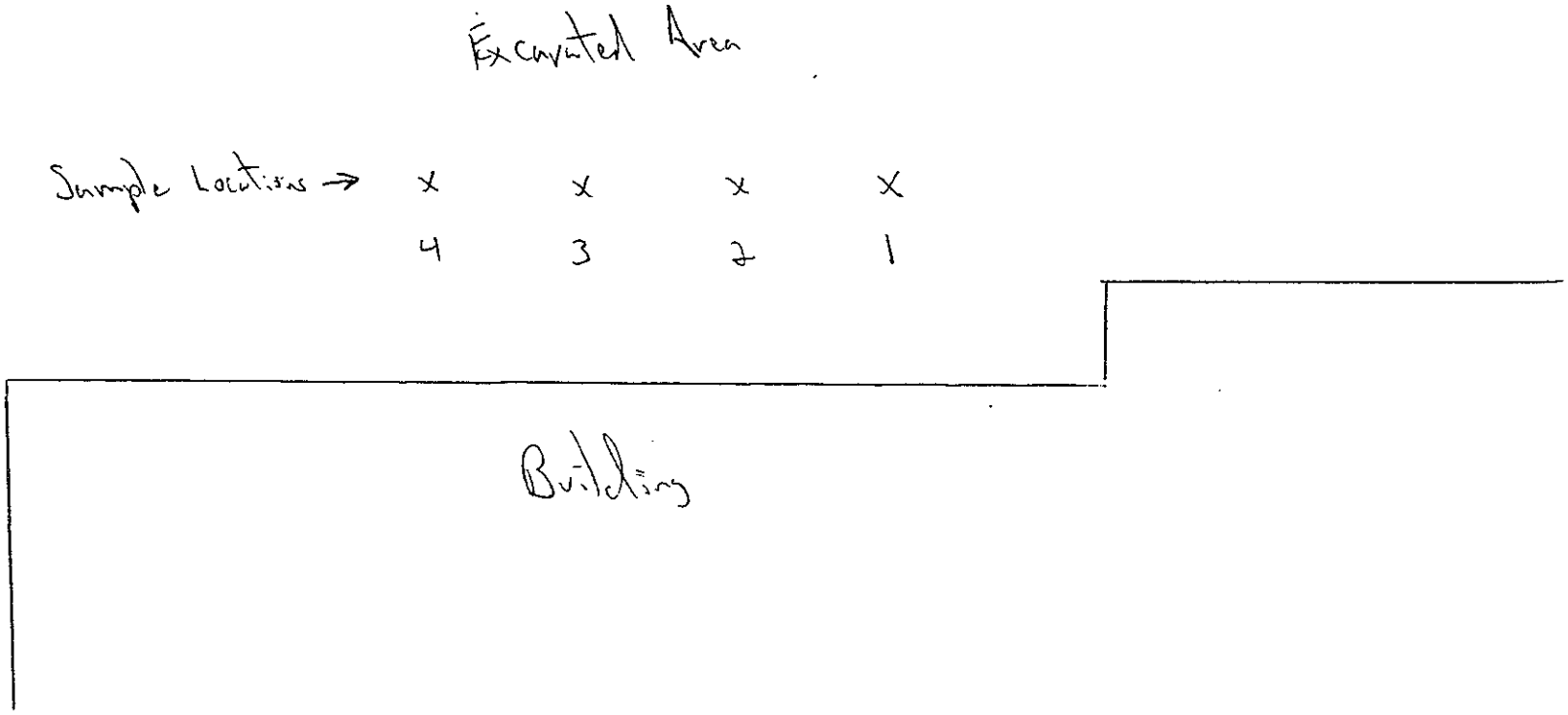
TCLP

RESULTS OF ANALYSIS

CTL Sample No.	9233 1	9234 2	9235 3	9236 4
Arsenic-mg/L	ND<0.05	ND<0.05	ND<0.05	ND<0.05
Cadmium-mg/L	ND<0.01	ND<0.01	ND<0.01	ND<0.01
Lead-mg/L	ND<0.05	ND<0.05	ND<0.05	ND<0.05

CONNECTICUT TESTING LABORATORIES, INC.
165 Gracey Avenue / Meriden, CT 06450
(203)-634-3731
Connecticut Certification No. PH-0547

9/24/91



RECEIVED

NOV 15 1991

DEP- Waste Management Bureau
Waste Engineering & Enforcement
Enforcement-District 3

Town of Cheshire

Cheshire, Connecticut • Telephone 203-272-3208

November 12, 1991

Margaret Cochran
DEP - Waste Engineering
165 Capitol Avenue
Hartford, CT 06106

Dear Margaret;

This letter is a response to our phone conversation of 11/08/91. Bovano Industries has been ordered to remove soil which has been contaminated with lead, cadmium, and arsenic as the result of overspray from a porcelain enamel manufacturing operation.

The following steps have been done to comply with this order:

1. Engaged excavation contractor.
2. Tested soil for extent of contamination.
3. Excavated soil and contained soil on site.
4. Tested excavated area and excavated soil stockpiled.
5. Excavated soil a second time.
6. Tested excavated area and excavated soil stockpiled.
7. Had removal of excavated soil quoted from transportation companies.
8. Requested and received authorization from State DEP to separate rocks from contaminated soil to be left on-site when soil is removed.
9. Began rock separation and subsequent hiring of excavation company to screen soil.
10. Requested extension of time from State DEP until February, 1992, for removal.

Today, I am attempting to expedite soil screening and removal with a completion date projected at December 6, 1991. Any delays that have slowed the process of removal are the result of financial restraints, contractor scheduling, laboratory analysis time, and weather conditions.

Costs incurred during the excavation process are estimated as follows:

Excavation costs	$2200.
Laboratory analysis	2100.
Total spent to this date:	$4300.

Without knowing the exact quantity of soil to be removed, it is difficult to assess the total cost of removal and transport of the stockpiled material. I have developed these estimates:

1. Before screening of rocks:

Total estimated quantity 34 yards or 44 tons	
44 tons @ $353/ton	$15,532.
Transportation costs	2,000.
Total Cost	$17,532.

2. If rocks are screened:

Total estimated quantity 20 yards or 26 tons	
26 tons @ $353/ton	$ 9,178.
Transportation costs	2,000.
Screening cost	1,400.
Total Cost	$12,578.

These costs are devastating to Bovano Industries in its present financial condition. During the excavation process, payment of those costs were done from working capital generated from continued operations at Bovano. The company does not generate sufficient working capital on a monthly basis to support the estimated cost of removal ($12,000-$18,000).

I have delayed removal and asked your authorization for this delay until money was available to pay for removal. I estimated this would be February, 1992. As I mentioned, I am now attempting to move the removal date up to early December, 1991.

Bovano has experienced substantial net losses from its operations during 1991. There are no cash reserves to draw from, including bank financing. If the costs of soil removal are incurred without responsible financial management, Bovano Industries will be forced to shutdown completely.

Your patience and understanding of this financial situation during the excavation process has been appreciated. I will proceed with removal as I have outlined above unless you indicate a change should be made.

Sincerely,

James A. Flood
President

Enclosure: EWR Quotation

Quotation Analysis

Environmental Waste Resources, Inc.

☐ P.O. Box 160
Coal City, IL 60416
(815) 634-2211
FAX # 815-634-2480
EPA ID # ILDO87157251

☒ 130 Freight Street
Waterbury, CT 06702
(203) 755-2283
FAX # 203-755-5748
EPA ID # CTDO72138969

To: Bovano Industries
830 South Main Street
Cheshire, CT 06410
Attn: James Flood

AUG 0 8 19
VANO NF

Date August 7, 1991
P.O. # _____
FOB _____
Your Plant ( )
Our Plant (X) See Trucking Rates

A 32949

Waste Stream Number

This stream number must be assigned to specific waste at all times. Should the waste be contained in drums, this number must be painted on each drum in clear, legible numbers at least 4 inches high.

WASTE DESCRIPTION: (per Waste Product Survey Form): Contaminated Soil

Generator Name: _____

Broker/Gen. Code: _____

COST PER DRUM/GALLON/TON/YARD/POUND FOR PROCESSING:

Three Hundred Fifty Three Dollars & 00/100 Per Ton **dollars** ($ 353.00/TON)

This price is based on your sample analyzed in our laboratory. Should the parameters change, you will be subject to a price increase. This quotation is valid for 30 days and is therefore subject to re-evaluation.

CONDITIONS: *If you accept our quotation, please forward a copy of your purchase order to us.*
All waste must be manifested whether hazardous or non-hazardous.
On receipt of your purchase order, our lab analysis sample will be forwarded to you.
Laboratory analyses are immediately available for a fee.
Insurance surcharge: $ .025/gallon, $ 4.20/drum, $ 5.75/ton

TRUCKING RATES: $75.00/HOUR PORTAL TO PORTAL

_____ SIGNED

_____ DATE

ACKNOWLEDGEMENT COPIES MUST BE SIGNED AND RETURNED TO EWR BEFORE MATERIAL WILL BE ACCEPTED FOR PROCESSING.
(Terms and Conditions attached)

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

MEMORANDUM

To: File
From: Margaret Cochran, Sanitary Engineer
Waste Engineering and Enforcement Division

Date: November 19, 1991

Re: Bovano of Cheshire, letter dated September 27, 1990, authorizing disposal of contaminated soils at the Cheshire Landfill

Bovano never utilized the September 27, 1990 soil disposal authorization. None of the soils referenced in the letter were disposed of at the Cheshire Landfill. Following issuance of the authorization, Bovano performed further excavation at the site and added additional soils to those referenced in the letter. The combination of soils were then analyzed and found to be hazardous for lead. Therefore, all of the soils are being handled as a hazardous waste.

cc: David McKeegan

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

September 27, 1990

Mr. James A. Flood
Bovaro of Cheshire
830 South Main Street
Cheshire, CT 06410

Re: Disposal of approximately 20 cubic yards of soil contaminated with glass enamel material utilized in the production of glass coated items from Bovaro Industries, Inc., South Main Street, Cheshire, CT.

Dear Mr. Flood:

The Waste Management Bureau has determined that the above referenced material is suitable for disposal at the Cheshire solid waste disposal area, subject to the following conditions:

1. Material should not contain any free draining liquids.

2. It may be used as cover material at the landfill.

This determination is based on the review of analytical results of soil samples submitted to the Waste Engineering and Enforcement Division Hazardous Waste Section by Bovaro Industries, Inc., Cheshire, CT.

Permission to dispose of this material must also be obtained from the Town of Cheshire, contact the Public Works Director at 271-6650 for proper disposal procedures.

It is the responsibility of Bovaro Industries, Inc. to make a hazardous waste determination on all wastes generated prior to disposal and to frequently reevaluate these determinations. A hazardous waste determination should be repeated annually and when there is a change in manufacturing processes. This is a one time authorization for disposal of this material, any future disposal requests must be submitted to this office for review.

Please contact David McKeegan at 566-5847 if you have any questions.

Sincerely yours,

Richard J. Barlow

Richard J. Barlow
Chief
Waste Management Bureau

RJB/dkm/mdg

cc: Thomas Crowe, Cheshire DPW

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

SITE NAME: BOVANO
TOWN: CHESHIRE
FILE TYPE: ENF.

ORDER STEP APPROVAL

August 21, 1990

James A. Flood
President
Bovano of Cheshire
830 South Main Street
Cheshire, CT 06410

Dear Mr. Flood:

The report dated July 30, 1990, submitted by Bovano of Cheshire, has been reviewed by the Department of Environmental Protection.

This report is hereby approved in accordance with Section 22a-6 and 22a-449 of the Connecticut General Statutes, as amended. This report is approved as fulfilling the requirements of Steps B and D of the Department of Environmental Protection's, Waste Engineering and Enforcement Division Order No. HM-688, entered on May 10, 1990.

This Approval does not relieve the facility of the obligation to obtain any other authorizations as may be required by other provisions of the Connecticut General Statutes, or Regulations of Connecticut State Agencies.

Sincerely,

Richard J. Barlow

Richard J. Barlow
Chief
Waste Management Bureau

RJB:MMC

Phone:
165 Capitol Avenue • Hartford, Connecticut 06106
An Equal Opportunity Employer

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

SITE NAME: Bovano of Cheshire
TOWN: Cheshire
FILE TYPE: CPD

PROJECT/VIOLATION REFERRAL

TO: Edward Parker, Director
DEP Site Remediation and Closure Division, 18/20 Trinity St., Htfd.

FROM: David A. Nash, Director x5406
DEP Waste Management, Engineering and Enforcement, 18/20 Trinity St., Htfd.

DATE: May 29, 1992

Subj: Bovano of Cheshire
830 South Main Street
Cheshire, Conn.

A project/violation referral on the Bovano site was originally sent to you on April 3, 1991 (copy attached). Following a RCRA inspection on November 29, 1989, Order No. HM-688 was issued to Bovano on May 10, 1990. The Order was issued under Section 22a-449 of the C.G.S. and did not include a schedule for remediation.

In conjunction with performing a hazardous waste determination on powdered material which had been discharged on the ground, Bovano collected samples from an area of visibly contaminated soil. The samples indicated levels of arsenic, lead and cadmium above drinking water standards, but below concentrations considered hazardous. Bovano subsequently excavated approximately 21 cubic yards of contaminated (cadmium and lead) soil. The excavated material was sent to EWR on January 8, 1992. Post-excavation sampling indicated that arsenic, lead and cadmium were at non-detectable levels. Dwight Chernauskas from this division inspected the Bovano site on April 22, 1992. Attached is a copy of his inspection report, along with analytical data he received at that time.

While Bovano did remove contaminated soil from the site, it must be emphasized that they have <u>not</u> evaluated possible impacts on the groundwater, a drinking water well at an adjacent residence or the nearby Cheshire well fields.

Bovano has satisfied the 449 requirements of Order No. HM-688. A compliance letter should be issued in the near future. If you have any questions, please contact Peter Ploch at x8256.

ENAMELS
COLOR
BEAUTY
IMAGINATION

Bovano of Cheshire

Cheshire, Connecticut • Telephone 203-272-3208

June 1, 1992

Peter Plock
Waste Engineering & Enforcement
DEP
165 Capitol Avenue
Hartford, CT 06106

Dear Peter;

Enclosed are copies of manifests indicating contaminated soil held on-site at Bovano has been removed.

These manifests are being sent as a result of your phone call on 5/26/92.

I have searched the town of Cheshire land records but have been unable to find a lien placed on Bovano by the State DEP as a result of the order.

Please call me if I can assist further in completing the removal of this order.

Sincerely;

James A. Flood;
President

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

June 5, 1992

CERTIFICATE OF COMPLIANCE

Bovano of Cheshire
830 South Main Street
Cheshire, Conn. 06410

Attn: James A. Flood, President

Re: Order No. HM-688 Notice of Violation No. 307

Dear Mr. Flood:

On April 22, 1992 a compliance inspection of Bovano of Cheshire located at 830 South Main Street, Cheshire, Connecticut was conducted by staff from the Department of Environmental Protection's Waste Management Bureau. As a result of the site inspection and a review of the documents submitted to this office, the Department has determined that Bovano of Cheshire has satisfied the substantive requirements of Steps A - E in the schedule of compliance in Order No. HM-688, entered on the 10th day of May, 1990 and the substantive requirements of Notice of Violation No. 307, entered on the 28th day of April, 1987.

Nothing in this letter shall affect the Commissioner's authority to institute any proceeding to prevent or abate pollution, to recover costs and natural resources damages, or to impose penalties for violations of the law. If at any time the Commissioner determines that the remedial actions implemented by Bovano of Cheshire at this site pursuant to Order No. HM-688 and Notice of Violation No. 307 have not successfully abated or prevented pollution, the Commissioner may institute any proceeding to require further investigation or further action ot abate or prevent pollution, specifically with respect to an evaluation of the possible impact on groundwater due to Bovano of Cheshire's past operations and disposal practices.

In addition, nothing in this letter shall relieve any person of obligations under Federal, State and, to the extent local law is consistent with this notice, local law.

Sincerely,

Timothy R.E. Keeney
Commissioner

TREK:PMP:je

cc: Town of Cheshire
Darlene Sage, DEP Waste Management, Planning and Standards

APPENDIX G

WELL WATER ANALYSIS

WELL WATER TEST RESULTS.

S A F E W E L L S - N E W E N G L A N D , I N C .

19 Wallingford Road
Cheshire, CT 06410

Tel (203) 2 5 0 - T E S T

[redacted]

Report Date: [redacted] SafeWells Trak#: 95009-0209.
Sample(s) in lab on: 02/10/95. Attached Custody Log has sampling data.

Mail to:

Richard Foster
Bovano of Cheshire
831 South Main Street
Cheshire
CT 06410

APR - 3 1995
HRP ASSOCIATES, INC.

[redacted]

Bovano of Cheshire
831 South Main Street
Cheshire
CT 06410

LABORATORY RESULTS			
Your Sample		Units	Maximum Allowed
pH	7.05	SU	6.4 - 8.5
Turbidity	0.14	NTU	5.00
Coliform Bacteria	0	cfu per 100mL	0 cfu/100mL
Chlorides	19.8	mg per liter	250
Sulfates	12.4		250
Nitrate	2.83		10
Nitrite	nd<0.05		1
Calcium	36.34		(no limit)
Magnesium	3.52		(no limit)
Hardness	105.236		200
Iron	nd<0.02		0.3
Sodium	13.08		28
Manganese	nd<0.02		0.05
Lead	nd<0.002		0.02
Copper	0.11		1.00

Synthetic Solvents		Units	Maximum Allowed
1,2-Dichloroethane	nd<0.5	parts per billion	<2
Benzene	nd<0.5		<5
Toluene	nd<0.5		<1000
1,1,1-Trichloroethane	nd<0.5		<200
Methylene Chloride	nd<0.5		<25
Chloroform	nd<0.5		<100
Xylenes	nd<0.5		<600
Trichloroethylene (TCE)	nd<0.5		<5
Chlorobenzene	nd<0.5		<2
Tetrachloroethylene (PCE)	nd<0.5		<20
Dichlorobenzenes	nd<0.5		<75
Tetrachloroethane	nd<0.5		<2
1,1-Dichloroethane	nd<0.5		<2

* * * Note:"nd" means "not detected"; symbol "<" means "less than" * * *

Comments and Recommendations:
[redacted]

Analytical data presented above were obtained by an approved, CT Health Dept/ USEPA-Region I Certified laboratory.

Auth Signature for SafeWells, Inc.

APPENDIX H

MATERIAL SAFETY DATA SHEETS

MATERIAL SAFETY DATA SHEET NPCA 1-84
FOR COATINGS, RESINS, AND RELATED MATERIALS
REPLACES NPCA 1-82

MANUFACTURER'S NAME StanChem, Inc.
401 Berlin St.
E. Berlin, Ct. 06023

EMERGENCY TELEPHONE NO. CHEMTREC 1-800-424-9300

INFORMATION TELEPHONE NO.(203) 828-0571

DATE OF PREPARATION: 12/11/91

Section I - Product Identification

PRODUCT NUMBER 69X1732

PRODUCT NAME Incralac

PRODUCT CLASS Acrylic

Section II - Hazardous Ingredients

INGREDIENT	PERCENT WT	OCCUPATIONAL EXPOSURE LIMITS ACGIH TLV (ppm)	TWA (ppm)	OSHA STEL (ppm)	CEILING (ppm)	SKIN	VAPOR PRESSURE @ 20°C (mmHg)
Toluol CAS # 108-88-3	40.1	200	100	150	---	---	35
Xylol CAS # 1330-20-7	40.9	200	100	150	---	---	10
Methyl Ethyl Ketone CAS # 79-93-3	4.0	200	200	100	---	---	110

Section III - Physical Data

BOILING RANGE 180° - 240°F
VAPOR DENSITY
HEAVIER
LIGHT THAN AIR
EVAPORATION RATE
FASTER
SLOWER THAN ETHER
% VOLATILE VOLUME 87%
WT/GAL 7.5 #/gal.

Section IV - Fire and Explosion Hazard Data

FLAMMABILITY CLASSIFICATION:

OSHA	Flammable Liquid	Class 1B
DOT	Flammable Liquid	
FLASH POINT	25° - 40°F	
LEL	1%	

EXTINGUISHING MEDIA:

FOAM | "ALCOHOL" FOAM | CO2 | DRY CHEMICAL | WATER FOG | OTHER

UNUSUAL FIRE AND EXPLOSION HAZARDS

Water may be used to cool containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

Self-contained breathing apparatus and protective clothing.

SPECIAL FIREFIGHTING PROCEDURES

Fight as volatile liquid fire. Closed containers may explode when exposed to extreme heat. Use water to keep fire exposed containters cool to reduce pressure.

Section V - Health Hazard Data

EFFECTS OF OVEREXPOSURE: May cause nasal and respiratory tract irritation dizziness, weakness, fatigue, headaches. Skin: Prolonged or repeated contact may cause moderate irritation, dermatitits. Eyes: Severe irritation. Liquid may damage eye tissue Ingestion: May cause gastro-intestinal, nausea, vomiting and diarrhea.

MEDICAL CONDITIONS PRONE TO AGGRAVATION BY EXPOSURE:

Sinus & Dermatitis

PRIMARY ROUTE(S) OF ENTRY:

DERMAL | INHALATION | INGESTION

CARCINOGENICITY:	NTP?	No
	IARC Monographs?	No
	OSHA Regulated?	No

EMERGENCY AND FIRST AID PROCEDURES: Inhalation: Remove individual to fresh air. Skin: Thoroughly wash with soap and water. Remove contaminated clothing. Eyes: Immediately flush with large amounts of water for at least 15 minutes. See a physician. Ingestion: Dilute with clear fluid and immediately call a physician or Poison Control Center.

Section VI - Reactivity Data

STABILITY: UNSTABLE STABLE
HAZARDOUS POLYMERIZATION: MAY OCCUR
WILL NOT OCCUR
HAZARDOUS DECOMPOSITION PRODUCTS:
Thermal decomposition may produce carbon monoxide and/or carbon dioxide.

CONDITIONS TO AVOID:
None
INCOMPATIBILITY (MATERIALS TO AVOID)
Strong oxidizing agents.

Section VII - Spill or Leak Procedures

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
Avoid all sources of ignition. Avoid breathing vapors. Ventilate area. Stop spill at source, dike area to prevent spreading. Pump liquid into containers. The remainder should be removed with inert absorbent using non-sparking tools.
WASTE DISPOSAL METHOD:
Dispose of in accordance with local, state and federal regulations.

Section VIII - Safe Handling and Use Information

RESPIRATORY PROTECTION: Approved chemical/mechanical filters designed to remove organic vapors.

VENTILATION: Local exhaust as required by job conditions to keep TLV below acceptable limits.
Refer to OSHA regulations 29 CFR Part 1910.94.
PROTECTIVE GLOVES:
WEAR IMPERVIOUS GLOVES

EYE PROTECTION
Use safety eyewear with splash guards or side shields.

OTHER PROTECTIVE EQUIPMENT:
WEAR PROTECTIVE CLOTHES

HYGIENIC PRACTICES: Eye wash and shower should be available. Use under well ventilated conditions. Personnel should wash thoroughly after handing product. Always wash-up before eating, smoking or using toilet facilities. Do not breathe vapor, do not contact eyes, skin and clothing

C 0821
(9402)

Du Pont Chemicals

MSDS MATERIAL SAFETY DATA SHEET

8251CR | Revised 29-NOV-1993 | Printed 2-FEB-1994

HYDROGEN PEROXIDE (20 TO 60%)

CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Distributed by

HUBBARD-HALL INC.

Waterbury, CT 06725 203 754-2171
Inman, SC 29349 803 472-9031
Lincoln, RI 02865 401 333 6180
Agawam, MA 01001 413 789-4633

Material Identification

Corporate MSDS Number	DU000114
Formula	H2O2
Molecular Weight	34.02

Tradenames and Synonyms

"ALBONE"
"PERONE"
"TYSUL"
"ALBONE", "PERONE" AND "TYSUL" ARE REGISTERED TRADEMARKS OF DUPONT.
CC0007
HYDROGEN PEROXIDE SOLUTIONS

Company Identification

MANUFACTURER/DISTRIBUTOR
DuPont
1007 Market Street
Wilmington, DE 19898

PHONE NUMBERS

Product Information	1-800-441-9442
Transport Emergency	CHEMTREC: 1-800-424-9300
Medical Emergency	1-800-441-3637

COMPOSITION/INFORMATION ON INGREDIENTS

Components

Material	CAS Number	%
HYDROGEN PEROXIDE	7722-84-1	20-60
WATER	7732-18-5	40-80
"ALBONE" 50M ALSO CONTAINS		
ADIPIC ACID	124-04-9	
SUCCINIC ACID	110-15-6	

(Continued)

HAZARDS IDENTIFICATION

Potential Health Effects

Hydrogen peroxide may cause severe irritation or burns of the skin, eyes and mucous membranes. Splashes in the eye can cause severe eye damage with ulceration of the cornea, and may cause irreversible eye damage, including blindness. Skin exposure can result in bleaching of the skin and hair.

Inhalation of concentrated vapors can cause irritation of the nose and throat with chest discomfort, cough, difficulty in breathing and shortness of breath.

Ingestion can cause irritation of the upper gastrointestinal tract with pain and distention of the stomach and esophagus due to liberation of oxygen.

Gross overexposure by ingestion may be fatal.

HUMAN HEALTH EFFECTS:

Skin contact with aqueous solutions of less than 50% may cause irritation with discomfort or rash. Higher or prolonged exposure may result in skin burns or ulceration. Evidence suggests that skin permeation can occur in amounts capable of producing systemic toxicity. Effects of eye contact with aqueous solutions of less than 5% may include eye irritation with discomfort, tearing, or blurring of vision. Higher or prolonged exposure may result in eye corrosion with corneal or conjunctival ulceration. Contact with aqueous concentrations of greater than 10% may result in eye corrosion with corneal or conjunctival ulceration with possible irreversible eye damage, including blindness.

Overexposure by inhalation may cause irritation of the upper respiratory passages or nonspecific discomfort such as nausea, headache, or weakness. Higher inhalation exposures may lead to temporary lung irritation effects with cough, discomfort, difficulty breathing, or shortness of breath; or fatality from gross overexposure. Ingestion may cause irritation of the gastrointestinal tract with upper abdominal pain, "heartburn", nausea, vomiting, and diarrhea. "Coffee grounds" vomitus and black tarry stools may occur as a result of gastrointestinal tract bleeding. Additional effects from overexposure include red blood cell destruction, or gas embolism. When used as colonic lavage, hydrogen peroxide has caused gas embolism and gangrene of the intestine at concentrations down to 0.75%. Gross overexposure by ingestion may be fatal.

Individuals with preexisting diseases of the skin, eyes, or lungs may have increased susceptibility to the toxicity of excessive exposures.

Carcinogenicity Information

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

(Continued)

FIRST AID MEASURES

First Aid

INHALATION

If inhaled, immediately remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

SKIN CONTACT

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician. Wash contaminated clothing and shoes promptly and thoroughly.

EYE CONTACT

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

INGESTION

If swallowed, do not induce vomiting. Give large quantities of water. Never give anything by mouth to an unconscious person. Call a physician.

Notes to Physicians

If swallowed, large amounts of oxygen may be released quickly. The distention of the stomach or esophagus may be injurious. Insertion of a gastric tube may be advisable.

FIRE FIGHTING MEASURES

Flammable Properties

Will not burn, but decomposition, which may be caused by heat or contamination will release oxygen which will increase the explosive limit range and burning rate of flammable vapors.

Fire and Explosion Hazards:

Strong oxidizer. Contact with clothing or combustibles may cause fire. Effect may be delayed. Contact with organic liquids or vapors may cause immediate fire or explosion, especially if heated. Under certain circumstances, detonation may be delayed. Oxygen release from hydrogen peroxide may force organic or hydrogen vapors into an explosive range. Follow appropriate National Fire Protection Association (NFPA) codes.

Extinguishing Media

Use only water.

Fire Fighting Instructions

Flood with water. Cool tank/container with water spray.

Wear full protective clothing (rubber suit and boots) including chemical splash goggles or hood and self-contained breathing apparatus.

(Continued)

M A T E R I A L S A F E T Y D A T A S H E E T

RELIANCE CHEMICAL PRODUCTS CO.
64 AVENUE A
BAYONNE, NEW JERSEY 07002

PHONE NUMBER: 201-437-4144
EMERGENCY: 1-800-424-9300

DATE: NOVEMBER 27, 1990

PRODUCT CODE: C 3089

DISTRIBUTED BY: HUBBARD-HALL INC.
563 SOUTH LEONARD STREET
WATERBURY, CT 06725
(203) 756-5521

TRADE NAME: HUB-SIL ANTIFOAM 30-E
CHEMICAL NAME: ANTIFOAM 30-E
CHEMICAL FAMILY: SILICONE EMULSION
PROPRIETARY FORMULATION

NFPA DESIGNATION 704

HAZARD-RATING:
4 - EXTREME
3 - HIGH
2 - MODERATE
1 - SLIGHT

FIRE: 0
HEALTH: 0
0 REACTIVITY
0 SPECIFIC

SECTION II - HAZARDOUS INGREDIENTS

MIXTURE CONTAINS NO INGREDIENTS CONSIDERED TO BE HAZARDOUS ACCORDING TO ANY STATE OR FEDERAL REGULATIONS.

SECTION III - PHYSICAL DATA

SPECIFIC GRAVITY: 1.01
VAPOR PRESSURE: 30 MM
PERCENTAGE OF VOLATILITY BY VOLUME: >10
VAPOR DENSITY (AIR =1): NA
EVAPORATION RATE (ETHER =1): NA
SOLUBILITY IN WATER: >90%
APPEARANCE AND ODOR: WHITE LIQUID, ODORLESS

SECTION IV - FIRE AND EXPLOSION DATA

FLASH POINT (F): NONE
FLAMMABLE LIMITS: NA
EXTINGUISHING MEDIA: CO2 OR FOAM, IF NEEDED
SPECIAL FIRE FIGHTING MEDIA: NONE
UNUSUAL FIRE AND EXPLOSION HAZARDS: NONE

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE (TLV): NA
EFFECTS OF OVEREXPOSURE: MAY CAUSE TEMPORARY DISCOMFORT TO EYES.
ROUTES OF ENTRY AND EMERGENCY FIRST AID PROCEDURES: FLUSH WITH WATER.

SECTION VI - REACTIVITY DATA

INSTABILITY: STABLE
INCOMPATIBILITY: NONE KNOWN
DECOMPOSITION: SiO_2, CO_2, AND TRACES OF INCOMPLETELY BURNED CARBON PRODUCTS.
POLYMERIZATION: WILL NOT OCCUR.
CONDITIONS TO AVOID: NA

SECTION VII - SPILL OR LEAK PROCEDURES

SPILL, LEAK OR RELEASE: ADD ABSORBENT (SAND, EARTH, SAWDUST, ETC.) TO SPILL AREA. WIPE UP COMPLETELY, SINCE RESIDUE IS SLIPPERY. KEEP SPILL OUT OF SEWERS AND WATERCOURSES.
WASTE DISPOSAL: ASSURE CONFORMITY WITH APPLICABLE DISPOSAL REGULATIONS. DISPOSE OF ABSORBED MATERIAL AT AN APPROVED WASTE DISPOSAL SITE OR FACITLITY.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: NA
VENTILATION: MECHANICAL RECOMMENDED
SPECIAL: NA
OTHER: NA
PROTECTIVE GLOVES: NA
EYE PROTECTION: NA
OTHER PROTECTIVE EQUIPMENT: AS PER YOUR COMPANY'S REQUIREMENTS.

SECTION IX - SPECIAL PRECAUTIONS

HANDLING AND STORAGE: KEEP FROM FREEZING
OTHER PRECAUTIONS: NA

SECTION X - TRANSPORTATION REQUIREMENTS

PROPER SHIPPING NAME: NA
HAZARD CLASS: NA
ID NUMBER: NA
OTHER: NA

WHILE THE INFORMATION AND RECOMMENDATIONS GIVEN ARE BELIEVED TO BE ACCURATE, HUBBARD-HALL INC. MAKES NO WARRANTY, EXPRESS OR IMPLIED, AND ASSUMES NO LIABILITY WITH RESPECT TO USE OF THIS INFORMATION.

LIQUID GASFLUX

Material Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.

U.S. Department of Labor
Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

IDENTITY *(As Used on Label and List)* GASFLUX

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

Section I

Date Prepared: OCTOBER 1, 1986

THE GASFLUX COMPANY

Emergency Telephone Number: 1-800-424-9300 CHEMTREC

Address *(Number, Street, City, State, and ZIP Code)*: 32 HAWTHORNE STREET, ELYRIA, OHIO 44035

Telephone Number for Information: (216) 365-1941

Section II — Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))		OSHA PEL	ACGIH TLV	STEL
TRIMETHOXYBORANE (METHYL BORATE)	CAS 121-43-7	200 ppm	200 ppm	250 ppm
METHANOL (METHYL ALCOHOL)	CAS 67-56-1	200 ppm	200 ppm	250 ppm
DIMETHYL KETONE (ACETONE)	CAS 67-64-1	1000 ppm	750 ppm	1000 ppm

Section III — Physical/Chemical Characteristics

Boiling Point	137°F.	Specific Gravity (H_2O = 1)	.855
Vapor Pressure (mm Hg.)	100mm	Melting Point	-26°F.
Vapor Density (AIR = 1)	1.6	Evaporation Rate (Butyl Acetate = 1)	16

Solubility in Water: DECOMPOSES @ 10%

Appearance and Odor: CLEAR COLORLESS LIQUID WITH CHARACTERISTIC ODOR

Section IV — Fire and Explosion Hazard Data

Flash Point (Method Used)	Flammable Limits	LEL	UEL
18°F. C.O.C.		6.0%	36.5%

Extinguishing Media: DRY CHEMICAL, CO_2, WATER SPRAY, OR FOAM

Special Fire Fighting Procedures: USE STANDARD FIREFIGHTING TECHNIQUES. FIREFIGHTERS SHOULD WEAR FULL-FACE, SELF-CONTAINED BREATHING APPARATUS AND IMPERVIOUS PROTECTIVE CLOTHING.

Unusual Fire and Explosion Hazards: KEEP FIRE-EXPOSED CONTAINER COOL WITH WATER SPRAY TO PREVENT RUPTURE. HIGH PRESSURE WATER MAY SPREAD PRODUCT FROM BROKEN CONTAINER, INCREASING FIRE HAZARD.

Section V — Reactivity Data

Stability			Conditions to Avoid
	Unstable		
	Stable	X	STABLE IN THE ABSENCE OF WATER, MOIST AIR, OR AQUEOUS ACIDS.

Incompatibility *(Materials to Avoid)*: DETERIORATES MANY PLASTICS

Hazardous Decomposition or Byproducts: HYDROLYZES IN THE PRESENCE OF WATER, LIBERATING METHANOL AND BORIC ACID

Hazardous Polymerization			Conditions to Avoid
	May Occur		
	Will Not Occur	X	

Section VI — Health Hazard Data

Route(s) of Entry:	Inhalation?	Skin?	Ingestion?
	X	X	X

Health Hazards *(Acute and Chronic)*
SKIN OR EYE CONTACT MAY RESULT IN IRRITATION. INHALATION MAY CAUSE RESPIRATORY DISCOMFORT

Carcinogenicity:	NTP?	IARC Monographs?	OSHA Regulated?
	NO	NO	NO

Signs and Symptoms of Exposure
ACUTE: SAME AS METHANOL. EXTREMELY HIGH VAPOR LEVELS CAUSE HEADACHES, DROWSINESS & NAUSEA. SWALLOWING COULD CAUSE ABOVE PLUS SEVERE ILLNESS, BLINDNESS & POSSIBLY DEATH. REPEATED OR PROLONGED SKIN CONTACT CAUSES DRYNESS. EYE CONTACT MAY CAUSE INJURY WHICH PERSISTS FOR SEVERAL DAYS. NO INFORMATION AVAILABLE ON EFFECTS OF CHRONIC EXPOSURE.

Medical Conditions Generally Aggravated by Exposure
NO DATA AVAILABLE

Emergency and First Aid Procedures
CALL PHYSICIAN OR POISON CENTER. COPIOUSLY FLUSH SKIN & EYES WITH WATER. IF SWALLOWED, INDUCE VOMITING. IF INHALED, REMOVE TO FRESH AIR. ADMINISTER OXYGEN ONLY ON PHYSICIAN'S ADVICE.

Section VII — Precautions for Safe Handling and Use

Steps to Be Taken in Case Material Is Released or Spilled
REMOVE SOURCES OF IGNITION. PROVIDE ADEQUATE VENTILATION. WEAR PERSONAL PROTECTIVE EQUIPMENT. REMOVE LEAKING CONTAINER TO WELL VENTILATED AREA. HOSE AREA COPIOUSLY WITH WATER.

Waste Disposal Method
CONTACT RELIABLE APPROVED DISPOSER OF CHEMICAL WASTE.

Precautions to Be Taken in Handling and Storing
STORE IN COOL, DRY, WELL-VENTILATED AREA ATLEAST 35' FROM BRAZING SITE & OTHER SOURCES OF IGNITION. PREVENT DAMAGE TO OR LEAKAGE FROM THE CONTAINER.

Other Precautions
WHEN TRANSFERING FROM ONE CONTAINER TO ANOTHER, BOTH CONTAINERS SHOULD BE EFFECTIVELY BONDED & GROUNDED TO PREVENT DISCHARGE SPARKS OF STATIC ELECTRICITY.

Section VIII — Control Measures

Respiratory Protection *(Specify Type)*
IN POOR VENTILATION, USE NIOSH-APPROVED ORGANIC VAPOR RESPIRATOR WITH MIST & FUME FILTERS.

Ventilation				
	Local Exhaust	ACCEPTABLE	Special	OPTIONAL
	Mechanical *(General)*	ACCEPTABLE	Other	OPTIONAL

Protective Gloves	Eye Protection
RUBBER	CHEMICAL SAFETY GOGGLES OR GLASSES

Other Protective Clothing or Equipment
WEAR PROTECTIVE CLOTHING & FOOTWEAR

Work/Hygienic Practices
DO NOT POUR FROM OPEN CONTAINER WITHIN 35' OF SOURCES OF IGNITIONS.

THE INFORMATION IN THIS PRODUCT SAFETY DATA SHEET HAS BEEN OBTAINED FROM SOURCES BELIEVED RELIABLE AND IS, TO THE BEST OF OUR KNOWLEDGE, TRUE AND ACCURATE. THE MATERIAL DESCRIBED CAN BE HAZARDOUS IF NOT HANDLED PROPERLY AND IF USED WITHOUT REGARD FOR REQUIRED AND STANDARDIZED SAFETY PROCEDURES AND PROGRAMS. IT IS MANUFACTURED FOR A SPECIFIC END USE AND IS TO BE USED BY PERSONS WITH ADEQUATE TRAINING AND SKILL.

THE ABOVE FORM TO BE USED WITH GASFLUX (TRADENAME) AND NOT TO BE SUBSTITUTED AS AN MSDS SHEET FOR ANY OTHER LIQUID BRAZING FLUX.

GFC-8610 BASED ON OSHA 174, SEPT. 1985

Lead Free Frit

Material Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.

U.S. Department of Labor
Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

RECEIVED JAN 9 1987 NOVARO IND., I

IDENTITY (As Used on Label and List) CAS 65997-18-4*
Lead Free Jewelry Enamels (Frit)

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

Section I

Manufacturer's Name Thompson Enamel	Emergency Telephone Number 1-606/291-3800
Address (Number, Street, City, State, and ZIP Code) 650 Colfax Ave. Bellevue, KY 41073	Telephone Number for Information 1-606/291-3800
	Date Prepared June 5, 1986
	Signature of Preparer (optional)

Section II — Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Although these products contain some elements which have low LTV valves as soluble metal ions, these frits are formed at high temperatures and do not necessarily have any of the properties of their component oxides or metals.				

Section III — Physical/Chemical Characteristics

Boiling Point	N/A	Specific Gravity (H_2O = 1)	>2.0
Vapor Pressure (mm Hg.)	N/A	Melting Point	>850°F
Vapor Density (AIR = 1)	N/A	Evaporation Rate (Butyl Acetate = 1)	0%

Solubility in Water 0%

Appearance and Odor Odorless Glass

Section IV — Fire and Explosion Hazard Data

Flash Point (Method Used) None	Flammable Limits None	LEL N/A	UEL N/A

Extinguishing Media None

Special Fire Fighting Procedures None

Unusual Fire and Explosion Hazards None

(Reproduce locally)

OSHA 174, Sept. 1985

Section V — Reactivity Data

Stability			Conditions to Avoid
	Unstable		None
	Stable	X	

Incompatibility (*Materials to Avoid*): None

Hazardous Decomposition or Byproducts: None

Hazardous Polymerization			Conditions to Avoid
	May Occur		None
	Will Not Occur	X	

Section VI — Health Hazard Data

Route(s) of Entry: Inhalation? Yes Skin? No Ingestion? Yes

Health Hazards (*Acute and Chronic*): Alkali boro silicate glass. 15 mg/M^3 for inert or nuisance dust.

Carcinogenicity: None NTP? N/A IARC Monographs? N/A OSHA Regulated? No

Signs and Symptoms of Exposure: Dust may irritate eyes. Prolonged exposure may cause irritation to respiratory track.

Medical Conditions Generally Aggravated by Exposure: Not known

Emergency and First Aid Procedures: Remove to dust free fresh air. If irritation develops, call a physician.

Section VII — Precautions for Safe Handling and Use

Steps to Be Taken in Case Material Is Released or Spilled: If not contaminated, scoop up and use. If contaminated, sweep up and discard in suitable container.

Waste Disposal Method: Dispose according to Federal, State, and Local regulations.

Precautions to Be Taken in Handling and Storing: Wear appropriate respirator if 15 mg/M^3 working conditions are exceeded.

Other Precautions:

Section VIII — Control Measures

Respiratory Protection (*Specify Type*): Use NIOSH approved dust respirator.

Ventilation		
	Local Exhaust: Adequate for dust control.	Special: None
	Mechanical (*General*): Vent dust to collector.	Other: None

Protective Gloves: Use judgement - use work gloves.

Eye Protection: Use judgement - avoid getting enamel in eyes.

Other Protective Clothing or Equipment: Be clean and neat. Wear clean clothes.

Work/Hygienic Practices: No eating or smoking when using enamel.

★ U.S.G.P.O.: 1986-491-529/45775

Copper Chloride ZFG 7287

U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

Form Approved
OMB No. 44-R1387

MATERIAL SAFETY DATA SHEET

Required under USDL Safety and Health Regulations for Ship Repairing, Shipbuilding, and Shipbreaking (29 CFR 1915, 1916, 1917)

CAS # 1332-65-6

SECTION I

MANUFACTURER'S NAME: CP Chemical Inc.	EMERGENCY TELEPHONE NO.: 201-636-4300
ADDRESS (Number, Street, City, State, and ZIP Code): Arbor St., Sewaren, N.J. 07077	
CHEMICAL NAME AND SYNONYMS: Copper Oxy Chloride	TRADE NAME AND SYNONYMS: $CuSO_4$ - $Cu(OH)_2$ - $CuCl_2$
CHEMICAL FAMILY	FORMULA

SECTION II - HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS			BASE METAL		
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS			FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES			OTHERS		
OTHERS					

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES	%	TLV (Units)

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	—	SPECIFIC GRAVITY (H_2O=1)	—
VAPOR PRESSURE (mm Hg.)	—	PERCENT, VOLATILE BY VOLUME (%)	—
VAPOR DENSITY (AIR=1)	—	EVAPORATION RATE (_____ =1)	—
SOLUBILITY IN WATER	Insoluble		
APPEARANCE AND ODOR	Blue Color		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	FLAMMABLE LIMITS	Lel	Uel
EXTINGUISHING MEDIA			
SPECIAL FIRE FIGHTING PROCEDURES: Does not burn.			
UNUSUAL FIRE AND EXPLOSION HAZARDS			

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE

EFFECTS OF OVEREXPOSURE May cause eye or skin irritation.

EMERGENCY AND FIRST AID PROCEDURES In case of eye contact flush eyes with plenty of water and call a physician. Wash skin with soap and water.

SECTION VI - REACTIVITY DATA

STABILITY			CONDITIONS TO AVOID
	UNSTABLE		
	STABLE	X	

INCOMPATABILITY *(Materials to avoid)*

HAZARDOUS DECOMPOSITION PRODUCTS

HAZARDOUS POLYMERIZATION			CONDITIONS TO AVOID
	MAY OCCUR		
	WILL NOT OCCUR	X	

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED Sweep up solids and deposit in container. Dispose in proper fashion.

WASTE DISPOSAL METHOD Dispose in accordance with local, state and federal regulation.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION *(Specify type)* Dust respirators approved by Bureau of Mines for dust.

VENTILATION	LOCAL EXHAUST	SPECIAL
	Adequate Ventilation	
	MECHANICAL *(General)*	OTHER

PROTECTIVE GLOVES	EYE PROTECTION
Rubber gauntlet	Safety spectacles with side shields.

OTHER PROTECTIVE EQUIPMENT

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING Store in clean, dry area.

OTHER PRECAUTIONS

M A T E R I A L S A F E T Y D A T A S H E E T

HUBBARD-HALL INC.
563 SOUTH LEONARD STREET
WATERBURY, CT 06708

PHONE NUMBER: 203-756-5521
EMERGENCY: 1-800-424-9300

DATE: DECEMBER 3, 1993

PRODUCT CODE: ZFG 8001

TRADE NAME: CLEANER CB 1
CHEMICAL NAME: NA
CHEMICAL FAMILY: POWDERED MIX MEDIUM ALKALINE SALTS/SURFACTANTS
PROPRIETARY FORMULATION

NFPA DESIGNATION 704

HAZARD-RATING:
4 - EXTREME
3 - HIGH
2 - MODERATE
1 - SLIGHT

FIRE: 0
HEALTH: 1
0 REACTIVITY
0 SPECIFIC

SECTION II - HAZARDOUS INGREDIENTS

MIXTURE CONTAINS NO INGREDIENTS CONSIDERED TO BE HAZARDOUS ACCORDING TO ANY STATE OR FEDERAL REGULATIONS.

SECTION III - PHYSICAL DATA

SPECIFIC GRAVITY: NA
VAPOR PRESSURE: NA
PERCENTAGE OF VOLATILITY BY VOLUME: NA
VAPOR DENSITY (AIR =1): NA
EVAPORATION RATE (ETHER =1): NA
SOLUBILITY IN WATER: APPRECIABLE
APPEARANCE AND ODOR: OFF WHITE TO BROWNISH - GRANULAR

SECTION IV - FIRE AND EXPLOSION DATA

FLASH POINT (^{O}F): NA
FLAMMABLE LIMITS: NA
EXTINGUISHING MEDIA: DOES NOT BURN OR SUPPORT COMBUSTION
SPECIAL FIRE FIGHTING MEDIA: NA
UNUSUAL FIRE AND EXPLOSION HAZARDS: NA

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE (TLV): UNKNOWN
EFFECTS OF OVEREXPOSURE: SKIN: MAY CAUSE IRRITATION OR BURNS. EYES: MAY BURN OR EVEN CAUSE PERMANENT DAMAGE. INGESTION: DAMAGE TO TISSUE.
ROUTES OF ENTRY AND EMERGENCY FIRST AID PROCEDURES: SKIN/EYE CONTACT: IMMEDIATELY FLUSH EYES AND SKIN WITH PLENTY OF WATER FOR AT LEAST 10 TO 15 MINUTES. ALWAYS CONTACT A PHYSICIAN FOR EYE CONTACT OR SKIN BURNS. INGESTION: DRINK WATER, DO NOT INDUCE VOMITING. IMMEDIATELY CONTACT HOSPITAL OR PHYSICIAN.

SECTION VI - REACTIVITY DATA

INSTABILITY: STABLE
INCOMPATIBILITY: ACIDS - WILL RELEASE CARBON DIOXIDE.
DECOMPOSITION: NA
POLYMERIZATION: WILL NOT OCCUR
CONDITIONS TO AVOID: NA

SECTION VII - SPILL OR LEAK PROCEDURES

SPILL, LEAK OR RELEASE: SHOVEL UP CONTENTS AND RETURN TO CONTAINER OR ADD TO CLEANER SOLUTION IN TANK. THEN NEUTRALIZE REMAINING RESIDUALS WITH A DILUTE ACID AND FLUSH WITH WATER TO SEWER OR SETTLING LAGOON.
WASTE DISPOSAL: DISCHARGE TO A DISPOSAL SYSTEM. IN ORDER TO BE COMPLETELY INFORMED ON THE LATEST REGULATIONS FOR YOUR AREA, PLEASE CONTACT THE LOCAL AUTHORITIES.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: DUST MASK OR RESPIRATOR IS NECESSARY.
VENTILATION: LOCAL EXHAUST: AS NECESSARY TO ELIMINATE DUST.
SPECIAL: NA
OTHER: NA
PROTECTIVE GLOVES: RUBBER OR VINYL
EYE PROTECTION: CHEMICAL SAFETY GOGGLES
OTHER PROTECTIVE EQUIPMENT: CLOTHING SUFFICENT TO PROTECT SKIN FROM DUST.

SECTION IX - SPECIAL PRECAUTIONS

HANDLING AND STORAGE: STORE IN DRY PLACE.
OTHER PRECAUTIONS: NA

SECTION X - TRANSPORTATION REQUIREMENTS

PROPER SHIPPING NAME: NA
HAZARD CLASS: NA
ID NUMBER: NA
PKG GROUP: NA
DOT GUIDE NO.: NA
RQ: NA
OTHER: NA

WHILE THE INFORMATION AND RECOMMENDATIONS GIVEN ARE BELIEVED TO BE ACCURATE, THE HUBBARD-HALL CHEMICAL CO. MAKES NO WARRANTY, EXPRESS OR IMPLIED, AND ASSUMES NO LIABILITY WITH RESPECT TO USE OF THIS INFORMATION.

OxyChem®

(FC) 6/90 1

Responsible Care:® A Public Commitment

MATERIAL SAFETY DATA SHEET

Distributed by

HUBBARD-HALL INC.

Waterbury, CT 06725 203/754-2171
Inman, SC 29349 803/472-9031
Lincoln, RI 02865 401 333-6180
Agawam, MA 01001 413-789-4633

MSDS NUMBER : M4815

MSDS DATE : 01-14-93

PRODUCT NAME : CAUSTIC SODA-DIAPHRAGM NO. 2 FLAKE

24 HOUR EMERGENCY PHONE: 1-800-733-3665 OR 716-278-7021

I. PRODUCT IDENTIFICATION

HMIS HAZARD RATINGS

HEALTH HAZARD 3 **FIRE HAZARD 0** **REACTIVITY 2**

Based on the National Paint & Coatings Association HMIS rating system.

SARA/TITLE III HAZARD CATEGORIES (See Section X)

Immediate (ACUTE) Health: YES
Delayed (Chronic) Health: NO
Fire Hazard: NO
Reactive Hazard: YES
Sudden Release of Pressure: NO

MANUFACTURER'S NAME AND ADDRESS: Occidental Chemical Corporation
Customer Service, Occidental Tower,
P O Box 809050, Dallas, Texas 75380
Telephone (1-800-752-5151)

CHEMICAL NAME: Sodium hydroxide CAS NUMBER: 1310-73-2

SYNONYMS/COMMON NAMES: Sodium Hydroxide-Dry

CHEMICAL FORMULA: NaOH

DOT PROPER SHIPPING NAME: Sodium Hydroxide, solid

DOT HAZARD CLASS: Corrosive material

DOT I.D. NUMBER: UN1823

DOT HAZARDOUS SUBSTANCE: RQ 1000 lbs.

II. HEALTH HAZARD INFORMATION

EMERGENCY AND FIRST AID PROCEDURES

EYES:

OBJECT IS TO FLUSH MATERIAL OUT IMMEDIATELY THEN SEEK MEDICAL ATTENTION. IMMEDIATELY flush eyes with large amounts of water for at least 15 minutes, holding lids apart to ensure flushing of the entire surface. Washing eyes within several seconds is essential to achieve maximum effectiveness. SEEK MEDICAL ATTENTION IMMEDIATELY.

CAS = Chemical Abstract Service Number
PEL = OSHA Permissible Exposure Limit
TLV = ACGIH Threshold Limit Value, Current
ND = No relevant information found or not available
CORP = Corporate Exposure Limit
* = See Chronic Effects Information
NA = Not applicable

IMPORTANT: The information presented herein , while not guaranteed, was prepared by competent technical personnel and is true and accurate to the best of our knowledge. NO WARRANTY, OR GUARANTY, EXPRESS OR IMPLIED IS MADE REGARDING PERFORMANCE, STABILITY, OR OTHERWISE. This information is not intended to be all-inclusive as to the manner and conditions of use, handling and storage. Other factors may involve other or additional safety or performance considerations. While our technical personnel will be happy to respond to questions regarding safe handling and use procedures, safe handling and use remains the responsibility of the customer. No suggestions for use are intended as, and nothing herein shall be construed as a recommendation to infringe any existing patents or violate any Federal, State, or local laws

TE OF LAST CHANGE: 1/15/90 DATE PRINTED: 1/29/92

JUFACTURER'S NAME:

ZDAR COMPANY
37 N NORTH BRANCH ST
ICAGO IL 60622

EMERGENCY TELEPHONE NO. 913-384-3251
INFORMATION TELEPHONE NO. 913-384-3251

SECTION 1 -- PRODUCT INFORMATION

DDUCT CODE: 228

ADE NAME: BLUE ALKALI SOLUBLE RESIST

DDUCT CLASS: RESIN BASED LACQUER

DDUCT GROUP: 2

- H M I S C O D E S -
HEALTH - 2
FLAMMABILITY - 2
REACTIVITY - 0

SECTION 2 -- HAZARDOUS INGREDIENTS

EMICAL NAME; MMON NAME; S NUMBER	PERCENT BY WEIGHT	OCCUPATIONAL EXPOSURE LIMITS TLV	PEL	VAPOR PRESSURE IN mmHg
2-BUTOXYETHANOL; HYLENE GLYCOL BUTYL ETHER; S # 111-76-2	7	25PPM SKIN	25PPM	0.6 @ 25C
TROLEUM DISTILLATE; SOLV G,1431; OMATIC HYDROCARBON MIXTURE; 742-94-5	19	NOT ESTABLISHED	500PPM	5 @ 100 F
SUBJECT TO REPORTING REQUIREMENT OF SECTION 313 OF TITLE III OF SARA (40 CFR PART 372)				

SECTION 3 -- PHYSICAL DATA

ILING RANGE: 340 DEG. F - 395 DEG. F

VAPOR DENSITY: HEAVIER THAN AIR

APORATION RATE: SLOWER THAN ETHER

PERCENT VOLATILE BY VOLUME: 42%
WEIGHT PER GALLON: 12.42 LBS

SECTION 4 -- FIRE AND EXPLOSION HAZARD DATA

LAMMABILITY CLASSIFICATION:
Combustible Liquid Class III

THER COMMENTS:
Combustible Liquid

LASH POINT:
Lowest flashing component Hi-Sol 15 140 Deg. F TCC

OWER EXPLOSIVE LEVEL:
1

XTINGUISHING MEDIA:
Foam, CO2, Dry Chemical

NUSUAL FIRE AND EXPLOSION HAZARDS:
Keep containers tightly closed. Isolate from heat, electrical equipment, sparks, and open flame. Closed containers may explode when exposed to extreme heat. Do not apply to hot surfaces. Water spray may be ineffective. Water may be used to cool closed containers to prevent pressure buildup and possible autoignition or explosion exposed to extreme heat. If water is used, fog nozzles are preferable.

PECIAL FIREFIGHTING PROCEDURES:
N/A

SECTION 5 -- HEALTH HAZARD DATA

FFECTS OF OVEREXPOSURE:
Inhalation: Anesthetic. Irritation of the respiratory tract or acute

nervous system depression characterized by headache, dizziness, staggering gait, confusion, unconsciousness or coma. Skin or eye contact: Primary irritation. Repeated and prolonged overexposure by inhalation or skin absorption may cause kidney, liver, and blood damage.

EDICAL CONDITIONS PRONE TO AGGRAVATE BY EXPOSURE:
N/A

RIMARY ROUTE(S) OF ENTRY:
Dermal, inhalation and ingestion.

MERGENCY AND FIRST AID PROCEDURES:
Fumes: Remove from exposure. Restore breathing. Keep warm and quiet. Notify a physician. Splash (Eyes): Flush immediately with copious quantities of running water for at least 15 minutes. Take to a physician for definitive medical treatment. Splash (Skin): Remove with soap and water. Remove contaminated clothing. Do not induce vomiting if swallowed.

SECTION 6 -- REACITIVITY DATA

TABILITY:
Stable

ONDITIONS TO AVOID:
N/A

NCOMPATIBILITY (WITH MATERIALS):
N/A

AZARDOUS DECOMPOSITION PRODUCTS:
May produce hazardous fumes when heated to decomposition as in welding. Fumes may contain carbon monoxide and oxides of nitrogen.

AZARDOUS POLYMERIZATION:
Will not occur.

SECTION 7 -- SPILL OR LEAK PROCEDURES

TEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
Remove all sources of ignition (flames, hot surfaces, and electrical, static or frictional sparks). Avoid breathing vapors. Ventilate area. Remove with soap and water.

ASTE DISPOSAL METHOD:
Dispose of in accordance with applicable local, county, state and federal regulations. Do not incinerate closed containers.

SECTION 8 -- SPECIAL PROTECTION INFORMATION

ESPIRATORY PROTECTION:
If vapor concentration exceeds the TLV listed in Section II, use NIOSH approved respiratory with organic chemical cartridge. Consult a reputable Safety Supply company for proper respirator selection.

ENTILATION:
Provide general dilution or local exhaust ventilation in volume and pattern to keep TLV of most hazardous ingredient in Section II below acceptable limit, LEL in Section IV below stated limit, and to remove decomposition products during welding or flame cutting on surfaces coated with this product.

ROTECTIVE GLOVES:
Solvent resistant gloves required for prolonged or repeated contact.

YE PROTECTION:
Use safety eyewear designed to protect against splash of liquids.

THER PROTECTION:

Prevent prolonged skin contact with contaminated clothing.

YGIENIC PRACTICES:
Wash with soap and water before eating, smoking, or using toilet facilities.

SECTION 9 -- SPECIAL PRECAUTIONS

RECAUTIONS TO BE TAKEN IN HANDLING AND STORING:
Do not store above 120 degrees F. Store large quantities in buildings designed for storage of NFPA Class III combustible liquids.

THER PRECAUTIONS:
Do not take internally. Containers should be grounded when pouring. Avoid free fall of liquids in excess of a few inches. Do not flame cut, braze, or weld without MSHA or NIOSH approved respirator or appropriate ventilation.

SECTION 10 -- DISCLOSURE

ISCLOSURE INFORMATION:
The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein.

II. HEALTH HAZARD INFORMATION (Continued)

SKIN:
IMMEDIATELY wash contaminated areas with plenty of water for at least 15 minutes. Remove contaminated clothing and footwear and wash clothing before reuse. Discard footwear which cannot be decontaminated. SEEK MEDICAL ATTENTION IMMEDIATELY.

INHALATION:
Remove to fresh air; if breathing is difficult, have trained person administer oxygen. If respiration stops, give mouth-to-mouth resuscitation. GET MEDICAL ATTENTION.

INGESTION:
NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. If available, give several glasses of milk. If vomiting occurs spontaneously, keep airway clear. SEEK MEDICAL ATTENTION IMMEDIATELY.

ROUTES OF EXPOSURE

INHALATION:
Breathing of dust, mist, or spray may cause damage to the upper respiratory tract and the lung tissue which could produce chemical pneumonia depending upon severity of exposure.

SKIN:
Contact produces severe burns and destroys tissues. Irritation may be delayed.

EYE CONTACT:
Causes severe burns that result in damage to the eyes and possibly blindness.

INGESTION:
Causes severe burns to mucous membranes of the mouth, throat, esophagus, and stomach.

EFFECTS OF OVEREXPOSURE

ACUTE:
Corrosive to all body tissues by all routes of exposure. The effect of local dermal exposure may consist of multiple areas of superficial destruction of the skin or of primary irritant dermatitis. Similarly, inhalation of dust, spray, or mist may result in varying degrees or irritation or damage to the respiratory tract tissues and an increased susceptibility to respiratory illness.

CHRONIC:
No known chronic effects.

TOXICOLOGY DATA:
Caustic soda is a corrosive material.
Acute Dermal LD50 (rabbit) 1350 mg/kg

Human Dermal Exposure
Regardless of concentration, the severity of damage and extent of its irreversibility increases with length of contact time. Prolonged contact with sodium hydroxide solutions of ≧1% can cause a high degree of tissue destruction. The latent period, following skin contact during which no sensation of irritation occurs, varies from several hours for 0.4 - 4% solutions to 3 minutes with concentrations of 25% or greater.

Du Pont Chemicals

4950CR | Revised 12-AUG-1994 | Printed 31-AUG-1994

BA 0164

Sulfuric Acid, 77 to 100%

(9409)

CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Distributed by

HUBBARD-HALL INC.

Waterbury, CT 06725 203/754-2171
Inman, SC 29349 803/472-9031
Lincoln, RI 02865 401/333-6180
Agawam, MA 01001 413/789-4633

Material Identification

Corporate MSDS Number	DU000051
CAS Number	7664-93-9
Formula	H2S04
Molecular Weight	98.08
CAS Name	SULFURIC ACID
Grade	77 to 100% TECHNICAL

Company Identification

MANUFACTURER/DISTRIBUTOR
DuPont
1007 Market Street
Wilmington, DE 19898

PHONE NUMBERS

Product Information	1-800-441-7515
Transport Emergency	CHEMTREC: 1-800-424-9300
Medical Emergency	1-800-441-3637

COMPOSITION/INFORMATION ON INGREDIENTS

Components

Material	CAS Number	%
*SULFURIC ACID	7664-93-9	
60 DEG TECHNICAL		77.7
66 DEG TECHNICAL		93.2
1.835 ELECTROLYTE		93.2

(Continued)

HAZARDS IDENTIFICATION(Continued)

between sulfuric acid mist exposure and respiratory tract cancer has been shown.

Individuals with preexisting diseases of the lungs may have increased susceptibility to the toxicity of excessive exposures.

Carcinogenicity Information

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

FIRST AID MEASURES

First Aid

INHALATION

If inhaled, immediately remove to fresh air and have patient lie down and remain quiet. Apply artificial respiration if breathing has stopped. Give oxygen if breathing is difficult. Call a physician.

INGESTION

If swallowed, do not induce vomiting. Give large quantities of water. Call a physician. Do not neutralize the acid. Never give anything by mouth to an unconscious person.

SKIN OR EYE CONTACT

In case of contact, immediately (within seconds) flush skin or eyes with plenty of water (preferably cold water) for at least 15 minutes while removing contaminated clothing and shoes. Call a physician. Wash clothing before reuse.

While the patient is being transported to a medical facility, apply compresses of iced water. If medical treatment must be delayed, immerse the affected area in iced water. If immersion is not practical, compresses of iced water can be applied. Avoid freezing tissues.

Notes to Physicians

Continued washing of the affected area with cold or iced water will be helpful in removing the last traces of sulfuric acid. Creams or ointments should not be applied before or during the washing phase of the treatment.

(Continued)

ACCIDENTAL RELEASE MEASURES (Continued)

multiplied by time (CxT) for up to a maximum of 60 minutes and as a ceiling airborne concentration. These limits are used in conjunction with engineering controls/monitoring and as an aid in planning for episodic releases and spills. For more information on the applicability of EEL's, contact DuPont.

The DuPont Emergency Exposure Limit (EEL) for Sulfuric Acid is 10 mg/m3 for 15 to 60 minutes and 20 mg/m3 for up to 15 minutes with a not-to-exceed ceiling of 20 mg/m3.

HANDLING AND STORAGE

Handling (Personnel)

Do not get in eyes, on skin, or on clothing. Avoid breathing vapors or mist. Wash thoroughly after handling.

Keep containers closed. Do not add water to contents while in container because of violent reaction.

Storage

Keep out of sun and away from heat, sparks, and flame. Keep container tightly closed and (drum) closure up to prevent leakage. Loosen closure carefully. Relieve internal pressure when received and at least weekly thereafter. Do not use pressure to empty. Be sure closure is securely fastened before moving container. Do not wash out container or use it for other purposes; replace closure after each withdrawal and return it with empty container.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls

Good general ventilation should be provided to keep vapor and mist concentrations below the exposure limits.

Personal Protective Equipment

Have available and wear as appropriate for exposure conditions when handling containers or operating equipment containing sulfuric acid: chemical splash goggles; full-length face shield/chemical splash goggles combination; acid-proof gauntlet gloves, apron, and boots; long sleeve wool, acrylic, or polyester clothing; acid proof suit and hood; and appropriate NIOSH/MSHA respiratory protection. In case of emergency or where there is a strong possibility of considerable exposure, wear a complete acid suit with hood, boots, and gloves. If acid vapor or mist are present and exposure limits may be exceeded, wear appropriate NIOSH/MSHA respiratory protection.

(Continued)

STABILITY AND REACTIVITY (Continued)

Incompatibility with Other Materials
Vigorous reactions with water; alkaline solutions; metals, metal powder; carbides; chlorates; fuminates; nitrates; picrates; strong oxidizing, reducing, or combustible organic materials. Hazardous gases are evolved on contact with chemicals such as cyanides, sulfides, and carbides.

Decomposition
Releases sulfur dioxide at extremely high temperatures.

Polymerization
Polymerization will not occur.

TOXICOLOGICAL INFORMATION

Animal Data

Inhalation 1-hour LC50: 347 ppm in rats
Oral LD50 : 2,140 mg/kg in rats

Sulfuric acid is corrosive to the skin and eyes of animals. By ingestion, it is moderately toxic in animals causing corrosion of mucosal surfaces. Toxic effects described in animals from single exposures by inhalation include respiratory irritation. Animal testing indicates that this compound does not have carcinogenic, mutagenic, embryotoxic, or reproductive effects.

ECOLOGICAL INFORMATION

Ecotoxicological Information
Aquatic Toxicity

96-hour LC50, bluegill sunfish: 10.5 ppm
48-hour TLm, flounder : 100-300 ppm

DISPOSAL CONSIDERATIONS

Waste Disposal
Cleaned-up material may be an RCRA Hazardous Waste on disposal due to the corrosivity characteristic. Do not flush to surface water or sanitary sewer system. Comply with Federal, State, and local regulations. If approved, neutralize and transfer to waste treatment system.

(Continued)

The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

Responsibility for MSDS : DuPont Chemicals
Address : Engineering & Product Safety
> : P.O. Box 80709, Chestnut Run
> : Wilmington, DE 19880-0709
Telephone : (302) 999-4946

# Indicates updated section.

End of MSDS

BA0144
(9410)

MATERIAL SAFETY DATA SHEET

EMERGENCY PHONE NUMBER
CHEMTREC 800/424-9300

SUPPLIER: CHEMICAL INTERCHANGE
2932 SOUTH BRENTWOOD
ST. LOUIS, MO 63144

Distributed by

HUBBARD-HALL INC.

Waterbury, CT 06725 203/754-2171
Inman, SC 29349 803/472-9031
Lincoln, RI 02865 401/333-6180
Agawam, MA 01001 413/789-4633

PRODUCT IDENTIFICATION

PRODUCT NAME: NITRIC ACID
SYNONYMS: HYDROGEN NITRATE, AQUA FORTIS
CHEMICAL FORMULA: HNO_3
CONCENTRATION RANGE: 56 TO 70%
CAS NUMBER: 7697-37-2
DOT PROPER SHIPPING NAME: NITRIC ACID (OTHER THAN RED FUMING LESS THAN 70 PERCENT NITRIC ACID)
DOT/IMO HAZARD CLASS: 8
DOT CHEMICAL I.D. NO.: UN 2031
DOT LABEL(S)/PLACARDS(S): CORROSIVE
DOT EMERGENCY RESPONSE
GUIDE NUMBER: GUIDE NUMBER 44
HAZARDOUS SUBSTANCE(S)/
RQ(S): YES - 1,000 LBS. (SEE ADDITIONAL COMMENTS)
U.S. SURFACE FREIGHT
CLASSIFICATION: NITRIC ACID, 8, UN 2031, PG II, RQ

WARNING STATEMENTS

DANGER!
THIS PRODUCT IS A STRONG OXIDIZER!
LIQUID AND VAPOR CAUSE SEVERE BURNS HARMFUL IF INHALED AND MAY CAUSE DELAYED LUNG INJURY SPILLAGE MAY CAUSE FIRE OR LIBERATE DANGEROUS GAS

PRECAUTIONARY MEASURES

DO NOT BREATHE VAPOR.
DO NOT GET IN EYES, ON SKIN, OR ON CLOTHING.
KEEP CONTAINER CLOSED.
USE WITH ADEQUATE VENTILATION.
WASH HANDS AND/OR OTHER EXPOSED AREAS THOROUGHLY AFTER HANDLING.

EMERGENCY AND FIRST AID PROCEDURES

IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES WHILE REMOVING CONTAMINATED CLOTHING AND SHOES. CALL A PHYSICIAN. WASH CLOTHING BEFORE REUSE.

IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL RESPIRATION, PREFERABLY MOUTH-TO-MOUTH. IF BREATHING IS DIFFICULT, GIVE OXYGEN. CALL A PHYSICIAN.

IF INGESTED, DO NOT INDUCE VOMITING. GIVE THREE OR MORE GLASSES OF WATER OR MILK TO DRINK. SEEK IMMEDIATE MEDICAL ATTENTION.

PROTECTION INFORMATION

EYE PROTECTION: WEAR CHEMICAL SAFETY GOGGLES AND FACE SHIELD WHEN THERE IS POTENTIAL FOR EYE AND/OR FACIAL CONTACT WITH THE LIQUID. PROVIDE EYE BATHE IN THE IMMEDIATE AREA OF POTENTIAL EXPOSURE.

SKIN PROTECTION: WEAR IMPERVIOUS RUBBER GLOVES AND PROTECTIVE LONG-SLEEVED CLOTHING WHEN THERE IS POTENTIAL FOR SKIN CONTACT WITH THE LIQUID. WEAR IMPERVIOUS RUBBER BOOTS, APRONS AND/OR SUITS AS APPROPRIATE WHEN SPLASHING IS LIKELY. REMOVE CONTAMINATED CLOTHING PROMPTLY AND LAUNDER BEFORE REUSE. PROVIDE A SAFETY SHOWER IN THE IMMEDIATE VICINITY OF POTENTIAL EXPOSURE.

RESPIRATORY PROTECTION: WEAR A NIOSH APPROVED FULL FACE RESPIRATOR OR A POSITIVE PRESSURE SELF CONTAINED BREATHING APPARATUS AS APPROPRIATE FOR PROTECTION. WHEN WORN, CHEMICAL SAFETY GOGGLES ARE REMOVED. CONSULT WITH RESPIRATOR MANUFACTURERS TO DETERMINE THE APPROPRIATE TYPE OF EQUIPMENT FOR A GIVEN APPLICATION.

VENTILATION: PROVIDE SUFFICIENT VENTILATION TO CONTROL EXPOSURE LIMITS. LOCAL EXHAUST VENTILATION IS PREFERRED.

FIRE PROTECTION INFORMATION

FLASH POINT: NOT APPLICABLE; STRONG OXIDIZING AGENT

IGNITION TEMPERATURE: NOT APPLICABLE

FLAMMABLE LIMITS: NOT APPLICABLE

EXTINGUISHING MEDIA: IN CASE OF FIRE, SOAK WITH WATER.

SPECIAL FIRE FIGHTING INSTRUCTIONS: WEAR FULL ACID PROTECTIVE CLOTHING WITH SELF-CONTAINED BREATHING APPARATUS. EVACUATE AREA AND STAY UPWIND.

UNUSUAL FIRE AND EXPLOSION HAZARDS: POWERFUL OXIDIZING AGENT. MAY CAUSE EXPLOSION WHEN IN CONTACT WITH OXIDIZABLE MATERIALS SUCH AS H_2S, NITRATE, WOOD, METALLIC POWDERS, CELLULOSE, OR OTHER ORGANIC MATERIAL.

HEALTH HAZARD DATA

ACUTE EFFECTS: NITRIC ACID IS HIGHLY CORROSIVE, CAUSTIC, SUFFOCATING, AND FUMING. THE DILUTE ACID CAN CAUSE MILD IRRITATION, HARDEN SKIN EPITHELIUM WITHOUT DESTRUCTION AND CAUSE CHRONIC SKIN IRRITATION. THE CONCENTRATED ACID SEVERELY BURNS AND STAINS THE SKIN, DESTROYS THE TISSUES AND BURNS THE EYES.

CHRONIC EFFECTS: CONTINUED EXPOSURE TO NITRIC FUMES CAN ERODE THE TEETH AND IS SEVERELY IRRITATING AND CORROSIVE TO THE MUCOUS MEMBRANES OF THE RESPIRATORY TRACT.

CARCINOGENIC STATUS: NONE SUSPECTED.

INGESTION: NITRIC ACID IS A TOXIC SUBSTANCE. INGESTED AMOUNTS OF 1 TEASPOON TO 1 OUNCE MAY BE FATAL.

AIRBORNE EXPOSURE LIMITS: PRODUCT: NITRIC ACID 100% BY WT.
EXPOSURES SHOULD BE KEPT BELOW THESE LIMITS:
NITRIC ACID: OSHA PEL/TWA-2PPM (8 HR)
ACGIH TLV/TWA-2PPM (8 HR); STEL-4PPM (15 MIN)

PHYSICAL DATA

APPEARANCE AND ODOR: COLORLESS TO LIGHT BROWN LIQUID WITH ACRID ODOR.

WATER SOLUBILITY: MISCIBLE

VAPOR DENSITY (AIR=1): 1

PH: LESS THAN 1

EVAPORATION RATE (BUTYL ACETATE=1): APPROX. 1

VAPOR PRESSURE (MM HG): 9-10 @ 25 DEGREES C (77 DEGREES F)

WEIGHT % HNO3: 56.5 65.7 67.2

SPECIFIC GRAVITY @ 60/60 DEGREES F: 1.3551 1.4010 1.4078

DEGREES BAUME: 38 41.5 42

FREEZING POINT, DEGREES F, ATM (APP): -4 -20 -25

BOILING POINT, DEGREES F, ATM (APP): 243 246 248

VISCOSITY, CP @ 20 DEGREES C (68 DEGREES F): 2.0 2.1 2.2

REACTIVITY DATA

CONDITIONS TO AVOID: AVOID CONTACT WITH ORGANIC REFUSE (WOOD, TURPENTINE, CHARCOAL, ETC.).

INCOMPATIBILITY: NITRIC ACID IS A STRONG OXIDIZER. AVOID CONTACT WITH ORGANIC MATERIALS, REDUCING AGENTS, ALKALI, AND METALLIC POWDERS. CORRODES MOST METALS.

HAZARDOUS DECOMPOSITION PRODUCT: OXIDES OF NITROGEN, A TOXIC GASEOUS MATERIAL, CANBEPRODUCES.

HAZARDOUS POLYMERIZATION: DOES NOT OCCUR.

SPILL, LEAK & DISPOSAL INFORMATION

SPILL OR LEAK, KEEP UPWIND OF LEAK. EVACUATE ENCLOSED PLACES UNTIL GAS HAS DISPERSED. FLUSH AWAY SPILL BY FLOODING WITH WATER APPLIED QUICKLY TO ENTIRE SPILL. WEAR SELF-CONTAINED BREATHING APPARATUS IF NECESSARY TO ENTER SPILL AREA.

AVOID SKIN, EYE AND RESPIRATORY CONTACT - SEE PROTECTION INFORMATION.

FLUSH SMALL LEAKS AND SPILLS WITH LARGE QUANTITIES OF WATER. WHERE POSSIBLE, CONTAIN AND DILUTE LARGE SPILLS; THEN NEUTRALIZE WITH LIMESTONE, OR SODA ASH.

CAUTION: NEUTRALIZATION CAN PRODUCE VIGOROUS REACTIONS, BOILING, AND FUMES. REMAIN UPWIND, EVACUATE DOWNWIND, IF NECESSARY. DISPOSE OF ANY NEUTRALIZATION SLUDGES OR HEAVILY CONTAMINATED SOILS IN AN APPROVED LANDFILL.

NOTE: CLEANED-UP MATERIAL IS A RCRA HAZARDOUS WASTE. COMPLY WITH FEDERAL, STATE AND LOCAL REGULATIONS FOR WASTE DISPOSAL.

REGULATORY INFORMATION

SUPPLIER NOTIFICATION REQUIREMENTS:

THIS PRODUCT CONTAINS NITRIC ACID, A CHEMICAL SUBSTANCE SUBJECT TO THE ANNUAL REPORTING OF RELEASES INTO THE ENVIRONMENT UNDER SECTION 313 OF TITLE III OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT (SARA) OF 1986.

HAZARD CATEGORIES, PER 40 CFR-PART 370:
HEALTH: IMMEDIATE (ACUTE), DELAYED (CHRONIC)
PHYSICAL: REACTIVITY, OXIDIZER

TOXIC SUBSTANCES CONTROL ACT (TSCA):

THIS SUBSTANCE IS LISTED ON THE TOXIC SUBSTANCES CONTROL ACT INVENTORY.

ADDITIONAL COMMENTS

NITRIC ACID IS A DESIGNATED "HAZARDOUS SUBSTANCE." SPILLS OF 1000 LBS. OR GREATER MUST BE REPORTED TO THE EPA.

CALL THE NATIONAL RESPONSE CENTER AT 800-424-8802, OR A REGIONAL OFFICE.

PREPARED BY RANDALL S. MOORE
EFFECTIVE DATE: JANUARY 14, 1994

FOR ADDITIONAL NON-EMERGENCY INFORMATION CONTACT: (314)962-9002

CHEMICAL INTERCHANGE COMPANY
2932 S. BRENTWOOD BLVD.
ST. LOUIS, MO 63144

AlliedSignal
CHEMICALS

Distributed by
HUBBARD-HALL INC.
Waterbury, CT 06725 203/754-2171
Inman, SC 29349 803/472-9031
Lincoln, RI 02865 401/333-6180
Agawam, MA 01001 413/789-4633

AlliedSignal Inc.
P.O. Box 1053
Morristown, NJ 07962-1053
201 455 2000

Material Safety Data Sheet

B0502
(9407)

ACETONE

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: ACETONE

OTHER/GENERIC NAMES: Acetone NF, 2-Propanone, Dimethyl Ketone, Dimethylketal, Dimethylformaldehyde, Pyroacetic acid, Pyroacetic ether.

PRODUCT USE: Chemical intermediate.

MANUFACTURER: AlliedSignal Inc.
101 Columbia Road, Box 1139
Morristown, New Jersey 07962-1139

FOR MORE INFORMATION CALL:
(Monday-Friday, 9:00am-4:30pm)(EST)
Product Safety Department: (201)-455-4157

IN CASE OF EMERGENCY CALL:
(24 Hours/Day, 7 Days/Week)
(201)-455-2000.

2. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT NAME	CAS #	WEIGHT %
Acetone	67-64-1	99.7

Trace impurities and additional material names not listed above may also appear in the Regulatory Information section (#15) towards the end of the MSDS. These materials may be listed for local "Right to Know" compliance and for other reasons.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Acetone is a colorless liquid possessing a sweet, pungent odor. It is a volatile substance, extremely flammable and its vapors form explosive mixtures with air. Dangerous fire hazard when exposed to heat, sparks, flame, or oxidants. Eye, skin and mucous membrane irritant. Harmful if swallowed or inhaled.

POTENTIAL HEALTH HAZARDS:

SKIN: Prolonged exposure to the vapor irritates the skin. Repeated and prolonged contact of the liquid with skin can cause dryness and erythema.

EYES: Acetone is an irritant to the eyes and mucous membranes.

INHALATION: Vapor concentration of 2,500-3,000 ppm causes minor irritation of eyes, nose and throat. Inhalation of higher concentration may cause headache, nausea, confusion, drowsiness, convulsions and coma.

INGESTION: Ingestion of a toxic dose can cause gastroenteric irritation, narcosis and injury to the kidneys and liver.

DELAYED EFFECTS: Acetone is not known to produce chronic or cumulative systemic effects.

Ingredients found on one of the OSHA designated carcinogen lists are listed below.

Ingredient Name	NTP Status	IARC Status	OSHA List
No ingredients listed in this section			

4. FIRST AID MEASURES

SKIN: In case of contact with skin, immediately wash skin with soap and water while removing contaminated clothing. Obtain medical attention if defatting action of acetone causes skin cracking or dermatitis.

EYE: In case of contact with eyes, immediately flush eyes with plenty of water for at least 15 minutes, lifting eyelids occasionally during flushing to facilitate irrigation. Get prompt medical attention.

INHALATION: If inhaled, remove the patient from contaminated atmosphere to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen which is administered only by trained personnel. Get prompt medical attention.

INGESTION: If swallowed, do not induce vomiting unless advised to do so by a physician. If physician advises vomiting and if patient is conscious, immediately give 2 to 4 glasses of water and induce vomiting by touching finger to back of throat. Get prompt medical attention.

ADVICE TO PHYSICIAN:

A. Treatment of severe systemic intoxication (narcosis) from either vapor exposure or ingestion is primarily supportive. Acetone has minimal toxicity on other organ systems and if the victim can be supported through the period of central nervous system depression and respiratory failure, the prognosis is good.

(1) Following recent ingestion, acetone should be removed by emesis (if not performed by rescue personnel) and/or gastric lavage.

(2) Mechanically assisted ventilation may be necessary.

(3) In severe cases, an initial period of hypoglycemia may require correction by intravenous solutions of dextrose.

(4) In some cases, transient hyperglycemia--resembling diabetes-- has occurred during the recovery phase and lasted for a few days. Treatment with insulin may be beneficial but should be used cautiously as the condition tends to resolve over a period of a few days.

B. Eye exposures usually do not require any specific treatment if liquid acetone is promptly washed out of eyes. If exposure was prolonged, some initial corneal damage may be present. It is advisable for these individuals to be seen by an ophthalmologist.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES:
FLASH POINT: 1.4°F (-17°C)
FLASH POINT METHOD: Tag closed cup.
AUTOIGNITION TEMPERATURE: 869°F (465°C)
UPPER FLAME LIMIT (Volume % in air): 12.8

LOWER FLAME LIMIT (Volume % in air): 2.5
FLAME PROPAGATION RATE (Solids): Not applicable to liquids.
OSHA FLAMMABILITY CLASS: Flammable liquid.

EXTINGUISHING MEDIA:

Small Fire: Use carbon dioxide or dry chemical.
Large Fire: Use "alcohol" type foam; water spray will reduce intensity of flames.

Acetone-water solutions containing more than 8 % acetone have a flash point.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Acetone is extremely flammable and its vapors form explosive mixtures with air. Dangerous when exposed to heat, sparks, flame or oxidants.

SPECIAL FIREFIGHTING PRECAUTIONS/INSTRUCTIONS:

Handle as very flammable liquid. Use water spray to keep fire-exposed tanks and containers cool. Do not enter the fire area without proper personal protective equipment including self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

IN CASE OF SPILL OR OTHER RELEASE: (Always wear recommended personal protective equipment.)

Eliminate all sources of ignition in the vicinity of spill or released vapors. Isolate the spill area. Permit only trained personnel wearing full personal protective equipment to enter the spill area. Terminate the leak immediately, if possible. Collect the spill in a waste container for disposal. Then flush the spill area thoroughly with water; wash contaminated equipment thoroughly with water. Flushings and wash water must be contained and prevented from entering a waterway. **Spills of acetone should be reported to Federal, State and Local Environmental Agencies, including the National Response Center (800-424-8802).**

Spills and releases may have to be reported to Federal and/or local authorities. See the Regulatory Information section (#15) regarding reporting requirements.

7. HANDLING AND STORAGE

NORMAL HANDLING: (Always wear recommended personal protective equipment.)

Danger! Extremely flammable. Keep away from heat, sparks and flame. Electrically ground all handling equipment. Keep container closed. Do not use air pressure to unload acetone from container. Use adequate ventilation (cf. see Section 8 on Respiratory Protection).

Observe OSHA regulations on exposure limits. Avoid prolonged or frequently repeated breathing of vapors. Avoid prolonged or frequent contact with skin. Wear safety glasses with cup-type shields or chemical goggles, face shield, natural rubber or neoprene gloves, hard hat and safety shoes in normal handling operations. Whenever handling operations are such that unavoidable gross contact with the liquid is likely, the handler should wear full protective equipment and clothing comprising chemical goggles, face shield, hard hat, and natural rubber or neoprene jacket, trousers, gloves and shoes or boots. Wash contaminated clothing and protective equipment before reuse.

STORAGE RECOMMENDATIONS:

Protect container against physical damage. Store in accordance with OSHA Regulation 29 CFR 1910.106 in a cool, well-ventilated location equipped with automatic sprinklers or fire extinguishing system. Keep away from sources of ignition and oxidizing materials.

"Empty" containers, unless throughly cleaned, must be assumed to have the same hazards as full ones.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS:

Good ventilation is essential in areas where acetone is handled to prevent the accumulation of explosive mixtures. Explosion-proof fans should be used in mechanical type ventilation system. Under normal conditions the atmospheric concentration of acetone vapor must be kept low enough to prevent irritation of the mucous membranes and discomfort to the workers. Under abnormal conditions, such as leaks or spills, special emergency ventilating equipment may be necessary.

PERSONAL PROTECTIVE EQUIPMENT:
SKIN PROTECTION:

HANDS, ARMS, AND BODY: Natural rubber or neoprene gloves. Safety shoes and hard hat.

EYE PROTECTION:

EYES AND FACE:
Liquid contact likely: Wear safety glasses with cup-type side shields or chemical goggles, and face shield.
Vapor contact likely: Wear personal protective equipment described under "respiratory protection".

Contact lanses should not be worn when working with this chemical.

RESPIRATORY PROTECTION:

No respiratory protection required for concentrations < 750 ppm.

750 to < 1,000 ppm: NIOSH approved chemical cartridge respirator with organic vapor cartridge.

1,000 to < 12,500 ppm: NIOSH approved air purifying full face piece respirator equipped with organic vapor canister.

12,500 ppm and above: NIOSH approved full face piece supplied air respirator operated in pressure demand or other positive pressure mode.

Escape: NIOSH approved air purifying, full face piece respirator with organic vapor canister or any escape type self-contained breathing apparatus.

ADDITIONAL RECOMMENDATIONS:

OTHER CLOTHING AND EQUIPMENT: Natural rubber or neoprene jacket, trousers and shoes or boots. Emergency showers, emergency eye wash fountains and fire blankets. Warning signs. Rubber carrier for glass containers.

EXPOSURE GUIDELINES: (Guidelines exist for the following ingredients)

Ingredient Name	ACGIH TLV	OSHA PEL	Other Limit
Acetone	750 ppm (TWA) 1000 ppm (STEL)	750 ppm (TWA) 1000 ppm (STEL)	None

* = Limit established by Allied-Signal for internal use.
** = Workplace Environmental Exposure Level (AIHA).
*** = Biological Exposure Index

Other exposure limits for the potential decomposition products are as follows:

None

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Colorless liquid.
PHYSICAL STATE: Liquid.
MOLECULAR WEIGHT: 58.08
CHEMICAL FORMULA: CH3COCH3
ODOR: Sweet, pungent odor.
SPECIFIC GRAVITY: (Water = 1.0) 0.79 @ 20/4°C
SOLUBILITY IN WATER: (Weight %) Complete
pH: Approx. 7 (i.e. 1 vol. acetone in 1 vol. water)
BOILING POINT: 56.2°C
MELTING POINT: -95.35°C
VAPOR PRESSURE: 181 mm Hg @ 20°C
VAPOR DENSITY: (Air = 1.0) 2.0
EVAPORATION RATE: > 7.0 Compared to: Butyl Acetate = 1
% VOLATILES: Approx. 100% (by volume at 20°C)
FLASH POINT: 1.4°F (-17°C)
(Flash point method and additional flammability data are found in section 5.)

10. STABILITY AND REACTIVITY

NORMALLY STABLE? (Conditions to Avoid)

Normally stable. Keep away from heat, sparks and flame.

INCOMPATABILITIES:

Materials to avoid: Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS:

Complete combustion results in the formation of carbon dioxide and water vapor. Incomplete combustion can yield carbon monoxide.

HAZARDOUS POLYMERIZATION?

Hazardous polymerization will not occur.

Conditions to avoid: None.

11. TOXICOLOGICAL INFORMATION

IMMEDIATE (ACUTE) EFFECTS:

Oral(Mouse) LD50 = 3,000 mg/kg
Oral(Rat) LD50 = 5,800 mg/kg
Oral(Rabbit) LD50 = 5,340 mg/kg
Eye(Human) = 500 ppm
Skin(Rabbit) 500 mg/24H. Reaction mild.

DELAYED (SUBCHRONIC & CHRONIC) EFFECTS:
No data available. Acetone is not known to produce chronic or cumulative systemic effects.

OTHER DATA:

BIOLOGICAL ACTION LEVEL: 270 mg/L in urine at end of work shift = excessive exposure to acetone.

12. ECOLOGICAL INFORMATION

DEGRADABILITY:

a) Biochemical Oxygen Demand (BOD5 Lb./Lb.; aclimated bacteria): 0.31 - 1.63.
b) Chemical Oxygen Demand (COD Lb./Lb.): 1.12 - 2.07.

OCTANOL/WATER PARTITION COEFFICIENT: 0.58

13. DISPOSAL CONSIDERATIONS

RCRA:
Is the unused product a RCRA hazardous waste if discarded? Yes
If yes, the RCRA ID number is: U002 and D001

OTHER DISPOSAL CONSIDERATIONS: The waste material should be treated and/or disposed of at site authorized to handle hazardous chemical waste. Appropriate Federal, State and Local Regulatory Authorities should be contacted before discharge, treatment or disposal of waste material.

The information offered here is for the product as shipped. Use and/or alterations to the product such as mixing with other materials may significantly change the characteristics of the material and alter the RCRA classification and the proper disposal method.

14. TRANSPORT INFORMATION

US DOT HAZARD CLASS: 3, (Flammable liquid), Packaging Group II.

US DOT ID NUMBER: UN 1090

For additional information on shipping regulations affecting this material, contact the information number found on the first page.

15. REGULATORY INFORMATION

TOXIC SUBSTANCES CONTROL ACT (TSCA):
TSCA INVENTORY STATUS: Acetone is listed on the TSCA inventory.

OTHER TSCA ISSUES: Subject to export notification.

SARA TITLE III/CERCLA:
RQs & TPQs:
"Reportable Quantities" (RQs) and/or "Threshold Planning Quantities" (TPQs) exist for the following ingredients.

Ingredient	SARA/CERCLA RQ(lbs)	SARA EHS TPQ(lbs)
Acetone	5000	None

Spills resulting in the loss of any ingredient at or above its RQ requires immediate notification to the National Response Center (1-800-424-8802) and to your Local Emergency Planning Committee.

SECTION 311 HAZARD CLASS:
Immediate = Yes
Delayed = No
Fire = Yes
Pressure = No
Reactive = No

SARA 313 TOXIC CHEMICALS:
The following ingredients are SARA 313 "Toxic Chemicals". CAS #'s and wt.% are found in section #2.

Ingredient	Comment
Acetone	None

STATE RIGHT TO KNOW:

In addition to the ingredients found in section 2, the following are listed for state right-to-know purposes:

Ingredient	Wt.%	Comment
No ingredients listed in this section.		

ADDITIONAL REGULATORY INFORMATION:

Acetone is subject to the Chemical Diversion & Trafficking Act of 1988 and subject to certain record keeping and reporting requirements. (21 CFR 1310 and 1313).

WHMIS CLASSIFICATION (CANADA):

Class B, Division 2

FOREIGN INVENTORY STATUS:

Canadian DSL (Domestic Substances List)
EINECS (European Inventory of Existing Commercial Chemical Substances)

16. OTHER INFORMATION

CURRENT ISSUE DATE: September, 1993.
PREVIOUS ISSUE DATE: May, 1989.

CHANGES TO MSDS FROM PREVIOUS ISSUE DATE ARE DUE TO THE FOLLOWING:

Changes made to First Aid Measures for ingestion (Section 4)
Incorporated advice to physician (Section 4)
Added statements to Toxicological Information (Section 11)
Changes made to Transportation Information (Section 14)
Conversion of existing product MSDS to new format.

OTHER INFORMATION:

NFPA HAZARD RATINGS: Health = 1, Fire = 3, Reactivity = 0

HMIS HAZARD RATINGS: Health = 1, Flammability = 4, Reactivity = 0

REFERENCES:

PERMISSIBLE CONCENTRATION REFERENCES: "Threshold Limit Values and Biological Exposure Indices for 1992-93" American Conference of Government Industrial Hygienists.

OSHA Regulation 29 CFR 1910.1000 Z List 1989.

GENERAL:

NIOSH Registry of Toxic Effects of Chemical Substances 1985-1986.

AlliedSignal
CHEMICALS

Distributed by

HUBBARD-HALL INC.

Waterbury, CT 06725 203/754-2171
Inman, SC 29349 803/472-9031
Lincoln, RI 02865 401/333-6160
Agawam, MA 01001 413/789-4633

AlliedSignal Inc.
P.O. Box 1053
Morristown, NJ 07962-1053
201 455 2000

Material Safety Data Sheet

B0502
(9407)

ACETONE

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: ACETONE

OTHER/GENERIC NAMES: Acetone NF, 2-Propanone, Dimethyl Ketone, Dimethylketal, Dimethylformaldehyde, Pyroacetic acid, Pyroacetic ether.

PRODUCT USE: Chemical intermediate.

MANUFACTURER: AlliedSignal Inc.
101 Columbia Road, Box 1139
Morristown, New Jersey 07962-1139

FOR MORE INFORMATION CALL:
(Monday-Friday, 9:00am-4:30pm)(EST)
Product Safety Department: (201)-455-4157

IN CASE OF EMERGENCY CALL:
(24 Hours/Day, 7 Days/Week)
(201)-455-2000.

2. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT NAME	CAS #	WEIGHT %
Acetone	67-64-1	99.7

Trace impurities and additional material names not listed above may also appear in the Regulatory Information section (#15) towards the end of the MSDS. These materials may be listed for local "Right to Know" compliance and for other reasons.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Acetone is a colorless liquid possessing a sweet, pungent odor. It is a volatile substance, extremely flammable and its vapors form explosive mixtures with air. Dangerous fire hazard when exposed to heat, sparks, flame, or oxidants. Eye, skin and mucous membrane irritant. Harmful if swallowed or inhaled.

POTENTIAL HEALTH HAZARDS:

SKIN: Prolonged exposure to the vapor irritates the skin. Repeated and prolonged contact of the liquid with skin can cause dryness and erythema.

EYES: Acetone is an irritant to the eyes and mucous membranes.

INHALATION: Vapor concentration of 2,500-3,000 ppm causes minor irritation of eyes, nose and throat. Inhalation of higher concentration may cause headache, nausea, confusion, drowsiness, convulsions and coma.

INGESTION: Ingestion of a toxic dose can cause gastroenteric irritation, narcosis and injury to the kidneys and liver.

DELAYED EFFECTS: Acetone is not known to produce chronic or cumulative systemic effects.

Ingredients found on one of the OSHA designated carcinogen lists are listed below.

Ingredient Name	NTP Status	IARC Status	OSHA List
No ingredients listed in this section			

4. FIRST AID MEASURES

SKIN: In case of contact with skin, immediately wash skin with soap and water while removing contaminated clothing. Obtain medical attention if defatting action of acetone causes skin cracking or dermatitis.

EYE: In case of contact with eyes, immediately flush eyes with plenty of water for at least 15 minutes, lifting eyelids occasionally during flushing to facilitate irrigation. Get prompt medical attention.

INHALATION: If inhaled, remove the patient from contaminated atmosphere to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen which is administered only by trained personnel. Get prompt medical attention.

INGESTION: *If swallowed, do not induce vomiting unless advised to do so by a physician.* If physician advises vomiting and if patient is conscious, immediately give 2 to 4 glasses of water and induce vomiting by touching finger to back of throat. Get prompt medical attention.

ADVICE TO PHYSICIAN: A. Treatment of severe systemic intoxication (narcosis) from either vapor exposure or ingestion is primarily supportive. Acetone has minimal toxicity on other organ systems and if the victim can be supported through the period of central nervous system depression and respiratory failure, the prognosis is good.

(1) Following recent ingestion, acetone should be removed by emesis (if not performed by rescue personnel) and/or gastric lavage.

(2) Mechanically assisted ventilation may be necessary.

(3) In severe cases, an initial period of hypoglycemia may require correction by intravenous solutions of dextrose.

(4) In some cases, transient hyperglycemia--resembling diabetes-- has occurred during the recovery phase and lasted for a few days. Treatment with insulin may be beneficial but should be used cautiously as the condition tends to resolve over a period of a few days.

B. Eye exposures usually do not require any specific treatment if liquid acetone is promptly washed out of eyes. If exposure was prolonged, some initial corneal damage may be present. It is advisable for these individuals to be seen by an ophthalmologist.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES:
FLASH POINT: 1.4°F (-17°C)
FLASH POINT METHOD: Tag closed cup.
AUTOIGNITION TEMPERATURE: 869°F (465°C)
UPPER FLAME LIMIT (Volume % in air): 12.8

LOWER FLAME LIMIT (Volume % in air): 2.5
FLAME PROPAGATION RATE (Solids): Not applicable to liquids.
OSHA FLAMMABILITY CLASS: Flammable liquid.

EXTINGUISHING MEDIA:

Small Fire: Use carbon dioxide or dry chemical.
Large Fire: Use "alcohol" type foam; water spray will reduce intensity of flames.

Acetone-water solutions containing more than 8 % acetone have a flash point.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Acetone is extremely flammable and its vapors form explosive mixtures with air. Dangerous when exposed to heat, sparks, flame or oxidants.

SPECIAL FIREFIGHTING PRECAUTIONS/INSTRUCTIONS:

Handle as very flammable liquid. Use water spray to keep fire-exposed tanks and containers cool. Do not enter the fire area without proper personal protective equipment including self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

IN CASE OF SPILL OR OTHER RELEASE: (Always wear recommended personal protective equipment.)

Eliminate all sources of ignition in the vicinity of spill or released vapors. Isolate the spill area. Permit only trained personnel wearing full personal protective equipment to enter the spill area. Terminate the leak immediately, if possible. Collect the spill in a waste container for disposal. Then flush the spill area thoroughly with water; wash contaminated equipment thoroughly with water. Flushings and wash water must be contained and prevented from entering a waterway. **Spills of acetone should be reported to Federal, State and Local Environmental Agencies, including the National Response Center (800-424-8802).**

Spills and releases may have to be reported to Federal and/or local authorities. See the Regulatory Information section (#15) regarding reporting requirements.

7. HANDLING AND STORAGE

NORMAL HANDLING: (Always wear recommended personal protective equipment.)

Danger! Extremely flammable. Keep away from heat, sparks and flame. Electrically ground all handling equipment. Keep container closed. Do not use air pressure to unload acetone from container. Use adequate ventilation (cf. see Section 8 on Respiratory Protection).

Observe OSHA regulations on exposure limits. Avoid prolonged or frequently repeated breathing of vapors. Avoid prolonged or frequent contact with skin. Wear safety glasses with cup-type shields or chemical goggles, face shield, natural rubber or neoprene gloves, hard hat and safety shoes in normal handling operations. Whenever handling operations are such that unavoidable gross contact with the liquid is likely, the handler should wear full protective equipment and clothing comprising chemical goggles, face shield, hard hat, and natural rubber or neoprene jacket, trousers, gloves and shoes or boots. Wash contaminated clothing and protective equipment before reuse.

STORAGE RECOMMENDATIONS:

Protect container against physical damage. Store in accordance with OSHA Regulation 29 CFR 1910.106 in a cool, well-ventilated location equipped with automatic sprinklers or fire extinguishing system. Keep away from sources of ignition and oxidizing materials.

"Empty" containers, unless throughly cleaned, must be assumed to have the same hazards as full ones.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS:

Good ventilation is essential in areas where acetone is handled to prevent the accumulation of explosive mixtures. Explosion-proof fans should be used in mechanical type ventilation system. Under normal conditions the atmospheric concentration of acetone vapor must be kept low enough to prevent irritation of the mucous membranes and discomfort to the workers. Under abnormal conditions, such as leaks or spills, special emergency ventilating equipment may be necessary.

PERSONAL PROTECTIVE EQUIPMENT:
SKIN PROTECTION:

HANDS, ARMS, AND BODY: Natural rubber or neoprene gloves. Safety shoes and hard hat.

EYE PROTECTION:

EYES AND FACE:
Liquid contact likely: Wear safety glasses with cup-type side shields or chemical goggles, and face shield.
Vapor contact likely: Wear personal protective equipment described under "respiratory protection".

Contact lanses should not be worn when working with this chemical.

RESPIRATORY PROTECTION:

No respiratory protection required for concentrations < 750 ppm.

750 to < 1,000 ppm: NIOSH approved chemical cartridge respirator with organic vapor cartridge.

1,000 to < 12,500 ppm: NIOSH approved air purifying full face piece respirator equipped with organic vapor canister.

12,500 ppm and above: NIOSH approved full face piece supplied air respirator operated in pressure demand or other positive pressure mode.

Escape: NIOSH approved air purifying, full face piece respirator with organic vapor canister or any escape type self-contained breathing apparatus.

ADDITIONAL RECOMMENDATIONS:

OTHER CLOTHING AND EQUIPMENT: Natural rubber or neoprene jacket, trousers and shoes or boots. Emergency showers, emergency eye wash fountains and fire blankets. Warning signs. Rubber carrier for glass containers.

EXPOSURE GUIDELINES: (Guidelines exist for the following ingredients)

Ingredient Name	ACGIH TLV	OSHA PEL	Other Limit
Acetone	750 ppm (TWA) 1000 ppm (STEL)	750 ppm (TWA) 1000 ppm (STEL)	None

* = Limit established by Allied-Signal for internal use.
** = Workplace Environmental Exposure Level (AIHA).
*** = Biological Exposure Index

Other exposure limits for the potential decomposition products are as follows:

None

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Colorless liquid.
PHYSICAL STATE: Liquid.
MOLECULAR WEIGHT: 58.08
CHEMICAL FORMULA: CH3COCH3
ODOR: Sweet, pungent odor.
SPECIFIC GRAVITY: (Water = 1.0) 0.79 @ 20/4°C
SOLUBILITY IN WATER: (Weight %) Complete
pH: Approx. 7 (i.e. 1 vol. acetone in 1 vol. water)
BOILING POINT: 56.2°C
MELTING POINT: -95.35°C
VAPOR PRESSURE: 181 mm Hg @ 20°C
VAPOR DENSITY: (Air = 1.0) 2.0
EVAPORATION RATE: > 7.0 Compared to: Butyl Acetate = 1
% VOLATILES: Approx. 100% (by volume at 20°C)
FLASH POINT: 1.4°F (-17°C)
(Flash point method and additional flammability data are found in section 5.)

10. STABILITY AND REACTIVITY

NORMALLY STABLE? (Conditions to Avoid)

Normally stable. Keep away from heat, sparks and flame.

INCOMPATABILITIES:

Materials to avoid: Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS:

Complete combustion results in the formation of carbon dioxide and water vapor. Incomplete combustion can yield carbon monoxide.

HAZARDOUS POLYMERIZATION?

Hazardous polymerization will not occur.

Conditions to avoid: None.

MATERIAL SAFETY DATA SHEET	Ashland	ASHLAND CHEMICAL, INC. Subsidiary Of Ashland Oil, Inc P.O. BOX 2219 COLUMBUS, OHIO 43216 (614) 889-3333	24-HOUR Emergency Telephone 1(800) 274-5263 or 1(800) ASHLAND

BP 0477
(9502)

002697 **XYLENE**

THIS MSDS COMPLIES WITH 29 CFR 1910.1200 (THE HAZARD COMMUNICATION STANDARD)

****

Product Name: XYLENE
CAS NUMBER: 1330-20-7

HUBBARD-HALL, INC.
P.O. BOX 790
WATERBURY CT 06720

ATTN: PLANT MGR./SAFETY DIR.

05 50 074 4224050-002

PRODUCT: 3001950
INVOICE: 135126
INVOICE DATE: 01/26/95
TO: HUBBARD-HALL, INC.
589 SOUTH LEONARD STREET
(FOR BULK DELIVERIES)
WATERBURY CT 06720

Data Sheet No: 0004340-006.008
Prepared: 01/20/95
Supersedes: 09/30/94
Print Date: 01/28/95

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Wilmington, MA 01887 508/988-0077

SECTION I - PRODUCT IDENTIFICATION

General or Generic ID: AROMATIC HYDROCARBON

DOT Hazard Classification: 3 (FLAMMABLE LIQUID)

SECTION II - COMPONENTS

IF PRESENT, IARC, NTP AND OSHA CARCINOGENS AND CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SARA TITLE III SECTION 313 ARE IDENTIFIED IN THIS SECTION. SEE DEFINITION PAGE FOR CLARIFICATION

INGREDIENT	Percent	PEL	TLV	Note
XYLENE CAS #: 1330-20-7	100	100 PPM	100 PPM	(1)

Notes:

(1) TECHNICAL GRADE XYLENE CONTAINS 18-20% ETHYL BENZENE. ETHYL BENZENE HAS A PEL/TLV OF 100 PPM (125 PPM - STEL); IT HAS A CAS # OF 100-41-4. ETHYL BENZENE IS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF SARA TITLE III.

OSHA/ACGIH SHORT TERM EXPOSURE LIMIT (STEL) FOR XYLENE IS 150 PPM. NIOSH RECOMMENDS A LIMIT OF 100 PPM, 8-HOUR TWA; 200 PPM 10 MINUTE CEILING.

THIS CHEMICAL IS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF SARA TITLE III.

SECTION III - PHYSICAL DATA

Boiling Point	for PRODUCT	279.00 Deg F (137.22 Deg C) @ 760.00 mm Hg
Vapor Pressure	for PRODUCT	5.10 mm Hg @ 68.00 Deg F (20.00 Deg C)
Specific Vapor Density	AIR = 1	3.66
Specific Gravity		.870 @ 60.00 Deg F (15.55 Deg C)
Percent Volatiles		100.00%
Evaporation Rate	(N-BUTYL ACETATE = 1)	.86
Appearance		CLEAR, APHA COLOR 15 MAX
State		LIQUID
Form		NEAT

SECTION IV - FIRE AND EXPLOSION INFORMATION

FLASH POINT(TCC) 80.0 Deg F (26.7 Deg C)

EXPLOSIVE LIMIT (PRODUCT) LOWER - 1.0% UPPER - 6.6%

EXTINGUISHING MEDIA: REGULAR FOAM OR CARBON DIOXIDE OR DRY CHEMICAL

HAZARDOUS DECOMPOSITION PRODUCTS: MAY FORM TOXIC MATERIALS:, CARBON DIOXIDE AND CARBON MONOXIDE, VARIOUS HYDROCARBONS, ETC.

FIREFIGHTING PROCEDURES: WEAR SELF-CONTAINED BREATHING APPARATUS WITH A FULL FACEPIECE OPERATED IN THE POSITIVE PRESSURE DEMAND MODE WHEN FIGHTING FIRES.

SPECIAL FIRE & EXPLOSION HAZARDS: NEVER USE WELDING OR CUTTING TORCH ON OR NEAR DRUM (EVEN EMPTY) BECAUSE PRODUCT (EVEN JUST RESIDUE) CAN IGNITE EXPLOSIVELY.

ALL FIVE GALLON PAILS AND LARGER METAL CONTAINERS INCLUDING TANK CARS AND TANK TRUCKS SHOULD BE GROUNDED AND/OR BONDED WHEN MATERIAL IS TRANSFERRED.

VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL ALONG THE GROUND OR MAY BE MOVED BY VENTILATION AND IGNITED BY PILOT LIGHTS, OTHER FLAMES, SPARKS, HEATERS, SMOKING, ELECTRIC MOTORS, STATIC DISCHARGE, OR OTHER IGNITION SOURCES AT LOCATIONS DISTANT FROM MATERIAL HANDLING POINT.

NFPA CODES: HEALTH- 2 FLAMMABILITY- 3 REACTIVITY- 0

CONTINUED ON PAGE: 2

SECTION V-HEALTH HAZARD DATA

PERMISSIBLE EXPOSURE LEVEL 100 PPM

THRESHOLD LIMIT VALUE 100 PPM

EFFECTS OF ACUTE OVEREXPOSURE:

EYES - EXPOSURE MAY CAUSE MILD EYE IRRITATION. SYMPTOMS MAY INCLUDE STINGING, TEARING, AND REDNESS.
SKIN - EXPOSURE CAUSES SKIN IRRITATION. PROLONGED OR REPEATED EXPOSURE MAY DRY THE SKIN. SYMPTOMS MAY INCLUDE REDNESS, BURNING, DRYING AND CRACKING, SKIN BURNS AND SKIN DAMAGE.PRE-EXISTING SKIN DISORDERS MAY BE AGGRAVATED BY EXPOSURE TO THIS MATERIAL.
SKIN ABSORPTION IS POSSIBLE, BUT HARMFUL EFFECTS ARE NOT EXPECTED FROM THIS ROUTE OF EXPOSURE UNDER NORMAL CONDITIONS OF HANDLING AND USE.
BREATHING - EXPOSURE TO VAPOR OR MIST IS POSSIBLE.
SHORT-TERM INHALATION TOXICITY IS LOW. BREATHING SMALL AMOUNTS DURING NORMAL HANDLING IS NOT LIKELY TO CAUSE HARMFUL EFFECTS; BREATHING LARGE AMOUNTS MAY BE HARMFUL.
SYMPTOMS ARE MORE TYPICALLY SEEN AT AIR CONCENTRATIONS EXCEEDING THE RECOMMENDED EXPOSURE LIMITS. SYMPTOMS OF EXPOSURE MAY INCLUDE:
-IRRITATION (NOSE, THROAT, RESPIRATORY TRACT)- PRE-EXISTING LUNG DISORDERS, E.G. ASTHMA-LIKE CONDITIONS, MAY BE AGGRAVATED BY EXPOSURE TO THIS MATERIAL.
-SHORTNESS OF BREATH-
-CENTRAL NERVOUS SYSTEM DEPRESSION (DIZZINESS, DROWSINESS, WEAKNESS, FATIGUE, NAUSEA, HEADACHE, UNCONSCIOUSNESS)-
-RESPIRATORY DEPRESSION-
-COMA-
SWALLOWING - SINGLE DOSE ORAL TOXICITY IS LOW. SWALLOWING SMALL AMOUNTS DURING NORMAL HANDLING IS NOT LIKELY TO CAUSE HARMFUL EFFECTS; SWALLOWING LARGE AMOUNTS MAY BE HARMFUL.
SYMPTOMS MAY INCLUDE:
-GASTROINTESTINAL IRRITATION (NAUSEA, VOMITING, DIARRHEA)-
-CENTRAL NERVOUS SYSTEM DEPRESSION (DIZZINESS, DROWSINESS, WEAKNESS, FATIGUE, NAUSEA, HEADACHE, UNCONSCIOUSNESS)-
THIS MATERIAL CAN ENTER THE LUNGS DURING SWALLOWING OR VOMITING AND CAUSE LUNG INFLAMMATION AND/OR DAMAGE.

FIRST AID:

IF ON SKIN: REMOVE CONTAMINATED CLOTHING. FLUSH EXPOSED AREA WITH LARGE AMOUNTS OF WATER. IF SKIN IS DAMAGED, SEEK IMMEDIATE MEDICAL ATTENTION. IF SKIN IS NOT DAMAGED AND SYMPTOMS PERSIST, SEEK MEDICAL ATTENTION. LAUNDER CLOTHING BEFORE REUSE.

IF IN EYES: IF SYMPTOMS DEVELOP, MOVE INDIVIDUAL AWAY FROM EXPOSURE AND INTO FRESH AIR. FLUSH EYES GENTLY WITH WATER WHILE HOLDING EYELIDS APART. IF SYMPTOMS PERSIST OR THERE IS ANY VISUAL DIFFICULTY, SEEK MEDICAL ATTENTION.

IF SWALLOWED: DO NOT INDUCE VOMITING. THIS MATERIAL IS AN ASPIRATION HAZARD. IF INDIVIDUAL IS DROWSY OR UNCONSCIOUS, PLACE ON LEFT SIDE WITH THE HEAD DOWN. SEEK MEDICAL ATTENTION. IF POSSIBLE, DO NOT LEAVE INDIVIDUAL UNATTENDED.

IF BREATHED: IF SYMPTOMS DEVELOP, IMMEDIATELY MOVE INDIVIDUAL AWAY FROM EXPOSURE AND INTO FRESH AIR. SEEK IMMEDIATE MEDICAL ATTENTION. KEEP PERSON WARM AND QUIET. IF PERSON IS NOT BREATHING, BEGIN ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, ADMINISTER OXYGEN.

NOTE TO PHYSICIAN:
INHALATION OF HIGH CONCENTRATIONS OF THIS MATERIAL, AS COULD OCCUR IN ENCLOSED SPACES OR DURING DELIBERATE ABUSE, MAY BE ASSOCIATED WITH CARDIAC ARRHYTHMIAS. SYMPATHOMIMETIC DRUGS MAY INITIATE CARDIAC ARRHYTHMIAS IN PERSONS EXPOSED TO THIS MATERIAL.

PRIMARY ROUTE(S) OF ENTRY:

INHALATION, SKIN CONTACT, EYE CONTACT

EFFECTS OF CHRONIC OVEREXPOSURE:

THIS MATERIAL (OR A COMPONENT) HAS BEEN SHOWN TO CAUSE BIRTH DEFECTS IN LABORATORY ANIMAL STUDIES. THE RELEVANCE OF THESE FINDINGS TO HUMANS IS UNCERTAIN.

THIS MATERIAL IS NOT EXPECTED TO BE CARCINOGENIC IN HUMANS BASED ON NEGATIVE EVIDENCE OF CARCINOGENICITY IN LABORATORY ANIMALS.

THIS MATERIAL IS NOT LISTED AS A CARCINOGEN BY IARC, NTP OR OSHA.

OVEREXPOSURE TO THIS MATERIAL (OR ITS COMPONENTS) HAS BEEN SUGGESTED AS A CAUSE OF THE FOLLOWING EFFECTS IN LABORATORY ANIMALS, AND MAY AGGRAVATE PRE-EXISTING DISORDERS OF THESE ORGANS IN HUMANS:, KIDNEY DAMAGE, MILD, REVERSIBLE LIVER EFFECTS, EFFECTS ON HEARING, CARDIAC SENSITIZATION.

SECTION VI-REACTIVITY DATA

HAZARDOUS POLYMERIZATION: CANNOT OCCUR

STABILITY: STABLE

INCOMPATIBILITY: AVOID CONTACT WITH:, STRONG OXIDIZING AGENTS

SECTION VII-SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

SMALL SPILL: ABSORB LIQUID ON VERMICULITE, FLOOR ABSORBENT OR OTHER ABSORBENT MATERIAL.

LARGE SPILL: ELIMINATE ALL IGNITION SOURCES (FLARES, FLAMES INCLUDING PILOT LIGHTS, ELECTRICAL SPARKS). PERSONS NOT WEARING PROTECTIVE EQUIPMENT SHOULD BE EXCLUDED FROM AREA OF SPILL UNTIL CLEAN-UP HAS BEEN COMPLETED. STOP SPILL AT SOURCE. PREVENT FROM ENTERING DRAINS, SEWERS, STREAMS OR OTHER BODIES OF WATER.PREVENT FROM SPREADING. IF RUNOFF OCCURS, NOTIFY AUTHORITIES AS REQUIRED. PUMP OR VACUUM TRANSFER SPILLED PRODUCT TO CLEAN CONTAINERS FOR RECOVERY. ABSORB UNRECOVERABLE PRODUCT.TRANSFER CONTAMINATED ABSORBENT, SOIL AND OTHER MATERIALS TO CONTAINERS FOR DISPOSAL.

PREVENT RUN-OFF TO SEWERS, STREAMS OR OTHER BODIES OF WATER. IF RUN-OFF OCCURS, NOTIFY PROPER AUTHORITIES AS REQUIRED, THAT A SPILL HAS OCCURED.

CONTINUED ON PAGE: 3

SECTION VII-SPILL OR LEAK PROCEDURES (Continued)

WASTE DISPOSAL METHOD:

SMALL SPILL: DISPOSE OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.

LARGE SPILL: DISPOSE OF IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.

SECTION VIII-PROTECTIVE EQUIPMENT TO BE USED

RESPIRATORY PROTECTION: IF WORKPLACE EXPOSURE LIMIT(S) OF PRODUCT OR ANY COMPONENT IS EXCEEDED (SEE SECTION II), A NIOSH/MSHA APPROVED AIR SUPPLIED RESPIRATOR IS ADVISED IN ABSENCE OF PROPER ENVIRONMENTAL CONTROL. OSHA REGULATIONS ALSO PERMIT OTHER NIOSH/MSHA RESPIRATORS (NEGATIVE PRESSURE TYPE) UNDER SPECIFIED CONDITIONS (SEE YOUR INDUSTRIAL HYGIENIST). ENGINEERING OR ADMINISTRATIVE CONTROLS SHOULD BE IMPLEMENTED TO REDUCE EXPOSURE.

VENTILATION: PROVIDE SUFFICIENT MECHANICAL (GENERAL AND/OR LOCAL EXHAUST) VENTILATION TO MAINTAIN EXPOSURE BELOW TLV(S).

PROTECTIVE GLOVES: WEAR RESISTANT GLOVES (CONSULT YOUR SAFETY EQUIPMENT SUPPLIER).

EYE PROTECTION: CHEMICAL SPLASH GOGGLES IN COMPLIANCE WITH OSHA REGULATIONS ARE ADVISED; HOWEVER, OSHA REGULATIONS ALSO PERMIT OTHER TYPE SAFETY GLASSES. CONSULT YOUR SAFETY REPRESENTATIVE.

OTHER PROTECTIVE EQUIPMENT: TO PREVENT REPEATED OR PROLONGED SKIN CONTACT, WEAR IMPERVIOUS CLOTHING AND BOOTS.

SECTION IX-SPECIAL PRECAUTIONS OR OTHER COMMENTS

CONTAINERS OF THIS MATERIAL MAY BE HAZARDOUS WHEN EMPTIED. SINCE EMPTIED CONTAINERS RETAIN PRODUCT RESIDUES (VAPOR, LIQUID, AND/OR SOLID), ALL HAZARD PRECAUTIONS GIVEN IN THIS DATASHEET MUST BE OBSERVED.

WARNING!!! SUDDEN RELEASE OF HOT ORGANIC CHEMICAL VAPORS OR MISTS FROM PROCESS EQUIPMENT OPERATING AT ELEVATED TEMPERATURE AND PRESSURE, OR SUDDEN INGRESS OF AIR INTO VACUUM EQUIPMENT, MAY RESULT IN IGNITIONS WITHOUT THE PRESENCE OF OBVIOUS IGNITION SOURCES. PUBLISHED "AUTOIGNITION" OR "IGNITION" TEMPERATURE VALUES CANNOT BE TREATED AS SAFE OPERATING TEMPERATURES IN CHEMICAL PROCESSES WITHOUT ANALYSIS OF THE ACTUAL PROCESS CONDITIONS. ANY USE OF THIS PRODUCT IN ELEVATED TEMPERATURE PROCESSES SHOULD BE THOROUGHLY EVALUATED TO ESTABLISH AND MAINTAIN SAFE OPERATING CONDITIONS.

HYDROCARBON SOLVENTS ARE BASICALLY NON-CONDUCTORS OF ELECTRICITY AND CAN BECOME ELECTROSTATICALLY CHARGED DURING MIXING, FILTERING OR PUMPING AT HIGH FLOW RATES. IF THIS CHARGE REACHES A SUFFICIENTLY HIGH LEVEL, SPARKS CAN FORM THAT MAY IGNITE THE VAPORS OF FLAMMABLE LIQUIDS.

THE INFORMATION ACCUMULATED HEREIN IS BELIEVED TO BE ACCURATE BUT IS NOT WARRANTED TO BE WHETHER ORIGINATING WITH THE COMPANY OR NOT. RECIPIENTS ARE ADVISED TO CONFIRM IN ADVANCE OF NEED THAT THE INFORMATION IS CURRENT, APPLICABLE, AND SUITABLE TO THEIR CIRCUMSTANCES.

BA 0145
(9405)

PPG INDUSTRIES, INC. ONE PPG PLACE PITTSBURGH, PA 15272

* * * MURIATIC ACID (18, 20, 22 AND 23 DEG. BE')

MSDS NUMBER: 0130
DATE: 04/27/94
EDITION: 010
TRADE NAME: MURIATIC ACID (18, 20, 22 AND 23 DEG. BE')
CHEMICAL NAME/SYNONYMS: HYDROCHLORIC ACID, HYDROGEN CHLORIDE
CHEMICAL FAMILY: ACIDS
FORMULA: HCL CAS NUMBER: 007647 01 0
U.S. DOT SHIPPING NAME: HYDROCHLORIC ACID, SOLUTION
U.S. DOT HAZARD CLASS: 8 (CORROSIVE MATERIAL)
SUBSIDIARY RISK: N/A
I.D. NUMBER: UN1789
PACKING GROUP: II
REPORTABLE QUANTITY: 5000 LBS/2270 KG

Distributed by

HUBBARD-HALL INC.
Waterbury CT 06725 203 754-2171
Inman SC 29349 803 472-9031
Lincoln RI 02865 401 333-6180
Agawam MA 01001 413 789-4633

SECTION 1 * PHYSICAL DATA

BOILING POINT @ 760 MM HG: AZEOTROPE 108 F (20.2%)
VAPOR DENSITY (AIR=1): > 1
SPECIFIC GRAVITY (H20=1): 1.142/1.16/1.179/1.189*
PH OF SOLUTIONS: ACIDIC
FREEZING/MELTING POINT: -68.3/44.5/23.8/17.5 F*
SOLUBILITY (WEIGHT % IN WATER): COMPLETE
BULK DENSITY: 9.5/9.7/9.8/9.9 LB/GAL*
VOLUME % VOLATILE: 100
VAPOR PRESSURE: 14/24/100/150 MM HG*
EVAPORATION RATE: N/A
HEAT OF SOLUTION: EXTREMELY EXOTHERMIC
APPEARANCE AND ODOR:
CLEAR, WATER WHITE TO SLIGHTLY YELLOW LIQUID, PUNGENT AND IRRITATING ODOR
*18/20/22/23 DEG. BE' RESPECTIVELY

SECTION 2 * INGREDIENTS

MATERIAL	PERCENT
HYDROCHLORIC ACID (18, 20, 22 OR 23 DEG. BE') (27.9, 31.5, 35.2, 37.1% HCL)	AS NOTED

SECTION 3 * FIRE/EXPLOSION HAZARD DATA

FLASH POINT (METHOD USED):
NONE

FLAMMABLE LIMITS IN AIR (% BY VOLUME)
LEL: NONE
UEL: NONE

EXTINGUISHING MEDIA:
N/A

SPECIAL FIRE FIGHTING PROCEDURES:
FIRE FIGHTERS MUST WEAR NIOSH/MSHA APPROVED PRESSURE DEMAND, SELF-CONTAINED BREATHING APPARATUS TO AVOID POSSIBLE EXPOSURE TO HCL VAPORS.

UNUSUAL FIRE AND EXPLOSION HAZARDS:
HYDROCHLORIC ACID WILL ATTACK MOST METALS WITH EVOLUTION OF POTENTIALLY EXPLOSIVE HYDROGEN.

SECTION 4 * HEALTH HAZARD DATA

TOXICITY DATA:

LC50 INHALATION:	(RAT) 3124 PPM (1 HOUR)
LD50 DERMAL:	NOT DETERMINED
SKIN/EYE IRRITATION:	SEE SECTION 5
LD50 INGESTION:	(RABBIT) 900 MG/KG
FISH,LC50 (LETHAL CONCENTRATION):	UNKNOWN

CLASSIFICATION:

INHALATION:	SLIGHTLY TOXIC
SKIN:	CORROSIVE
SKIN/EYE:	CORROSIVE
INGESTION:	SLIGHTLY TOXIC BUT CORROSIVE
AQUATIC:	UNKNOWN

SECTION 5 * EFFECTS OF OVEREXPOSURE

IS CHEMICAL LISTED AS A CARCINOGEN OR POTENTIAL CARCINOGEN?
NTP - NO IARC - NO OSHA - NO

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:
NONE KNOWN

PERMISSIBLE EXPOSURE LIMITS:
OSHA - 5 PPM (7 MG/CU.M.) CEILING; 29 CFR 1910.1000.

ACUTE:
INHALATION: MURIATIC ACID MISTS OR HCL VAPORS ARE SEVERELY IRRITATING TO THE RESPIRATORY TRACT AND MUCOUS MEMBRANES. INHALATION OF SUFFICIENTLY HIGH CONCENTRATIONS MAY RESULT IN LARYNGEAL SPASMS AND/OR EDEMA, AND LEAD TO RAPIDLY DEVELOPING PULMONARY EDEMA. MISTS MAY ALSO CAUSE BLEEDING OF THE NOSE AND GUM, ULCERATION OF THE NASAL AND ORAL MUCOSA, AND SEVERE SKIN AND EYE IRRITATION.

EYE/SKIN: MURIATIC ACID IS CORROSIVE TO THE EYES AND SKIN. DIRECT EYE CONTACT CAN RESULT IN BLINDNESS EVEN AFTER A SHORT EXPOSURE TO SMALL AMOUNTS.

INGESTION: INGESTION OF MURIATIC ACID CAUSES SEVERE BURNS OF THE DIGESTIVE TRACT BECAUSE OF ITS CORROSIVE NATURE AND MAY BE FATAL.

CHRONIC:
THE EFFECTS OF LONG-TERM, LOW-LEVEL EXPOSURES TO THIS PRODUCT HAVE NOT BEEN DETERMINED. SAFE HANDLING OF THIS MATERIAL ON A LONG-TERM BASIS SHOULD EMPHASIZE THE AVOIDANCE OF ALL EFFECTS FROM REPETITIVE ACUTE EXPOSURES.

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* EMERGENCY AND FIRST AID PROCEDURES

INHALATION:
REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL RESPIRATION, PREFERABLY MOUTH-TO-MOUTH. IF BREATHING IS DIFFICULT, GIVE OXYGEN. CALL A PHYSICIAN.

EYE OR SKIN CONTACT:
IMMEDIATELY FLUSH EYES AND SKIN WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES WHILE REMOVING CONTAMINATED CLOTHING AND SHOES. CALL A PHYSICIAN. THOROUGHLY CLEAN CONTAMINATED CLOTHING AND SHOES BEFORE REUSE OR DISCARD.

INGESTION:
IF CONSCIOUS: DRINK LARGE QUANTITIES OF WATER. DO NOT INDUCE VOMITING.

TAKE IMMEDIATELY TO A HOSPITAL OR PHYSICIAN.
IF UNCONSCIOUS, OR IN CONVULSIONS: TAKE IMMEDIATELY TO A HOSPITAL. DO NOT ATTEMPT TO INDUCE VOMITING OR GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

NOTES TO PHYSICIAN (INCLUDING ANTIDOTES):

INHALATION: EXPOSURE SHOULD BE TREATED SYMPTOMATICALLY AND SUPPORTIVELY.
IN CASE OF SKIN CONTAMINATION: A MILD ALKALINE SOLUTION MAY BE USED TO NEUTRALIZE ACID.
IN CASE OF EYE CONTAMINATION: IRRIGATE WITH WATER OR NORMAL SALINE. AVOID USE OF TOPICAL STEROIDS AND/OR ANESTHETICS.
IF INGESTION OCCURS: AVOID USE OF CARBONATES AND BICARBONATES AS THEY RELEASE CO2, WHICH MAY CAUSE GASTRIC TENSION AND RUPTURE. NEUTRALIZATION OF INGESTED ACID MAY BE ACCOMPLISHED BY USING ALUMINUM HYDROXIDE GEL OR MILK OF MAGNESIA. SUBSEQUENTLY, TREATMENT SHOULD BE SYMPTOMATIC AND SUPPORTIVE.

SECTION 6 * REACTIVITY DATA

STABILITY: STABLE
CONDITIONS TO AVOID: CONTACT WITH METALS

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR
CONDITIONS TO AVOID: NONE

INCOMPATIBILITY (MATERIALS TO AVOID):
METALS, STRONG ALKALI

HAZARDOUS DECOMPOSITION PRODUCTS:
HYDROGEN WILL BE FORMED IF ACID COMES IN CONTACT WITH METALS.

SECTION 7 * SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS SPILLED OR RELEASED:

REMOVE UNPROTECTED PERSONNEL FROM AREA OF SPILL. ONLY PERSONNEL EQUIPPED WITH NIOSH/MSHA APPROVED SELF-CONTAINED BREATHING APPARATUS OR FULL FACE-PIECE AIRLINE RESPIRATORS WITH AUXILIARY SCBA'S OPERATED IN THE PRESSURE/DEMAND MODE AND SKIN/EYE PROTECTION SHOULD BE ALLOWED IN AREA. DIKE AREA TO CONTAIN SPILL. DILUTE SPILL WITH LARGE AMOUNTS OF WATER THEN NEUTRALIZE WITH DILUTE CAUSTIC OR SODA ASH. USE VACUUM TRUCK TO PICK UP NEUTRALIZED MATERIAL FOR PROPER DISPOSAL. PROPERLY NEUTRALIZED LIQUID RESIDUES (PH 6-9) MAY BE DISPOSED OF IN WASTE WATER TREATMENT FACILITIES WHICH ALLOW THE DISCHARGE OF NEUTRAL SALT SOLUTIONS. AFTER ALL VISIBLE TRACES HAVE BEEN REMOVED, FLUSH AREA WITH LARGE AMOUNTS OF WATER.

WASTE DISPOSAL METHOD:

PPG RECOMMENDS DISPOSAL OF UNNEUTRALIZED OR IMPROPERLY NEUTRALIZED MATERIAL IN AN APPROVED HAZARDOUS WASTE MANAGEMENT FACILITY. CARE MUST BE TAKEN TO DISPOSE OF THE CHEMICAL MATERIALS AND/OR THEIR CONTAINERS TO PREVENT ENVIRONMENTAL CONTAMINATION. IT IS YOUR DUTY TO DISPOSE OF THE CHEMICAL MATERIALS AND/OR THEIR CONTAINERS IN ACCORDANCE WITH THE CLEAN AIR ACT, THE CLEAN WATER ACT, THE RESOURCE CONSERVATION AND RECOVERY ACT, AS WELL AS ANY OTHER RELEVANT FEDERAL, STATE, OR LOCAL LAWS/REGULATIONS REGARDING DISPOSAL.

SECTION 8 * SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION:

USE NIOSH/MSHA APPROVED CONBINATION DUST/MIST AND ACID GAS CARTRIDGE OR CANISTER RESPIRATOR FOR ROUTINE WORK PURPOSES WHEN AIR CONCENTRATIONS EXCEED THE PERMISSIBLE EXPOSURE LIMIT. SEE SECTION 7 FOR RESPIRATORY PROTECTION DURING SPILLS OR LEAKS. THE RESPIRATOR USE LIMITATIONS MADE BY NIOSH/MSHA OR THE MANUFACTURER MUST BE OBSERVED. RESPIRATORY PROTECTION PROGRAMS MUST MEET THE REQUIREMENTS OF 29 CFR 1910.134.

VENTILATION(TYPE):

LOCAL EXHAUST VENTILATION SUFFICIENT TO MAINTAIN WORKPLACE CONCENTRATION BELOW PERMISSIBLE EXPOSURE LIMIT.

EYE PROTECTION:

SPLASHPROOF GOGGLES AND FACE SHIELD

GLOVES:

NITRILE, NEOPRENE, PVC, NATURAL RUBBER

OTHER PROTECTIVE EQUIPMENT:

BOOTS, APRONS, OR CHEMICAL SUITS SHOULD BE USED WHEN NECESSARY TO PREVENT SKIN CONTACT. PERSONAL PROTECTIVE CLOTHING AND USE OF EQUIPMENT MUST BE IN ACCORDANCE WITH 29 CFR 1910.132 AND 29 CFR 1910.133.

SECTION 9 * SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN DURING HANDLING AND STORING:

* WHEN HANDLING, WEAR SPLASHPROOF GOGGLES AND FACE SHIELD, RUBBER GLOVES, RUBBER BOOTS, RUBBER APRON, LONG SLEEVED SHIRT, AND PLASTIC HARD HAT.
* WEAR NIOSH/MSHA APPROVED RESPIRATORY PROTECTION IN ANY EVENT WHERE MIST OR VAPOR MAY BE GENERATED ABOVE PERMISSIBLE EXPOSURE LIMITS.
* PREVENT ACID FROM CONTACTING STRONG ALKALIES OR METALS.

OTHER PRECAUTIONS:

* DO NOT GET IN EYES, ON SKIN, OR ON CLOTHING. CAN CAUSE SEVERE INJURY

OR BLINDNESS.
* AVOID BREATHING MIST OR VAPOR.
* USE ONLY WITH VENTILATION SUFFICIENT TO LIMIT EMPLOYEE EXPOSURE AT OR BELOW PERMISSIBLE LIMITS.
* DO NOT SWALLOW.
* WASH THOROUGHLY AFTER HANDLING.

COMMENTS:

TSCA - HYDROCHLORIC ACID IS ON THE TSCA INVENTORY UNDER CAS #7647-01-0.

SARA TITLE III - A) 311/312 CATEGORIES - ACUTE, REACTIVITY AND SUDDEN PRESSURE RELEASE B) LISTED IN SECTION 313 UNDER HYDROCHLORIC ACID, C) LIQUID NOT LISTED AS AN "EXTREMELY HAZARDOUS SUBSTANCE" IN SECTION 302; HYDROGEN CHLORIDE GAS IS LISTED IN SECTION 302.

CERCLA - LISTED IN TABLE 302.4 OF 40 CFR PART 302 AS A HAZARDOUS SUBSTANCE WITH A REPORTABLE QUANTITY OF 5000 POUNDS. RELEASES TO AIR, LAND OR WATER WHICH EXCEED THE RQ MUST BE REPORTED TO THE NATIONAL RESPONSE CENTER, 800-424-8802.

RCRA - WASTE MURIATIC ACID IS A RCRA CHARACTERISTIC HAZARDOUS WASTE IF IT EXHIBITS RCRA CORROSIVITY CHARACTERISTIC. AS SUCH, IT MUST BE MANAGED, MANIFESTED, AND DISPOSED AS A RCRA D002 HAZARDOUS WASTE.

CANADIAN REGULATIONS - WHMIS CLASSIFICATION: CLASS E (CORROSIVE MATERIAL), CLASS D1A (VERY TOXIC); TDGA CLASSIFICATION: CLASS 8 (9.2) CORROSIVE MATERIAL.

IN CASE OF EMERGENCY IN CANADA, CONTACT PPG CANADA, INC., B.P. 2010, BEAUHARNOIS, QUEBEC J6N 3C3, 514-429-3552, OR CANUTEC 613-996-6666.

REVISIONS MADE TO 5/28/93, 9TH EDITION - DATE, EDITION, ADDED CANADIAN ADDRESS/PHONE NUMBERS (PAGE 6).

R. KENNETH LEE
MANAGER, PRODUCT SAFETY

APPENDIX I

OCS REPORTS

Connecticut Department of Environmental Protection
165 Capitol Avenue
Hartford, CT 06106

Bureau of Waste Management
Oil and Chemical Spill Response Division

EMERGENCY INCIDENT REPORT

CASE NO. 94-3367 ASSIGNED TO: N/R

DATE: 6/19/94 TIME: 2047 TOWN OF DISCHARGE: Cheshire

REPORTED BY Bob Soderburg TELEPHONE: BUSINESS ( )-249-5895 HOME ( )-

REPRESENTING: Northeast Utilities

STREET TOWN STATE ZIP

INCIDENT LOCATION: 828 South Main St
STREET TOWN POLE NO.

TYPE OF INCIDENT: ☒ PETROLEUM ☐ CHEMICAL ☐ DIELECT ☐ GASEOUS ☐ HAZARDOUS WASTE ☐ SEWAGE RELATED ☐ BIOMEDICAL ☐ ALGAE ☐ OTHER

DISCHARGE SUBSTANCE: Transformer Oil (non PCB)

QUANTITY: less than 1 GALLONS CUBIC YARDS CUBIC FEET LB(S) CONCENTRATION DRUMS

IF THIS IS A CHEMICAL RELEASE AND DOES THIS INCIDENT CONSTITUTE A SARA 304 RELEASE? ☐ YES ☐ NO IF YES, THEN YOU MUST OBTAIN THE FOLLOWING ADDITIONAL INFORMATION:

☐ SARA 304 RELEASE - EXTREMELY HAZARDOUS SUBSTANCE ☐ CERCLA HAZARDOUS SUBSTANCE FEDERAL EXCEEDING R.Q. ☐ CROSS PROPERTY LINE ☐ PROTECTIVE ACTIONS TAKEN

R.Q. #'S: TOTAL LB(S) LB(S)

SARA TITLE III: DESCRIBE PROTECTIVE ACTIONS AND PROVIDE MEDICAL INFORMATION:

DATE OF SPILL: 6/19/94 (MONTH/DAY/YEAR) IS THE SPILL ONGOING? ☐ YES ☒ NO TIME OF SPILL: 2047

HAS THE RELEASE BEEN TERMINATED ☒ YES ☐ NO HAS THE RELEASE BEEN CONTAINED? ☒ YES ☐ NO

MISCELLANEOUS INFORMATION:

~~PCB~~ Overloaded machine
pick up

WATER BODY: None ☐ RIVER ☐ L.I.S. ☐ TRIBUTARY ☐ CATCH BASIN/STORM DRAIN ☐ POND

MEDIA: ☐ AIR ☐ SURFACE WATER ☐ GROUND WATER ☒ GROUND SURFACE ☐ INSIDE BUILDING ☐ OTHER

TOTAL IN WATER (APPROXIMATE GALLONS): 0 TOTAL RECOVERED FROM WATER: 0

QUANTITY RECOVERED: 100 gal POLLUTER NAME: NU

POLLUTER MAILING ADDRESS: TELEPHONE: 249 5895

POLLUTER ACCEPTS FINANCIAL RESPONSIBILITY? ☒ YES ☐ NO

CLEAN-UP ACTIONS BEING TAKEN: Contained / Removed

STATE OF CONNECTICUT

DEPARTMENT OF ENVIRONMENTAL PROTECTION

STATE OFFICE BUILDING HARTFORD, CONNECTICUT 06115

RECEIVED

JUN 6 1980

HAZARDOUS MATERIALS MANAGEMENT UNIT

REPORT OF PETROLEUM OR CHEMICAL PRODUCT DISCHARGE, SPILLAGE, SEEPAGE, FILTRATION

The following information is submitted concerning petroleum or chemical product discharge reported verbally to the Department of Environmental Protection/State Police at 831 So. MAIN ST (location) on 6/4/80 (date) at 5:30 PM (time) by FIRE MARSHAL DOHERTY (name).

1. Time and date of discharge, spillage, etc.

   UNKNOWN - SOMETIMES DURING THE NIGHT OF 6/4/80

2. Location, to include name of town, river, highway, distance from intersection, etc., of the pollution or contamination.

   831 SOUTH MAIN ST - CHESHIRE CT

3. Type of oil, petroleum or chemical pollutant or contaminant.

   GASOLINE

4. Quantity of discharge, spillage, seepage, filtration.

   UNKNOWN

5. Cause of pollution or contamination:

   a. Type of vessel, vehicle, containers, etc., which contained the pollutant or contaminant N/A

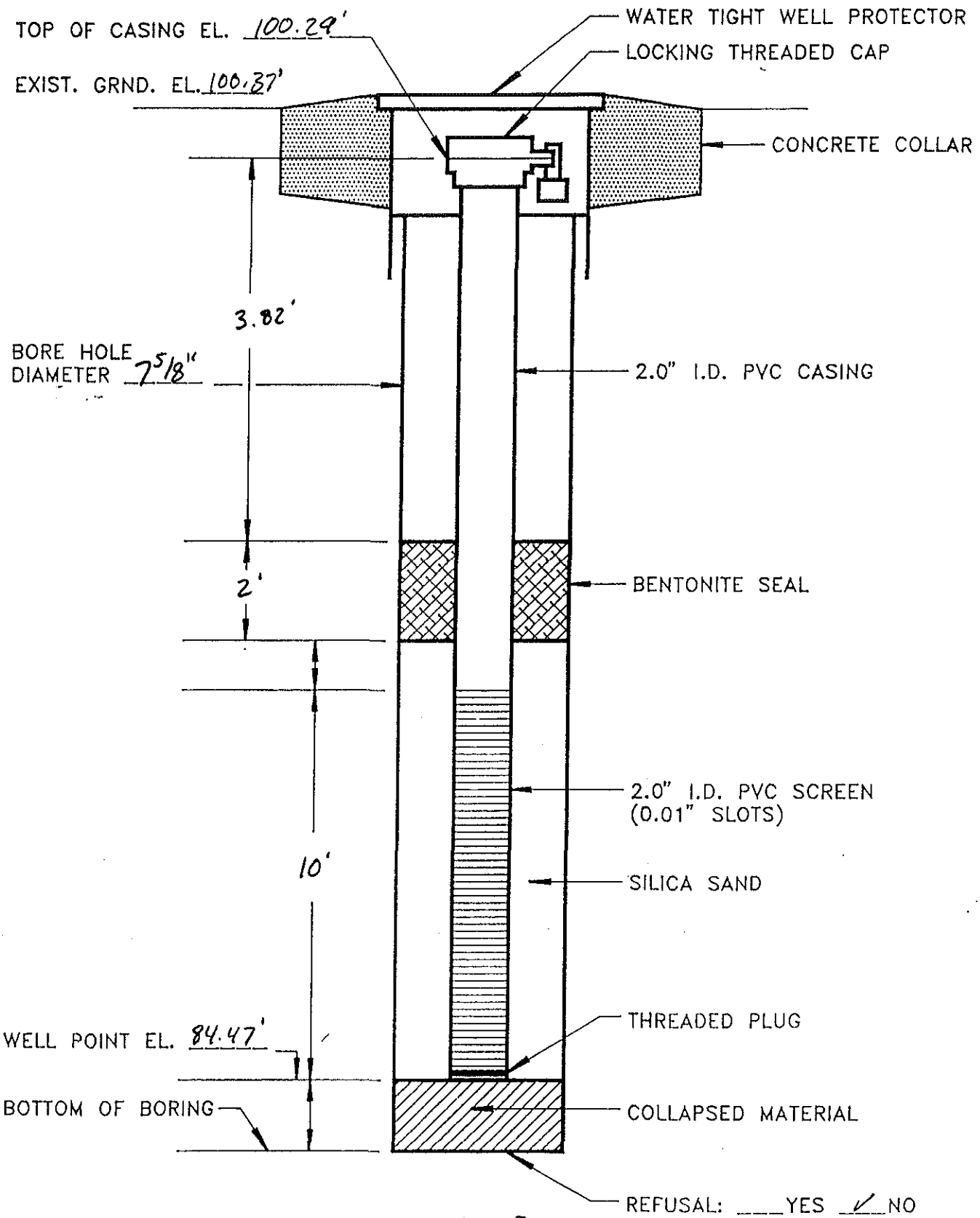
   TRAPPED UNDERGROUND GASOLINE

   b. Describe in detail what actually occurred to cause discharge, spillage, seepage, filtration. DURING THE EARLY MORNING OF 6/4/80 ONE OF 4 SUBMERGED PUMPS INSTALLED AT THIS LOCATION TO LOWER THE WATER TABLE STARTED TO PICK UP AND DISCHARGE A MIXTURE OF WATER AND GASOLINE.

APPENDIX J

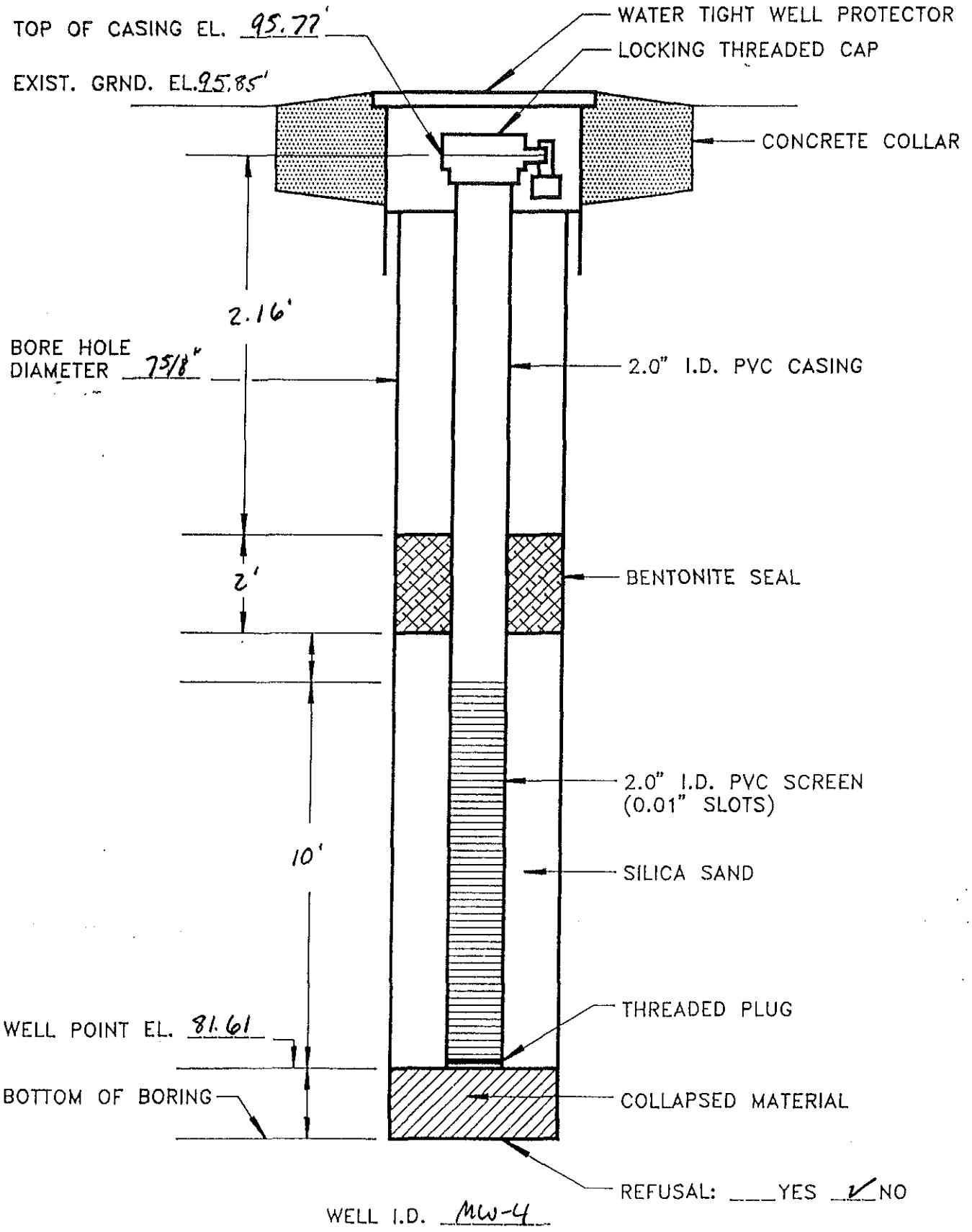
MONITOR WELL COMPLETION FORMS

MONITOR WELL INSTALLATION DETAIL
FOR WELL IN UNCONSOLIDATED DEPOSIT



WELL I.D. MW-3

MONITOR WELL INSTALLATION DETAIL
FOR WELL IN UNCONSOLIDATED DEPOSIT



WELL I.D. MW-4

APPENDIX K

LABORATORY RESULTS

July 3, 1995

HRP Associates Inc.
167 New Britain Ave
Plainville, CT 06062

Attn: Ms. Pat Terwilliger

RECEIVED
JUL - 7 1995
HRP ASSOCIATES, INC.

Please find attached laboratory report(s) for the samples submitted on : **June 29, 1995**

All pertinent information for this analysis is located on the report. Should it be necessary to contact us regarding billing and or the test results, please have the following information readily available :

```
LAB No.      : 65-506-2
PO/JOB No.   : BOV0002.P2
INVOICE No.  : 52546
ORDER No.    : 32609
CUSTOMER No.: 350
```

Please feel free to contact us if you have any questions.

Very truly yours,

Stephen J. Franco
Laboratory Director
PH-0547

connecticut testing laboratories inc.
WATER ■ SOIL ■ AIR

STEPHEN J. FRANCO
Laboratory Director
PHONE ■ 203/634-3731
165 GRACEY AVENUE ■ MERIDEN, CT ■ 06451

Date Samples Received : 6-29-95

Client Name: **HRP Associates Inc.**	CTL Lab No. 65-569-2
Report Date: 7-7-95	PO/Job No. BOV0002.P2

RESULTS OF ANALYSIS

Total Metals

Matrix Type	**W**	**W**		
CTL Sample No.	**8518**	**8519**		
Field ID	**MW-3**	**MW-4**		
pH	6.4	6.8		
Cadmium-mg/L	ND<0.005	0.010		
Chromium, Total-mg/L	0.22	0.45		
Copper-mg/L	0.74	13.5		
Lead-mg/L	0.308	0.520		
Spec. Conductance-umhos/cm	265	261		

Matrix Types : W = Water/Aqueous
S = Soil/Solid
O = Oil/Hydrocarbons

CONNECTICUT TESTING LABORATORIES, INC.
165 Gracey Avenue / Meriden, CT 06451-2268
(203)-634-3731
Connecticut Certification No. PH-0547

Date Samples Received : 6-1-95

Client Name: **HRP Associates Inc.**	CTL Lab No. 65-175-5
Report Date: 6-16-95	PO/Job No. BOV0002.P2

RESULTS OF ANALYSIS

Dissolved Metals

Matrix Type	**W**	**W**	**W**	**W**
CTL Sample No.	**7126**	**7127**	**7128**	**7129**
Field ID	**MW-1**	**MW-2**	**MW-A**	**MW-B**
pH	7.3	7.3	6.7	7.3
Cadmium-mg/L	ND<0.005	ND<0.005	ND<0.005	ND<0.005
Chromum, Total-mg/L	ND<0.05	ND<0.05	ND<0.05	ND<0.05
Copper-mg/L	ND<0.01	ND<0.01	ND<0.01	ND<0.01
Lead-mg/L	ND<0.010	ND<0.010	ND<0.010	ND<0.010
Spec. Cond.-umhos/cm	229	271	275	197

Dissolved Metals

Matrix Type	**W**			
CTL Sample No.	**7130**			
Field ID	**MW-C**			
pH	7.2			
Cadmium-mg/L	ND<0.005			
Chromium, Total-mg/L	ND<0.05			
Copper-mg/L	ND<0.01			
Lead-mg/L	ND<0.010			
Spec. Cond.-umhos/cm	126			

Matrix Types : W = Water/Aqueous
S = Soil/Solid
O = Oil/Hydrocarbons

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(203)-634-3731
Connecticut Certification No. PH-0547

Client	: HRP Associates Inc.	Date Tested	: 6-30-95
Lab No.	: 65-506-2	Analyst	: RS
PO No.	: BOV0002.P2		
Rep. Date	: 7-3-95		

EPA METHOD 601/8010 **Date Samples Rec'd: 6-29-95**

	MDL				
Matrix Type :		W	W		
Field ID :		MW-3	MW-4		
Chloromethane	2	BDL	BDL		
Bromomethane	2	BDL	BDL		
Vinylchloride	2	BDL	BDL		
Chloroethane	2	BDL	BDL		
Methylenechloride	1	BDL	BDL		
Trichlorofluoromethane	1	BDL	BDL		
11-Dichloroethylene	1	BDL	BDL		
11-Dichloroethane	1	BDL	BDL		
T12-Dichloroethylene	1	4.0	BDL		
Chloroform	1	BDL	BDL		
12-Dichloroethane	1	BDL	BDL		
111-Trichloroethane	1	BDL	BDL		
Carbontetrachloride	1	BDL	BDL		
Bromodichloromethane	1	BDL	BDL		
12-Dichloropropane	1	BDL	BDL		
T13-Dichloropropylene	1	BDL	BDL		
Trichloroethylene	1	7.0	BDL		
Dibromochloromethane	1	BDL	BDL		
112-Trichloroethane	1	BDL	BDL		
Cis13-Dichloropropylene	1	BDL	BDL		
2-Chlorethylvinylether	1	BDL	BDL		
Bromoform	1	BDL	BDL		
1122-Tetrachloroethane	1	BDL	BDL		
Tetrachloroethylene	1	BDL	BDL		
Chlorobenzene	1	BDL	BDL		
Benzyl Chloride	10	BDL	BDL		
Bis(2-chlorethoxy)methane	10	BDL	BDL		
Bis(2-chloroisopropyl)eth	10	BDL	BDL		
Bromobenzene	1	BDL	BDL		
Chloracetaldehyde	10	BDL	BDL		
1-Chlorohexane	1	BDL	BDL		
Chloromethyl methyl ether	10	BDL	BDL		
Chlorotoluene	1	BDL	BDL		
Dibromomethane	1	BDL	BDL		
12-Dichlorobenzene	1	BDL	BDL		
13-Dichlorobenzene	1	BDL	BDL		
14-Dichlorobenzene	1	BDL	BDL		
Trichloropropane	1	BDL	BDL		

MDL= Minimum Detectable Level/**BDL**= Below Detection Level/**UNITS**= PPB

Matrix Type : W= Water/Aqueous **S**= Soil/Solid **O**= Oil/Hydrocarbons

CONNECTICUT TESTING LABORATORIES, INC.
165 Gracey Avenue / Meriden, CT 06451-2268
(203)-634-3731
Connecticut Certification No. PH-0547

Client	: HRP Associates Inc.	Date Tested	: 6-30-95
Lab No.	: 65-506-2	Analyst	: RS
PO No.	: BOV0002.P2		
Rep. Date	: 7-3-95		

EPA METHOD 602/8020 Date Samples Rec'd: 6-29-95

	MDL				
Matrix Type :		W	W		
Field ID :		MW-3	MW-4		
Benzene	1	BDL	BDL		
Toluene	1	BDL	BDL		
Chlorobenzene	1	BDL	BDL		
Ethyl Benzene	1	BDL	BDL		
P & M Xylene	1	BDL	BDL		
O- Xylene	1	BDL	BDL		
1,4-Dichlorobenzene	1	BDL	BDL		
1,3-Dichlorobenzene	1	BDL	BDL		
1,2-Dichlorobenzene	1	BDL	BDL		
MTBE	1	BDL	BDL		

MDL = Minimum Detectable Level/ **BDL** = Below Detection Level/ **UNITS= PPB**

Matrix Type: W= Water/Aqueous **S**= Soil/Solid **O**= Oil/Hydrocarbons

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HRP Associates, Inc.
167 New Britain Avenue
Plainville, CT 06062
Phone: 203-793-6899
Fax: 203-793-6871

HRP

CHAIN OF CUSTODY

Sheet ____ of ____
Job Number BOV.0002.P2
Project Manager ____

Place & Address of Collection: CHESIRE
Samplers Name (Signature): Aj Botello
Assistant (Witness)(Signature):

Sample Number	Sample Location	Container Type	Total Volume	Preservative	Date	Time	Sample Type: Water	Soil	Air	Waste	Remarks
MW-3	well	P/G	1080ml	cool	6/29		X				
MW-4	↓	↓	↓	↓			X				

Relinquished By (Signature): AJ Botello	Received By (Signature): M. McMahon	Date 6/29/95	Time 12:25
Relinquished By (Signature):	Received By (Signature):	Date	Time

Name & Address of Laboratory:

LABORATORY SAMPLE PREPARATION REQUIRED

None ☒ | Filter ☒ | Adjust pH to ____ | Priority ☒

Other:

ANALYSES REQUIRED

Parameters	Sample Number: MW-3	MW-4				Parameters	Sample Number: MW-3	MW-4			
pH						TPH 418.1					
Ag						TOC					
Al						TOX					
As						STD Water					
Ba						Total Coliform					
Cd	X	X				Fluoride					
CN-A						Chloride					
CN-T						8010/601	X	X			
Cr^{+6}						8015					
Cr-T	X	X				8020/602					
Cu						8020 + MTBE	X	X			
Fe-D						8080					
Hg						8100					
Na						8 TCLP Metals					
Ni	X	X									
Pb	X	X				pH	X	X			
Se											
Sp. Cond.	X	X									
TDS											
Zn											

Remarks:

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№ 3232

July 7, 1995

RECEIVED
JUL 12 1995
HRP ASSOCIATES, INC.

HRP Associates Inc.
167 New Britain Ave
Plainville, CT 06062

Attn: Ms. Pat Terwilliger

Please find attached laboratory report(s) for the samples submitted on : **June 29, 1995**

All pertinent information for this analysis is located on the report. Should it be necessary to contact us regarding billing and or the test results, please have the following information readily available :

LAB No.	: 65-569-2
PO/JOB No.	: BOV0002.P2
INVOICE No.	: 52608
ORDER No.	: 32671
CUSTOMER No.	: 350

Please feel free to contact us if you have any questions.

Very truly yours,

Stephen J. Franco
Laboratory Director
PH-0547

connecticut testing laboratories inc.
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STEPHEN J. FRANCO
Laboratory Director
PHONE ■ 203/634-3731
165 GRACEY AVENUE ■ MERIDEN, CT ■ 06451

HRP Associates, Inc.
167 New Britain Avenue
Plainville, CT 06062
Phone: 203-793-6899
Fax: 203-793-6871

HRP

CHAIN OF CUSTODY

Sheet ____ of ____
Job Number BOV.0002.P2
Project Manager ____

Place & Address of Collection: CHESIRE
Samplers Name (Signature): [signature]
Assistant (Witness)(Signature):

Sample Number	Sample Location	Container Type	Total Volume	Preservative	Date	Time	Sample Type: Water	Soil	Air	Waste	Remarks
MW-3	well	P/G	1080mL	cool	6/29		X				
MW-4	↓	↓	↓	↓			X				

Relinquished By (Signature): [signature]	Received By (Signature): M. McMahon	Date 6/29/95	Time 12:25
Relinquished By (Signature):	Received By (Signature):	Date	Time

Name & Address of Laboratory:

LABORATORY SAMPLE PREPARATION REQUIRED

None ☒ | Filter ☒ | Adjust pH to ____ | Priority ☒

Other:

ANALYSES REQUIRED

Parameters	Sample Number: MW-3	MW-4				Parameters	Sample Number: MW-3	MW-4			
pH						TPH 418.1					
Ag						TOC					
Al						TOX					
As						STD Water					
Ba						Total Coliform					
Cd ✓	X	X				Fluoride					
CN-A						Chloride					
CN-T						8010/601 ✓	X	X			
Cr^{+6}						8015					
Cr-T ✓	X	X				8020/602					
Cu						8020 + MTBE ✓	X	X			
Fe-D						8080					
Hg						8100					
Ni	X	X				8 TCLP Metals					
Pb ✓	X	X				pH ✓	X	X			
Se											
Sp. Cond. ✓	X	X									
TDS											
Zn											

Remarks: Ron called the lab + requested Copper to be analyzed instead of nickel. (lab called on 7/12/95 to verify)

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№ 3232

June 15, 1995

HRP Associates Inc.
167 New Britain Ave
Plainville, CT 06062

Attn: Ms. Pat Terwilliger

RECEIVED
JUN 19 1995
HRP ASSOCIATES, INC.

Please find attached laboratory report(s) for the samples submitted on : **June 1, 1995**

All pertinent information for this analysis is located on the report. Should it be necessary to contact us regarding billing and or the test results, please have the following information readily available :

LAB No.	:	65-175-5
PO/JOB No.	:	BOV0002.P2
INVOICE No.	:	52211
ORDER No.	:	32274
CUSTOMER No.	:	350

Please feel free to contact us if you have any questions.

Very truly yours,

Stephen J. Franco
Laboratory Director
PH-0547

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Laboratory Director
PHONE ■ 203/634-3731
165 GRACEY AVENUE ■ MERIDEN, CT ■ 06451

7126 - 7130

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167 New Britain Avenue
Plainville, CT 06062
Phone: 203-793-6899
Fax: 203-793-6871

HRP

CHAIN OF CUSTODY

Sheet 1 of 1
Job Number BOV0002PC
Project Manager RAS

Place & Address of Collection: Bovano of Cheshire

Samplers Name (Signature): [signature]
Assistant (Witness)(Signature):

Sample Number	Sample Location	Container Type	Total Volume	Preservative	Date	Time	Sample Type: Water	Soil	Air	Waste	Remarks
MW-1		glass/plas	1050 ml	cool	5/26/95	1 pm	X				
MW-2											
MW-A											
MW-B											
MW-C											

Relinquished By (Signature): [signature] — Received By (Signature): [signature] — Date 6/1/95 — Time 7:35

Relinquished By (Signature): — Received By (Signature): — Date — Time

Name & Address of Laboratory:

LABORATORY SAMPLE PREPARATION REQUIRED

None ☐ Filter ☐ Adjust pH to _____ Priority ☐

Other

ANALYSES REQUIRED

Parameters	Sample Number: All					Parameters	Sample Number: All				
pH	X					TPH 418.1					
Ag						TOC					
Al						TOX					
As						STD Water					
Ba						Total Coliform					
Cd	X					Fluoride					
CN-A						Chloride					
CN-T						8010/601	X				
Cr^{+6}						8015					
Cr-T	X					8020/602	X				
Cu	X					8020 + MTBE					
Fe-D						8080					
Hg						8100					
Na						8 TCLP Metals					
Ni											
Pb	X										
Se											
Sp. Cond.	X										
TDS											
Zn											

Remarks: metals by TCLP

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№ 3681

HRP
ASSOCIATES, INC.

September 20, 1994

Mr. James Flood
Bovano Industries, Inc.
830 South Main Street
Cheshire, Connecticut 06410

RE: RESULTS OF GROUND WATER SAMPLING CONDUCTED AT BOVANO INDUSTRIES, INC., 830 SOUTH MAIN STREET, CHESHIRE, CONNECTICUT (HRP #BOV-0001.RC)

Dear Mr. Flood:

On August 25, 1994, HRP Associates sampled two monitoring wells at Bovano Industries, Inc. located at 830 South Main Street in Cheshire, Connecticut.

As described in the proposal, HRP personnel redeveloped each well prior to sampling by removing at least six times the volume of standing water from each well. A total of 16 gallons (or 8 well volumes) was removed for redevelopment of MW-1, while 22 gallons (or 6 well volumes) were removed from MW-2. Ground water samples from both wells were collected with dedicated bailers and submitted to a State certified laboratory for analysis of pH, cadmium, chromium (total), copper, lead, nickel, silver, zinc, non-halogenated volatile organic (via EPA Method 8015), and aromatic volatile organics (via EPA Method 8020).

Copies of the laboratory reports for the analyses are included in Attachment 1 to this letter. As can be seen from the laboratory reports, copper is the only parameter detected in the ground water. The copper levels detected (0.02 mg/l in MW-1, 0.01 mg/l in MW-2) are well below the drinking water standard of 1.0 mg/l for copper. The laboratory detection limits for the remaining parameters were at or below the parameters' applicable drinking water standards.

Conclusions and Recommendations

It appears from the static water level measurements (obtained from the wells prior to redevelopment) that the ground water is flowing from MW-2 toward MW-1. Figure 1 (included in Attachment 2) depicts the general ground water flow. In order to more completely characterize ground water flow beneath the site, at least one more monitoring well would need to be installed to the north of Bovano's manufacturing facility. The location of this additional monitoring well would aid in ensuring that

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future ground water samples are representative of ground water that flows under the facility. It is possible, for example, that both MW-1 and MW-2 are upgradient of the facility, and therefore, would not contain any trace contaminants that may enter the ground water from the facility. Since the difference in ground water elevation between MW-1 and MW-2 is only 0.08', it is possible that ground water is actually flowing in a north-south direction as opposed to east-west.

The stand pipes on MW-1 and MW-2 should be replaced before the next sampling event. Due to the effects of weathering and the fact that the wells were not sampled for at least five years, HRP personnel experienced great difficulty trying to remove the cap from each stand pipe. In order to conduct the ground water sampling, each stand pipe had to be completely removed from the ground to access the monitoring wells. HRP recommends that new stand pipes, with locking flip-top lids, be installed. The stand pipes should have concrete collars to prevent their removal from the ground.

If you have any questions or comments regarding this letter report, please call either Rick McFee or myself at 793-6899.

Sincerely,

HRP ASSOCIATES, INC.

Christopher R. Shepard

Christopher R. Shepard
Project Engineer

CRS/cpk
Attachments

n\bov-1-rc.ltr

ATTACHMENT 1

LABORATORY REPORTS

Bovano BOV0001.RC

September 12, 1994

RECEIVED
SEP 15 1994
HRP ASSOCIATES, INC.

HRP Associates Inc.
167 New Britain Ave
Plainville, CT 06062

Attn: Ms. Pat Terwilliger

Please find attached laboratory report(s) for the samples submitted on : **August 25, 1994**

All pertinent information for this analysis is located on the report. Should it be necessary to contact us regarding billing and or the test results, please have the following information readily available :

LAB No.	: 84-540-2
PO/JOB No.	: BOV0001.RC
INVOICE No.	: 46344
ORDER No.	: 26254
CUSTOMER No.	: 350

Please feel free to contact us if you have any questions.

Very truly yours,

Stephen J. Franco
Laboratory Director
PH-0547

connecticut testing laboratories inc.
WATER ■ SOIL ■ AIR

STEPHEN J. FRANCO
Laboratory Director
PHONE ■ 203/634-3731
165 GRACEY AVENUE ■ MERIDEN, CT ■ 06451

Date Samples Received : 8-25-94

Client Name: **HRP Associates Inc.**	CTL Lab No. 84-540-2
Report Date: 9-12-94	PO/Job No. BOV0001.RC

RESULTS OF ANALYSIS

Dissolved Metals

Matrix Type	**W**	**W**		
CTL Sample No.	**10389**	**10390**		
Field ID	**MW1**	**MW2**		
pH	7.1	7.1		
Silver-mg/L	ND<0.01	ND<0.01		
Cadmium-mg/L	ND<0.005	ND<0.005		
Chromium, Total-mg/L	ND<0.05	ND<0.05		
Copper-mg/L	0.02	0.01		
Nickel-mg/L	ND<0.05	ND<0.05		
Lead-mg/L	ND<0.010	ND<0.010		
Zinc-mg/L	ND<0.05	ND<0.05		

Matrix Types : W = Water/Aqueous
S = Soil/Solid
O = Oil/Hydrocarbons

September 1, 1994

RECEIVED
SEP - 7 1994
HRP ASSOCIATES, INC

HRP Associates Inc.
167 New Britain Ave
Plainville, CT 06062

Attn: Ms. Pat Terwilliger

Please find attached laboratory report(s) for the samples submitted on : **August 25, 1994**

All pertinent information for this analysis is located on the report. Should it be necessary to contact us regarding billing and or the test results, please have the following information readily available :

LAB No.	:	84-446-2
PO/JOB No.	:	BOV0001.RA
INVOICE No.	:	46213
ORDER No.	:	26123
CUSTOMER No.	:	350

Please feel free to contact us if you have any questions.

Very truly yours,

Stephen J. Franco
Laboratory Director
PH-0547

connecticut testing laboratories inc.
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STEPHEN J. FRANCO
Laboratory Director
PHONE ■ 203/634-3731
165 GRACEY AVENUE ■ MERIDEN, CT ■ 06451

Client	: HRP Associates, Inc.		
Lab No.	: 84-446-2	Date Tested	: 8/31/94
PO No.	: BOV0001.RC		
Rep. Date	: 9/1/94	Analyst	: RS

EPA METHOD 602/8020 **Date Samples Rec'd:** 8/25/94

	MDL				
Matrix Type :		W	W		
Field ID :		MW-1	MW-2		
Benzene	1	BDL	BDL		
Toluene	1	BDL	BDL		
Chlorobenzene	1	BDL	BDL		
Ethyl Benzene	1	BDL	BDL		
P & M Xylene	1	BDL	BDL		
O- Xylene	1	BDL	BDL		
1,4-Dichlorobenzene	1	BDL	BDL		
1,3-Dichlorobenzene	1	BDL	BDL		
1,2-Dichlorobenzene	1	BDL	BDL		

MDL = Minimum Detectable Level/ **BDL** = Below Detection Level/ **UNITS = PPB**

Matrix Type: W = Water/Aqueous **S** = Soil/Solid **O** = Oil/Hydrocarbons

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(203)-634-3731
Connecticut Certification No. PH-0547

Client	: HRP Associates, Inc.		
Lab No.	: 84-446-2	Date Tested	: 8/31/94
PO No.	: BOV0001.RC		
Rep. Date	: 9/1/94	Analyst	: RS

EPA METHOD 8015 **Date Samples Rec'd:** 8/25/94

	MDL				
Matrix Type :		W	W		
Field ID :		MW-1	MW-2		
Methyl Ethyl Ketone	50	BDL	BDL		
Methyl Isobutyl Ketone	50	BDL	BDL		
Acrylamide	50	BDL	BDL		
Carbon Disulfide	50	BDL	BDL		
Diethyl Ether	50	BDL	BDL		
Paraldehyde	50	BDL	BDL		

MDL = Minimum Detectable Level/*BDL* = Below Detection Level/***UNITS***=PPB

Matrix Type: W= Water/Aqueous *S=* Soil/Solid O= Oil Hydrocarbons

CONNECTICUT TESTING LABORATORIES, INC.
165 Gracey Avenue / Meriden, CT 06451-2268
(203)-634-3731
Connecticut Certification No. PH-0547

HRP Associates, Inc.
167 New Britain Avenue
Plainville, CT 06062
Phone: 203-793-6899
Fax: 203-793-6871

HRP

CHAIN OF CUSTODY

Sheet 1 of 1
Job Number BOV 0001.RC
Project Manager RDM

Place & Address of Collection BOVAUD INDUSTRIES, 830 S. MAIN ST. CHESHIRE, CT
Samplers Name (Signature) Christopher R. Sheppard
Assistant (Witness)(Signature)

Sample Number	Sample Location	Container Type	Total Volume	Preservative	Date	Time	Sample Type: Water	Soil	Air	Waste	Remarks
1	MW-1	40-VOAS 1-P CUBE	1.16 l	COOL	8/25/94	9:55	X				GROUNDWATER
2	MW-2	↓	↓	↓	8/25/94	12:15	X				↓

Relinquished By (Signature) Christopher R. Sheppard
Received By (Signature) Helen Calvo
Date 8/25/94 Time 3:04 P.M.
Relinquished By (Signature)
Received By (Signature)
Date
Time

Name & Address of Laboratory CTL MERIDEN

LABORATORY SAMPLE PREPARATION REQUIRED

None ☐ Filter ☒ Adjust pH to _____ Priority ☐

Other

ANALYSES REQUIRED

Parameters	Sample Number 1	2				Parameters	Sample Number 1	2			
pH	X	X				TPH 418.1					
Ag	X	X				TOC					
Al						TOX					
As						STD Water					
Ba						Total Coliform					
Cd	X	X				Fluoride					
CN-A						Chloride					
CN-T						8010/601					
Cr^{+6}						8015 ✓	X	X			
Cr-T	X	X				8020/602 ✓	X	X			
Cu	X	X				8020 + MTBE					
Fe-D						8080					
Hg						8100					
Na						8 TCLP Metals ✓					
Ni	X	X									
Pb	X	X									
Se											
Sp. Cond.											
TDS											
Zn	X	X									

Remarks ONLY ANALYZE DISSOLVED METALS.

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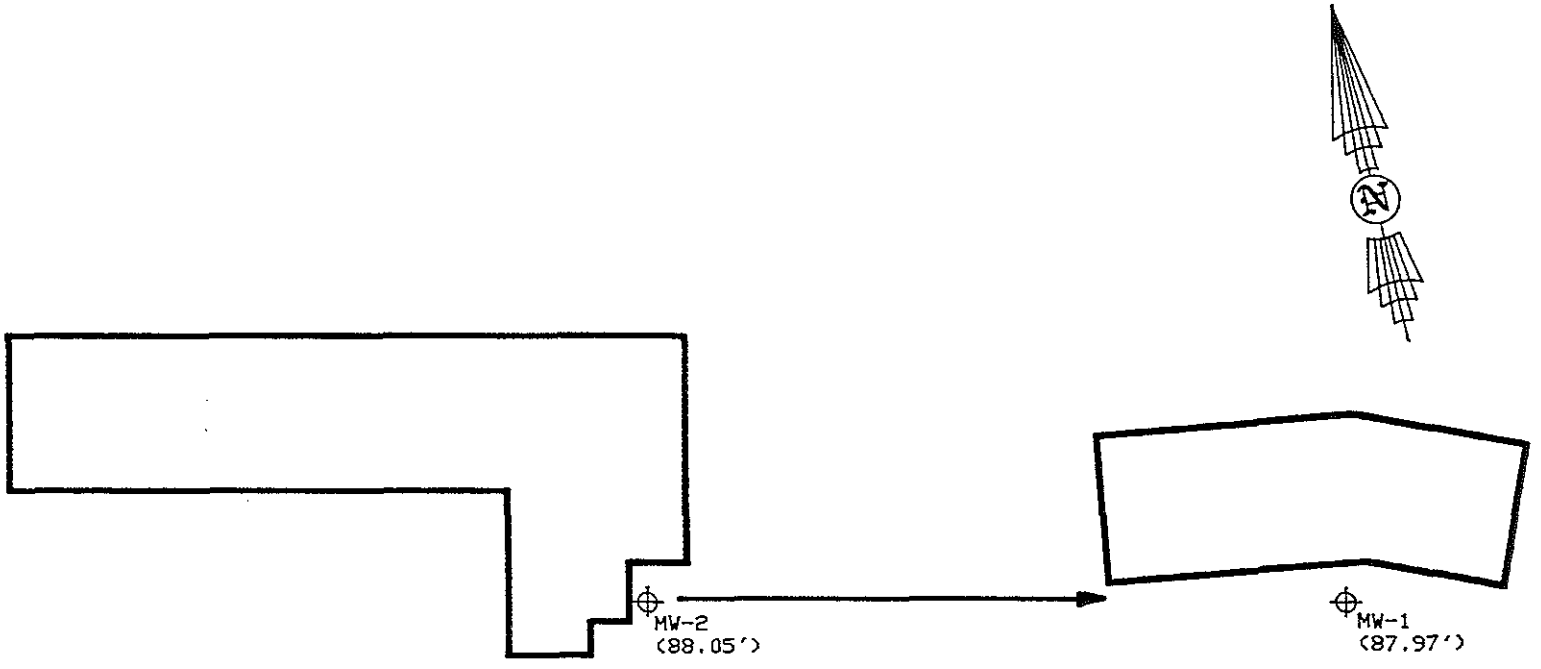
№ 2408

ATTACHMENT 2

MAP SHOWING APPARENT GROUND WATER FLOW DIRECTION



LEGEND

MW-1 (87.97')	MONITORING WELL AND GROUND WATER LEVEL
→	ASSUMED DIRECTION OF GROUND WATER FLOW

FIGURE 1
GROUND WATER FLOW DIRECTION
BOVANO INDUSTRIES, INC.
830 SOUTH MAIN STREET
CHESHIRE, CT.
HRP #BOV.0001.RC
NOT TO SCALE

E:\MARK\BOV001RC