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89-119-01

September 30, 1988

M E M O R A N D U M

TO : Mrs. Flor L. del Valle
Director
Land Pollution Control Area

THROUGH : Mr. Carlos R. Martinez
Acting Director
Hazardous Waste Division

: Mr. Chendy Rivera
Acting Chief
Permits & Engineering Section

FROM : Harold Carrasquillo
Junior Environmental Science Specialist

SUBJECT : RCRA Facility Assessment Report
Caribe General Electric Products, Inc.
Vieques, Puerto Rico - PRD000692582

Enclosed please find the RFA Report prepared for the above mentioned facility. The preparation of this RFA was committed for the fourth quarter of FY-88 and should be sent to EPA, New York.

Four SWMUs and three AOCs have been identified on this RFA.

For SWMU-2 and SWMU-3 direct evidence of release to soil was identified. An RFI is recommended for both units.

For SWMU-4 a high release potential with respect to soil had been determined. A sampling visit to this unit is recommended.

For SWMU-1, AOC-1, AOC-2 and AOC-3 no further action is recommended.

HC/eas

Enclosure

COMMONWEALTH OF PUERTO RICO / OFFICE OF THE GOVERNOR

Environmental Quality Board

September 30, 1988

Mr. Angel Chang, Chief
Caribbean Facilities Section
Hazardous Waste Facilities Branch
US Environmental Protection Agency
26 Federal Plaza - Region II
New York, New York 10278

RE: RCRA Facility Assessment
Report - Caribe General
Electric Products, Inc.
Vieques, Puerto Rico
PRD000692582

Dear Mr. Chang:

Enclosed please find the RFA Report prepared for General Electric Company of Puerto Rico (Vieques Plant), as committed for the fourth quarter of FY-88.

If you need additional information, please contact Mr. Harold Carrasquillo or Mr. Chendy Rivera, at (809) 722-5453.

Cordially,

Carlos L. Martínez for
Flor L. del Valle
Director
Land Pollution Control Area

HC/eas

Enclosure

RCRA FACILITY ASSESSMENT REPORT
CARIBE GENERAL ELECTRIC PRODUCTS, INC.
VIEQUES PLANT - VIEQUES, P.R.
EPA ID NO. PRD000692582

Harold Carrasquillo
EQB Land Pollution Control Area
Hazardous Waste Division
September 1988

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I. Introduction

This RCRA Facility Assessment identifies all Solid Waste Management Units (SWMUs) and other Areas of Concern (AOCs) that represent a potential release at Caribe General Electric Products Inc. (Vieques Plant).

An evaluation of the release potential with respect to soil, groundwater, surface water, air, and the generation of subsurface gas was performed for each one of these SWMUs and AOCs.

Information reviewed in the preparation of this RFA Report included among others: facility's SWMU response letter, Part A Permit Application, Closure Plan, and EQB Hazardous Waste Division files.

Four SWMUs and three Areas of Concern (AOCs) have been identified at this facility and are discussed in detail in this report.

SWMUs

SWMU-1 Hazardous Waste Container Storage Area

SWMU-2 Leachfield

SWMU-3 Concrete Treatment/Settling Sump

SWMU-4 Septic Tank System

AOCs

AOC-1 Raw Material Storage Area

AOC-2 Degreaser Tank

AOC-3 Electroplating Area

II. Facility and Process Description

Caribe General Electric Products, Inc. (Vieques Plant) is a facility engaged in the manufacture of relays, terminal boards, high power fuses, transformer fuses and indicating lights.

This facility is located on Road #200, Km. 1.9, Martinó Ward, Isabel Segunda, Vieques, Puerto Rico on latitude 18°08'35.0" and longitude 65°27'28.0".

Its mailing address is P.O. Box 187, Isabel Segunda, Vieques, P.R., 00765.

The facility began manufacturing operations in May 1969 and remains in operation.

History

The following table summarizes the facility history:

EVENT	DATE
Started Operations	June 15, 1959
Notification of Hazardous Waste Activity	August 1, 1980
Part A Submittal	October 31, 1980
Full RCRA TSD Inspection	December 9, 1981
Full RCRA TSD Inspection	September 3, 1982
Request for Change of Status	July 24, 1984
Full RCRA TSD Inspection	September 11, 1985
Closure Plan Submittal (Leach Field)	November 22, 1985
Order to Show Cause	December 2, 1985
Revised Notification of Hazardous Waste Activity	March 17, 1986
Full RCRA TSD Inspection	June 4, 1986

EVENT	DATE
Part B Call-In Letter	April 21, 1987
Part B Call-In Visit	May 26, 1987
Full RCRA TSD Inspection	September 2, 1987
Closure Plan Submittal (Container Storage Area)	October 21, 1987
Closure Plan Revision (Container Storage Area)	February, 1988
Public Notice Closure Plan (Container Storage Area)	May 21, 1988

In addition to its EPA ID. Number this facility is authorized to operate with the following environmental permits:

Underground Injection Control	84-0223
EQB Air Emissions Permit	PFE-88-008161-II

This facility consists of one building with approximately 33,000 square feet of office and operation areas, established in a property of approximately 2.08 acres.

The facility consists of the following departments or areas: Fuses Assembly, Relays Assembly, Accessories Assembly, Machine Shop, Molding Area, Tool Room, Warehouse, Hazardous Wastes Container Storage Area, Raw Material Storage Area and Office Area.

119 employees work for this facility at this time.

Summary of Present Facility Operations

Caribe G.E. Products, Inc. (Vieques Plant) is a facility engaged in the manufacture of relays, terminal boards, high power fuses, transformer fuses and indicating lights.

The following raw materials are used in the manufacturing process of this facility:

Copper
Steel
Brass
Silic Sand
Silver (Wires, Ribbons)

Molding Compound (Plastic Resin)
Lead - Tin Alloy
Cristal Tubes
Ceramic Tubes
Fiber Wound Tubes
1,1,1-Trichloroethane
Hydraulic Oil
Silver Cyanide
Potassium Cyanide
Sodium Thiosulfate
Solvent (Varsol)
Nitric Acid
Flux (Alcohol)
Thinner
Paints

The following table include a description of the manufacturing processes in the different areas/departments of the facility:

AREA/DEPARTMENT	PROCESS
Fuses Assembly	Copper ferrule is joined to the tubes. Element assembly is made with the Silver wires. Elements are then wound on a ceramic core. Ceramic core is assembled into the tubes. Tubes are filled with Silica. Caps are soldered to the tubes. The end of tubes are plated on the plating machine.
Relays Assembly	Assembly of plastic base with the metal contacts. Encoil assembly.
Accesories Assembly	Metal parts assembled on a plastic base.
Machine Shop	Making of metal parts in different machines (punch press, screw machine, drilling machine). Metal parts goes into a degreaser tank to remove oil.
Molding Area	Making of plastic parts by comppression molding machines.

The electroplating process takes place in the Fuses Assembly Area.

Two electroplating machines are located in this area.

Both machines uses a plating solution consisting of Silver Cyanide and Potassium Cyanide.

The plating solution in the holding tank is composed of:

100.00 gallons water
62.50 pounds AgCN
82.00 pounds KCN
0.01 pounds Sodium Thiosulfate

These compounds are replaced on a monthly basis to assure a proper concentration, with the exception of Sodium Thiosulfate which is replaced every four hours.

After assembled, fuses are placed on a fixture machine. The machine is started and a pump circulates the plating solution from the holding tank to the fixture.

By means of the application of electric current the silver contained in the plating solution is deposited on the copper part of the fuse. This process takes about two minutes.

After plated, fuses are removed from the machine and rinsed with plain water.

Washwaters generated are collected on one, 55 gallon plastic drum located besides the machine. From 2-3 drums of these washwaters are generated monthly.

Finally, parts are polished, waxed, tested and packed.

34,784 relays and 62,750 fuses are manufactured annually.

Identification of All Waste Streams

The following list includes all hazardous wastes generated and reported by Caribe G.E. in its Part A RCRA Permit Application dated October 31, 1980.

Hazardous Waste Code Number	Annual Quantity	Waste
F001	3,000 pounds	1,1,1-Trichloroethane
D001	100 pounds	Waste Oil
D002	400 pounds	Acid for Cleaning Copper
D003	200 pounds	Rinsewaters from electroplating operations
D008	300 pounds	Lead
P104, P098	50 pounds	Silver Cyanide, Potassium Cyanide
U133	10 pounds	Hydrazine
K054	900 pounds	

At present time this facility is generating the following hazardous wastes:

D003	rinsewaters from electroplating operations
D002	cyanides (corrosive)
F001	1,1,1-Trichloroethane

Part A had not been revised by this facility.

The following table summarizes the origin of these wastes:

WASTE	ORIGIN
F001, 1,1,1-Trichloroethane	Used as solvent, for the cleaning of metal parts in a degreaser tank. One drum 55 gal. is generated/3 months
D002 Corrosive (Acids) 8% HCl	Fuse operation Cleaning of Copper Terminals
D003 Rinse Waters (Containing cyanide and traces of Ag, Cu, Zn, Cr)	Rinse of fuses after electroplated for removal of plating solution Six 55 gal. drums/3 months are generated

Note:

The paper file copy skips from page 6 to page 8; therefore, there is no page 7 in the scanned version.

Mary Sullivan

6/2/2016

III. Environmental Setting

Geology and Soils

Caribe G.E. Products Inc. is located on the north area of the Island of Vieques.

According to the Soil Survey of Humacao Area of Eastern Puerto Rico (sheet #63) soils of this area are classified as Vieques Loam (VmC).

This soils consists of moderately deep, well drained soils that have moderately rapid permeability. These soils formed in partly weathered granite rocks. Slopes are 5 - 40%.

The surface layer is dark brown, slightly acid loam about 6 - 7 inches thick. Below that layer is brown to dark-brown, friable sandy clay loam 10 inches thick. The underlying material is yellowish - brown, loose gravely coarse sand 23 inches thick. Consolidated granite rock is at a depth of 38 inches.

These soils have allowed available water capacity and medium fertility, and they are susceptible to erosion.

Permeability of these soils varies from 2.0 - 6.0 inches/hour.

The geology of the Island of Vieques was mapped on a general basis by the U.S. Geological Survey in 1965. Two general rock types (volcanic and plutonic) have been mapped in the vicinity of the site. The volcanic rocks were largely deposited in a marine environment and consist of sandstone, siltstone, conglomerate, lava, tuff, or tuffaceous breccia and are Late Cretaceous in age. The plutonic rocks were emplaced within the older volcanic rocks and consist largely of granodiorite and quartz diorite. Although some fine grained volcanic rocks are exposed just northwest of the site, the General Electric property appears to be situated predominantly on granodiorite or its weathered product. The present plant grade was apparently achieved by cutting into the granodiorite knoll just south of the plant and filling in the northern portions of the site (including the leach field area). The weathered granodiorite is typically a tan or brown, fine to coarse sandy gravel. Because of the granular texture of the granodiorite, it is difficult to distinguish between fill materials and in place soils derived from the weathered rock.

Ground water yields from the plutonic rocks are generally less than 10 gallons per minute and usually only provide water for small domestic supplies. The yields from the volcanic rocks are variable but anticipated to be low in the vicinity of the site because of the fine-grained texture of the rock. The majority of wells that exist on the Island of Vieques are located on the south side. No wells have been surveyed within 4000 feet of the plant by the U.S. Geological Survey.

Metereology

The climate in the area is semiarid tropical.

The average annual precipitation is 35 inches and the average annual temperature is 78°F.

The area is under the influence of the easterly trade winds the year round and has a definite land and sea breeze pattern caused by the differential daytime heating and night time cooling of the land and sea.

The prevailing wind direction reflects the easterly trade winds. The section on the east coast, around Fajardo and the Roosevelt Roads Naval Air Station, receives a surface flow from a quadrant encompassing northeast to southeast about 75 percent of the time annually and as much as 95 percent of the time in July when the easterlies are at their strongest.

About 40% of the time, the windspeed is 8-12 miles per hour, about 30% of the time it is 7 miles per hour or less, and the rest of the time it is more than 12 miles per hour. A small pond is located on the southwest of the plant site at approximately 1,000 feet.

No river or creek is located in the immediate vicinity of this facility.

According to the flood maps this facility is not located in a 100 year floodplain.

IV. Visual Site Inspection (VSI)

Two visual site inspection to Caribe General Electric Products Inc. were performed on September 7, 1988 and September 15, 1988.

Mr. Luis A. Dávila, Plant Manager and Mrs. Elsie Ríos, Environmental Health and Safety Specialist answered all our questions during this visit.

SWMU-1 Hazardous Wastes Container Storage Area

The area is roofed and diked.

A shower is available in the area.

Two 55 plastic gallon drums were found stored in the hazardous wastes container storage area containing rinsewaters (waste cyanide) at the time of the inspection.

A photo of this unit was taken during VSI. See Attachment 9.

Some small yellowish spots were observed on the concrete floor located in front of this unit.

During the VSI it was observed that this area does not meet the minimum distance (50') requirements stated on the 40 CFR 265.176 for containers holding ignitable or reactive wastes.

SWMU-2 Leachfield

The leachfield is covered with vegetation. No evidence of release was observed during the VSI.

A stand pipe was observed in the area. Three monitoring wells were observed in the vicinity of the leachfield.

SWMU-3 Concrete Treatment/Settling Sump

Sump was observed filled with sand.

The following dimensions were obtained during the VSI:

Lenght: 8 1/2'
Width: 5'
Height: 8'
Depth: 8'

No evidence of release was observed during VSI.

SWMU-4 Septic Tank System

The following dimensions were obtained during the VSI:

Tank 1: 24'H x 8'W x 3'H
Tank 2: 10' diameter, 8'H
Tank 3: 10' diameter, 8'H

No evidence of release was observed during VSI.

AOC-1 Raw Material Storage Area

This area is located adjacent to the hazardous wastes container storage area.

Both the raw material storage area and the hazardous wastes container storage area are located under the same shelter.

The following raw materials were found stored in this area:

12 drums 55 gal. Lubrication Oil
2 drums 55 gal. Thinner
5 drums 55 gal. 1,1,1-Trichloroethane
6 drums 55 gal. Diesel
3 drums 55 gal. Scrab Metal
10 drums 55 gal. Coloidal Silica
14 drums 55 gal. Paint

No evidence of release was observed during VSI.

AOC-2 Degreaser Tank

The degreaser tank is located in the Machine Shop Area.

A 55 gallon plastic drum was observed located adjacent to the degreaser tank.

This drum receives waste used trichloroethane resulting from this tank.

No evidence of release was observed during VSI.

AOC-3 Electroplating Area

Two electroplating machines are located on this area.

Several air control devices (roof vents, fume hood) were observed on the area.

No evidence of release was observed during VSI.

V. SWMUs AND AOCs

Four Solid Waste Management Units (SWMUs) and three Areas of Concern (AOCs) have been identified in this Preliminary Assessment.

A detailed description of each unit follows.

Unit Number:	**SWMU-1**
Unit Name:	Hazardous Wastes Container Storage Area
Unit Description:	The hazardous wastes container storage area is located outside the manufacturing building of this facility at the south end of the property. The east south and west sides of the unit are concrete block walls, about fifteen feet high. The north side of the unit is enclosed by a six-foot high fence having a gate in the center. The area is divided in two zones: the raw material storage area and the hazardous waste storage zone. The two zones are separated by a 5-inch high concrete curb. Access from one area to the other is by a concrete ramp. The total area of the init (including storage areas for both raw materials and hazardous wastes) is about 1,100 ft^2. Of this area, approximately 450 ft^2 is used for hazardous waste storage. Dimensions of the unit are 19.5'L x 22.0'W. The floor consist of a 6-inch thick concrete slab on which a sealer coat has been applied to the surface as an impervious barrier. The particular sealer used was selected to prevent the penetration of acids, moisture, grease and alkali into the concrete pores. (This is a Floor Clear Sealer, Celing Brand). Run-on and Run-off is controlled by concrete curbs and walls and by the sheet metal roof. The roof prevents rainfall from falling directly on the unit.

For a layout of this unit see attachment 5.

Wastes are stored in DOT approved 55 plastic gallon containers.

It is estimated that the maximum number of drums that can be stored in the Containers Storage Area is forty-four, 55 gallon drums.

The area includes one emergency shower.

See photo 9e.

Date of Start-Up: April 1978

Date of Closure: In operation

On October 21, 1987 this facility submitted a Closure Plan for this area.

This Closure Plan was submitted in lieu of a Part B request since the facility intends to reclassify from a TSD to a generator of hazardous wastes only. This Closure Plan is pending final approval from EQB.

Waste Managed: This area stores the following wastes for less than 90 days:

1) Rinsewater from the electroplating operations (D003)

2) 1,1,1-Trichloroethane (F001)

3) Corrosive solution containing Cyanides (D002)

All wastes are stored on 55 gallon plastic drums.

After stored for less than 90 days these wastes are shipped off-site to: Chemical Waste Management, Inc. Emelle Facility, Alabama Highway 17, Mile Marker 163 Emelle, Alabama 35459.

Presently, the GE Vieques facility generates approximately six 55 gallons drums of D003 material and one fifty-five gallons drum of F001 material every three months.

Release Control:	5 inch curb on the west and north sides with a sufficient holding capacity of approximately 150 gallons. 16 ft. concrete block wall on the south and east sides. Floor contains a sealer coat to prevent the penetration of acids, moisture, grease and alkali into the concrete pores. Dike with trench ditch. A small trench filled with absorbent material serves as a release control in the immediate surrounding of the pallets/ rack area. Also three trenches are located in front of the storage area with the following dimensions (2'L x 1 1/2'W, 1' depth)
History of Release:	No release had ever been reported from this unit.

Unit Number:	**SWMU-2**
Unit Name:	Leachfield
Unit Description:	This subsurface leachfield is located in a grassed area (40' x 40') adjacent to the plant building (See Attachment 4 and photo 9a). The field was originally designed to have 6 lines on 7 foot spacings, starting 10 feet east of the plant and 30 feet in length. The plant's drainage system, with the exception of the sanitary system, was connected with the leachfield and solids, oils and liquids were allowed to enter the field. In the past, rinse water from a selective metal plating process (about 10 gallons/day) was discharged to a small buried concrete treatment/setting sump. After setting, the rinse water flowed to the leachfield. The leachfield was 2 foot deep. The leachfield was used as a subsoil disposition facility. The drain field was fed by a concrete tank with valves or process water was discharged on the ground surface by a line that leads to a standpipe at the eastern portion of the property.
Date of Start-up:	October 1971
Date of Closure:	1983
Waste Managed:	Discharge to the leachfield consisted of waste waters coming from the electroplating area. The waste waters contained: cyanide, silver, copper, zinc, and chromium.
Release Control:	None

History of Release: Several soil sampling had been performed on the leachfield area.

The following table summarizes current sampling data.

SAMPLING DATE	SUMMARY
March 25, 1981	Four soil test borings were drilled around the leachfield. Samples were collected at intervals of 4, 8 and 12 feet below land surface. The parameters analyzed were total CN and total Ag. The sampling results indicate that the Draft EPA recommended cleanup target levels as of November, 1987, for these parameters were not exceeded.
May 11, 12, 13, 1981	Eleven test borings were drilled on site that ranged from 3'6" to 20' depth. Parameters analyzed were total Cn and EP Toxicity. Sampling results indicate that for Cn, the Draft EPA recommended cleanup target level (20 mg/kg) was not exceeded. EP Toxicity parameters were not exceeded.
October, 1982	Three soil samples were collected from the bottom of three monitoring wells digged during 1981. The parameter analyzed was total Cn. Sampling results indicate that the Draft EPA recommended cleanup target level for CN (20 mg/kg) was not exceeded.
April, 1983	Soil samples from the wells were analyzed for additional parameters (CN, hexavalent Cr and trivalent Cr, Silver, copper, Lead, BOD, COD and Total Suspended Solids).

	Sampling results indicate that the Draft EPA recommended cleanup target level for Ag (4 mg/kg) was exceeded in two of the three wells sampled.
May, 1981	Several samples were analyzed from the electroplating rinsewaters. CN concentration was 13.6 mg/l.
April, 1983	Several samples were analyzed from the electroplating rinsewaters. The CN concentration ranged from 0.001 ppm to 5,375 ppm.
November 15, 16, 1983	Sampling was performed by Law Engineering. Soil samples were collected from eight locations near the leachfield. See Figure 2. Samples from two locations were collected directly in the leachfield. Samples were analyzed for EP Toxicity and Total Cyanide. Sampling results indicate that the Draft EPA recommended cleanup target level for Cn (20 mg/kg) was exceeded in one of the eight locations (VL-5, See Figure 2). This point is located in the overflow area along the eastern edge of GE at a depth of 2.0 feet below land surface.
November, 1983	Seven additional samples were collected to those of November 15-16, 1983 by Law Eng. Samples were analyzed for: total Cr, total Cu, Total Ag, total Zn, and total CN.

	Results of the sampling was as follows: total Cr 5-11 mg/kg total Cu 7.6-19 mg/kg total Ag 0.9-5.9 mg/kg total Zn 43-130 mg/kg total CN <0.1 mg/kg These results indicate that the Draft EPA recommended cleanup target level for various parameters (Cr, Ag) were exceeded. Also the results of the CN sampling are not representative since the time elapsed between sampling and analysis was one year.
September 6, 1985	Eleven soil samples were collected by Law Engineering. Figure 1 indicates the approximate location of these samples. Sample depth varied from 0.5-3 ft. Samples were analyzed for total CN, total Cr, total Cu, total Ag and total Zn. Sampling results was as follows: total Cr 24 mg/kg total Ag 22-26 mg/kg total Cu 14-72 mg/kg total Zn 30-60 mg/kg total CN <0.1-0.14 mg/kg
June 25, 1986	EQB performed a sampling. Samples were analyzed for CN and EP Toxicity Metals. Surface samples were taken at approximately 6" depth. The results indicated that samples did not exceed concentration limits for the parameters analyzed.

At that time EQB recommended additional sampling at deeper locations.

Three monitoring wells were installed in the vicinity of the leachfield on October 26, 1981 at a depth of 20 feet.

A Closure Plan for this leachfield unit was submitted on November 22, 1985.

This Closure Plan had not been reviewed by EQB.

The leachfield was clogged by solids on two occasions (June 1979 and October 1982).

The leachfield was excavated, cleaned out and replaced on these occasions.

Attachment #8 includes copy of all sampling data.

2. This leachfield was designed without considering the groundwater monitoring requirements for land treatment units as established on 264.91 - 264.100.

Unit Number:	**SWMU-3**
Unit Name:	Concrete Treatment/Settling Sump
Unit Description:	A concrete treatment/settling sump located on the northeast side of the main building next to the leaching field. For a location of this unit see attachment 4 and photo 9d. Dimensions of this sump are: 6 1/2'L x 5'W x 8"H. The sump was used for treatment and holding of wastewaters coming from the electroplating area prior to its discharge to the leach field unit. About 10 gallons/day of wastewaters from electroplating process were discharge to this sump. Check False The sump included valves that allowed the discharge to be drain to the field. This unit was not reported in the original Part A.
Date of Start-up:	1982
Date of Closure:	1984
Wastes Managed:	Rinsewaters coming from the electroplating area and containing cyanide, silver, copper, zinc and chromium Sump contents was treated with Sodium hypochlorite for CN oxidation.
Release Control:	None
History of Release:	Soil sampling (September 6, 1985) performed near this sump demonstrated concentrations above EPA recommended cleanup target levels for Cr and Ag. Concentrations of 24 mg/kg total Cr and 22-26 mg/kg total Ag were obtained. This constituents evidence of release to soil.

Unit Number:	**SWMU-4**
Unit Name:	Septic Tank System
Unit Description:	The septic tank system consist of three tanks and one trap located on the north side of the main building in the front yard. The dimensions of the tanks are the following: tank 1: 24'L x 8'W x 8'H tank 2: 10' Diameter (circular), 8'H tank 3: 10' Diameter (circular), 8'H trap: 3'L x 3'W x 8'H All tanks are concrete constructed. For a location of these tanks see attachment 4. This septic tank system has a total capacity of 10,000 gallons. 864 gallons/day of sanitary waters are discharged to this system. Facility is authorized with UIC/Permit No. 84-0223 to operate this septic tank system.
Date of Start-Up:	Tank 1: 1969 Tank 2: 1972 Tank 3: 1972
Date of Closure:	Still in Operation
Waste Managed:	This septic tank system receives sanitary waters from this facility. Prior to 1971 electroplating wastewaters were being discharged into the septic tank system. This wastewaters contained: CN, Ag, Cu, Zn and Cr. Facility representatives admitted this fact during VSI.
Release Control:	None
History of Release:	None

Unit Number:	**AOC-1**
Unit Name:	Raw Material Storage Area
Unit Description:	The raw material storage area is located immediately adjacent to the hazardous wastes container storage area. See attachment 5 and photo 9c. The raw material storage area is separated from the hazardous wastes container storage area by means of a 5 inch high concrete curb. Approximately 650 ft^2 are used for raw material storage. Dimensions of the area are: 20.5'L x 27.5'W. The floor consist of a 6 inch thick concrete slab on which a sealer coat has been applied to the surface as an inpervious barrier. Run on and run off is controlled by concrete curbs and walls and by the sheet metal roof. The roof prevents rainfall from falling directly on the area. Raw material are stored on a drum rack area.
Date of Start-up:	April 1978
Date of Closure:	In operation
Waste Managed:	This area stores the following raw materials: Oil thinner 1,1,1-Trichloroethane Diesel Scrab Metal Coloidal Silica Paint

Release Control:	5 inch curb on the east side with a sufficient holding capacity. 16 ft concrete block wall on the west and south sides. Floor contains a sealer coat.
History of Release:	No release had ever been reported from this unit.

Unit Number:	**AOC-2**
Unit Name:	Degreaser Tank
Unit Description:	This tank is located on the Machine Shop Area. After prepared metal parts are transferred to this tank for its cleaning and oil removal. This degreaser tank is designed to remove oils and greases from the smallest parts. Parts are immersed in the boiling liquid compartment to remove oil, grease and chips and then transferred to the concentrated vapors in the second tank. The tank is of welded steel construction, heavily reinforced, and zinc coated on the inside. A large cleanout door is provided in each compartment to facilitate periodic cleaning of the solvent sumps. The machines are self distilling. Distillate piping is arranged for gravity circulation of clean solvent and to maintain the proper liquid levels automatically at all times. Dimensions of the tank are: 22"L x 16"W x 6"H. Tank sides are 11 gauge and tank bottom is 8 Gauge. 660 gals/year of 1,1,1,-trichloroethane are used. See Attachment #7.
Date of Start Up:	1976
Date of Closure:	Still In Operation
Waste Managed:	The degreaser tank generated used 1,1,1 Trichloroethane. Approximately one 55 gallons drum is generated every three months.
Release Control:	Sump that collects used solvent. Condenser with stack 20 ft. high.
History of Release:	No release had ever been reported from this area.

Unit Number:	**AOC-3**
Unit Name:	Manufacturing Process Area
Unit Description:	The manufacturing process area consists of 30,000 ft^2. The area includes different devices for air emission control. Two electroplating machines are located in the area. By means of the application of electric current the Silver contained in the plating solution is deposited on the copper part of the fuses.
Date of Start-up:	1959
Date of Closure:	Still In Operation
Waste Managed:	This is a manufacturing process area. The area <u>generates</u> the following hazardous wastes: 1) 1,1,1 Trichloroethane 2) Rinsewaters containing cyanide and traces of Ag, Cu, Zn, Cr. 3) Acids (8% HCl) This area is a potential source of the following air pollutants: Hydrocarbons Trichloroethane (traces) Leads (traces) Toluene Cyanide 2-Ethoxyethanol (traces)

Release Control: The following table summarizes the air control equipment existing in the area:

Manufacturing Process	Air Control Equipment
Paint Booth	3 Roof Vents Stack 20 ft.H
Degreasing	Condenser Stack 20 ft.H
Cap Soldering	2 Roof Vents Stack 20 ft.H
Relay Assembly	Stack 89 ft.H
Electroplating	2 Roof Vents 67 ft.H
Preparation of Isothermal Material	2 Hood Exhaust Vents 8,9 ft.H
Curing Oven	3 Exhaust Vents, 67, 69 82 ft.H

VI. SUMMARY OF CONCLUSIONS AND FURTHER ACTION

SWMU-1 Hazardous Wastes Container Storage Area

A release potential with respect to soil exists in this unit.

No wells have been surveyed within 4,000 ft of the plant by the US Geological Survey.

However, due to the presence of an adequate release control (5 inch curb in the west and north sides with a sufficient holding capacity, 16 ft concrete block wall on the south and east sides, floor with sealer coat, 3 trenches 2'L x 1 1/2'W x 1'Depth, trench filled with absorbent material, dike with trench ditch).

During VSI some small yellowish spots were observed on the concrete floor located in front of this unit.

During an inspection performed by EQB personnel on December 9, 1981 it was found that storage drums were leaking and corroded. However, after subsequent inspections these deficiencies were corrected.

No release had ever been reported from this unit as revealed by EQB records.

A Closure Plan for this unit was submitted on October 21, 1987.

This unit does not represent a release potential with respect to surface water, air or subsurface gas.

No further action is recommended for this unit.

SWMU-2 Leachfield

This unit was used as a subsoil disposition facility. It is inactive since 1983.

Direct evidence of release exists which indicate that soils in the leachfield area are potentially contaminated with various pollutants.

A review of the soil sampling data presented by this facility in a Closure Plan submitted for this unit reveals that the following parameters exceeded the Draft Recommended Cleanup Target Levels:

Sampling Date	Parameter	Sample Depth (ft)	Concentration mg/kg	EPA Cleanup Target level mg/kg
April 1983	Silver	20	10.97	4
April 1983	Silver	20	4.96	4
Nov. 1983	Cyanide	2.0-2.5	83	20
Nov. 1983	Chromium	1.3-4.0	5-11	.6
Nov. 1983	Silver	1.3-4.0	0.9-5.9	4
Sept. 1985	Chromium	0.5-1.0	24	6
Sept. 1985	Silver	0.5-1.0	22-26	4

This data indicates that a release to soil has in fact occurred and that some Draft EPA Recommended Cleanup Target Levels had been exceeded.

Therefore, it is suggested that additional sampling should be conducted to establish the nature and extent of the release for the following parameters:

Total Cyanide
Total Chromium (Hexavalent/Trivalent)
Total Silver
Copper Cyanide
Zinc Cyanide

Since most of the soil sampling performed up to this date had been limited to surface layers it is recommended to perform soil sampling at deeper layers on this area.

No evidence of release was observed during the VSI. All area is covered with vegetation. See photo a, b. No release potential exists with respect to surface water, air or subsurface gas.

An RFI is recommended for this unit.

SWMU-3 Concrete Treatment/Setting Sump

Evidence of release exits which indicate that soils adjacent to this unit are potentially contaminated with metals (Chromium, Silver).

Concentrations of 24 mg/kg total Cr, and 22-26 mg/kg total Ag were obtained in soils adjacent to this unit on a sampling performed during September 6, 1985. These concentrations are above Draft EPA recommended cleanup target levels for Chromium and Silver.

The unit was closed on 1984.

This unit functioned without release control.

This unit was considered part of the leachfield unit (SWMU-2). No release potential exits with respect to surface water, air or subsurface gas.

The same recommendations for SWMU-2 applies to this unit.

An RFI is recommended.

SWMU-4 Septic Tank System

A high release potential with respect to soil/groundwater exists on this unit.

Prior to 1971 electroplating wastewaters were being discharged into this septic tank system without authorization.

The preliminary review revealed that no soil sampling had ever been performed to detect possible contaminants associated with this unit.

No evidence of release was observed during VSI.

A sampling strategy should be developed to investigate it either a release to soil has in fact occurred and to establish the nature and extent of the release.

At present time (and since 1971) this unit treats exclusively sanitary waters.

This unit does not represent a release potential with respect to surface water, air or subsurface gas.

No surface water bodies are located near this facility.

AOC-1 Raw Material Storage Area

This area represents a release potential with respect to soil/groundwater.

However due to the presence of an adequate release control (5 inch curb, 16 ft. concrete block, floor with seal coat), the potential for a release from this unit to the environment can be considered low.

No release had ever been reported from this area and no evidence of release was observed during VSI.

This unit does not represent a release potential with respect to surface water, air or subsurface gas.

No further action is recommended for this area.

AOC-2 Degreaser Tank

This area represents a release potential with respect to soil/groundwater and air.

Since this tank includes an adequate release control (sump, condenser) the release potential to the environment can be considered low.

No release had ever been reported from this area and no evidence of release was observed during VSI.

This area does not represent a release potential with respect to surface water or subsurface gas.

No surface water bodies are located near this facility.

No subsurface gas is likely to be generated at this facility. This area do not have biodegradable wastes that may decompose generating organic gases like methane.

No further action is recommended.

AOC-3 Manufacturing Process Area

This area represents a release potential with respect to air.

The area is a potential source of the following air pollutants:

Hydrocarbons
Trichloroethane (traces)
Lead (traces)
Toluene
Cyanide
2-Ethoxyethane (traces)

The area includes the following air control equipment which minimizes the release potential to air:

Roof Vents
Condenser
Hood Exhaust Vents
Exhaust Vents

Facility is authorized by EQB to operate the above captioned control equipment with Air Permit PFE-88-008161-II.

EQB records reveals no violations to the requirements of this permit.

This area does not represent a release potential with respect to surface water, soil/groundwater or subsurface gas.

No further action is recommended for this area.

Four SWMUs and three AOCs have been identified on this RFA. For two units (SWMU-2, SWMU-3) direct evidence of release to soil is available. An RFI is recommended for both units.

For SWMU-4 a high release potential with respect to soil had been determined. A sampling visit to this unit is recommended to establish the nature and extent of the release.

For SWMU-1, AOC-1, AOC-2, and AOC-3 no further action is recommended.

The following table summarizes the release potential of the various SWMUs and AOCs identified on this report.

SUMMARY OF RELEASE POTENTIAL OF SWMU'S AND AOC'S

UNIT	SOIL/GROUNDWATER	SURFACE WATER	AIR	SUBSURFACE GAS	CONCLUSIONS
SWMU-1	Low Release Potential	None	None	None	No further action
SWMU-2	Evidence of Release	None	None	None	RFI is recommended
SWMU-3	Evidence of Release	None	None	None	RFI is recommended
SWMU-4	High Release Potential	None	None	None	Sampling Visit
AOC-1	Low Release Potential	None	None	None	No further action
AOC-2	Low Release Potential	None	Low Release Potential	None	No further action
AOC-3	None	None	Low Release Potential	None	No further action

HC/eas

VII. REFERENCES

1) Part A submitted on October 31, 1980

2) Full RCRA TSD Inspection Report December 9, 1981

3) Full RCRA TSD Inspection Report September 3, 1982

4) Full RCRA TSD Inspection Report September 11, 1985

5) Full RCRA TSD Inspection Report June 4, 1986

6) Full RCRA TSD Inspection Report September 2, 1987

7) Closure Plan submitted on October 21, 1987 for the Hazardous Waste Containers Storage Area

8) Closure Plan submitted on November 22, 1985 for the Leachfield Unit

9) Soil Survey of Humacao Area of Eastern PR

HC/eas

VIII. ATTACHMENTS

1) General Location Map

2) Specific Location Map

3) Facility Plant Layout

4) Flow Diagram of Drain System to Septic Tanks and Leach Field

5) Hazardous Wastes Storage Area Diagram

6) Part A

7) Degreaser Tank Information/Diagram

8) Soil Sampling Data/Leachfield Unit

9) Photos

   a) Leachfield

   b) Leachfield

   c) Raw Material Storage Area

   d) Concrete Treatment/Settling Sump

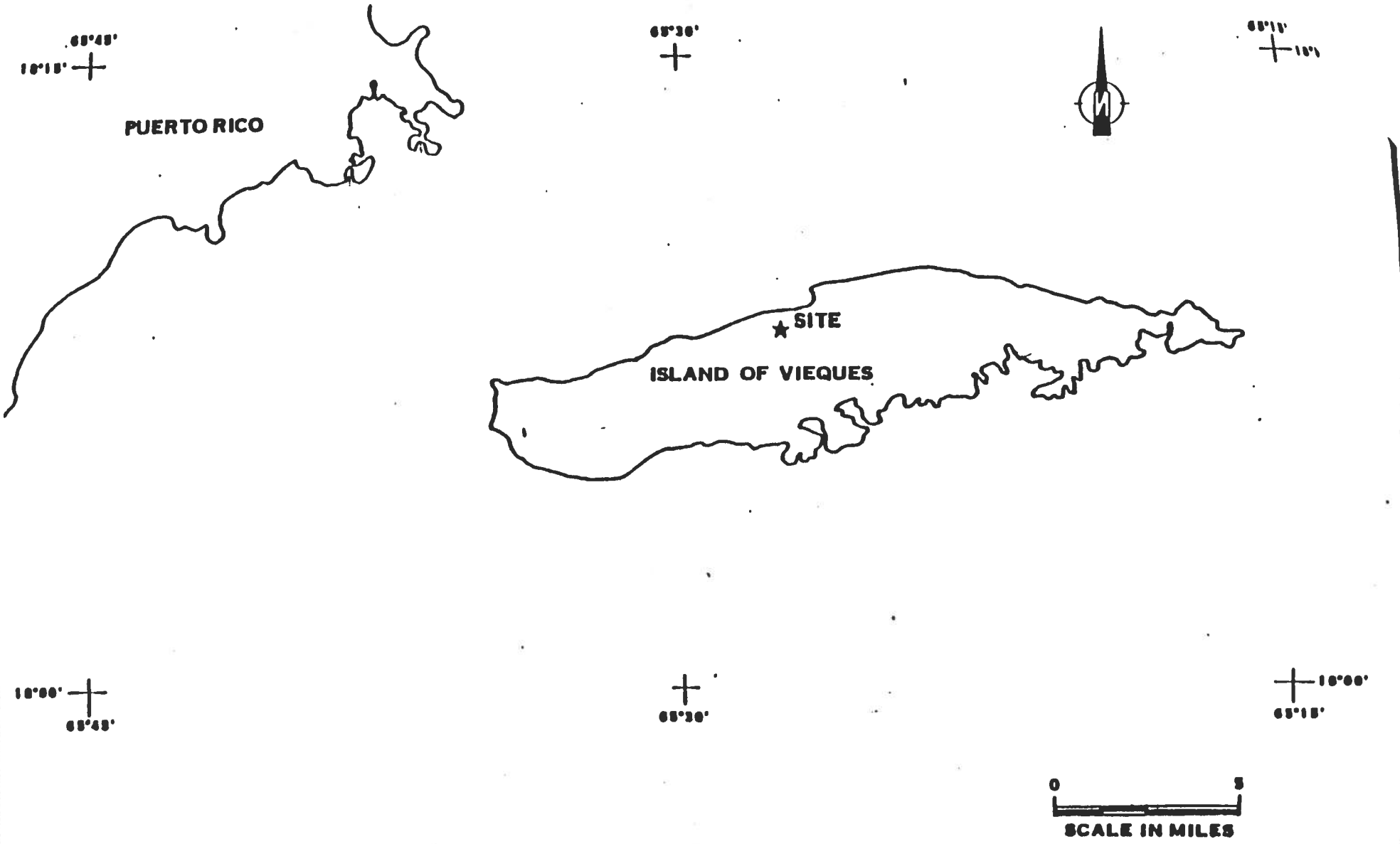
   e) Hazardous Wastes Container Storage Area

   f) West side of facility

) Closure Plan for the Leachfield Unit

. eas

General Location Map



GENERAL ELECTRIC

VIEQUES, PUERTO RICO

CARIBE DIVISION
54-56 BOLIVIA STREET
HATO REY, PUERTO RICO 00917

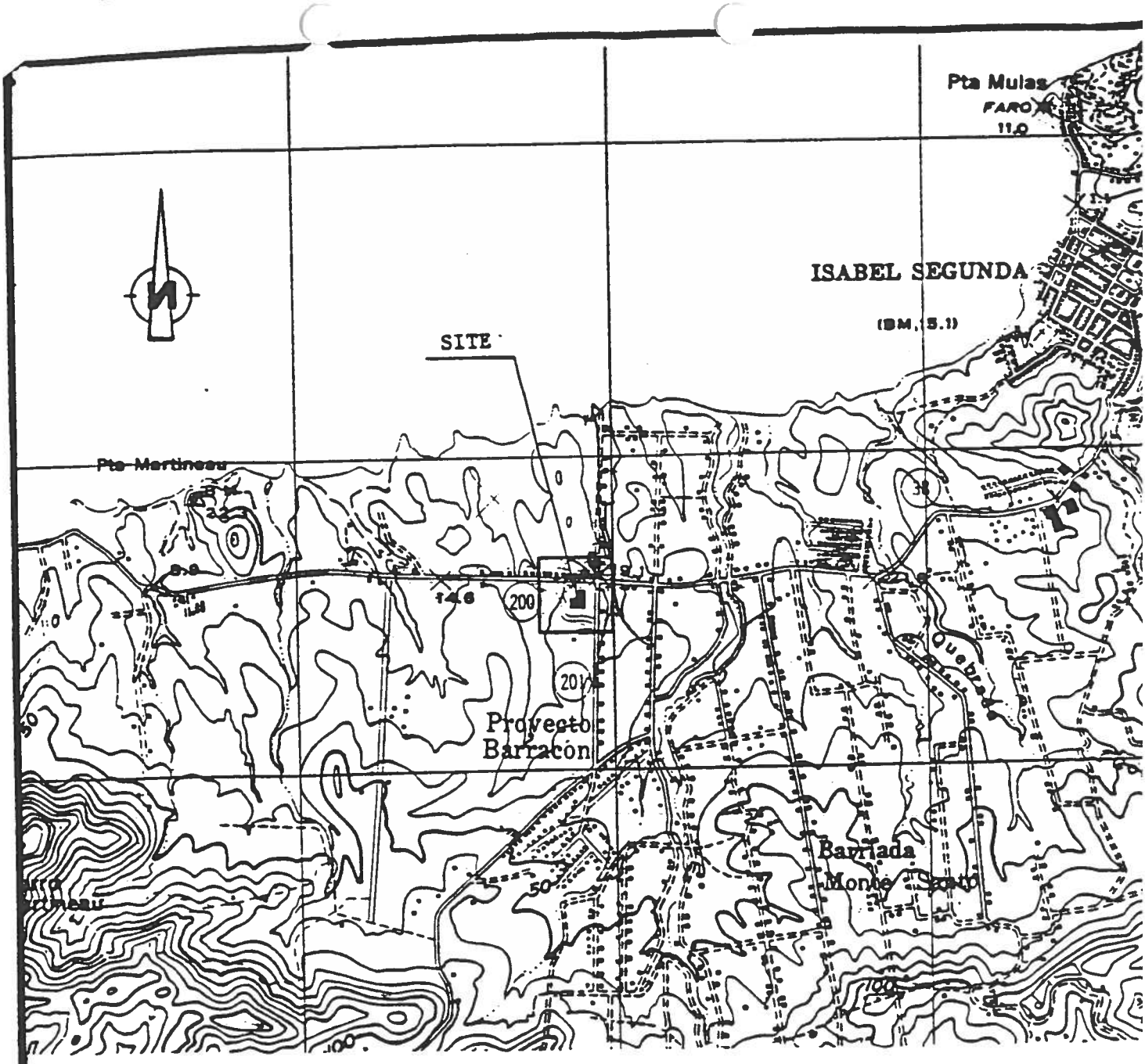
LAW ENVIRONMENTAL

GENERAL LOCATION MAP

PROJECT LC.7465

FIGURE 1

Specific Location Map



SCALE 1:30000

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 5 0 1 KILOMETER

CONTOUR INTERVAL 10 METERS
DASHED LINES INDICATE 1 METER CONTOURS
DATUM IS MEAN SEA LEVEL

REFERENCE: U.S.G.S. VIEQUES QUADRANGLE

GENERAL ELECTRIC

VIEQUES, PUERTO RICO

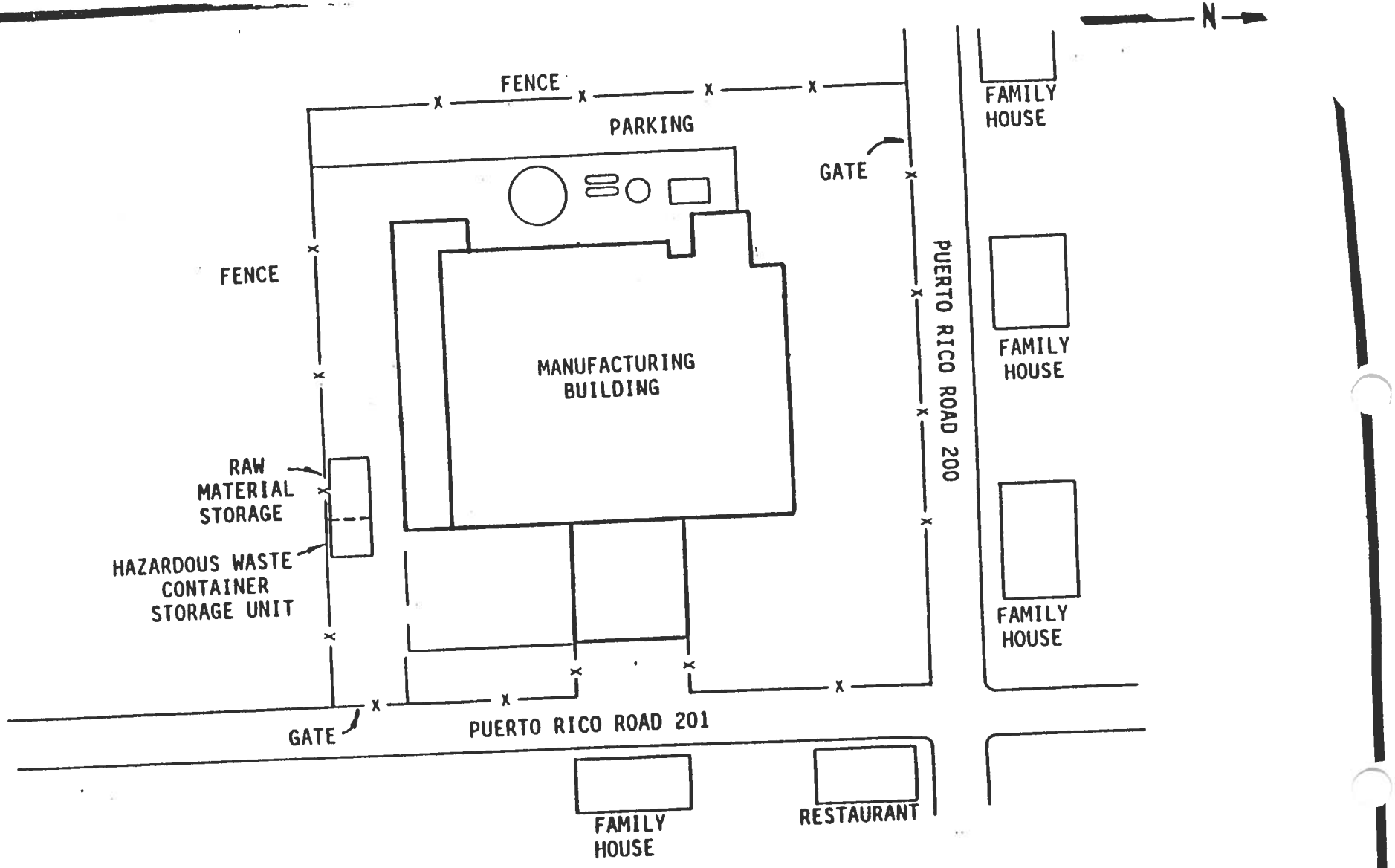
CARIBE DIVISION
54-56 BOLIVIA STREET
HATO REY, PUERTO RICO 00917

LAW ENVIRONMENTAL

SPECIFIC LOCATION MAP

PROJECT LC. 7465.00 FIGURE

Facility Plant Layout



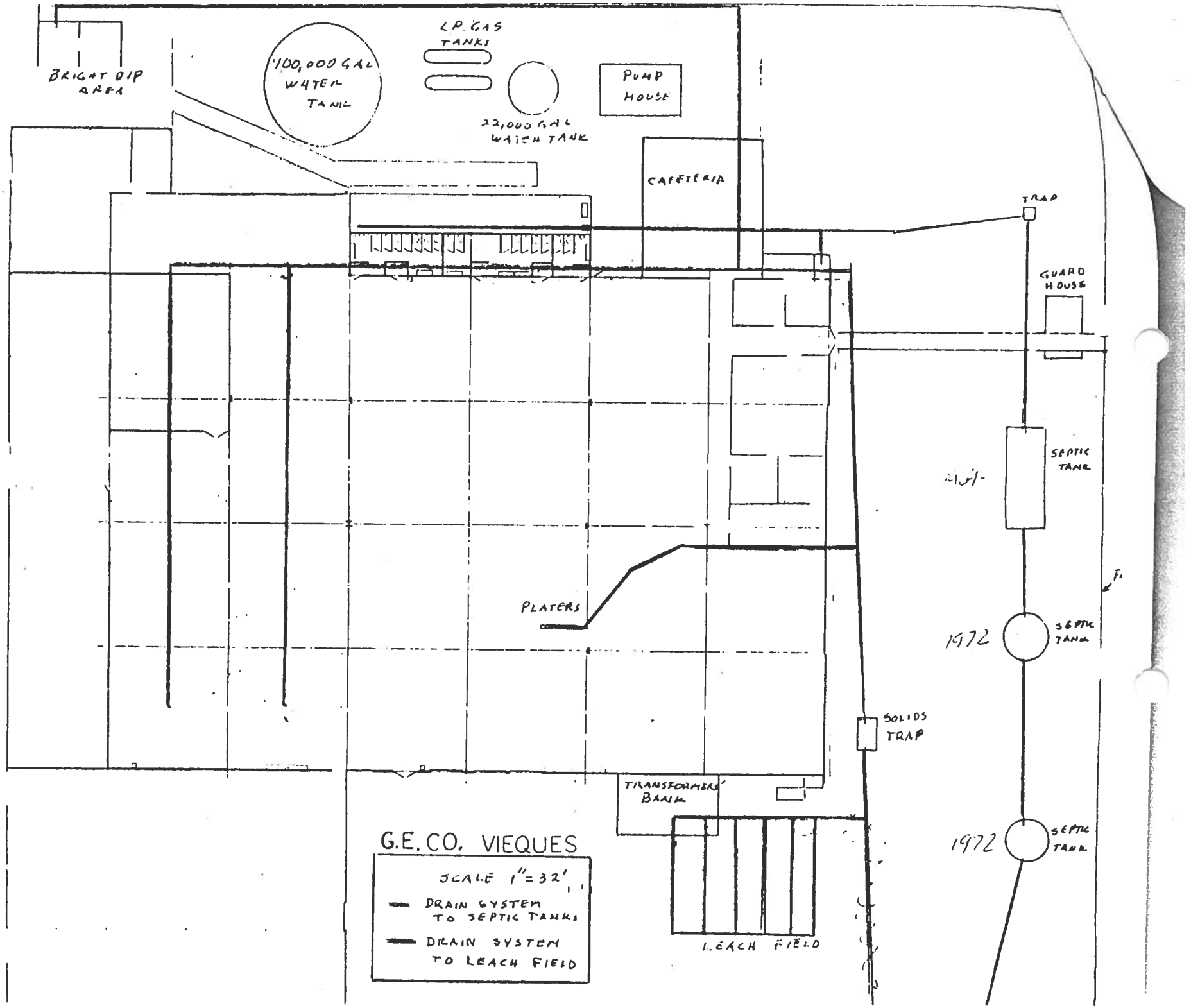
GENERAL ELECTRIC
VIEQUES, PUERTO RICO

LAW ENVIRONMENTAL
CARIBE DIVISION
54-56 BOLIVIA STREET
HATO REY, PUERTO RICO

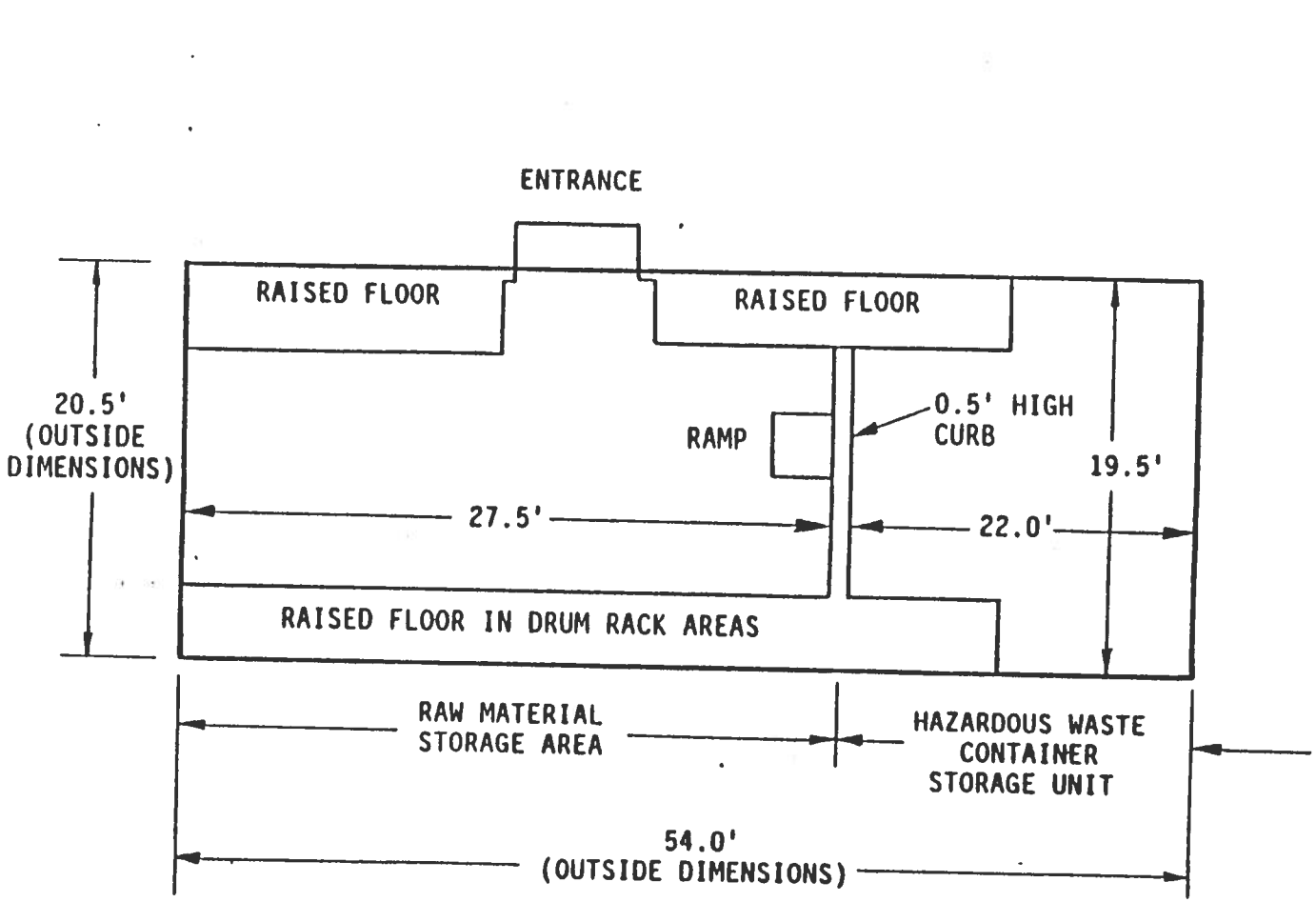
SITE AND LAND USE PLAN

PROJECT NO. LC7465 FIGURE 3

Flow Diagram of Drain System to Septic Tanks and Leach Field


BRIGHT DIP AREA
100,000 GAL WATER TANK
L.P. GAS TANKS
22,000 GAL WATER TANK
PUMP HOUSE
CAFETERIA
TRAP
GUARD HOUSE
SEPTIC TANK
1972
SEPTIC TANK
1972
SEPTIC TANK
PLATERS
SOLIDS TRAP
TRANSFORMERS' BANK
LEACH FIELD
G.E. CO. VIEQUES
SCALE 1"=32'
DRAIN SYSTEM TO SEPTIC TANKS
DRAIN SYSTEM TO LEACH FIELD

Hazardous Wastes Storage Area Diagram



NOT TO SCALE

GENERAL ELECTRIC
VIEQUES, PUERTO RICO

LAW ENVIRONMENTAL
CARIBE DIVISION
54-56 BOLIVIA STREET
HATO REY, PUERTO RICO

CONTAINER STORAGE UNIT

PROJECT NO. LC-7465 FIGURE 4

Part A

ONMENTAL PROTECTION AGENCY

ENERAL INFORMATION

Consolidated Permits Program

(Read the "General Instructions" before starting.)

EPA I.D. NUMBER

F PRD006925827

GENERAL INSTRUCTIONS

If a preprinted label has been pro... it in the designated space. Review the inf... ation carefully; if any of it is incorrect, ... through it and enter the correct data in ... appropriate fill-in area below. Also, if any ... the preprinted data is absent (the area to t... left of the label space lists the inform... that should appear), please provide it in ... proper fill-in area(s) below. If the label ... complete and correct, you need not ... Items I, III, V, and VI (except VI-B ... must be completed regardless). Complete ... items if no label has been provided. Refer ... the instructions for detailed item d... tions and for the legal authorizations ... which this data is collected.

I. FACILITY NAME

GENERAL ELECTRIC COMPANY
LA BRISA NO.5 SABANA LLANA

II. FACILITY MAILING ADDRESS

RIO PIEDRAS, PR 00924

ROUTE 993 BARRIO MARTINO
ISABEL SEGUNDA VIEQUES, PR 00765

III. FACILITY LOCATION

IV. POLLUTANT CHARACTERISTICS

INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to ... questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third colu... If the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activ... is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of bold-faced terms.

SPECIFIC QUESTIONS	MARK "X" YES	MARK "X" NO	MARK "X" FORM ATTACHED
A. Is this facility a publicly owned treatment works which results in a discharge to waters of the U.S.? (FORM 2A)		X	
B. Does or will this facility (either existing or proposed) include a concentrated animal feeding operation or aquatic animal production facility which results in a discharge to waters of the U.S.? (FORM 2B)		X	
C. Is this a facility which currently results in discharges to waters of the U.S. other than those described in A or B above? (FORM 2C)		X	
D. Is this a proposed facility (other than those described in A or B above) which will result in a discharge to waters of the U.S.? (FORM 2D)			X
E. Does or will this facility treat, store, or dispose of hazardous wastes? (FORM 3)	X	X	
F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)			X
G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)		X	
H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in-situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)			X
I. Is this facility a proposed stationary source which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		X	
J. Is this facility a proposed stationary source which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)			X

V. FACILITY CONTACT

A. NAME & TITLE (last, first, & title)

1 GARCIA RAFAEL PRESIDENT MGR

B. PHONE (area code & no.)

800 765 0812

VII. FACILITY MAILING ADDRESS

A. STREET OR P.O. BOX

2 LA PRISA NO5 SABANA LLANA

B. CITY OR TOWN

3 RIO PIEDRAS

C. STATE

PR

D. ZIP CODE

00924

VIII. FACILITY LOCATION

A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER

ROUTE 993 BARRIO MARTINO

B. COUNTY NAME

C. CITY OR TOWN

ISABEL SEGUNDA VIEQUES

D. STATE

PR

E. ZIP CODE

00765

F. COUNTY CODE (if known)

IX. FACILITY OWNER

A. NAME

1 GENERAL ELECTRIC COMPANY

...with ELITE type (12 characters/inch) in the unshaded areas only.

Form Approved ... B No. 158-S79015
GSA No. 0245-E... OT

U.S. ENVIRO... AL PROTECTION AGENCY

NOTIFICATION OF HAZARDOUS WASTE ACTIVITY

INSTRUCTIONS: If you received a preprinted label, affix it in the space at left. If any of the information on the label is incorrect, draw a line through it and supply the correct information in the appropriate section below. If the label is complete and correct, leave Items I, II, and III below blank. If you did not receive a preprinted label, complete all items. "Installation" means a single site where hazardous waste is generated, treated, stored and/or disposed of, or a transporter's principal place of business. Please refer to the INSTRUCTIONS FOR FILING NOTIFICATION before completing this form. The information requested herein is required by law (Section 3010 of the Resource Conservation and Recovery Act).

INSTALLATION'S EPA I.D. NO.

NAME OF INSTALLATION

INSTALLATION MAILING ADDRESS

LOCATION OF INSTALLATION

PLEASE PLACE LABEL IN THIS SPACE

FOR OFFICIAL USE ONLY

COMMENTS

INSTALLATION'S EPA I.D. NUMBER | APPROVED | DATE RECEIVED

P R D 0 0 0 6 9 2 5 8 2

I. NAME OF INSTALLATION

GENERAL ELECTRIC COMPANY

II. INSTALLATION MAILING ADDRESS

STREET OR P.O. BOX

LA BRISA NO. 5 SABANA LLANA

CITY OR TOWN | ST. | ZIP CODE

RIO PIEDRAS | PR | 00924

III. LOCATION OF INSTALLATION

STREET OR ROUTE NUMBER

ROUTE 993 BARRIO MARTINO

CITY OR TOWN | ST. | ZIP CODE

ISABEL SEGUNDA VIEQUES | PR | 00765

IV. INSTALLATION CONTACT

NAME AND TITLE (last, first, & job title) | PHONE NO. (area code & no.)

RAFAEL ROSARIO SAFETY ENGINEER | 809-75-0372

V. OWNERSHIP

A. NAME OF INSTALLATION'S LEGAL OWNER

PUERTO RICO INDUSTRIAL DEVELOPMENT CORP

B. TYPE OF OWNERSHIP (enter the appropriate letter into box)

F = FEDERAL
M = NON-FEDERAL

M

VI. TYPE OF HAZARDOUS WASTE ACTIVITY (enter "X" in the appropriate box(es))

[X] A. GENERATION
[X] B. TRANSPORTATION (complete item VII)
[X] C. TREAT/STORE/DISPOSE
[ ] D. UNDERGROUND INJECTION

VII. MODE OF TRANSPORTATION (transporters only — enter "X" in the appropriate box(es))

[ ] A. AIR
[ ] B. RAIL
[X] C. HIGHWAY
[X] D. WATER
[ ] E. OTHER (specify):

VIII. FIRST OR SUBSEQUENT NOTIFICATION

Mark "X" in the appropriate box to indicate whether this is your installation's first notification of hazardous waste activity or a subsequent notification. If this is not your first notification, enter your Installation's EPA I.D. Number in the space provided below.

A. FIRST

SWITCHGEAR & SWITCHBOARD

3610 (specify) ELECTRIC TRANSMISSION AND DISTRIBUTION EQUIP

C. THIRD

(specify)

D. FOURTH

(specify)

OPERATOR INFORMATION

A. NAME

GENERAL ELECTRIC COMPANY

B. Is the name listed in Item VIII-A also owner? YES [X]

C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box; if "Other", specify.)

F = FEDERAL, S = STATE, P = PRIVATE, M = PUBLIC (other than federal or state), O = OTHER (specify)

P (specify)

D. PHONE (area code & no.)

A 809 765 0812

E. STREET OR P.O. BOX

CARR. 993 - BARRIO MARTINO

F. CITY OR TOWN

ISABEL SEGUNDA VIEQUES

G. STATE

PR

H. ZIP CODE

00765

IX. INDIAN LAND

Is the facility located on Indian lands? YES [ ] NO [X]

X. EXISTING ENVIRONMENTAL PERMITS

A. NPDES (Discharges to Surface Water)

B. PSD (Air Emissions from Proposed Sources)

C. RCRA (Hazardous Waste)

D. UIC (Underground Injection of Fluids)

E. OTHER (specify)

PFE880081611 (specify) E.O.B. AIR EMISSION PERMIT

F. OTHER (specify)

(specify)

XI. MAP (Topographic map extending one mile beyond property boundaries. The map must be attached to this application.) You must attach a topographic map of the area extending at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in the map area. See instructions for precise requirements. See exhibit I

XII. NATURE OF BUSINESS (provide a brief description)

General Electric Company--is a manufacturing operation of panel switches, auxiliary relays; terminal boards, indicating lamps, test blocks, transformer fuses hi-power fuses, and current limiting fuses.

XIII. CERTIFICATION (See instructions)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the 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. NAME & OFFICIAL TITLE (type or print)

A. Urquhart
Vice President & Group Executive

B. SIGNATURE

John N. Urquhart

C. DATE SIGNED

10/31/80

FOR OFFICIAL USE ONLY

OF HAZARDOUS WAST (Continued from front)

ES WASTES FROM NON-SPECIFIC SOURCES. Enter the four-digit number from 40 CFR Part 261.31 for each listed hazardous ... non-specific sources your installation handles. Use additional sheets if necessary.

1	2	3	4	5	6
0 0 1	F 0 0 4				
7	8	9	10	11	12

OUS WASTES FROM SPECIFIC SOURCES. Enter the four-digit number from 40 CFR Part 261.32 for each listed hazardous waste from industrial sources your installation handles. Use additional sheets if necessary.

13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30

RCIAL CHEMICAL PRODUCT HAZARDOUS WASTES. Enter the four-digit number from 40 CFR Part 261.33 for each chemical ... your installation handles which may be a hazardous waste. Use additional sheets if necessary.

31	32	33	34	35	36
P 0 3 0	P 0 9 8	P 1 0 4	U 1 3 3		
37	38	39	40	41	42
43	44	45	46	47	48

INFECTIOUS WASTES. Enter the four-digit number from 40 CFR Part 261.34 for each listed hazardous waste from hospitals, ... ls, medical and research laboratories your installation handles. Use additional sheets if necessary.

49	50	51	52	53	54

ACTERISTICS OF NON-LISTED HAZARDOUS WASTES. Mark "X" in the boxes corresponding to the characteristics of non-listed ... ous wastes your installation handles. *(See 40 CFR Parts 261.21 – 261.24.)*

[X] 1. IGNITABLE (D001) [X] 2. CORROSIVE (D002) [ ] 3. REACTIVE (D003) [ ] 4. TOXIC (D004)

IFICATION

y under penalty of law that I have ... sonally examined and am familiar with the information submitted in this ... and all d documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, e that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for sub- false information, including the possibility of fine and imprisonment.

NAME & OFFICIAL TITLE (type or print)	DATE SIGNED
Rafael García - President	9/7/88.

8700-12 (7-80) REVERSE

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY

HAZARDOUS WASTE PERMIT APPLICATION

Consolidated Permits Program

(This information is required under Section 3005 of RCRA.)

EPA I.D. NUMBER

F	P	R	D	C	C	6	2	5	2	1	1

OFFICIAL USE ONLY

APPLICATION APPROVED	DATE RECEIVED (yr, mo, & day)

COMMENTS

I. FIRST OR REVISED APPLICATION

Enter an "X" in the appropriate box in A or B below *(mark one box only)* to indicate whether this is the first application you are submitting for your facility or a revised application. If this is your first application and you already know your facility's EPA I.D. Number, or if this is a revised application, enter your facility's EPA I.D. Number in Item I above.

A. FIRST APPLICATION *(Place an "X" in box and provide the appropriate date)*

☒ 1. EXISTING FACILITY *(See instructions for definition of "existing" facility. Complete item below.)*

FOR EXISTING FACILITIES, PROVIDE THE DATE (yr., mo., & day) OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED *(Use the boxes to the left)*

YR.	MO.	DAY
19	16	15

☐ 2. NEW FACILITY *(Complete item below.)*

FOR NEW FACILITIES PROVIDE THE DATE (yr., mo., & day) OPERATION BEGAN OR IS EXPECTED TO BEGIN

YR.	MO.	DAY

B. REVISED APPLICATION *(Place an "X" in box and complete Item I above)*

☐ 1. FACILITY HAS INTERIM STATUS

☐ 2. FACILITY HAS A RCRA PERMIT

II. PROCESSES — CODES AND DESIGN CAPACITIES

A. PROCESS CODE — Enter the code from the list of process codes below that best describes each process to be used at the facility. Two lines are provided for entering codes. If more lines are needed, enter the code(s) in the space provided on page 3. If a process will be used that is not included in the list of codes below, then describe the process *(including its design capacity)* in the space provided on page 3 (Item III-C).

B. PROCESS DESIGN CAPACITY — For each code entered in column A enter the capacity of the process.

1. AMOUNT — Enter the amount.
2. UNIT OF MEASURE — For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Storage:		
CONTAINER (barrel, drum, etc.)	S01	GALLONS OR LITERS
TANK	S02	GALLONS OR LITERS
WASTE PILE	S03	CUBIC YARDS OR CUBIC METERS
SURFACE IMPOUNDMENT	S04	GALLONS OR LITERS
Disposal:		
INJECTION WELL	D79	GALLONS OR LITERS
LANDFILL	D80	ACRE-FEET *(the volume that would cover one acre to a depth of one foot)* OR HECTARE-METER
LAND APPLICATION	D81	ACRES OR HECTARES
OCEAN DISPOSAL	D82	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	D83	GALLONS OR LITERS
Treatment:		
TANK	T01	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	T02	GALLONS PER DAY OR LITERS PER DAY
INCINERATOR	T03	TONS PER HOUR OR METRIC TONS PER HOUR OR GALLONS PER HOUR OR LITERS PER HOUR
OTHER *(specify)*	T04	GALLONS PER DAY OR LITERS PER DAY

(Include physical, chemical, thermal, biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided. Item III-C.)

UNIT OF MEASURE	CODE
GALLONS	G
LITERS	L
CUBIC YARDS	Y
CUBIC METERS	C
GALLONS PER DAY	U
LITERS PER DAY	V
TONS PER HOUR	D
METRIC TONS PER HOUR	W
GALLONS PER HOUR	E
LITERS PER HOUR	H
ACRE-FEET	A
HECTARE-METER	F
ACRES	B
HECTARES	G

EXAMPLE FOR COMPLETING ITEM II *(shown in line numbers X-1 and X-2 below)*: A facility has two storage tanks, one tank can hold 200 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.

DUP

LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify)	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY
X-1	S02	600	G	
X-2	T03	20	E	
1	S01	660	G	
	S02	400	G	
3				
4				

LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY
5				
6				
7				
8				
9				
10				

CONTINUE ON PAGE 2

CAPACITY.

For non-listed hazardous wastes: For each characteristic or toxic contaminant entered in column A, select the code(s) from the list of process codes contained in Item III to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed hazardous wastes that possess that characteristic or toxic contaminant.

Note: Four spaces are provided for entering process codes. If more are needed: (1) Enter the first three as described above; (2) Enter "000" in the extreme right box of Item IV-D(1); and (3) Enter in the space provided on page 4, the line number and the additional code(s).

2. PROCESS DESCRIPTION: If a code is not listed for a process that will be used, describe the process in the space provided on the form.

NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER — Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

1. Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B, C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste. In column D(2) on that line enter ...
2. In column A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In column D(2) on that line enter "included with above" and make no other entries on that line.
3. Repeat step 2 for each other EPA Hazardous Waste Number that can be used to describe the hazardous waste.

EXAMPLE FOR COMPLETING ITEM IV (shown in line numbers X-1, X-2, X-3, and X-4 below) — A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

LINE NO.	A. EPA HAZARD. WASTE NO. (enter code)				B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)				2. PROCESS DESCRIPTION (if a code is not entered in D(1))
X-1	K	0	5	4	900	P	T 0 3	D 8 0			
X-2	D	0	0	2	400	P	T 0 3	D 8 0			
X-3	D	0	0	1	100	P	T 0 3	D 8 0			
X-4	D	0	0	2							included with above

CONTINUE ON PAGE 3

... for completing if you have more than 25 wastes to list ... Approved O.M.B. No. 158-S80004

FOR OFFICIAL USE ONLY

... NUMBER (enter from page 1)

D C C C C 7 2 5 C L | 1

W | DUP | 2 | DUP

...CRIPTION OF HAZARDOUS WASTES (continued)

A. EPA HAZARD. WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)				D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1))
0 0 1	3,000	P	S 0 1				
1 0 4	50	P	S 0 1				
0 9 3							INCLUDED ABOVE
1 3 3	10	P	S 0 1				
0 0 1	100	P	S 0 1				
0 0 2	200	P	S 0 1				
0 0 3	300	P	S 0 1				
0 0 3	200	P	D 8 3				
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							

CONTINUE ON REVERSE

EPA I.D. NO. (enter from page 1)

P	R	D	0	0	6	2	5	8	2			

FACILITY DRAWING

All existing facilities must include in the space provided on page 5 a scale drawing of the facility (see instructions for more detail).

PHOTOGRAPHS

All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures, disposal areas, and sites of future storage, treatment or disposal areas (see instructions for more detail).

FACILITY GEOGRAPHIC LOCATION

LATITUDE (degrees, minutes, & seconds)

1	8	0	2	3	5	0

LONGITUDE (degrees, minutes, & seconds)

6	5	2	7	2	0

III. FACILITY OWNER

A. If the facility owner is also the facility operator listed in Section VIII on Form 1, "General Information", place an "X" in the box to the left and skip to Section IX below.

B. If the facility owner is not the facility operator as listed in Section VIII on Form 1, complete the following items:

1. NAME OF FACILITY'S LEGAL OWNER

PUERTO RICO INDUSTRIAL DEVELOPMENT CORPORATION

2. PHONE NO. (area code & no.)

8	0	9	-	7	6	7	-	4		

3. STREET OR P.O. BOX

PONCE DE LEON AVE. P.O. 268

4. CITY OR TOWN

HATO REY

5. ST.

PR

6. ZIP CODE

0	0	9	2	0

OWNER 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.

A. NAME (print or type)
ANGEL J. COLON
EXECUTIVE VICE PRESIDENT

B. SIGNATURE

C. DATE SIGNED
11/18/80

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, 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. NAME (print or type)
J. A. Urquhart
Sr. Vice President & Group Exec.

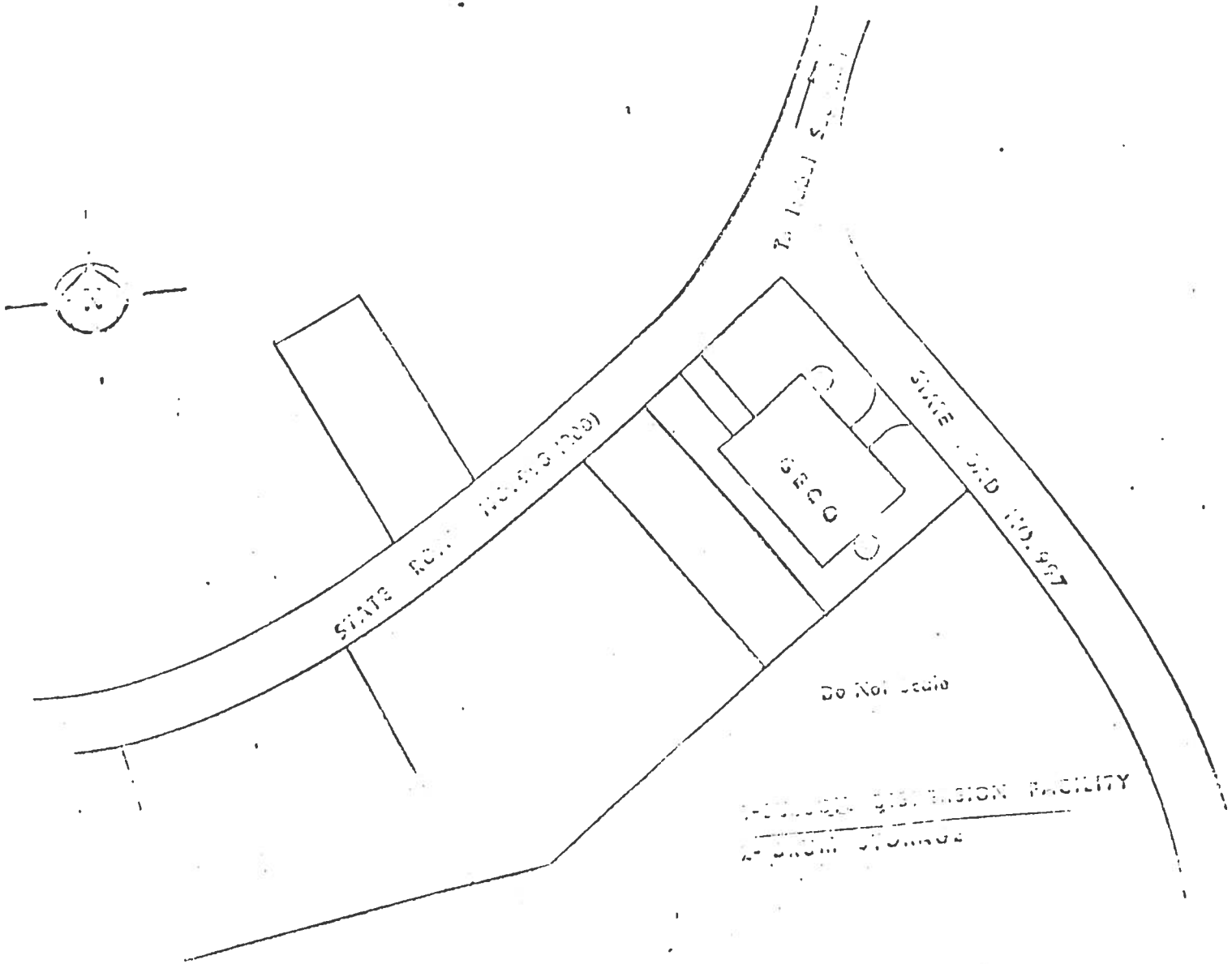
B. SIGNATURE

C. DATE SIGNED
10/31/80

V - See Exhibit II

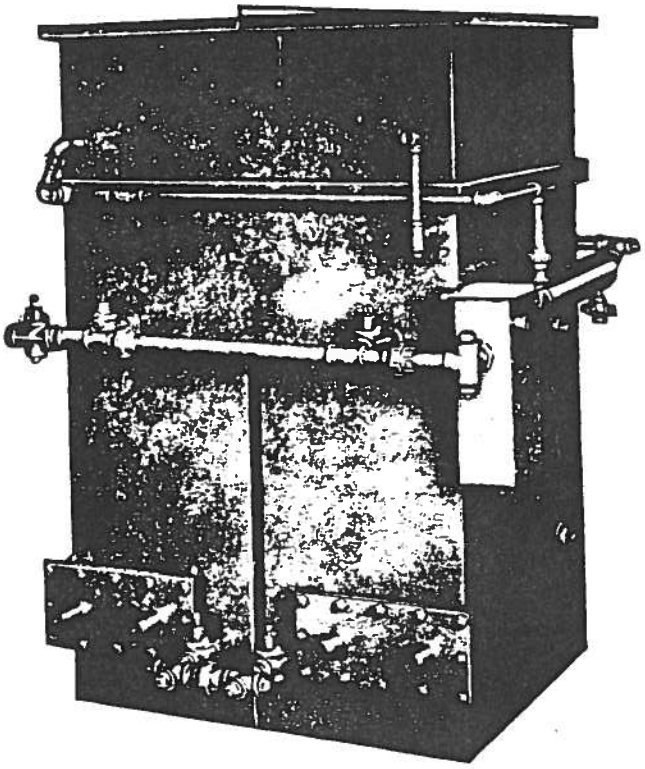
VI - See Exhibit III

EXHIBIT A



Degreaser Tank Information/Diagram

Blakeslee Standard Liquid Vapor Degreasers



The BLAKESLEE Liquid Vapor Degreasers are designed to remove oils and greases from the smallest parts, especially those that nest or pack in baskets. The work is thoroughly cleaned by immersing the parts in the boiling liquid compartment to remove oil, grease and chips (or buffing and grinding compounds) and then transferred to the concentrated vapors in the second tank. These degreasers are so valved and piped that they can be used as Liquid, Liquid Vapor type when the work requires a boiling liquid dip, warm liquid dip, and final vapor rinse.

The Degreaser is of welded steel construction, heavily reinforced, and zinc coated on the inside after fabrication. A large cleanout door is provided in each compartment to facilitate periodic cleaning of the solvent sumps. The machines are self-distilling. Distillate piping is arranged for gravity circulation of clean solvent and to maintain the proper liquid levels automatically at all times. In this way the oil polluted solvent is carried to the sump of the vapor section where it will not come into contact with the work. No pump is needed to circulate or transfer the solvent in a Blakeslee LV Degreaser. The Degreasers are also available with the tank section fabricated of stainless clad steel with solid stainless steel solvent collecting trough and tank fittings.

Steam heated models are provided with steam coils and electrically heated models with immersion heaters mounted on the removable cleanout door plates. Gas heated models are equipped with thermostats and atmospheric type gas burners housed in specially designed combustion chambers beneath the sumps.

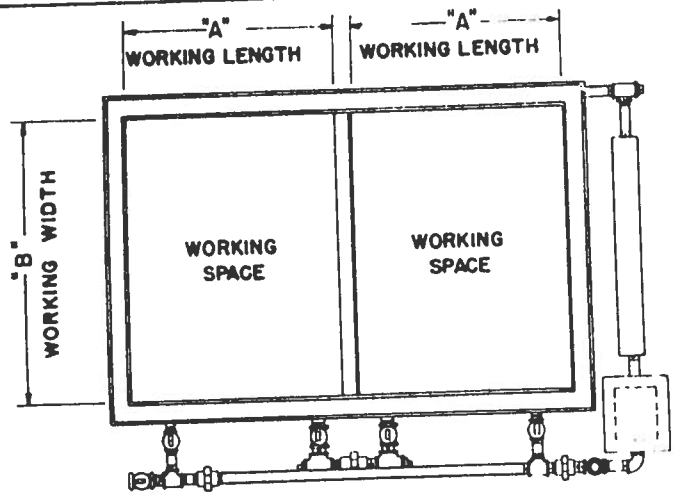
The Degreasers are equipped with BLAKESLEE Standard Dual Vapor Control consisting of water cooled control coil on the inside of the tank and a narrow water jacket on the outside which insures a 28% to 35% saving in solvent consumption.

The BLAKESLEE Patented Solvent Cooler and Water Separator are included in the solvent distillate line to remove excessive moisture from the solvent to give more efficient degreasing.

	1-LV	2-LV	3-LV
Recommended Basket Size, Length x Width x Height	15" x 6" x 4"	18" x 12" x 6"	22" x 16" x 6"
Tank Sides	11 Gauge	11 Gauge	11 Gauge
Tank Bottoms	8 Gauge	8 Gauge	8 Gauge
Water Consumption G.P.H.	40	50	90
Steam Consumption - Pounds Per Hour	29	46	65
Gas Consumption—Cu. Ft./Hr. (1000 BTU Gas)	51	92	130
Electric Consumption	8 KWH	12 KWH	18 KWH
Heating Time to Start	20 Minutes	25 Minutes	30 Minutes
Work Loads Lbs./Hr.	575	975	1475
Crated Weight—Pounds	600	875	1100

Baron·Blakeslee·Incorporated

CHICAGO · LOS ANGELES · SAN FRANCISCO · MILWAUKEE

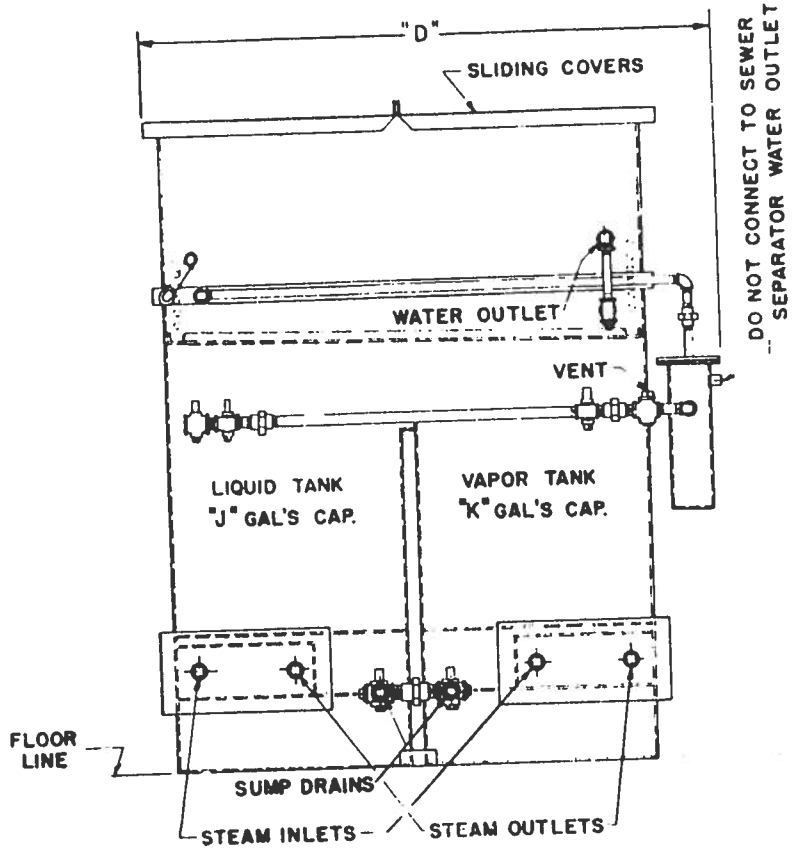


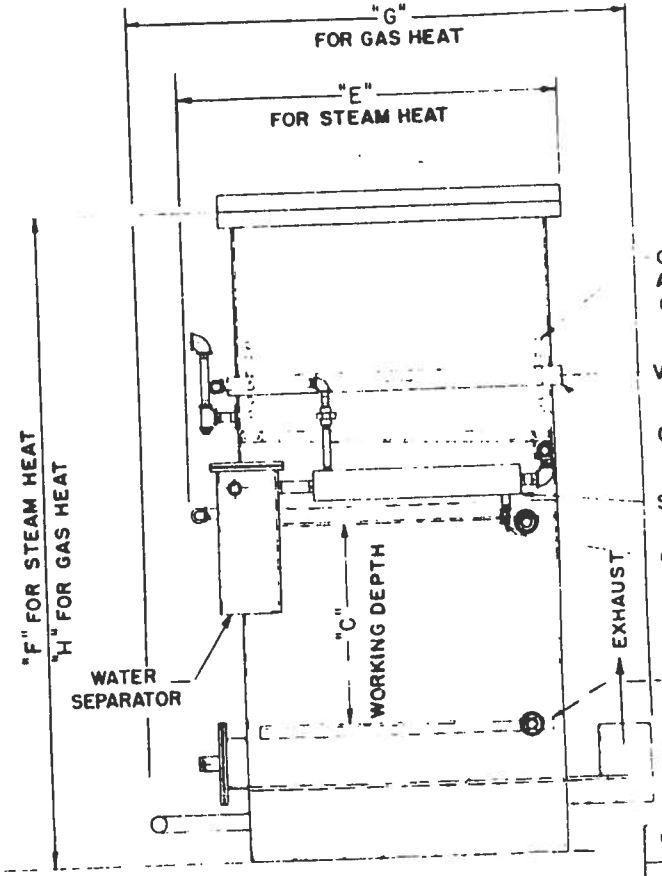
Serial
KW-15529

MODEL NO	WORK SPACE			STEAM & GAS HEAT DIMENSIONS					GAL'S WASH	GAL'S RINSE
	A	B	C	D	E	F	G	H	J	K
1LV	9"	18"	15"	2'-10"	2'-4"	4'-6"	3'-4"	4'-8"	21	4
2LV	15"	24"	18"	3'-8"	3'-0"	4'-10"	3'-10"	5'-0"	47	8
3LV	20"	26"	18"	4'-6"	3'-3"	5'-0"	4'-6"	5'-2"	66	11

77 gal

DIMENSIONS FOR ELECTRIC HEAT SAME AS FOR STEAM





LIQUID VAPOR DEGREASERS
STEAM & GAS HEATED

BARON-BLAKESLEE, INC.

DR BY OUE
TR BY REJ
SC

SCALE NONE
DATE
DRW NO
3-40700

Soil Sampling Data/Leachfield Unit

ABORATORIES, Inc.
P.O. BOX 2242
JUAN, PUERTO RICO 00936

...LOW VOLTAGE PRODUCTS, INC.

Date: 4/8/81
ample by: Client

SAMPLE NO.	HOLE NO.	DEPTH	BLOWS EVERY 6"	TOTAL CYANIDE mg/kg	TOTAL SILVER mg/kg	
14551-A	1	4-5-6"	70-50/2"	3.6	0.0005	
" -B	1	8-9'-6"	70/2"	3.0	0.0005	
" -C	1	10-6-12"	80/4"	4.0	0.0009	
" -D	2	4-5-6"	23-32-38	3.0	0.0009	
" -E	2	8-A9'C	Bhizer Rocrobro 5"	3.0	0.0012	
" -F	3	4-5-6"	100/4"	3.0	0.0009	
" -G	3	8-9-6"	100/6"	3.0	0.0009	
" -H	3	10'-6-12"	100/2"	3.0	0.0019	
" -I	4	4-5-6"	50-50/3"	3.0	0.0018	
" -J	4	8-9-6"	75/3"	4.0	0.0003	
" -K	4	10-6--12"	75/3"	6.0	0.0019	

SAMUEL BARRERA, M.
LICENCIA
QUIMICO
1742
COLEGIO QUIMICOS DE P.R.

DATE: 4/23/81

BY:

...ATORIES, Inc.
...BOX 2242
...PUERTO RICO 00936

CORRECTED

DATE SUBMITTED: 5/19/81
COLLECTED BY: Client

SOURCE: G.E. COMPANY
VIEQUES, PR

	SAMPLE	DEPTH	CYANIDE mg/kg	COMMENTS	
14759 - 1	2 A	3'6"-5'	< 0.50		
- 2	2 B	9-10	< 0.59		
- 3	2 C	13'6"-15'	< 0.49	Recovered:	Solid Rock
- 4	3 A	3'6"-5'	< 0.32		
- 5	3 B	9'-10'	< 0.50	Recovered:	Solid Rock
- 6	3 C	11'	< 0.58		
- 7	5 A	3'6"-5'	< 0.17		
- 8	5 B	9'-10'	< 0.59		
- 9	5 C	13'6"-15	< 0.50	Recovered:	Solid Rock
- 10	6 A	3'6"-5'	< 0.59		
- 11	6 B	8'6"-10'	< 0.49		
- 12	6 C	13'6"-15'	< 0.49		
- 13	6 D	18'6"-20'	< 0.58		
- 14	7 A	3'6"-5'	< 0.32		
- 15	7 B	8'6"-10'	< 0.50		
- 16	7 C	13'6"-15'	< 0.32		
- 17	7 D	18'6"-20'	< 0.33		
- 18	9 A	3'6"-5'	< 0.02		
- 19	9 B	9'-10'	< 0.59		
- 20	9 C	14'-15'	< 0.49		
- 21	9 D	19'-20'	< 0.32		
- 22	10 A	3'6"-5'	< 0.32		
- 23	10 B	9'-10'	< 0.32		
- 24	10 C	14'-15'	< 0.32		
- 25	10 D	17'-18'	< 0.49	Recovered:	Solid Rock
- 26	11 A	3'6"-5'	< 0.32		
- 27	11 B	8'6"-10'	< 0.50		
- 28 Triplicate	11 C	13'6"-15'	< 0.31	Recovered:	Solid Rock

MANUFACTURING ENGINEERING
R. ROSARIO
JUN 15 1981
RECEIVED
...FIELDS

RITA E. KOETT
QUIMICO
LIC. 2084
PUERTO RICO

DATE: 6/12/81

Rita E. Koett

LANGSTON LABORATORIES
INC - PUERTO RICO
SEARCH • DEVELOPMENT • TESTING

LABORATORY REPORT

Received: May 20, 1981
Completed: June 25, 1981
Submitted by: GENERAL ELECTRIC LOW VOLTAGE
Vieques, P.R.

Attn: Ada Gómez
P. O. No.:
LLI-PR No.: 5278

Sample Description: Soil & Rock Samples

Sample Identification	Analysis	Result
1A 3'6"-5'	Cyanide	1.2 Mg/kg
1B 6'6"-8'	Cyanide	1.8 Mg/kg
4A 3'6"-5'	Cyanide	1.9 Mg/kg
4B 9'-10'	Cyanide	1.0 Mg/kg
4C 14-15'	Cyanide	0.6 Mg/kg
4D 19'-20'	Cyanide	0.8 Mg/kg
8A 3'6"-5'	Cyanide	1.3 Mg/kg
8B 8'6"-10'	Cyanide	0.4 Mg/kg
8C 13'6"-16'*	Cyanide	1.8 Mg/kg
8C 13'6"-16'*	Cyanide	1.2 Mg/kg
1B 6'6"-8' *	Cyanide	1.2 Mg/kg

Comments:

* These sample bottles have same identification. Also both samples were solid rock, others were soil.

Approved By:
Alan Kerschen
Lab Manager
Chem Lic 1374

APPENDIX 4

Caribtec Laboratories, inc.
g.p.o. box 2242
san juan, puerto rico 00936
tels. 754-7622 - 754-7566
telex - 385-9397

REPORT OF ANALYSIS

DATE SUBMITTED 6/24/81 SAMPLED BY Client

SOURCE GENERAL ELECTRIC CO. Vieques P.R.

DESCRIPTION OF SAMPLES

1. 14759 Composite 3 solid samples 6A - 3'-6"-5' (10)
2. " " " " 6B - 8'6"-10' (11)
3. " " " " 6C - 13'-6"-15' (12)
4.
5.
6.

PARAMETERS

Arsenic, mg/l	$< 1 \times 10^{-4}$
Barium, mg/l	< 0.1
Cadmium, mg/l	< 0.01
Lead, mg/l	< 0.1
Selenium, mg/l	$< 1 \times 10^{-4}$
Silver, mg/l	0.79
Chromium, mg/l	0.05
Mercury, mg/l	8.0×10^{-3}

SAMUEL BARRERA, M. LICENCIA QUIMICO 1742 COLEGIO QUIMICOS DE P.R.

REMARKS: Date received 5/19/81. Metals from E.P. Toxicity

DATE REPORTED 7/7/81 BY

...ec
aboratories, inc.

telex - 38...

REPORT OF ANALYSIS

DATE SUBMITTED 10/13/82 SAMPLED BY Client

SOURCE General Electric Low Voltage Products, Inc.

DESCRIPTION OF SAMPLES
1. 21666 Sample #1
2. 21667 Sample #2
3. 21668 Sample #3
4.
5.
6.

PARAMETERS	1	2	3
Total Cyanide, mg/kg	< 0.02	< 0.02	< 0.02

REMARKS:

DATE REPORTED 10/18/82 BY

SAMUEL BARRERA, M.
LICENCIA
QUIMICO
1743
QUIMICOS E.P.

APPENDIX 6

REPORT OF ANALYSIS

RECEIVED 04/07/83 SAMPLED BY Client

ATTENTION General Electric Company

DESCRIPTION OF SAMPLES
1. 23953 Trap 1 (liquid sample)
2. 23954 Electroplating 2 (liquid sample)
3. 23955 South Monitoring Well 3 (solid sample)
4. 23956 Middle Monitoring Well 4 (solid sample)
5. 23957 North Monitoring Well 5 (solid sample)
6.

PARAMETERS		1	2	3	4	5
Total Cyanide,	ppm	217.5	5,375	< 0.5	3.8	2.0
Free Cyanide,	"	6.8	1,750	< 0.5	< 0.5	< 0.5
Hexavalent Chromium,	"	0.090	< 0.001	0.020	0.016	0.0
Trivalent Chromium,	"	0.82	3.0	30.89	26.79	33.2
Silver,	"	220	2,510	10.97	4.96	3.0
Copper,	"	11.0	32.6	20.95	27.79	17.1
Lead,	"	< 0.1	< 0.1	< 10	< 10	< 10
BOD,	"	< 1				
COD,	"	4,340				
Total Suspended Solids,	"	106				

REMARKS: The lead values are restricted to a detection limit of 0.1 and 10 ppm, respectively, as a result of interference in the sample.

DATE REPORTED 04/22/83 BY

SIGUEL BARRERA M.
LICENCIA
QUIMICO
1742
COLEGIO QUIMICOS DE P. R.

ARNOLD GREENE TESTING LABORATORIES, INC.
EAST NATICK INDUSTRIAL PARK, 6 HURON DRIVE • NATICK, MASS. 01760
AREA CODE 617 • PHONE: 235-7330 • 653-5500

NCH LABORATORIES:
SANTURCE, PUERTO RICO TEL. (809) 723-1888
287 PAGE BOULEVARD SPRINGFIELD, MASS. 01104 TEL. (413) 734-6848
90 PARIS STREET EVERETT, MASS. 02149 TEL. (617) 387-3770
5 MILLBURY STREET AUBURN, MASS. 01501 TEL. (617) 832-3000
100 PIONEER AVE. WARWICK, RHODE ISLAND 02 TEL. (401) 467-2000

TEST REPORT

TO AGTL of Puerto Rico, Inc.
Carrion Maduro 706 Int.(Stop 22)
Santurce, Puerto Rico 00909
ATT: D.E.Cintron

DATE Sept 24,1971
JOB NO. 98105
LAB. NO. 2981
ORDER NO. letter 9/14/71

MATERIAL Water
HEAT NO.
SPECIFICATIONS

Sample from General Electric Switchgear, Inc. Plant at Vieques, Puerto Rico
Discharged Water taken on Sept. 14,1971

All results as ppm except Mercury

Part A					
Alkalinity ($CaCO_3$)	0.0	Bromide	0.00	Nickel	0.0
BOD 5 day	0	Chloride	127	Magnesium	trace*
COD	336	Cyanide	0.0	Zinc	trace*
Total solids	900	Sulfide	0.0		
Total dissolved solids	852	Mercury	<1 PPB		
Total suspended solids	46	Aluminum	0.1		
Total volatile solids	190	Chromium	0.0		
Ammonia (N)	0.30	Copper	0.5		
Phosphorus (P)	0.0	Iron	6.0		
Nitrate (N)	40.7	Lead	0.0		
Kjeldahl Nitrogen	0.0	Manganese	0.0		

*Could not analyse accurately due to high sodium content.

SUBSCRIBED TO AND SWORN TO BEFORE ME THIS DAY OF 19

NOTARY PUBLIC

IN WITNESS WHEREOF, I HAVE HEREUNTO SET MY HAND THIS 24th DAY OF Sept 19 71

ARNOLD GREENE TESTING LABORATORIES, INC.
Leo F. Fitzpatrick
Leo F.Fitzpatrick

APPENDIX 8

EC LABORATORIES, INC.

G.P.O. Box 2242
SAN JUAN, PUERTO RICO 00936

REPORT OF ANALYSIS

E SUBMITTED 4/10/81 SAMPLED BY Client

SOURCE General Electric Co., Sábana Llana, Río Piedras

SCRIPTION OF SAMPLES
1. 14565-A Sample No. 1 City Water
2. 14565-B Sample No. 2 Recycling Water
3. 14565-C Sample No. 3 City Water
4. 14565-D Sample No. 4 Effluent Water

RAMETERS	1	2	3	4
H	8.38	8.43	6.51	
emperature, °C				
lkalinity, (as $CaCo_3$) mg/l				
. O. D., mg/l	1	7	2	8
. O. D., mg/l				
olids, Total, mg/l				
olids, Dissolved, mg/l				
olids, Suspended, mg/l	2	12	3	25
olids, Volatile, mg/l				
mmonia (N) mg/l				
jeldahl (N) mg/l				
itrate (N) mg/l				
hosphorous, Total (P), mg/l				
hosphorous, Ortho (P), mg/l				
ulfate, mg/l				
ulfite, mg/l				
henols, mg/l				
yanide, mg/l				
il and Grease, mg/l				
ardness, Total, mg/l				
hloride, mg/l				
olor, Pt-Co Units				
Turbidity, Jackson Units				
Conductivity, Micromhos				
Coliform, Total No./100 ml				
Coliform, Fecal No./100 ml				
Setteable Solids, mg/l	<0.1	<0.1	<0.1	<0.1
Copper (Cu), mg/l	<0.01	0.02	<0.01	<0.01
Lead (Pb), mg/l	<0.01	<0.01	<0.01	0.01
Silver (Ag), mg/l	<0.01	<0.01	<0.01	<0.01

SAMUEL BARRERA M.
LICENCIA
QUIMICO
1742
COLEGIO QUIMICOS DE P.R.

REMARKS

DATE REPORTED 4/23/81

BY

P.O. Box 2242
SAN JUAN, PUERTO RICO 0?936

?IBTEC LABORATORIES, INC.

REPORT OF ANALYSIS

SAMPLED BY Client

DATE SUBMITTED 5/19/81

SOURCE G.E. COMPANY, VIEQUES, PUERTO RICO

DESCRIPTION OF SAMPLES
1. 14758-A Process Water Effluent
2. 14758-B Platers Rinse Water Composite (Trap)
3. 14758-C Platers Rinse Water
4.

PARAMETERS	1	2	3	4
pH		8.04	8.34	
Temperature, C				
Alkalinity, (as $CaCO_3$) mg/l	46			
B. O. D., mg/l	301			
C. O. D., mg/l				
Solids, Total, mg/l				
Solids, Dissolved, mg/l	68			
Solids, Suspended, mg/l				
Solids, Volatile, mg/l				
Ammonia (N) mg/l				
Kjeldahl (N) mg/l				
Nitrate (N) mg/l				
Phosphorous, Total (P), mg/l				
Phosphorous, Ortho (P), mg/l				
Sulfate, mg/l				
Sulfite, mg/l		1300.0	13.6	
Phenols, mg/l				
Cyanide, mg/l				
Oil and Grease, mg/l				
Hardness, Total, mg/l				
Chloride, mg/l				
Color, Pt-Co Units				
Turbidity, Jackson Units				
Conductivity, Micromhos				
Coliform, Total No./100 ml				
Coliform, Fecal No./100 ml	<0.001			
Chromium Hexavalent, mg/l	0.05			
Chromium Total, mg/l	<0.01			
Copper, mg/l	<0.01			
Lead, mg/l				

SAMUEL BARRERA M. LICENCIA QUIMICO 1742 COLEGIO QUIMICOS DE P.R.

DATE REPORTED 05/29/81

REMARKS

BY

ENVIRONMENTAL QUALITY BOARD
DIVISION OF LABORATORY
HAZARDOUS WASTE STUDY REPORT

Report date: 13 de mayo de

Study: Carta GE. Viegues

Revised By: JdC

Date received: 30 de junio de 1986

Reference: Test methods for Evaluating Solid Wastes, 2nd ed

Requested by: Contaminación Terrenos

STATION NO.	Cn^-	Hg mg/l	Se mg/l	As mg/l	Ba mg/l	Pb mg/l	Cr mg/l	Cd mg/l	Ag mg/l
1	negativo	<0.0002	<0.002	0.0019	1.485	<0.1	<0.05	0.015	<0.01
2	negativo	<0.0002	<0.002	0.0024	1.380	<0.1	<0.05	0.021	<0.01
3	negativo	<0.0002	<0.002	0.0024	0.461	<0.1	0.093	0.021	<0.01
4	negativo	<0.0002	<0.002	0.0017	1.170	<0.1	<0.05	0.021	<0.01
5	negativo	<0.0002	<0.002	0.0019	0.856	<0.1	<0.05	0.021	<0.01
6	negativo	<0.0002	<0.002	0.0019	1.170	<0.1	<0.05	0.044	<0.01

* Cn^- -> negativo = <0.1 mg/l

Photos

ARNOLD GREENE
EAST NATICK INDUSTRIAL PARK, 6 HURON DRIVE
AREA CODE 617 • PHONE: 235-7330 • 653-5950

RANCH LABORATORIES:
SANTURCE, PUERTO RICO
TEL. (0809) 723-1888

307 PAGE BOULEVARD
SPRINGFIELD, MASS. 01104
TEL. (413) 734-6648

90 PARIS STREET
EVERETT, MASS. 02149
TEL. (617) 387-2770

5 MILLBURY STREET
AUBURN, MASS. 01501
TEL. (617) 832-3030

100 PIONEER AVE.
WARWICK, RHODE ISLAND 02
TEL. (401) 467-3000

TEST REPORT

TO AGTL of Puerto Rico, Inc.
Carrion Maduro 706 Int.(Stop 22)
Santurce, Puerto Rico 00909
ATT: D.E.Cintron

DATE Sept 24,1971
JOB NO. 98105
LAB. NO. 2981
ORDER NO. letter 9/14/71

MATERIAL Water
HEAT NO.
SPECIFICATIONS

Sample from General Electric Switchgear, Inc. Plant at Vieques, Puerto Rico
Discharged Water taken on Sept. 14,1971

All results as ppm except Mercury

Part A					
Alkalinity (CaCO3)	0.0	Bromide	0.00	Nickel	0.0
BOD 5 day	0	Chloride	127	Magnesium	trace*
COD	336	Cyanide	0.0	Zinc	trace*
Total solids	900	Sulfide	0.0		
Total dissolved solids	852	Mercury	< 1 PPB		
Total suspended solids	46	Aluminum	0.1		
Total volatile solids	190	Chromium	0.0		
Ammonia (N)	0.30	Copper	0.5		
Phosphorus (P)	0.0	Iron	8.0		
Nitrate (N)	40.7	Lead	0.0		
Kjeldahl Nitrogen	0.0	Manganese	0.0		

*Could not analyse accurately due to high sodium content.

SUBSCRIBED TO AND SWORN TO BEFORE ME THIS
DAY OF 19

NOTARY PUBLIC

IN WITNESS WHEREOF, I HAVE HEREUNTO SET MY HAI
24th DAY OF Sept
ARNOLD GREENE TESTING LABORATORIES, INC.
Leo F. Fitzpatrick
Leo F.Fitzpatrick