

**GENERAL
INSTRUMENT**

Power Semiconductor Division
General Instrument Corporation
172 Spruce Street
P.O. Box 283
Westbury NY 11590
516/333-8400
FAX 516/333-8406

August 26, 1992

NYSDEC
SUNY, Bldg #40
Stony Brook, NY 11794

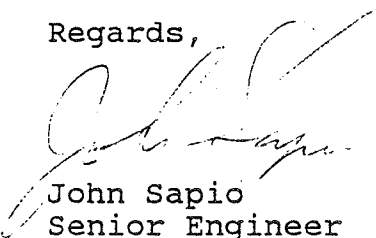
Re: 550 gallon UST removal

Dear Mrs. Gara:

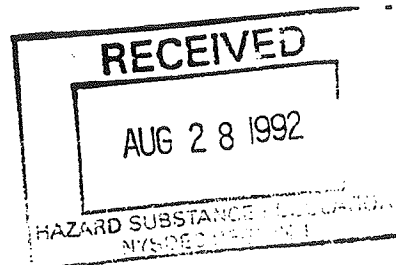
This letter is to confirm telephone conversations between Scott A. Yanuck of Richard D. Galli, PE, PC and yourself regarding the removal of a 550 gallon underground storage tank at this facility. The tank in question had been closed as per an accepted plan in 1987, and had remained dormant (no piping connections to or from it) since that time. Although there were phone conversations concerning the removal project, there was no written prior notification. This letter will serve as that written notification, albeit late.

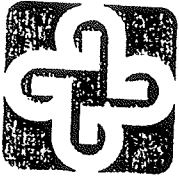
Enclosed you will find a copy of the Closure Report concerning the tank removal which took place December 16 to 18, 1991.

Regards,


John Sapio
Senior Engineer

enclosure





RICHARD D. GALLI, P.E., P.C.
52 BROADWAY, GREENLAWN, N.Y. 11740

(516) 754-0396
FAX: (516) 754-7408

CLOSURE REPORT

550 GALLON PHOTO-WASTE UNDERGROUND STORAGE TANK

**GENERAL INSTRUMENT CORPORATION
172 SPRUCE STREET
WESTBURY, NEW YORK**

MAY 1992



Scott A. Yanuck

Scott A. Yanuck
Senior Hydrogeologist

Richard D. Galli

Richard D. Galli, P.E.
Principal

PROJECT NUMBER 90-075-04
SAY-05:\CLOSURE\GITANK.001

LIST OF FIGURES

Blueprint: Project Location, Site Sketch, 172 Spruce Street, Westbury, New York

LIST OF APPENDICES

- A. Laboratory Analysis of Soil from UST Excavation
- B. Laboratory Analysis of Cement Vault for waste disposal purposes
- C. Laboratory Analysis of water removed from UST prior to UST removal and letter from NCDPW permitting discharge to sewer

1.0 INTRODUCTION

In the fall of 1991, RDG was contracted to set up and supervise the removal of an underground storage tank (UST) at General Instrument's 172 Spruce Street, Westbury, facility. The UST has been used to contain waste photolithography chemicals until such wastes ceased to be produced at the facility. In 1987, a closure workplan was accepted by the New York State Department of Environmental Conservation (NYSDEC) and the UST was decommissioned in 1987.

2.0 UST REMOVAL

During the period of December 16 to 18, 1991, RDG hydrogeologist Scott A. Yanuck supervised the removal of the decommissioned UST and surrounding concrete vault, located along the south side of the facility. The contractor performing the work was Fenley and Nicol. The Nassau County Department of Health (NCDH), Nassau County Fire Marshal (NCFM) and NYSDEC were notified of the UST removal. NCFM inspector George Laakso was on-site on the mornings of the 16th and 17th to witness removal. Permission to backfill was given on the morning of the 17th.

Rainwater had filled the UST and vault since 1987. This water was screened with a Photoionization Detector (PID) prior to commencing work. During PID screening, concentrations reached a maximum of 2 parts per million (ppm), a level considered to be

background. A sample was collected of the water and analyzed for all parameters that were stored in the UST, as well as full TCLP parameters (less pesticides/herbicides) for waste disposal. The water was then pumped and placed to the side. The concrete vault was subsequently removed and broken up to fit into two (2) dumpsters lined with plastic for storage. A sample was collected of the concrete and analyzed for full TCLP parameters (less pesticides/herbicides) for waste disposal purposes.

No contamination was apparent upon removal of the vault and vent lines. A composite sample was collected from four (4) sides of the excavation as well as the bottom of the excavation and the under the line. The sample was analyzed for all parameters stored in the UST, as well as full TCLP parameters (less pesticides/herbicides). After collection of the sample, the excavation was backfilled.

3.0 ANALYTICAL RESULTS

All samples were delivered to Ecotest Laboratories, Inc., a New York State Department of Health (NYSDOH) certified laboratory. The concentrations of all parameters analyzed for in soil and concrete samples were below regulatory limits, see Appendices A and B. The analysis of the water sample showed that the water was non-hazardous, see Appendix C.

4.0 DISPOSAL OF WATER

On March 6, 1992, the Nassau County Department of Public Works (NCDPW) granted permission to discharge the water directly into the sewer system from inside the General Instrument facility, see Appendix C. This was subsequently completed by General Instrument personnel.

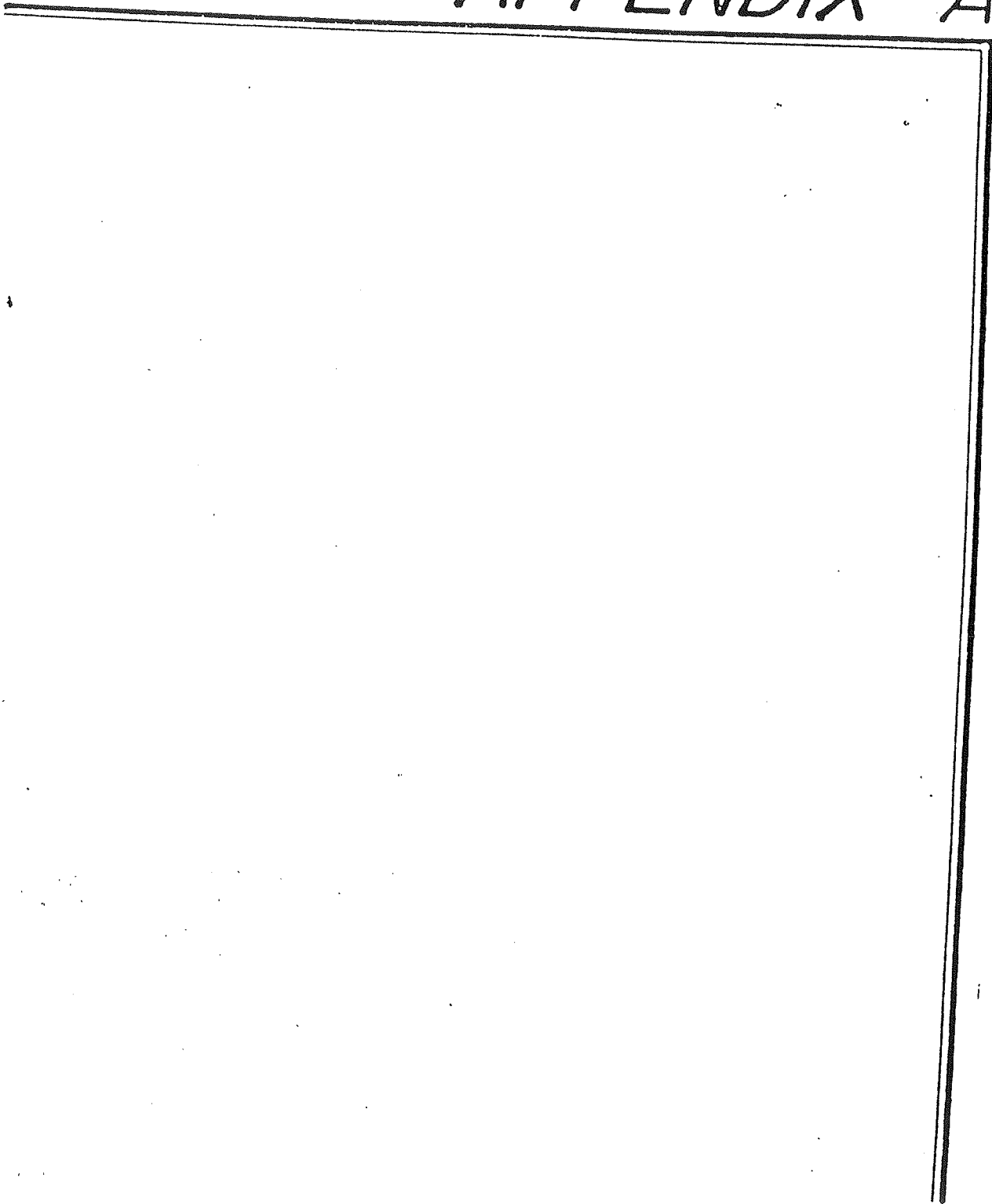
5.0 DISPOSAL OF CONCRETE

Based on the analysis of the concrete, this material was deemed to be non-hazardous, see Appendix B. The concrete was disposed of in a licensed Construction and Debris landfill.

6.0 CONCLUSIONS

Contamination of the soil under and around the UST was not detected at levels above regulatory limits. No visible signs of leakage or holes noted in the UST.

APPENDIX A



377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C914516/3

01/24/92

General Instrument Coporation
600 West John Street
Hicksville, NY 11803

ATTN: William Durkin

PO#56382

SOURCE OF SAMPLE: General Instruments, #90-075-04, (TCLPMET)
COLLECTED BY: Galli Eng. DATE COL'D: 12/17/91 RECEIVED: 12/18/91

SAMPLE: Soil sample, SY121891, 11:00 am, comp.

ANALYTICAL PARAMETERS

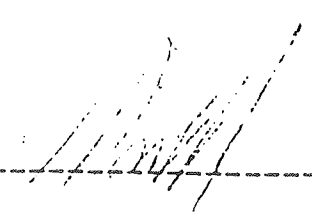
Arsenic as As	mg/L*	<0.005
Barium as Ba	mg/L*	0.12
Cadmium as Cd	mg/L*	<0.001
Chromium as Cr	mg/L*	<0.00
Lead as Pb	mg/L*	0.005
Mercury as Hg	mg/L*	<0.001
Selenium as Se	mg/L*	<0.005
Silver as Ag	mg/L*	<0.05

ANALYTICAL PARAMETERS

cc:Galli Eng.

REMARKS: * Analysis performed on TCLP leachate according to USEPA Method 1311.

DIRECTOR _____



377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C914516/3

01/24/92

General Instrument Corporation
600 West John Street
Hicksville, NY 11803

ATTN: William Durkin

PO#56382

SOURCE OF SAMPLE: General Instruments, #90-075-04, (TCLPZHE)
COLLECTED BY: Galli Eng. DATE COL'D: 12/17/91 RECEIVED: 12/18/91

SAMPLE: Soil sample, SY121891, 11:00 am, comp.

ANALYTICAL PARAMETERS

Carbon Tetrachloride	ug/L*	<1
Chlorobenzene	ug/L*	<1
Chloroform	ug/L*	<1
1,4-Dichlorobenzene	ug/L*	<1
1,2-Dichloroethane	ug/L*	<1
1,1-Dichloroethene	ug/L*	<1
Methyl Ethyl Ketone	ug/L*	<10
Tetrachloroethene	ug/L*	<1
Trichloroethylene	ug/L*	17
Vinyl Chloride	ug/L*	<1
Benzene	ug/L*	<1
Methanol	ug/L*	<5
Acetone	ug/L*	<10
Xylene	ug/L*	<3
Isopropyl alcohol	ug/L*	<100

ANALYTICAL PARAMETERS

cc: Galli Eng.

REMARKS: *All analysis on this page was performed on TCLP according to USEPA Method 1311. Methanol performed for EcoTest by Princeton Testing Lab, NJ

DIRECTOR _____

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C914516/3

01/24/92

General Instrument Corporation
600 West John Street
Hicksville, NY 11803

ATTN: William Durkin

PO#56382

SOURCE OF SAMPLE: General Instruments, #00-075-04, (TCLPBNA)
COLLECTED BY: Galli Eng. DATE COL'D: 12/17/91 RECEIVED: 12/18/91

SAMPLE: Soil sample, SY121891, 11:00 am, comp.

UNITS: ug/L*

ANALYTICAL PARAMETERS

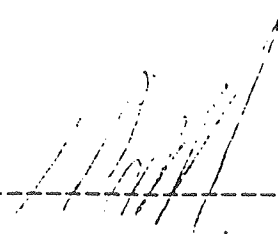
ANALYTICAL PARAMETERS

o-Methylphenol (o-cresol)	<10
m-Methylphenol (m-cresol)	<10
p-Methylphenol (p-cresol)	<10
Pentachlorophenol	<10
2,4,5-Trichlorophenol	<10
2,4,6-Trichlorophenol	<10
2,4-Dinitrotoluene	<10
Polychlorobenzene	<10
Hexachlorobutadiene	<10
Hexachloroethane	<10
Nitrobenzene	<10
Pyridine	<10

cc:Galli Eng.

REMARKS: *All analysis on this page was performed on TCLP leachate per USEPA Method 1311.

DIRECTOR _____



377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C914516/3

01/24/92

General Instrument Corporation
600 West John Street
Hicksville, NY 11803

ATTN: William Durkin

PO#56382

SOURCE OF SAMPLE: General Instruments, #90-075-04
COLLECTED BY: Galli Eng. DATE COL'D: 12/17/91 RECEIVED: 12/18/91

SAMPLE: Soil sample, SY121891, 11:00 am, comp.

ANALYTICAL PARAMETERS

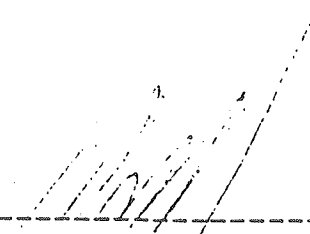
pH units 7.8
Flash Point deg C >100

ANALYTICAL PARAMETERS

cc: Galli Eng.

REMARKS:

DIRECTOR _____



APPENDIX B

ECOTEST LABORATORIES, INC.

ENVIRONMENTAL TESTING

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C914516/4

01/24/92

General Instrument Coporation
600 West John Street
Hicksville, NY 11803

ATTN: William Durkin

PO#56382

SOURCE OF SAMPLE: General Instruments, #30-075-04, (TCLFMET).
COLLECTED BY: Galli Eng. DATE COL'D: 12/17/91 RECEIVED: 12/18/91

SAMPLE: Concrete, SW121801, 12:00 pm, comp.

ANALYTICAL PARAMETERS

Arsenic as As	mg/L*	<0.005
Barium as Ba	mg/L*	0.18
Cadmium as Cd	mg/L*	<0.001
Chromium as Cr	mg/L*	0.05
Lead as Pb	mg/L*	<0.005
Mercury as Hg	mg/L*	<0.001
Selenium as Se	mg/L*	<0.005
Silver as Ag	mg/L*	<0.02

ANALYTICAL PARAMETERS

cc: Galli Eng.

REMARKS: • Analysis performed on TCLP leachate according to USEPA Method 1311.

DIRECTOR _____

21287

NYSDOH ID# 10320

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C914516/4

01/24/92

General Instrument Coporation
600 West John Street
Hicksville, NY 11803

ATTN: William Durkin

PO#56382

SOURCE OF SAMPLE: General Instruments, #90-075-04, (TCLPENE)
COLLECTED BY: Galli Eng. DATE COL'D: 12/17/91 RECEIVED: 12/18/91.

SAMPLE: Concrete, SY121891, 12:00 pm, comp.

ANALYTICAL PARAMETERS

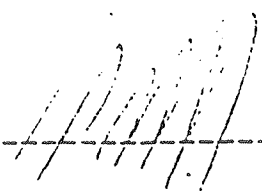
Carbon Tetrachloride	ug/L*	<1
Chlorobenzene	ug/L*	<1
Chloroform	ug/L*	<1
1,4 Dichlorobenzene	ug/L*	<1
1,2 Dichloroethane	ug/L*	<1
1,1 Dichloroethene	ug/L*	<1
Methyl Ethyl Ketone	ug/L*	<10
Tetrachloroethene	ug/L*	<1
Trichloroethylene	ug/L*	<1
Vinyl Chloride	ug/L*	<1
Benzene	ug/L*	<1
Methanol	ug/L*	<5
Acetone	ug/L*	<10
Xylene	ug/L*	<3
isopropyl alcohol	ug/L*	< 00

ANALYTICAL PARAMETERS

cc:Galli Eng.

REMARKS: *All analysis on this page was performed on TCLP according to USEPA Method 1311.
Methanol performed for EcoTest by Princeton Testing Lab, NJ

DIRECTOR _____



377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C914516/4

01/24/92

General Instrument Coporation
600 West John Street
Hicksville, NY 11803

ATTN: William Durkin

PO#56382

SOURCE OF SAMPLE: General Instruments, #90-075-04, (TCLPBNA)
COLLECTED BY: Galli Eng. DATE COL'D: 12/17/91 RECEIVED: 12/18/91

SAMPLE: Concrete, SY121891, 12:00 pm, comp.
UNITS: ug/L*

ANALYTICAL PARAMETERS

ANALYTICAL PARAMETERS

2-Methylphenol (o-cresol)	<10
3-Methylphenol (m-cresol)	<10
4-Methylphenol (p-cresol)	<10
Pentachlorophenol	<10
2,4,5-Trichlorophenol	<10
2,4,6-Trichlorophenol	<10
2,4-Dinitrotoluene	<10
Hexachlorobenzene	<10
Hexachlorobutadiene	<10
Hexachloroethane	<10
Nitrobenzene	<10
Pyridine	<10

cc:Galli Eng.

REMARKS: *All analysis on this page was performed on TCLP leachate per USEPA Method 1311.

DIRECTOR _____

ECOTEST LABORATORIES, INC.

ENVIRONMENTAL TESTING

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C914516/4

01/24/92

General Instrument Corporation
600 West John Street
Hicksville, NY 11803

ATTN: William Durkin

PO#56382

SOURCE OF SAMPLE: General Instruments, #90-075-04

COLLECTED BY: Galli Eng. DATE COL'D: 12/17/91 RECEIVED: 12/18/91

SAMPLE: Concrete, SY121891, 12:00 pm, comp.

ANALYTICAL PARAMETERS

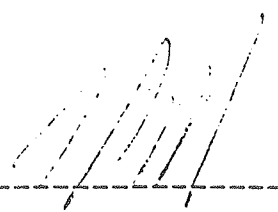
pH	units	11.7
Flash Point	deg C	>100

ANALYTICAL PARAMETERS

cc: Galli Eng.

REMARKS:

DIRECTOR _____



APPENDIX C



RICHARD D. GALLI, P.E., P.C.
52 BROADWAY, GREENLAWN, N.Y. 11740

(516) 754-0396
FAX (516) 754-7408

March 13, 1992

Mr. John Sapio
General Instrument Corporation
172 Spruce Street
Westbury, NY 11590

Re: Discharge of water (from UST) to sanitary sewer.

Mr. Sapio:

Please find enclosed the letter from the NCDPW permitting the discharge of approximately 600 gallons of contaminated water into the Nassau County sewer system. As stated in the letter, discharge must be through a receptor located within the facility. Please advise me of when this procedure is complete. Also find enclosed a copy of the letter sent to the NCDPW on your behalf and a copy of the laboratory analysis that was sent with it.

Very truly yours,
Richard D. Galli, P.E., P.C. (RDG)

Scott A. Yanuck
Project Hydrologist

90-075-04
SAY-05

Just 3/13/92



RICHARD D. GALLI, P.E., P.C.
52 BROADWAY, GREENLAWN, N.Y. 11740

(516) 754-0396
FAX: (516) 754-7408

February 26, 1992

Maurice J. Osman, Chief Chemist
Cedar Creek WPCP
PO Box 88
Wantagh, NY 11793

RE: Disposal of non-hazardous water drummed during an underground storage tank (UST) removal at General Instrument's Spruce St., Westbury facility.

Dear Mr. Osman:

As per our conversation yesterday, this letter is to request permission to discharge non-hazardous water presently stored in eleven 55 gallon drums into the Nassau County Sewer System via a sink located inside the General Instrument Westbury facility. The total amount of water to be discharged is approximately 600 gallons.

This water was pumped into drums from a waste solvent UST prior to the removal of this UST, under supervision of RDG and Nassau County Fire Marshall personnel. The UST and the pipes leading to it had been cleaned out by Marine Pollution Control in 1987. The pipes were disconnected and the UST was no longer used.

The water found in the tank, and in the concrete vault surrounding it was assumed to be rain water. A sample of the water was taken from the UST prior to pumping. The sample was analyzed for TCLP parameters for waste disposal (less pesticides and herbicides), as well as acetone, methanol, isopropyl alcohol and xylenes which were previously stored in the UST. The analytical results enclosed show that this water is would be considered non-hazardous under USEPA TCLP guidelines.

Very Truly Yours,

Richard D. Galli, P.E., P.C.

Scott A. Yanuck
Senior Hydrogeologist
90-075-04
SAY-05

c. John Sapio, General Instrument Corp.
enclosures

THOMAS S. GULOTTA
COUNTY EXECUTIVE



LUDWIG C. HASL, P.E.
COMMISSIONER

COUNTY OF NASSAU
DEPARTMENT OF PUBLIC WORKS
MINEOLA, NEW YORK 11501-4822

March 6, 1992

Mr. Scott Yanuck
Galli Engineering, P.C.
52 Broadway
Greenlawn, New York 11740

Re: General Instrument, Westbury
Discharge of Water (from UST) to Sanitary Sewer


Dear Mr. Yanuck:

Your request to discharge approximately 600 gallons of contaminated water into the Nassau County sewer system has been reviewed and is accepted. The discharge shall be made through the General Instrument facility sewer, as proposed.

This determination is based on the non-hazardous nature of the water and the relatively low level of contamination as noted in the sample analysis.

Your concern and cooperation are appreciated. If you have any questions with regard to this matter, please feel free to call me at 516-571-7352.

Very truly yours,


Maurice J. Osman
Chief Chemist

MJO:sm

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C914538

02/26/92

General Instrument Corporation
600 West John Street
Hicksville, NY 11803

ATTN: William Durkin

SOURCE OF SAMPLE: General Instruments #90-075-04, (TCLPzhe)
COLLECTED BY: Galli DATE COL'D: 12/16/91 RECEIVED: 12/20/91

SAMPLE: Water sample, SY121691, TW-1, 12:00 pm

ANALYTICAL PARAMETERS	
Carbon Tetrachloride	ug/L* <1
Chlorobenzene	ug/L* <1
Chloroform	ug/L* <1
1,4 Dichlorobenzene	ug/L* 10
1,2 Dichloroethane	ug/L* <1
1,1 Dichloroethene	ug/L* 3
Methyl Ethyl Ketone	ug/L* <10
Tetrachloroethene	ug/L* <1
Trichloroethylene	ug/L* 104
Vinyl Chloride	ug/L* <1
Acetone	ug/L* 510
Methanol	ug/L* <5
Isopropyl Alcohol	ug/L* 320
m Xylene	ug/L* 2500
o,p Xylene	ug/L* 950

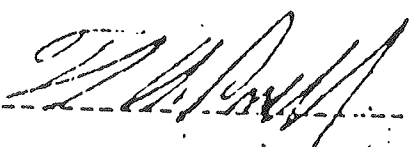
ANALYTICAL PARAMETERS

cc: Galli Eng-S. Yanuck

REMARKS: *All analysis on this page was performed on TCLP according to USEPA Method 1311.

Methanol analysis performed for EcoTest by Princeton Labs, NJ
Amended report

DIRECTOR



FAXED

RICHARD D. GALLI, P.E., P.C.
52 BROADWAY, GREENLAWN, NY 11740

(516) 754-0396
FAX (516) 754-7408

F A X T R A N S M I S S I O N L E T T E R

DATE: March 13, 1991

PLEASE DELIVER THE FOLLOWING PAGES TO:

Name: John Sapio

Firm: General Instrument Corp.

City: Westbury

FAX #: 333-8406

FROM:

Name: Scott A. Yanuck

TOTAL NUMBER OF PAGES FOUR INCLUDING THIS PAGE

If you do not receive all the pages, please call us back ASAP.

PLEASE ISSUE A COPY OF THIS DOCUMENT TO:

ADDITIONAL COMMENTS:

As per our conversation today find the letter from NCDPW concerning discharge of UST liquid stored in drums to indoor sewer receptor. Hard copy will follow.

