

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID AND HAZARDOUS WASTE
HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Form Approved OMB No. 2000-0404 Expires 7-31-86

Please print or type.

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA No. NYD045662921		Manifest Document No.		2. Page: 1 of 1 Information in the shaded areas is not required by Federal Law.	
3. Generator's Name and Mailing Address THE NDL ORGANIZATION, INC. P.O. Box 791, Peekskill, New York 10566				A. State Manifest Document No. NY A 270647-1			
4. Generator's Phone (914) 737-7330				B. Generator's ID Peekskill, N.Y. 1000 Lower South Street			
5. Transporter 1 (Company Name) THE NDL ORGANIZATION, INC.		6. US EPA ID Number NYD045662921		C. State Transporter's ID 14764-NY			
7. Transporter 2 (Company Name)		8. US EPA ID Number		D. Transporter's Phone (914) 737-7330			
9. Designated Facility Name and Site Address QUADREX HPS INC. 1940 N.W. 67th Place Gainesville, Florida		10. US EPA ID Number FLD980711071		E. State Transporter's ID			
				F. Transporter's Phone			
				G. State Facility's ID			
				H. Facility's Phone (904) 373-6066			
11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)				12. Containers		13. Total Quantity	
				No. Type		Unit	
a. Radioactive Material LSA NOS UN2912 (Deregulated Scintillation Media)				2 5 DM		1 16 8 G	
b. Waste Flammable Liquid NOS Limited Quantity UN1993 (Deregulated Scintillation Vials)				2 3 DM		1 18 7 G	
c. Waste Flammable Liquid NOS UN1993 (Deregulated Scintillation Media)				2 DM		6 2 G	
d.							
J. Additional Descriptions for Materials listed Above				8 6		K. Handling Codes for Wastes Listed Above	
Xylene				8 6		B	
a. Toluene				8 6		B	
Xylene				8 6		B	
b. Toluene				8 7		B	
15. Special Handling Instructions and Additional Information							
<p>16. GENERATORS CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and all applicable state laws and regulations.</p> <p>Unless I am a small quantity generator who has been exempted by statute or regulation from the duty to make a waste minimization certification under Section 3002(b) of RCRA, I also certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment.</p>							
Printed/Typed Name Alan Jones				Signature <i>Alan Jones</i>		Mo. Day Year 11/08/85	
17. Transporter 1 (Acknowledgement of Receipt of Materials)						DATE	
Printed/Typed Name Alan Jones				Signature <i>Alan Jones</i>		Mo. Day Year 11/08/85	
18. Transporter 2 (Acknowledgement or Receipt of Materials)						DATE	
Printed/Typed Name				Signature		Mo. Day Year	
19. Discrepancy Indication Space No discrepancies noted. This characteristic fluid D001 - is exempt from EPA reporting requirements.							
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19. QUADREX H.P.S., 1940-NW 67TH PL; GAINESVILLE, FL							
Printed/Typed Name JAMES T. McVEY				Signature <i>James T. McVey</i>		Mo. Day Year 11/15/85	

Form 8700-22 (3-84)

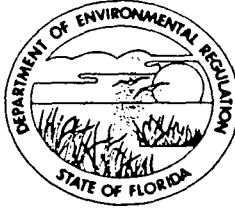
COPY 1—Disposer State—Mailed by TSD Facility

In case of emergency, call 1-800-424-6802 and the N.Y. Department of Transportation (914) 457-7302.

DEPARTMENT OF ENVIRONMENTAL REGULATION

NORTHEAST DISTRICT

3426 BILLS ROAD
JACKSONVILLE, FLORIDA 32207
(904) 396-6959



BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

ERNEST E. FREY
DISTRICT MANAGER

To be filed: HWcc to: AIAMEETING DOCUMENTATION

Attendees: (Attach list)

Location: DEA - Jax Date: 9/3/85 Time: 4:00 PM

Subject:



Permitting



Enforcement Other

Meeting requested by: Jim McVey - QUADREX

Notes:

ATTENDEES - ERNIE FREY - DEA
PHIL CONAM - DEA
JOHN BROWN - "
JIM McVEY - QUADREX

McVEY DISCUSSED DISPOSAL PROBLEMS OF "CLEAN" GLASS AND PLASTIC. ALACHUA CO. WILL NOT ACCEPT. ALTERNATIVES DISCUSSED.

- 1.) ON-SITE LANDFILL. DEA STATED WOULD BE DIFFICULT DUE TO EXISTING CIRCUMSTANCES IN ALACHUA CO. AND WOULD TAKE A LONG TIME TO PROCESS APPLICATION.
- 2.) ON SITE INCINERATION - TO BURN PLASTIC, SO RESIDUAL GLASS CAN BE RECYCLED. PROBABLY EASIER TO PERMIT THAN LANDFILL AND MORE ENVIRONMENTALLY SOUND. McVEY ASKED IF DODI WASTE COULD BE

Agreements/Conclusions Reached:

USFO AS FUEL. OHA STATED, IS POSSIBLE, BUT WOULD
REQUIRE MORE IN-DEPTH PERMIT APPLICATION REVIEW, RSTS
ETC. Mc VY AND BROWN DISCUSSED PERMIT APPLICATION
REQUIREMENTS FOR INCINERATORS.

Follow-up Actions/Dates:

Prepared by: _____

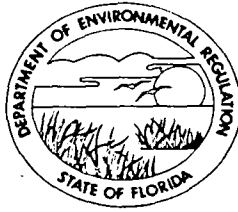
(sign)

P. M. Cron

DEPARTMENT OF ENVIRONMENTAL REGULATION

NORTHEAST DISTRICT

3426 BILLS ROAD
JACKSONVILLE, FLORIDA 32207
(904) 396-6959



BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

G. DOUG DUTTON
DISTRICT MANAGER

June 7, 1985

Mr. Vince McLeod, Environmental Engineer
Alachua County, Department of Environmental
Services
825 Northwest 23rd Avenue, Suite F-110
Gainesville, Florida 32609

Dear Mr. McLeod:

Subject: Quadrex HPS, Incorporated
Disposal of Shredded and Rushed
Scintillation Vials

This is to document the May 10, 1985 follow-up inspection of the above referenced facility.

This inspection was conducted to determine whether the recent changes made to the subject facility's vial shredder/crusher were sufficient to allow the processed waste to be landfilled at Alachua County's landfill.

In the past shredded glass and plastic vials, prior to going through the cutters, were rinsed with kerosene and alcohol and air dried. Presently the vials are sent through an alcohol wash which removes any ignitable fluids, then are rinsed with water to remove residual alcohols, next through the crusher, and finally through an alcohol spray rinse. The resulting rinsate is then drained and pumped to the facility's hazardous waste storage tank, and temporarily stored prior to disposal through permitted off-site facility.

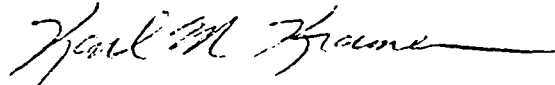
In the interim between the landfill incident and this inspection, Quadrex installed new cutter blades on its shredder/crusher and adjusted the blade's tooth size to eliminate the potential of vials passing through the system without being crushed. Quadrex is also attempting to have their shredded plastic and crushed glass recycled through an off-site contractor.

The current vial processing methods being used have greatly aided in the reduction of residual organic liquids in incorporating themselves into the plastic matrix and hence contributing to the odor problem previously experienced at the Alachua County Landfill. This office sees no reason to discourage

Mr. McLeod
June 7, 1985
Page Two

the disposal of this waste through the county's sanitary landfill. The decision to accept or deny this waste stream is the County's.

Sincerely,

A handwritten signature in cursive script, appearing to read "Karl M. Kramer", with a long horizontal flourish extending to the right.

Karl M. Kramer
Environmental Specialist

KMK/dje



Quadrex HPS Inc.

1940 N W 67th Place Gainesville Florida 32606-1649
904-373-6066 TWX 910-590-2438 TELEX 35-2031 TELECOPY 904-373-0040

May 31, 1985

Mr. Vince McCleod
Alachua County
Department of Environmental Services
825 NW 23rd Avenue
Gainesville, FL 32601

Dear Mr. McCleod,

As per the directions of those involved with the types of materials acceptable at the Alachua County Landfill (Archer site) Quadrex HPS has undergone a recent DER review and inspection of the glass and plastic resulting from our process. As you know, we have not been sending any of this material over the last few months until we could undergo this DER review. Just prior to this voluntary hold-up of sending the glass/plastic to the landfill we had been inspected by the DER and found to be in compliance. We had indicated to DER at that time our interest to add additional cleaning equipment and steps to more fully automate the facility. Even though these new steps are more than the EPA required triple rinse or equivalent it was felt that the recent DER review was of value to assure that the glass/plastic was indeed still within the standards. I am pleased to report that the DER considered the glass/plastic suitable for burial at the landfill.

Of additional note to you, we are reviewing potential alternate methods for disposal of the glass/plastic. This glass and plastic is of a specially refined quality and is valuable as a recyclable substance. We may in the near future be able to divert this currently landfilled material to a recycling facility.

The DER will contact you directly regarding our intent and approval to resume sending the glass/plastic to the Archer landfill.

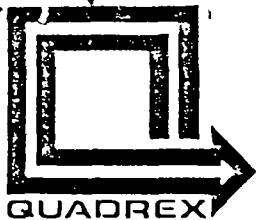
If you have any questions, please contact me.

Sincerely,

James T. McVey, CHCM
Corporate Radiation & Safety Officer

JTM/kdgl-o

cc: A.T. Nelson - Archer Landfill
Ernie Frey - DER



ALACHUA Co.

MEMORANDUM

DATE May 9, 1985

TO Jim McVey, RSO

FROM John McCanless *Jm*

SUBJECT LSV Rinse Water Disposal

Analytical results have finally been received on two (2) of the stored rinse water drums generated during our recent manual LSV glass washing operation. We attempted visually, to send our worst samples that were effectively clean radioactively. These results along with calculated values are attached. The results are summarized below.

	Drum #9	Drum #18
Water	669,700 PPM 66.97%	671,000 PPM 67.1%
Ethanol	327,600 PPM 32.76%	271,000 PPM 27.1%
Toluene	913 PPM 0.09%	14,100 PPM 1.4%
Xylene	1,780 PPM 0.20%	44,000 PPM 4.4%

Admittedly, these are results from only two of the twenty or more stored drums and the automatic system now under design/fabrication will generate water of a still different quality. However, these results do provide excellent guideline material. The preliminary conclusion drawn from these results is if the water quality can be controlled within established limits, dumping to the sewer is a disposal method alternative. The second alternative is to boil/force evaporate the solution, releasing the evaporate to atmosphere.

A resolution of the rinse water disposal question is required ASAP. Non resolution can easily prevent start up and operation of our rinse system. The disposal method must be in place before we can even consider allowing full production operation of the LSV area to begin. As a consequence, I am still actively pursuing establishment of an R & D effort to boil/force evaporate the water (this effort has fallen behind the intended schedule). At your request, actual operation will not begin until you have reviewed and approved the

procedures. As a result of the attached test results, I will begin development of empirical data to be used for monitoring/control of water quality in anticipation of approval for dumping to the sewer. This effort will have to be conducted on an "as time allows" basis simply because of project priorities.

In order for me to point our efforts in a productive direction, I need you to supply numerical limitations on discharge of Toluene/Xylene/Ethanol by the two methods described (dumping to the sewer/boiling forced evaporation). I will also need to know numerical limitations on radioactivity and the isotopes we regularly handle in our LSV operation. I will need to know under what circumstances dilution is acceptable or unacceptable. I will need to know the acceptability of using a Toluene/Xylene/Ethanol solution as fuel for boiling forced evaporation.

I understand Ernie Frey of the DER will be at our office next week and will comment on the methods proposed. This, presumably, will effect your decision on an acceptable disposal method. My concern is the time remaining until the rinse equipment is ready to go into full production (6/10/85). All rinse water disposal R & D, building and equipment design, purchasing, fabrication, building alterations and equipment installation must be complete by this date in order to begin a full LSV production schedule.

JM/kdg

Attachment

cc: Jim Flaacke
C. Witt
B. Warren

(LSV MANUAL RINSE
SAMPLE # 9

TOLUENE =	913 PPM	0.09%	S.G. = .8669
XYLENE =	1780 PPM	0.18%	S.G. = .8642
ETHANOL =	X	X	S.G. = .7905
WATER =	Y	Y	S.G. = 1.000
MIXTURE			S.G. = .931

$$(.0009)(.8669) + (.0018)(.8642) + X(.7905) + Y(1.000) = .931$$

$$.7905X + Y = .9287$$

$$.0009 + .0018 + X + Y = 1.000$$

$$Y = .9973 - X$$

$$.7905X + Y = .9287$$

$$.7905X + (.9973 - X) = .9287$$

$$.0686 = (1 - .7905)X$$

$$.3276 = X$$

$$\boxed{\text{ETH.} = 32.76\% = 327,600 \text{ PPM}}$$

$$(.7905)(.3276) + Y = .9287$$

$$Y = .6697$$

$$\boxed{\text{H}_2\text{O} = 66.97\% = 669,700 \text{ PPM}}$$

XYLENE	=	4.4%	S.G. = 0.864
ETHANOL	=	X	S.G. = 0.79
H ₂ O	=	Y	S.G. = 1.0
MIXTURE			S.G. = 0.935

$$1. \quad \frac{(0.014)(0.867) + (0.044)(0.864) + X(0.79) + Y(1.0)}{1} = 0.935$$

$$2. \quad X(0.79) + Y(1.0) = 0.885$$

$$.79X + Y = 0.885$$

$$2. \quad 0.014 + 0.044 + X + Y = 1.0$$

$$X + Y = 0.942$$

$$Y = 0.942 - X$$

3. Substituting,

$$0.79X + (0.942 - X) = 0.885$$

$$X - 0.79X = 0.942 - 0.885$$

$$X(1 - 0.79) = 0.057$$

$$.21X = 0.057$$

$$X = 0.271$$

$$4. \quad Y = 0.942 - 0.271 = 0.671$$

$$5. \quad \text{H}_2\text{O} = \underline{\underline{67.1\%}} \quad ; \quad \text{ETHANOL} = \underline{\underline{27.1\%}}$$

$$= 671,000 \text{ ppm} \quad = 271,000 \text{ ppm}$$

C. CHECK.

$$\frac{(0.014)(0.867) + (0.044)(0.864) + (0.271)(0.79) + (0.671)(1.0)}{0.014 + 0.044 + 0.271 + 0.671}$$

$$= 0.935$$

ENVIRONMENTAL SCIENCE AND ENGINEERING

85420365

DATE : 04/30/85

PROJECT: GUADREX - HPS - MISC. ORO. - 85

CHEM. LAB. COORD.: J.O. SHAMIS

FIELD GROUP: HPS-4 PARAMETERS: ALL

SAMPLES: ALL

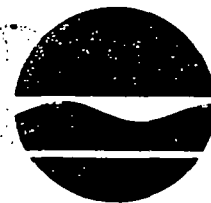
STATUS: FINAL

SAMPLE NUMBERS

PARAMETERS	STREET #	#C	#1P
		500700	500701
	METHOD #		
DATE		04/26/85	04/26/85
TIME		1200	1200
TOLUENE (UG/L)	34010	913000	14100.000
	2		
XYLENE (UG/L)	81551	1780.000	44000.000
	2		
SPECIFIC GRAVITY	80110	0.931	0.935
	0		

New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233 -0001

APR 19 1985



Henry G. Williams
Commissioner
ENVIRONMENTAL DEPT.

RECEIVED

APR 19 1985

FL
Gentlemen:

HAZARDOUS WASTE

In accordance with the New York State Environmental Conservation Law and Part 364 of the rules and regulations, all persons who transport septic or industrial/hazardous wastes in New York State must be permitted by the Department of Environmental Conservation. When our Department receives an application from a person who intends to haul wastes to a facility outside of New York, it is our policy to notify that State or Province before issuing a permit. We therefore request that you take note of the following.

Applicant Radian Research Corp. Date 4-9-85

Address 261 Kent Ave., Brooklyn, NY 11211

Waste

Destination

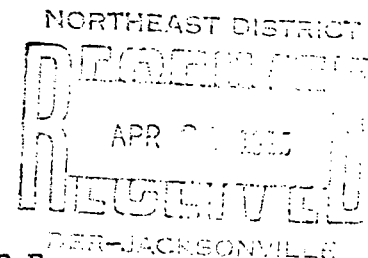
☒ See Attachment

If your department has any objections to the above applicant being issued a permit by New York State, or if you have any questions related to the permit application, please notify us within ten (10) days.

Thank you for your cooperation.

Sincerely,

Norman R. Drapeau, P.E.
Supervisor, Operations Section
Bureau of Hazardous Waste
Division of Solid and Hazardous Waste
(518) 457-3254



NRD:jb

File Quadrex - (Health Physics Systems)
Alachua Co

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID AND HAZARDOUS WASTE

MAR 29 1985

WASTE TRANSPORTER PERMIT APPLICATION—6 NYCRR Part 364

PART A—Applicant Information

1. APPLICANT BUSINESS NAME R A D I A C R E S E A R C H C O R P		2. NYSDEC PERMIT NUMBER 2A — 004	
3. MAILING ADDRESS STREET 261 KENT AVENUE CITY BROOKLYN COUNTY KINGS		STATE NY	ZIP CODE 11211
5. CONTACT PERSON ARTHUR F. GREEN		4. EPA ID NUMBER NYD1049178296	
		6. PHONE NUMBER (718) 963-2233	
7. CHECK <input type="checkbox"/> New Application <input checked="" type="checkbox"/> Renewal <input checked="" type="checkbox"/> Proof of Insurance Attached <input checked="" type="checkbox"/> Permit Fee Attached \$ 6 01			

WASTE TRANSPORTER PERMIT APPLICATION—6 NYCRR Part 364

PART B—Vehicle Information

1. APPLICANT BUSINESS NAME (for Modifications only)		2. NYSDEC PERMIT NUMBER (For Modifications only)	
3. VEHICLE FEE ATTACHED (for modification only)		4. TOTAL NUMBER OF VEHICLES EIGHT	
5. LOCATION WHERE VEHICLES ARE GARAGED: STREET 261 KENT AVENUE CITY BROOKLYN STATE NY ZIP CODE 11211			
6. License Number	7. State	8. Capacity	9. Units
10. Make	11. Type	12. Delete	13. Add
X X X 5 7 G	N J	2 7 5 0 0	0 3
FORD	VAN		X
X F 6 0 V F	N J	2 7 5 0 0	0 3
FORD	VAN		X
X X N 6 3 B	N J	2 7 5 0 0	0 3
FORD	VAN		X
8 9 8 5 1 G C	N Y	1 7 9 9 0	0 3
FORD	VAN		X
3 1 6 6 G H	N Y	6 9 7 0	0 3
DODGE	VAN		X
6 4 5 0 3 G J	N Y	6 9 7 0	0 3
DODGE	VAN		X
9 2 3 0 3 G M	N Y	6 9 7 0	0 3
DODGE	VAN		X
3 5 0 7 3 G R	N Y	6 9 7 0	0 3
DODGE	VAN		X

14. I hereby affirm under penalty of perjury that information provided on this form is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

SIGNATURE

TITLE

Secretary/Treasurer

PRINTED OR TYPED NAME

Arthur F. Green

DATE

March 26, 1985

NORTH EAST DISTRICT

APR 21 1985

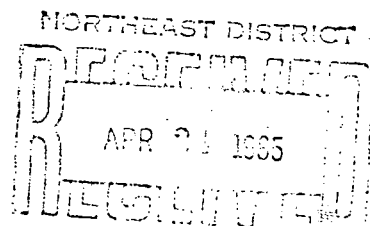
DER-JACKSONVILLE

MAR 29 1985

WASTE TRANSPORTER PERMIT APPLICATION—6NYCRR Part 364

PART C—Waste Information

1. APPLICANT BUSINESS NAME R A D I A C R E S E A R C H C O R P										2. NYSDEC PERMIT NUMBER 2A — 004									
3. TREATMENT, STORAGE, OR DISPOSAL FACILITY (TSDF) INFORMATION <input type="checkbox"/> Delete <input type="checkbox"/> Add																			
LPA ID Number F L D 9 8 0 7 1 1 0 7 1										NYSDEC Facility ID Number									
NAME Quadrex-Health Physics Systems, Inc.																			
STREET 1940 N.W. 67th Place																			
CITY Gainesville															STATE Fla			ZIP CODE 32606	
CONTACT PERSON Mr. Ben C. Warren										PHONE NUMBER 904 373-6066									
WASTE INFORMATION																			
4. Waste Description										5. Waste Code		6. Form		7. Handling Method		8. Delete		9. Add	
All wastes are acceptable to Quadrex-Health Physics Systems, Inc. in accordance with the laws and regulations of the State of Florida.																			
10. COMMENTS Disposal facility is currently permitted.																			
11. STATEMENT OF OWNER OR OPERATOR OF TREATMENT, STORAGE OR DISPOSAL FACILITY Permission is hereby granted to the above named applicant to deliver waste stated in this application to the TSDF listed above, subject to the Rules and Regulations of the Department of Environmental Conservation.																			
SIGNATURE <i>James T. McVey</i>										PRINTED OR TYPED NAME James T. McVey									
TITLE President D & S										DATE 3/29/85									



JACKSONVILLE

Quadrex - Solvents in
Lomfoll
Jim McVey, Pres.

crushed glass & plastic vials
normally hand filled after being
cleaned

its is possible that 5 ml mini vials
(DUE TO DULL BLADES)
may have slipped through the crusher
shredder, however the plastic once
shredded has a tendency to become
permeated with traces of scintillation
fluids (toluene, naphthalene or xylene) or
Kerosene, hence the volatile odors.

Some problem occurred a couple
of months ago, however, after meetings
between Quadrex & Alachua Co. L.F. officials
it was felt that the matter was under-
stood & resolved

Currently the shredding machines blades
are being replaced & ops are shut down

Qolux is researching new
ways to more effectively clean
than crushed glass & plastic

1) steam stripping

2) immersion of the glass & plastic
into pure ethyl alcohol

Alachua Co. Landfill A.T. Nelson, Dir
495-9215 Alan Ellison, Asst.

S.W. landfill
Lorane Trade

3/27/85

3:45

Alan Ellison } (2) 2" ^{plastic} ~~glass~~ light blue
Lybelle Taylor } a little bigger & light red
Washed one to see if it was .410 shell
Two cuts in them ligand

Ellison says waste has already
been landfilled & as far as he knows
landfilling of this waste was permitted



Quadrex HPS Inc.

1940 N.W. 57th Place, Gainesville, Florida 32606-1649
FAX 919-590-2438 TELEX 35-2031 TELECOPY 904-373-7040

EG
VG ✓
June
11/11

March 21, 1985

State of Florida
Dept. of Environmental Regulation
Solid & Hazardous Waste Section
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32301



Gentlemen:

Please be informed that Quadrex HPS has submitted an application to the U.S. EPA in Washington, DC for "PCB Destruction Unit - Nonthermal Destruction/Decontamination for Mobile Use". This permit would allow Quadrex HPS to apply the state-of-the-art decontamination technology to clean existing spills, retired transformers, and other items contaminated with PCB. The permit also would allow Quadrex HPS to be an integral and primary participant in the removal and cleaning of PCB dielectric fluids from in-service transformers, heat exchanger systems and hydraulic systems. Therefore, the Quadrex HPS permit for an alternate method of disposal will facilitate early removal of existing and potential PCB contaminants.

The permit will allow:

1. Use of the mobile distillation type decontamination unit anywhere in the United States. (Note: local regulations will be reviewed and complied with).
2. Rapid removal of PCB from items, surfaces, and containers by a "Freon" 113 solvent with subsequent distillation and segregation of the contaminants from the solvent. The cleanliness of the item and solvent will be determined by analysis for potential reuse or down grading to a lesser hazard class, while the waste will be packaged and disposed of at an EPA approved disposal facility.
3. The decontamination units may be temporarily stored at our Gainesville, Florida facility when not in use or may be serviced to maintain performance standards. Trace amounts of PCB materials from the internal surfaces of the units may be accumulated at the Gainesville facility. These wastes will be stored as per EPA regulations and sent for disposal within 90 days.



March 21, 1985

Page 2 of 2

4. No full scale decontamination efforts are proposed for the Gainesville site. Occasional R&D may continue to occur to expand the state-of-the-art for PCB removal from the environment.

As an integral part of this permit, EPA representatives from Washington, DC will observe, participate in and review a test demonstration of the unit. This test demonstration will occur during the week of April 22-26 with a resultant analysis of data concept etc. to follow.

If you have any questions, please call me at 904-373-6066.

Sincerely,

James T. McVey
James T. McVey, CHCM
Corporate Radiation & Safety Officer

JTM/jkc

cc: Vince McCleod - Alachua County Dept. of Environmental Services
Ernest Frey - NE District Dept. of Environmental Regulation
Constance Jones - USEPA, Region IV

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

INTEROFFICE MEMORANDUM

For Routing To District Offices And/Or To Other Than The Addressee		
To: _____	Locn.: _____	
To: _____	Locn.: _____	
To: _____	Locn.: _____	
From: _____	Date: _____	
Reply Optional []	Reply Required []	Info. Only []
Date Due: _____	Date Due: _____	

NORTHEAST DISTRICT - JACKSONVILLE

TO: Don Trussell - Hazardous Waste Section, Tallahassee

THROUGH: Jerry Owen *JWO*
Ernest Frey *EF*

FROM: Karl M. Kramer *KMK*

DATE: March 18, 1985

SUBJECT: Quadrex HPS, Incorporated
Hazardous Waste Inspection of February 19, 1985
Alachua County - FLD 980 711 071

RECEIVED

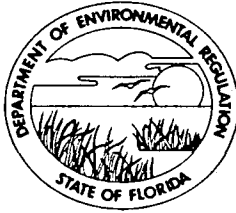
MAR 28 1985

Hazardous Waste

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

NORTHEAST DISTRICT

3426 BILLS ROAD
JACKSONVILLE, FLORIDA 32207
(904) 396-6959



BOB GRAHAM
GOVERNOR
VICTORIA J. TSCHINKEL
SECRETARY
G. DOUG DUTTON
DISTRICT MANAGER

March 18, 1985

Ben Warren, Health Physicist
Quadrex HPS, Incorporated
1940 Northwest 67th Place
Gainesville, Florida 32606

Dear Mr. Warren:

Subject: Quadrex HPS, Incorporated
Hazardous Waste Inspection
FLD 980 711 071

Enclosed is a copy of the report documenting the February 19, 1985 RCRA inspection conducted by this office.

This inspection found the subject facility to be in full compliance with all applicable regulations for generators of hazardous waste.

If you have any questions regarding this report or hazardous waste regulations, please do not hesitate to contact this office for assistance.

Thank you for your time and continual cooperation.

Sincerely,

Karl M. Kramer
Environmental Specialist

RECEIVED

MAR 28 1985

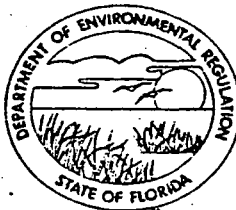
Hazardous Waste

KMK/dje

ENCLOSURE

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

HAZARDOUS WASTE INSPECTION REPORT

1. INSPECTION REPORT ☐ COMPLAINT ☒ ROUTINE ☐ FOLLOW-UP ☐ PERMITTING

FACILITY NAME Quadrex HPS, Inc. DER/EPA ID FLD 980 711 071

ADDRESS 1940 Northwest 67th Place, Gainesville, Florida 32606

COUNTY Alachua Phone (904) 373-6066 DATE 2/19/85 TIME 1:00

TYPE OF FACILITY:

Generator
☐ Small Quantity
☒ Generator

Transporter
☐ Transporter

Storage
☐ Container
☐ Tank
☐ Waste Pile
☐ Surface Impoundment

Disposal
☐ Landfill
☐ Surface Impoundment
☐ Waste Pile

Treatment
☐ Tank
☐ Land Treatment
☐ Thermal
☐ Chem/Phys/Bio.
☐ Incinerator
☐ Surface Impoundment

RECEIVED

MAR 28 1985

Hazardous Waste

2. Applicable Regulations: 40 CFR Part 261.6

☐ 40 CFR 262 ☐ 40 CFR 263 ☐ 40 CFR 264 ☐ 40 CFR 265

3. Responsible Official: (Name & Title) Ben Warren, Health Physicist

4. Survey Participants & Principal Inspector

Karl M. Kramer, FDER
Vincent McLeod, Alachua County, BES

5. Facility Latitude: 29° 42' 08"

Longitude: 82° 20' 51"

6. Type of Ownership: FEDERAL STATE COUNTY MUNICIPAL PRIVATE

7. Permit Number: _____ Date Issued: _____ Expiration Date: _____

7. Discrepancies with Process Description; if different from previous report.

See attached.

8. List and explain noncompliance items.

None.

Quadrex HPS, Inc.
Hazardous Waste Inspection

Process Description:

Quadrex HPS, Incorporated of Gainesville continues to process, for off-site disposal, small glass or plastic vials of liquid scintillation fluids. These vials contain very small quantities of radioactive materials (0.05 microcuries or less of carbon -14 or hydrogen -3 per gram of medium). Because of this, such materials are not subject to radioactive material disposal rules. However, the toluene, xylene, and naphthalene components of the scintillation fluids have a flash point of less than 140 degrees F. Therefore, waste scintillation fluids are a characteristic ignitable hazardous waste and are regulated under 40 CFR Parts 261 and 262.

Vials of scintillation fluids arrive at Quadrex in 55-gallon lab packs. Quadrex technicians separate the vials from their vermiculite packing materials. The vials are then crushed in a machine of the company's own design. During the crushing process, ignitable/radioactive waste fluids are separated from glass and plastic fragments. Once the fragments have been cleaned, using kerosine or ethanol, the spent solvents from this operation are pumped into test tanks dedicated to the individual customer's waste stream. The crushed vials are dried with air and ethyl alcohol. Volatile organic vapors generated via the shredding process are absorbed through a carbon filtration system. Clean crushed and shredded glass and plastic are checked for radiation via a pancake and deep probe, which is inserted into the 55-gallon drum containers. Fluid and crushed vials are both analyzed for beta activity and gamma emitters. Following radiation analysis, all ignitable liquids are pumped to an on-site 3,000 gallon, diked and walled, tank.

Quadrex officials indicated that they generate 3,000 gallons of D001 hazardous waste per month and dispose of their waste through the Oldover Corporation of Russell, Florida. Oldover burns ignitable hazardous waste as a supplemental fuel in their two (2) rotary kilns. This waste is exempt from regulation by 40 CFR Part 261.6.

The subject facility is currently storing twelve (12) drums of PCB contaminated waste, generated as the result of PCB decontamination oriented research. The drums were properly labeled and covered with a tarpaulin. No signs of leakage or spillage were detected. Disposal of this waste is expected to be through GSX, formerly Triangle Industries of Pinewood, South Carolina.

Date 2/26/85
Inspector [Signature]
Facility ID# FLD 980711071

RCRA INSPECTION REPORT
GENERATOR'S CHECKLIST

Note: On multiple part questions, check those not in compliance.

Section A - Site Identification No.

1. Site Name: Quadrex HS/Health Physics Systems, Inc.

Section B - Hazardous Waste Determination (262.11)

1. Does generator generate hazardous waste(s) listed in Subpart D (261.30 - 261.33 - List of Hazardous Waste)?

Yes ☒ No

a. If yes, list wastes, EPA numbers & quantities.

2. Does generator generate solid waste(s) that exhibit hazardous characteristics? (corrosivity, ignitability, reactivity, EP toxicity) (261.20 - 261.24 - Characteristics of Hazardous Waste.)

Yes ☒ No

a. If yes, list wastes, EPA numbers, and quantities.

D001 3000 gallons/month

b. Does generator determine characteristics by testing, by product knowledge, or by applying process knowledge?

(1) If determined by testing, did generator use test methods in Part 261, Subpart C (or Equivalent)?

Yes ☒ No

(2) If equivalent test methods used, attach copy of equivalent methods used.

3. Is generator subject to full regulation under Part 262? (If no, check appropriate exemptions)

Yes ☒ No

Small quantity generator (261.5 - Special requirements)
(Describe small quantity disposal practices & checklist)

OR

Produces non-hazardous waste at this time (261.4 - Exclusions)

OR

Recycles, reclaims, uses or reuses hazardous waste at this time (261.6 - Exclusions) (Describe how this is achieved.)

OR

Being a farmer disposing of waste pesticides for his own use on his own property (262.51 - Farmers)

OR

Burns hazardous waste as a fuel for the purpose of recovering usable energy (261.1(c)(2))

Section C - Manifest (262.20-.23)

1. Has generator shipped hazardous waste off-site since Nov. 19, 1980?
(Subpart B - The Manifest)

___ Yes ___ No

- a. If no, do not fill out Section C and D.
- b. If yes, identify primary off-site facilities.
List facilities in narrative report.

2. Does generator use manifest? (262.20 - General requirements)

___ Yes ___ No

If yes, inspect manifests at random. Do all manifests
reviewed include the following information?
(262.21 - Required information) (Check items not on manifest.)

- a. Manifest Document No. ___ Yes ___ No
- b. Generator's Name, Mailing Address, Tel. No. ___ Yes ___ No
- c. Generator EPA I.D. No. ___ Yes ___ No
- d. Transporter(s) Name and EPA I.D. No. ___ Yes ___ No
- e. Facility Name, Address and EPA I.D. No. ___ Yes ___ No
- f. DOT description of the waste ___ Yes ___ No
- g. (1) Quantity (weight or volume) ___ Yes ___ No
(2) Containers (type and number) ___ Yes ___ No
- h. Emergency Information (optional)
(special handling instructions, Phone No.) ___ Yes ___ No
- i. Is the following certification on each manifest form? ___ Yes ___ No

This is to certify that the above named
materials are properly classified, described,
packaged, marked and labeled and are in proper
condition for transportation according to the
applicable regulations of the Department of
Transportation and the EPA.

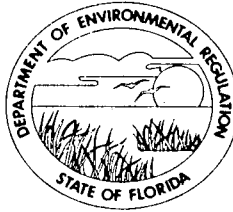
- j. Signatures and dates

- (1) Generator ___ Yes ___ No
- (2) Transporter ___ Yes ___ No
- (3) Disposer (returned copy) ___ Yes ___ No

- k. Indicate number of manifests inspected
and number of violations. _____
Note type of violation in report. _____

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

August 24, 1984

Mr. Bernhardt C. Warren
Health Physicist
Quadrex HPS Inc.
1940 NW 67 Place
Gainesville, Florida 32606-1649

Re: Facility I.D. No.: FLD 980 711 071

Dear Mr. Warren:

I am writing to confirm that we have modified both our records and our computerized tracking system to reflect the name change of your company, from Health Physics Systems, Inc. to that of Quadrex HPS Inc.

By copy of this letter, I am notifying our district office, as well as the EPA of the name change. Should any other changes occur in your operations, please notify us in writing at the letterhead address.

Sincerely,

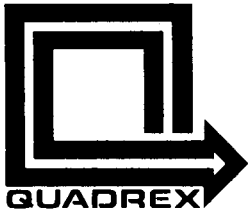
Melinda Bergeson

Melinda Bergeson
Solid & Hazardous Waste Section

MB/aw

cc: Nell Keever - EPA/Region IV
Ernie Frey - DER/Jacksonville

File



Quadrex HPS Inc.

1940 N.W. 67th Place, Gainesville, Florida 32606-1649
904-373-6066 TWX 910-590-2438 TELEX 35-2031 TELECOPY 904-373-0040

August 13, 1984

GROUNDWATER SEC.

AUG 20 1984

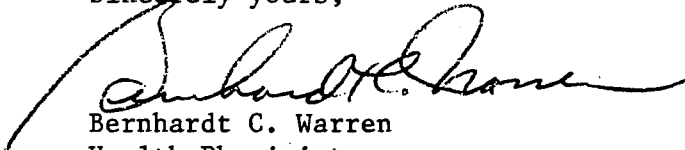
Ms. Gwenn D. Godfrey
State of Florida
Department of Environmental Regulation
Solid and Hazardous Waste Section
Twin Towers Office Building
2600 Blairstone Road
Tallahassee, Florida 32301-8241

Dear Ms. Godfrey:

This is regarding EPA I.D. No. FLD 980711071 issued to Health Physics Systems, Inc., on February 25, 1983. Effective immediately the company name should be changed to Quadrex HPS Inc. (a subsidiary of Quadrex Corporation). This is a name change only. Management control and all other aspects of your permit application should remain the same.

Thank you for your assistance.

Sincerely yours,


Bernhardt C. Warren
Health Physicist

BCW/jkc
enclosure



FLORIDA DEPARTMENT OF STATE

George Firestone

Secretary of State

D.W. McKinnon, Director
Division of Corporations
904/488-9636

Mrs. Nettie Sims, Chief
Bureau of Corporate Records
904/488-9383

June 1, 1984

John W. Weybrew
C T CORPORATION SYSTEM
2354 Montgomery St., Room 1815
San Francisco, CA 94104

Dear Mr. Weybrew:

Qualification documents for QUADREX HPS INC. were filed on June 1, 1984, and assigned charter number P02244. Your check for \$48.00 covering the various fees and taxes has been received.

If you desire further information, please telephone (904) 488-9005, the Foreign Filing Section.

Sincerely,

D. W. McKinnon, Director
Division of Corporations

DWM:krq

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION
INTEROFFICE MEMORANDUM

Routing To District Offices And/Or To Other Than The Addressee		
To: _____	Locn.: _____	
To: _____	Locn.: _____	
To: _____	Locn.: _____	
From: _____	Date: _____	
Reply Optional []	Reply Required []	Info. Only []
Date Due: _____	Date Due: _____	

NORTHEAST DISTRICT - JACKSONVILLE

TO: Don Trussell - Hazardous Waste Section, Tallahassee

THROUGH: Jerry Owen *JWO*
Ernest Frey *EF*

FROM: Karl M. Kramer *KMK*

DATE: March 18, 1985

SUBJECT: Quadrex HPS, Incorporated
Hazardous Waste Inspection of February 19, 1985
Alachua County - FLD 980 711 071

DEPARTMENT OF ENVIRONMENTAL REGULATION

NORTHEAST DISTRICT

3426 BILLS ROAD
JACKSONVILLE, FLORIDA 32207
(904) 396-6959



BOB GRAHAM
GOVERNOR
VICTORIA J. TSCHINKEL
SECRETARY
G. DOUG DUTTON
DISTRICT MANAGER

March 18, 1985

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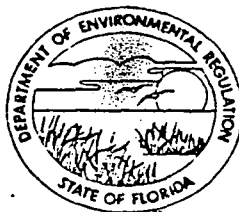
Karl M. Kramer
Environmental Specialist

KMK/dje

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HAZARDOUS WASTE INSPECTION REPORT

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ADDRESS 1940 Northwest 67th Place, Gainesville, Florida 32606

COUNTY Alachua Phone (904) 373-6066 DATE 2/19/85 TIME 1:00

TYPE OF FACILITY:

Generator	Storage	Treatment
<input type="checkbox"/> Small Quantity	<input type="checkbox"/> Container	<input type="checkbox"/> Tank
<input checked="" type="checkbox"/> Generator	<input type="checkbox"/> Tank	<input type="checkbox"/> Land Treatment
	<input type="checkbox"/> Waste Pile	<input type="checkbox"/> Thermal
Transporter	<input type="checkbox"/> Surface Impoundment	<input type="checkbox"/> Chem/Phys/Bio.
<input type="checkbox"/> Transporter		<input type="checkbox"/> Incinerator
	Disposal	<input type="checkbox"/> Surface Impoundment
	<input type="checkbox"/> Landfill	
	<input type="checkbox"/> Surface Impoundment	
	<input type="checkbox"/> Waste Pile	

2. Applicable Regulations: 40 CFR Part 261.6

☐ 40 CFR 262 ☐ 40 CFR 263 ☐ 40 CFR 264 ☐ 40 CFR 265

3. Responsible Official: (Name & Title) Ben Warren, Health Physicist

4. Survey Participants & Principal Inspector

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Vincent McLeod, Alachua County, BES

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Longitude: 82° 20' 51"

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Quadrex HPS, Inc.
Hazardous Waste Inspection

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FY 1985 HAZARDOUS WASTE COMPLIANCE MONITORING AND ENFORCEMENT LOG

1. EPA ID: EL 0080211021

2. H.W. PERMIT NO.

3. HANDLER NAME: Quilley HPS Incorporated
1940 NW 47th Place

4. ADDRESS: Homestead, Florida 33061

5. RESPONSIBLE FACILITY OFFICIAL: Mr. Leon Williams

6. COUNTY: Alachua LAT/LONG: 29°42'N 82°50'W

7. Handler Type: (Circle One)
Major Non-Major

7a. Type Facility: (Circle One)
Treat/Store/Dispose
Non-Handler
Transporter
Generator
Small Quan. Generator
Exempt

7b. Type Ownership: (Circle One)
Federal
State
County
Municipal
Private

8. DATE OF INITIAL EVALUATION WHICH IS THE BASIS FOR THIS REPORT: 6/19/85

8a. AGENCY RESPONSIBLE FOR EVALUATION:
Put *code in box 5
(*SEE Back of Form)

8b. TYPE OF EVALUATION COVERED BY THIS REPORT:
Put *code in box 1
Choose one

9. DATE OF EVALUATION COVERED BY THIS REPORT (enter only if different from 8): / /

10. AREA AND CLASS OF VIOLATION (enter 'X' in appropriate box if violations found. Enter '0' if no violations found in Area evaluated.)	Class of Violation	Area of Violation						
		GWM	CL/PC	Fin. Res.	Permit	Cmpl.Sch	Manif.	Other
I							<u>0</u>	
II								

11. ENFORCEMENT ACTIONS:

Class	Area of Violation	Rule	Type (use *code)	Date Action Taken	Compliance Dates Scheduled	Actual	Penalty Assessed	Collected	Resp. Ag. (use *code)

12. COMMENTS: Handled letter of DOW dated 10/18/85 under 40 CFR 261.6

Leon Williams
Principal Inspector

Section C - Manifest (262.20-.23)

1. Has generator shipped hazardous waste off-site since Nov. 19, 1980?
(Subpart B - The Manifest)

___ Yes ___ No

- a. If no, do not fill out Section C and D.
- b. If yes, identify primary off-site facilities.
List facilities in narrative report.

2. Does generator use manifest? (262.20 - General requirements)

___ Yes ___ No

If yes, inspect manifests at random. Do all manifests
reviewed include the following information?
(262.21 - Required information) (Check items not on manifest.)

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- c. Generator EPA I.D. No. ___ Yes ___ No
- d. Transporter(s) Name and EPA I.D. No. ___ Yes ___ No
- e. Facility Name, Address and EPA I.D. No. ___ Yes ___ No
- f. DOT description of the waste ___ Yes ___ No
- g. (1) Quantity (weight or volume) ___ Yes ___ No
(2) Containers (type and number) ___ Yes ___ No
- h. Emergency Information (optional)
(special handling instructions, Phone No.) ___ Yes ___ No
- i. Is the following certification on each manifest form? ___ Yes ___ No

This is to certify that the above named
materials are properly classified, described,
packaged, marked and labeled and are in proper
condition for transportation according to the
applicable regulations of the Department of
Transportation and the EPA.

- j. Signatures and dates

- (1) Generator ___ Yes ___ No
- (2) Transporter ___ Yes ___ No
- (3) Disposer (returned copy) ___ Yes ___ No

- k. Indicate number of manifests inspected
and number of violations. _____
Note type of violation in report. _____