

DEPARTMENT OF ENVIRONMENTAL REGULATION

INTEROFFICE MEMORANDUM

To: Pam
To: _____
To: _____
To: _____

NORTHEAST DISTRICT - JACKSONVILLE

*TO: Don Trussell
Hazardous Waste Section, Tallahassee

THROUGH: Ashwin B. Patel, ⁰⁰³⁸ Hazardous Waste Supervisor
Vicky G. Valade, ^{pk} Environmental Supervisor
Hazardous Waste Section

FROM: Pamela Fellabaum, Environmental Specialist ^{pk}
Hazardous Waste Section

DATE: November 4, 1993

SUBJECT: Quadrex Environmental Company, Inc.
Hazardous Waste Inspection of October 27, 1993
Alachua County - FLD 980 711 071

Attached is subject inspection report.

*Land Ban

PF:ps

Attachments



Florida Department of Environmental Protection

Lawton Chiles
Governor

Northeast District
7825 Baymeadows Way, Suite B200
Jacksonville, Florida 32256-7577

Virginia B. Wetherell
Secretary

November 23, 1993

Mr. Dennis Fleetwood
Quadrex Environmental Company, Inc.
Post Office Box 4100
Gainesville, Florida 32606

Dear Mr. Fleetwood:

Quadrex Environmental Company, Inc.
DER/EPA ID FLD 980 711 071
Alachua County - Hazardous Waste

Enclosed is a copy of the report documenting the
October 27, 1993, Hazardous Waste Inspection conducted by this
office.

If you have any questions regarding this report or hazardous
waste regulations, please contact this office for assistance. Thank
you for your time and continued cooperation.

Sincerely,

Pamela Fellabaum
Environmental Specialist
Hazardous Waste Section

VA
PF:lm

Enclosure



Florida Department of Environmental Protection

Lawton Chiles
Governor

Northeast District
7825 Baymeadows Way, Suite B200
Jacksonville, Florida 32256-7577

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Secretary

HAZARDOUS WASTE INSPECTION REPORT

1. INSPECTION REPORT COMPLAINT XX ROUTINE FOLLOW-UP PERMITTING
FACILITY NAME Quadrex Environmental Co. DER/EPA ID FLD 980 711 071
STREET ADDRESS 1940 N.W. Place, Gainesville, Florida 32606
MAILING ADDRESS Post Office Box 4100, Gainesville, Florida 32606
COUNTY Alachua PHONE (904) 373-6066 DATE 10/27/93 TIME 10:00 AM

TYPE OF FACILITY:

Generator Status

 Conditionally
Exempt(<100 kg/mo)
 SQG (100-1000 kg/mo)
XX Generator(>1000 kg/mo)
 Non-Handler
XX Hazardous Waste
Fuel Marketer

Storage

XX Container
XX Tank
 Waste Pile
 Surface
Impoundment

Treatment

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

Transporter

 Transporter
 Transfer Facility

Disposal

 Landfill
 Surface Impoundment
 Waste Pile

2. Applicable Regulations:

 40 CFR 261.5 XX 40 CFR 262 40 CFR 263 XX 40 CFR 264
XX 40 CFR 265 XX 40 CFR 266 XX 40 CFR 268

3. Responsible Official: Mr. Dennis Fleetwood

4. Survey Participants & Principal Inspector: Mr. Fleetwood, Quadrex Mr. Flaacke, Quadrex Mr. Whittle, Quadrex Pamela Fellabaum, FDEP

5. Facility UTM: 17/369641/3286370

6. Type of Ownership: FEDERAL STATE COUNTY MUNICIPAL PRIVATE

7. Permit No.: HO 01-169480 Date Issued: 9/28/90 Exp. Date: 9/27/95

8. Pre-arranged Inspection: Yes XX No

Quadrex Environmental Company, Inc.
Hazardous Waste Inspection of
October 27, 1993

PROCESS DESCRIPTION:

Quadrex Environmental Company, Inc. is a waste processing and liquid bulking operation for liquid scintillation fluids (LSF). These fluids are used by researchers to detect small amounts of radioactivity from samples of research materials that have been immersed in the fluid. The LSF contain small amounts of xylene and toluene, and are therefore, regulated under RCRA as F003/F005 hazardous waste and are subject to the land ban regulations. Quadrex is also subject to NRC regulations due to the potential radioactivity of the LSF.

Brokers throughout the United States ship the LSF to Quadrex in drums containing either small glass or plastic vials or bulk liquids. Approximately ninety percent (90%) of the LSF arrive in vials, and the remaining ten percent (10%) arrive in bulk liquids in lined drums. Both types of drums contain cushioning packing material, usually vermiculite.

After the paperwork corresponding to each drum has been checked, the drums are assigned a number and taken to the temporary holding area before processing. The drums that contain the LSF vials and packing material are processed inside the main facility building. The drum lids are removed, the drums are lifted by an air hoist and the contents are emptied onto a shaker screen. The packing materials that fall into a catch basin are radiologically tested and then put into a roll-off. This packing material is shipped by A.R. Paquette to Florida Solite for use in the production of light weight aggregate.

The glass and plastic vials that remain on top of the shaker table are conveyed to a crusher. The fluid in the vials is drained into a basin, radiologically tested and then pumped to a 3,000 gallon above-ground tank outside. The broken glass and plastic are caught in a catch basket and rinsed in a solution of alcohol and water which is in turn radiologically tested then pumped to the 3,000 gallon tank.

The crushed, rinsed plastic/glass is visually inspected to remove any uncrushed plastic/glass containers and placed in a drum where any residual liquids drain to the bottom of the drum. The accumulated liquid is then drained off, tested, and pumped to the 3,000 gallon tank. The remaining glass/plastic is put into trucks and transported by A.R. Paquette to Harold Clifton in Garden City, Georgia for disposal in an industrial waste landfill.

Quadrex Environmental Company, Inc.
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The bulk liquids that are brought to Quadrex arrive in both trucks and containers. The liquids that test negatively radiologically are then pumped to the 3,000 gallon tank. The packing material and empty drums are tested and transported by A. R. Paquette to Harold Clifton. The inner liners are rinsed and either returned to the broker or are transported by A.R. Paquette to Harold Clifton Conservation. All filtered solid hazardous waste (gloves and towels) is manifested and shipped to Southeastern Chemical in South Carolina.

Liquids that test negative radiologically and have waste codes D001, F003, F005 are either pumped to the 3,000 gallon tank or bulked into a tote before being pumped into a tanker truck. The hazardous waste fuel is then manifested to Giant Cement Company. The tank has 100% secondary containment and a sump to contain any spillage. All underground piping has been brought above ground to comply with the 40 CFR 264 tank regulations. Liquids with waste codes that Giant Cement is not permitted to accept remain in the drums for transportation to other facilities including the following: Fisher Industrial Services, Detrex Corporation, and Oldover Corporation.

All liquids that test positive radiologically are put into drums and placed in the main hazardous waste storage area for additional radiological decay. These drums were closed and were properly labeled.

All empty drums are radiologically tested and then loaded onto a trailer and sent to Drum Service of Florida in Zellwood.

Quadrex was issued Operating Permit #HO 01-169480 on September 18, 1990. The expiration date of the permit is September 27, 1995. The hazardous waste storage area has been built to permit specifications and consists of a covered, bermed concrete storage structure with secondary containment and sumps. The facility appears to be operating within its permitted storage capacity. There were approximately 840 55-gallon drums of hazardous waste inside the storage area, and all of the drums were labeled with hazardous waste labels. All of the drums were dated with the original accumulation dates and the date that the drum was received by Quadrex. Hazardous waste generated by Quadrex is also stored in the permitted storage area, and all of these drums were closed and properly labeled.

A review of the facility's operating records found them to be in order. Manifests and accompanying land ban documents were also in order. No violations were noted on the areas inspected.