



A. Achua
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET, SW
ATLANTA, GEORGIA 30303-8909

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4WD-RCRA

MAY 18 1998

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Mike Redig
Hazardous Waste Regulation
Florida Department of Environmental
Protection
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

SUBJ: RCRA Compliance Evaluation Inspection
Perma-Fix of Florida, Inc.
EPA I.D. No. FLD 980 711 071

Dear Mr. Redig:

On March 10, 1998, a compliance evaluation inspection was conducted by the United States Environmental Protection Agency (EPA) at Perma-Fix of Florida, Inc., in Gainesville, Florida. The purpose of the inspection was to determine the facility's compliance status with RCRA.

Enclosed is the EPA RCRA Site Inspection Report.

If you have any questions, please contact Susan Capel, of my staff, at (404) 562-8602.

Sincerely,

Jeffrey T. Pallas, Chief
South Enforcement and Compliance
Section
RCRA Enforcement and Compliance
Branch

Enclosure

cc: Pamela Fellabaum - FDEP (w/o enclosures)

DOCKET # 98-2



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CERTIFIED MAIL
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MAY 21 1998

Mr. Steven Douglas
Perma-Fix of Florida, Inc.
1940 NW 67th Place
Gainesville, Florida 32653

DEPT. OF ENV. PROTECTION
NORTHEAST DISTRICT - JAX

SUBJ: RCRA Compliance Evaluation Inspection
Perma-Fix of Florida, Inc.
EPA I.D. No. FLD 980 711 071

Dear Mr. Douglas:

On March 10, 1998, the United States Environmental Protection Agency (EPA) and Florida Department of Environmental Protection (FDEP) conducted a compliance evaluation inspection at your facility in Gainesville, Florida.

Enclosed is the EPA RCRA Site Inspection Report. A copy of this report has also been forwarded to FDEP, pursuant to the State of Florida - EPA Memorandum of Agreement (MOA).

If you have any questions, please contact Susan Capel, of my staff, at (404) 562-8602.

Sincerely yours,

Jeffrey T. Pallas, Chief
South Enforcement and Compliance
Section
RCRA Enforcement and Compliance
Branch

Enclosure

cc: Mr. Michael Redig, FDEP (w/o enclosures)
Ms. Pam Fellabaum, FDEP

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

RCRA SITE INSPECTION REPORT

1) INSPECTOR AND AUTHOR OF REPORT

Susan Capel
Environmental Engineer

2) FACILITY INFORMATION

Perma-Fix of Florida, Inc.
1940 NW 67th Place
Gainesville, Florida 32653
FLD 980 711 017

3) RESPONSIBLE FACILITY OFFICIAL

Steven Douglas
Regulatory Affairs Manager
Perma-Fix Environmental Services

4) INSPECTION PARTICIPANTS

Susan Capel - EPA
Pamela Fellabaum - FDEP
Steven Douglas - Perma-Fix
Raymond Whittle - Perma-Fix

5) DATE AND TIME OF INSPECTION

March 10, 1998

6) APPLICABLE REGULATIONS

RCRA § 3007
40 C.F.R. Parts 260-270
Florida Administrative Code (F.A.C.) 62.730.140-62.730.183

7) PURPOSE OF THE INSPECTION

To conduct a joint EPA and State Compliance Evaluation Inspection (CEI) of Perma-Fix of Florida, Inc., to verify the facility's compliance with the Resource Conservation and Recovery Act (RCRA) and the applicable regulations contained under 40 C.F.R. Parts 260-270, as well as document compliance with the facility's RCRA Permit.

8) FACILITY DESCRIPTION

Perma-Fix of Florida, Inc. (PF), formerly Quadrex Environmental, processes various hazardous, nonhazardous, and radioactive waste streams for use as fuel. Processing operations include liquid and sludge bulking, scintillation vial and other small container crushing, shredding, and compacting, solvent distillation, and repacking and blending of solid and other hazardous wastes for use as fuel. Hazardous waste derived fuel is shipped to Giant Cement in South Carolina. The facility is a generator and a TSD, permitted for container and tank storage.

Perma-Fix is located on three lots comprising 7 ½ acres. Lot 1 has its own separate EPA identification number and is maintained by Alachua County for coordination of household hazardous waste collection. Lot 2 contains an office building, warehouse, and the permitted container and tank storage building. Lot 3 contains the analytical laboratory for qualifying incoming wastes and a warehouse.

One of Perma-Fix's primary operations includes processing liquid scintillation fluids (LSF) from academic research institutions and medical facilities. LSF are used to detect minute amounts of radioactivity from samples of research materials that have been immersed in the scintillation fluid. After study, the LSF, which is contaminated with trace amounts of radioactivity, is overpacked and sent to the facility. Those containers which exceed a certain radioactive threshold are placed in storage for further radioactive decay. Otherwise, the scintillation fluid is decanted and bulked. Scintillation fluid contains toluene and xylene and is regulated under RCRA as F003/F005.

The facility also bulks lab packs, paint cans, and other hazardous wastes received in overpack containers.

Overpacked or residual sludges are blended in the bulk tank for pumpability and for reuse as fuel. Solids which have been contaminated with hazardous wastes such as oil filters, rags, cardboard, plastic and other materials are also compacted, bulked, then shipped to a permitted hazardous waste disposal facility or material recycler. The facility also bulks nonhazardous oily wastewater for shipment.

9) FINDINGS

Process Area

The process area is located in the warehouse behind the office building on Lot 2. The warehouse floor is used to store 55-gallon containers of nonhazardous waste, although none was being stored at the time of the subject inspection. The warehouse floor is configured to allow container storage in discrete, placarded rows, with separate row designations for nonhazardous oily water, nonhazardous solids, used oil filters, and household wastes including aerosols, household batteries and other household wastes. No household wastes were being stored at the time of the subject inspection.

The oil filter puncture and drain operation, formerly located against the north wall of the warehouse, has been disbanded. Now, oil filters are drummed in and drummed out without crushing. The spent oil filters are sent to All Environmental which compresses the filters prior to disposal.

The south east corner of the warehouse building contains a 7,000 gallon steel tank situated within a berm used to bulk nonhazardous wastewater. The wastewater is then sent to Perma-Fix's facility in Davie, Florida (formerly Integrated Resource Recovery).

The northeast corner of the warehouse building contained a laundry room with dry cleaning machine. The dry cleaning machine was retrofitted to utilize water, instead of freon, to launder the facility's aprons, gloves and uniforms. No wipes are laundered here. Laundry wastewater is collected in 55-gallon drums, sampled, and either routed to the nonhazardous storage tank or blended into with its other hazardous waste streams for use as fuel. To date, the laundry wastewater has not tested hazardous. Laundry filters are managed as hazardous waste and sent to Perma-Fix's facility in Memphis, Tennessee. No laundry operations were underway at the time of the subject inspection. No RCRA violations were noted in the warehouse area.

Receiving Dock and Lot 1

Lot 1 contains two trailers, belonging to Alachua County and used for their household hazardous waste program. This area possesses its own EPA I.D. number and address. Lot 1 also contains storage trailers used by Perma-Fix to store emergency response equipment and bales of diesel contaminated locomotive filters. The locomotive filters are shipped as nonhazardous waste from CSX Railroad. Perma-Fix bulks the filters, then ships them to Savannah Energy. Bale covers are returned to CSX. No RCRA violations were noted.

Scintillation Vial Processing Area

The liquid scintillation fluid processing area is located in a separate sealed room in the warehouse behind the office. Most of the LSF arrives in vials in overpacked containers; the remainder is delivered to Perma-Fix as a bulk liquid in a drum lined with cushioning material. The facility's current processing rate is 800 vials per month.

The overpack drum containing the LSF vials is lifted by a hoist, the drum lid removed, the inner liner loosened, and the vials allowed to flow out into a hopper. The vermiculite packing material shakes through a perforated screen in the hopper to a container below. The vermiculite

packing material and bag liners are tested for radioactivity, then shipped along with the facility's other hazardous waste solids to Chief Supply, a cement kiln in Oklahoma, which uses the material in production of its product.

The glass and plastic vials are crushed and chopped using steel blades. The crushed vials then fall into a basket where the xylene/toluene mixture is allowed to drain. The empty vials are then rinsed with recycled ethanol. The xylene/toluene mixture and rinsate are collected and a radiation test is conducted. If the tests indicate a radioactivity level that is too high or inappropriate for disposal, the liquid is placed in temporary storage drums for further decay. Otherwise, the mixture is routed to a permitted 3,000 gallon storage tank in the permitted container/tank storage area. Ultimately, this material is blended for shipment as a hazardous waste derived fuel.

The rinsed, crushed glass and plastic vials are dumped onto an inspection table for visual inspection to insure that all vials have been opened. The glass/plastic mixture is then bulked in a 50 yd trailer and sent to Savannah Energy for BTU value.

Where the radioactivity level is too high or inappropriate for disposal, the decanted scintillation fluid is placed in temporary storage drums for further decay. If the fluid is hazardous, the container is labeled, dated, and placed in the permitted container storage area. If the fluid is nonhazardous, the container is placed outside the permitted container storage area for decay.

Personnel manning the LDF operation must wear protective clothing and undergo a decontamination procedure upon exiting the Scintillation Room. No LDF operations were being conducted at the time of the inspection. No RCRA violations were noted.

Permitted Container and Tank Storage Area

The hazardous waste storage area consists of a covered, bermed concrete pad with secondary containment. The facility's operating permit authorizes up to 72,100 gallons of container storage and 3,000 gallons of tank storage. The facility appeared to be operating well within its volumetric permitted limits at the time of the inspection. Aisle space was adequate. The facility marks containers of incoming waste with its own start date. At the time of the inspection, two containers were either missing labels or the label could not be viewed from the aisle. A later examination of the shipping invoice for each container showed that neither container held hazardous waste.

The facility blends hazardous waste derived fuels to specification in the facility's 3,000 gallon permitted tank. The tank is situated within a second bermed area beneath the covered container storage area. Incoming bulk hazardous waste transported via tank truck and containerized hazardous waste are either pumped directly in the 3,000 gallon storage tank or off loaded into totes for specialized blending before being pumped into the tank.

Overpack containers are unloaded on the dock. The facility has discontinued the practice of crushing the individual containers to liberate the contents. Now, the facility unloads the containers from the overpack and debulks the containers one at a time into a 55-gallon drum or tote. The empty drums are triple rinsed, with the rinsate collected, then the drums are sent to Zellwood for reconditioning.

Movable dumpster gondolas were stored around the periphery of the container/tank storage barn. At the time of the subject inspection, all of the gondolas were empty.

Pumping hoses and screens are stored in a 55-gallon container of used solvent between pumping and blending operations. The solvent is a toluene/xylene/alcohol mixture received onsite as a waste product from a generator.

The 55-gallon container included a hazardous waste label and the container was closed.

Perma-Fix Analytical Services

A warehouse and laboratory are located in Lot 3 immediately adjacent to Perma-Fix Environmental Services. The laboratory operates under the same EPA I.D. number as the main Perma-Fix facility. The laboratory performs a thumbprint analysis on incoming waste to insure that the waste is substantially as represented on the manifest and also analyzes the final fuel blend prior to shipment. At the time of the inspection, the lab was undergoing an expansion to accommodate radioactive analytical equipment since radioactive waste and hazardous waste streams cannot be co-mingled or share the same equipment. Satellite accumulation containers were properly labeled and closed in the active portion of the lab. No RCRA violations were noted.

A warehouse is connected to the laboratory facility. A less-than-90-day storage area with secondary containment was located just outside the laboratory inside the warehouse. At the time of the inspection, the area held one 40-gallon container, two 55-gallon containers, one 5-gallon container, and one 10-gallon bucket of hazardous waste. All containers were properly labeled and closed. Weekly inspection logs were stored nearby. No RCRA violations were noted.

Records Review

Manifests: No violations were noted.

Training Records: Training records were current for the personnel surveyed. No violations were noted.

Inspection Logs: No violations were noted.

10) SIGNED

Susan Capel
Susan Capel
Environmental Engineer

7 May 98
Date

11) CONCURRENCE

Jeffrey T. Pallas
Jeffrey T. Pallas, Chief
South Enforcement and Compliance
Section
RCRA Enforcement and Compliance
Branch

5-15-98
Date