



**Florida Department of  
Environmental Protection  
Hazardous Waste Inspection Report**

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**FACILITY INFORMATION:**

**Facility Name:** Perma-Fix Of Florida Inc

**On-Site Inspection Start Date:** 08/24/2023

**On-Site Inspection End Date:** 08/24/2023

**ME ID#:** 50775

**EPA ID#:** FLD980711071

**Facility Street Address:** 1940 NW 67th Pl, Gainesville, Florida 32653-1649

**Contact Mailing Address:** 1940 NW 67th Pl, Gainesville, Florida 32653-1649

**County Name:** Alachua

**Contact Phone:** (352) 395-1368

**NOTIFIED AS:**

LQG (>1000 kg/month), Pharmaceuticals Reverse Distributor, TSD Facility, Transfer Facility, Transporter, Used Oil

**WASTE ACTIVITIES:**

**Generator:** LQG **Other Status:** Importer, Mixed RCRA/Radioactive, Offsite Waste Received **Transporter:** Own Waste, Commercial Waste, Transfer Facility **TSD:** Treater, Disposer, Operating Commercial TSD **Used Oil:** On-Spec, Off-Spec, Oil Filters **Universal Waste:** Indicate types of UW generated and/or accumulated at the facility: **Generate/Accumulate:** Batteries, Pesticides, Mercury Containing Lamps, Mercury Containing Devices **Transport:** Mercury Containing Lamps, Mercury Containing Devices **Transfer Facility:** Mercury Containing Lamps, Mercury Containing Devices **Maximum quantity of UW handled or transported at any time:** Less than 5,000 kg (11,000 lbs); Small Quantity Handler (SQH)

**INSPECTION TYPE:**

Routine Inspection for TSD Facility Facility  
Routine Inspection for Hazardous Waste Transporter Facility  
Routine Inspection for Used Oil Transporter Facility  
Routine Inspection for LQG (>1000 kg/month) Facility

**INSPECTION PARTICIPANTS:**

Principal Inspector: Cheryl L Mitchell, Inspector  
Other Participants: Andy Owens, Quality Assurance Manager

**LATITUDE / LONGITUDE:** Lat 29° 43' 0.5156" / Long 82° 20' 59.741"

**NAIC:** 562211 - Hazardous Waste Treatment and Disposal

**TYPE OF OWNERSHIP:** Private

**Introduction:**

Perma-Fix of Florida, Inc. (Perma-Fix, the facility) was inspected on August 24, 2023. Perma-Fix was last inspected by the Department's Hazardous Waste Program on June 24, 2021. Perma-Fix operates a hazardous waste Treatment, Storage and Disposal Facility (TSDF) under RCRA/HSWA permit #17680-013-HO issued by the Department on June 3, 2020, and expiring on June 8, 2025. Perma-Fix is a Large Quantity Generator (LQG) of hazardous waste, a Used Oil - Used Oil Filter Transporter and Transfer Facility, a Universal Waste (Lamps, Batteries, Devices, Aerosol Cans) Transporter and Transfer Facility, and a Used Oil Marketer. Mr. Andy Owens (Quality Control Manager) and Mr. Lason Kirkland (Industrial Operations Manager) were present during the inspection.

The facility's processes include liquid and sludge bulking, scintillation vial crushing and shredding, repackaging of solid wastes contaminated by hazardous and mixed wastes, stabilization of wastes in containers, thermal desorption and/or chemical oxidation, non-elementary neutralization, used oil handling, petroleum contact water (PCW) transportation, consolidation and storage of universal wastes, radiological screening, and chemical analyses of wastes. The facility receives, temporarily stores, and transfers radioactive and mixed wastes in accordance with US Nuclear Regulatory Commission (NRC) and RCRA requirements.

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Perma-Fix has approximately 52 employees at the facility and operates Monday through Thursday from 6 AM to 4 PM, and from 6 AM to 10 AM on Friday. The facility is connected to city water and sewer. Containers are received at the facility, inspected, cross-checked with the manifest, labeled with Perma-Fix inventory labels, logged into the facility's electronic inventory system, and then placed into the appropriate storage area. There are three permitted waste storage areas at the facility where waste containers are stored prior to treatment, blending, and/or off-site shipment: the Processing and Storage Building (PSB); the Liquid Scintillation Vials (LSV) Processing and Waste Storage Warehouse; and the Treatment and Operations Building (TOB). These areas are described in more detail below. Unless otherwise stated, all waste accumulation containers observed were closed, properly labeled, and dated.

**Process Description:****PROCESSING AND STORAGE BUILDING (PSB)**

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The area is not enclosed but is under a roof and has a containment system and concrete curbing with three different zones for storage of waste (Photos 1 and 2). This storage area is permitted to store up to 72,105 gallons of hazardous waste with a maximum container size of 718 gallons which is equivalent to a B-25 box container. At the time of the inspection, this storage area was within its permitted volume capacity and all containers observed had been accumulating for less than one year.

Drums are moved to different zones within the building for storage and treatment as appropriate. The following activities occur in this area: fuel-blending including phase separation treatment, decanting, and bulking of waste; lab-pack decommissioning; and bulking of chemotherapy and pharmaceutical wastes. An aisle near the middle of the PSB separates Zones 1 and 2 from Zone 3. Containers are staged here for initial sampling and after bulking prior to off-site shipment. Zone 1 and a portion of Zone 2 are used to stage containers for bulking of liquid hazardous wastes. The facility pumps the liquid waste from the drums via an overhead pumping / dispensing system into poly or stainless totes or tanker trucks. Bulking of waste usually occurs in the later part of the week to allow for Monday or Tuesday shipment. Zone 2 is primarily used for storage and bulking of chemotherapy, pharmaceutical and other non-infectious medical waste for transfer off-site, but is also used for overflow storage from the other zones in the PSB. At the time of the inspection, two 275-gallon totes and two 55-gallon drums of hazardous waste generated by Perma-Fix were observed. The containers were properly labeled as "Hazardous Waste," but were not marked with an indication of all the hazards of the contents (Photos 3 and 4) [40 CFR 262.17(a)(5)(i)(B)]. Zone 3 is primarily used for storage of waste that doesn't require further treatment, but waste treatment is permitted within this area including non-elementary neutralization which was occurring at the time of the inspection.

Satellite accumulation containers in the PSB were located in separate locations in the following PSB areas: Zone 1 had one 55-gallon container for collecting drips from the pumping equipment tools that are rinsed and placed into the container, and one 55-gallon container for waste aerosol cans; Zone 3 had one 55-gallon container for waste generated during the neutralization process that was being performed at that time. When full, the waste from each satellite container is bulked with other similar wastes and analyzed for disposal. The waste aerosol cans are disposed of as D001 hazardous waste. There was sufficient emergency equipment in this area and technicians had access to portable eyewash equipment during sampling activities in locations that are not readily accessible to the installed equipment. "No Smoking" signs were posted. A 3,000-gallon mixed liquid waste aboveground storage tank (AST) is located in between Zones 1 and 2. The tank had appropriate secondary containment and a sump to contain any spillage. According to facility personnel, the tank has not been used to store any waste since it was installed in 1999.

**LIQUID SCINTILLATION VIALS (LSV) PROCESSING AND WASTE STORAGE WAREHOUSE**

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This building is fully enclosed with a containment system and concrete curbing, and it is separated into two basic storage and treatment sections. In the southwestern portion of the building is the LSV processing and area, personnel 'clean' room for entry/exit to the LSV area, and a Radiological Counting Lab. In the eastern and northern portions of the building are waste storage areas for hazardous, non-hazardous, and universal wastes;

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radioactive-only wastes; used oil and used oil filters; and a facility maintenance shop, material storage, restrooms and laundry room.

#### LSV and Liquid Scintillation Fluids (LSF) Processing

Perma-Fix performs waste processing for LSVs and liquid bulking for LSF. Scintillation fluids emit traceable amounts of radiation when exposed to a radiation source. These fluids are generally used by hospitals and research institutes as tracer fluids. The fluids contain small amounts of xylene and toluene and may be radioactive, so they are placed in a vial and accumulated in 55-gallon drums. The LSF is managed as F003 /F005 hazardous waste, and, if radioactive, as a mixed waste under RCRA and NRC regulations. The facility typically processes LSV one week per month. The LSV treatment process is to place the vials on a vibratory conveyor that separates packing material from the vials, then moves the vials into a crusher where the fluids are separated from the crushed vials. The crushed vials are rinsed with ethanol, the fluids and rinsewater are collected in a storage tank and the crushed vials are transferred to a 55-gallon drum. LSF is screened for radioactivity and pumped into tanks and sent off-site Diversified Scientific Services Inc. (DSSI), a Perma-Fix subsidiary located in Kingston, Tennessee, for further treatment as mixed waste or radioactive waste as appropriate. The crushed, rinsed glass/plastic pieces are screened for radioactivity and disposed of as non-hazardous waste if not radioactive. Radioactive waste may also be stored on-site to decay and attain proper activity level before being shipped off-site as non-hazardous waste. At the time of inspection, the LSV processing unit was not in operation although bulking of low-radioactive waste into B-25 containers was in progress so access to the area was restricted. Other debris treatment permitted in this area includes chemical oxidation/reduction, neutralization, and mercury amalgamation.

#### Radiation Counting Lab

Screening of incoming LSV and waste LSV-LSF is performed in the lab. The process generates wipes and vials that are accumulated in satellite accumulation containers. There were three 15-gallon satellite accumulation containers in the lab for mixed waste vials, exempt vials (e.g., below a designated radioactivity threshold), and lab trash. All containers were closed and properly labeled. When full, the waste is bulked with similar waste in dated containers located in the Waste Storage Warehouse and disposed of as radioactive waste, mixed waste, or non-hazardous waste as appropriate.

#### Waste Storage Warehouse (WSW)

This storage area in the building is permitted to store up to 54,340 gallons of hazardous waste with a maximum container size of 718 gallons that is equivalent to a B-25 box container. At the time of the inspection, this area was within its permitted volume capacity, and all containers observed had been accumulating for less than one year. Permitted activities in this building include various debris treatment procedures described in the permit; and bulking of waste paints, pesticides, aerosols, and non-hazardous wastes. Universal wastes are also stored in this section of the building. There was sufficient emergency equipment in the area. "No Smoking" signs were posted.

#### Maintenance Shop

The maintenance area is located on the northern side of the building within a fenced compound. Routine maintenance on equipment and tools is performed in this area. There was one diesel fuel parts washer that is used for brush-cleaning of parts. Approximately every two years the fluid is changed-out and either bulked with other fuels or managed as non-hazardous waste. The area also had containers for used oil and used oil filters. The containers were closed and properly labeled.

#### TREATMENT AND OPERATIONS BUILDING (TOB)

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This building is fully enclosed with a containment system and concrete curbing. The Waste Storage Area is in the northwest portion of the building; the thermal desorption and chemical treatment area is located in the northeast portion of the building; and a Chemical Lab is located in the southeast portion of the building. The thermal desorption and chemical treatment area was undergoing renovations at the time of the inspection and was not accessible. The existing thermal desorption unit is being replaced with an electric-fired Vacuum

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Thermal Desorptor (VTD) that will be used as part of debris treatment procedures.

#### Waste Storage Area

This storage area has seven zones for different types/classifications of wastes, and it is permitted to store up to 35,200 gallons of hazardous waste with a maximum container size of 718 gallons that is equivalent to a B- 25 box container. At the time of the inspection, this area was within its permitted volume capacity and all containers observed had been accumulating for less than one year. One 1-cubic yard (CY) triwall of waste paint materials received from an off-site generator was not closed (Photo 6) [40 CFR 264.173(a)]. There was sufficient emergency equipment in the area. "No Smoking" signs were posted.

#### Radiological Archive Area

On a mezzanine, over the southern portion of the Waste Storage Area, is an archive storage area for radiological screening samples. The samples are archived pending review of test reports, treatability studies, or for other forensic reasons specific to the generator of the waste. Several times a year, the archive area is purged of samples that are no longer required. Because this purging event has the potential to generate >55-gallons of radioactive or mixed waste the facility is reminded that it should move any hazardous waste in excess of 55-gallons from the satellite accumulation area within three consecutive calendar days to one of the facility's accumulation area or storage buildings, and mark the container with the date the excess amount began accumulating.

#### The Chemical Lab

Fingerprint analyses are performed on a portion of the incoming wastes to confirm that waste received by the facility conforms to the initial waste profile. Analyses performed include water content, specific gravity, pH and flashpoint as appropriate. If a disparity between the waste profile and the test results is detected, additional testing is performed including screening for F-solvents and Total Organic Halides (TOX). Any disparity between the waste profile and lab tests that requires a different treatment and/or handling of the waste is reported to the waste generator in a Non-Conformance Report (NCR). The NCR identifies the disparity and includes the results of the lab test as well as differences in treatment methods and/or costs. The NCR is documented in the generator's record, on file at Perma-Fix, and the waste profile is 'flagged' for follow-up to determine if the generator needs to submit a revised profile.

Lab operations generate waste acid, solvents, solid debris (vials, wipes), and radioactive and mixed wastes. There were several satellite accumulation containers located in separate areas throughout the lab. All satellite containers observed were closed and properly labeled. When full, the waste is transferred to the lab's <90-day waste accumulation area located just outside the lab in the TOB. At the time of the inspection, there were three 55-gallon accumulation drums of waste acids, waste flammable liquids, waste vials/solids accumulating (Photos 7 and 8). One of the containers was empty. The waste accumulation containers were closed, properly labeled and had been accumulating for less than 90 days. There was sufficient emergency equipment in this area.

#### SECURITY

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The facility is surrounded by a chain link fence with barbed wire on top and appeared to be in good condition with adequate signage posted on the fence surrounding the facility. The facility is accessed through a main entrance gate that is kept closed and electronically locked outside normal operating hours. The paved areas outside the PSB, LSV-WSW and TOB are used to stage non-hazardous crushed LSV waste, non-hazardous bulked solid waste and CONEX boxes used for material/equipment storage.

#### RECORDS REVIEW

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Records reviewed included e-manifests, biennial report, Contingency Plan, emergency arrangements, personnel training records, weekly container inspection logs, hazardous waste and used oil logs, and transporter and insurance certifications. All records reviewed appeared to be in order.

**New Potential Violations and Areas of Concern:****Violations**

Type: Violation

Rule: **262.17(a)(5)(i)(B)**

Explanation: The facility failed to label two 275-gallon totes and two 55-gallon drums of hazardous waste, generated by Perma-Fix and located in the Processing and Storage Building, with an indication of all the hazards of the contents.

Corrective Action: No further action is required. The facility properly labeled the containers at the time of the inspection.

Type: Violation

Rule: **264.173(a)**

Explanation: The facility failed to close one 1-cubic yard triwall of waste paint materials located in the Waste Storage Area of the Treatment and Operations Building.

Corrective Action: No further action is required. The facility closed the container at the time of the inspection.

**PHOTO ATTACHMENTS:**

Photo 1



Photo 2



Photo 3

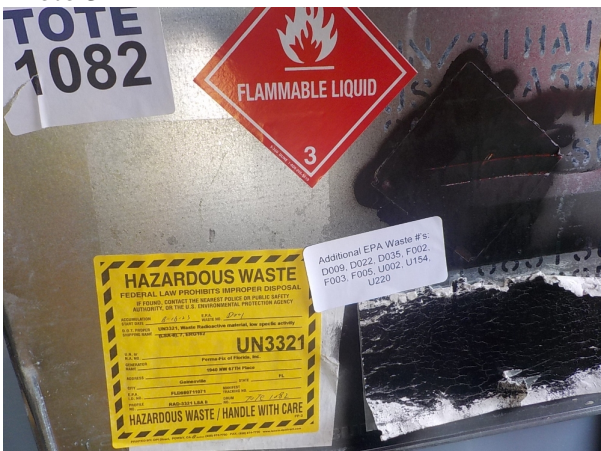


Photo 4





Photo 5



Photo 6



Photo 7



Photo 8



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**1.0: Pre-Inspection Checklist****Requirements:**

The requirements listed in this section provide an opportunity for the Department's inspector to indicate the conditions found at the time of the inspection. A "Not Ok" response to a requirement indicates either a potential violation of the corresponding rule or an area of concern that requires more attention. Both potential violations and areas of concern are discussed further at the end of this inspection report.

**Note: Checklist items with shaded boxes are for informational purposes only.**

Item No.	Pre-Inspection Review	Yes	No	N/A
1.1	Has the facility notified with correct status? 262.18(a)			✓
1.2	Has the facility notified of change of status? 62-730.150(2)(b)			✓
1.3	Did the facility conduct a waste determination on all wastes generated? 262.11			✓

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**Signed:**

A hazardous waste compliance inspection was conducted on this date, to determine your facility's compliance with applicable portions of Chapters 403 & 376, F.S., and Chapters 62-710, 62-730, 62-737 & 62 -740 Florida Administrative Code (F.A.C.). Portions of the United States Environmental Protection Agency's Title 40 Code of Federal Regulations (C.F.R.) 260 - 279 have been adopted by reference in the state rules under Chapters 62-730 and 62-710, F.A.C

Cheryl L Mitchell  
**Principal Investigator Name**

Inspector  
**Principal Investigator Title**



**Principal Investigator Signature**

<u>DEP</u>	<u>12/28/2023</u>
<b>Organization</b>	<b>Date</b>

Andy Owens  
**Representative Name**

Quality Assurance Manager  
**Representative Title**

Perma-Fix of Florida, LLC  
**Organization**

NOTE: By signing this document, the Site Representative only acknowledges receipt of this Inspection Report and is not admitting to the accuracy of any of the items identified by the Department as "Potential Violations" or areas of concern.

**Report Approvers:**

**Approver:** Cheryl L Mitchell

**Inspection Approval Date:** 12/28/2023