

**USED OIL  
GENERAL PERMIT APPLICATION**

**PERMA-FIX OF FT. LAUDERDALE, INC.  
3701 S.W. 47 Avenue, Suite 109  
Davie, Florida 33314**

**April 23, 1996  
(Submittal 1.0)**

**Prepared by:  
Michael J. Haynes  
Vice President / Regional Manager**

**USED OIL, GENERAL PERMIT APPLICATION**

**PERMA-FIX OF FT. LAUDERDALE, INC.  
3701 S.W. 47 Avenue, Suite 109  
Davie, Florida 33314**

**April 23, 1996**

**Prepared by:  
Michael J. Haynes  
Vice President / Regional Manager**

## TABLE OF CONTENTS

### USED OIL PROCESSING FACILITY GENERAL PERMIT NOTIFICATION

[Supplemental Information to FDEP Form 62-710.900(5) Sections 6, 7, 8, 9, and 10]

Section 6.	
Subpart F - Standards for Used Oil Processors and Re-refiners .....	1
[F.A.C. 62-710 and 40 CFR 279.51]	
Oil Filter Processing Standards .....	3
[F.A.C. 62-710.850]	
Subpart C - Standards for Used Oil Generators .....	3
[F.A.C. 62-710 and 40 CFR 279.20]	
Subpart E - Standards for Used Oil Transporter and Transfer Facilities .....	5
[F.A.C. 62-710 and 40 CFR 279.40]	
Subpart H - Standards for Used Oil Fuel Marketers .....	6
[F.A.C. 62-710 and 40 CFR 279.70]	
Section 7.	
Attach a description and general layout of the facility. ....	7
Section 8.	
Description of the operations . ....	8
Section 9.	
Attach the Closure Plan for the facility .....	8
Section 10.	
Certification .....	8
Attachment A -	U.S. EPA Form 8700-12
Attachment B -	FDEP Used Oil Registration
Attachment C -	FDEP Used Oil General Permit
Attachment D -	Preparedness and Prevention Plan
Attachment E -	Contingency Plan and Emergency Procedures & SPCC Plan
Attachment F -	Waste Analysis Plan
Attachment G -	Used Oil Closure Plan
Attachment H -	Used Oil Manifest, Facility Log, and Used Oil Fuel Delivery Manifest
Attachment I -	Used Oil Recordkeeping Form
Attachment J -	Used Oil Filter Label
Attachment K -	Used Oil Annual Report
Attachment L -	Vehicle Spill Contingency Plan
Attachment M -	Training Program
Attachment N -	Financial Assurance
Attachment O -	FDEP Form 62-710.900(5)
Attachment P -	FDEP Used Oil Check List
Attachment Q -	Storage Tank Registration and Tank List
Figure 1. -	Site Plan

**USED OIL PROCESSING FACILITY GENERAL PERMIT NOTIFICATION**  
[Supplemental Information to FDEP Form 62-710.900(5)]

**Section 6.     The following describes compliance with Rule 62-710, F.A.C. and 40 CFR 279, Subpart F - Standards for Used Oil Processors and Re-refiners as outlined in 40 CFR 279 and FDEP Used Oil Processor Checklist (Rev. 4/26/96)**

40 CFR 279.51 - Applicability

Perma-Fix is not exempt from regulation as a used oil processor under this section. Perma-Fix is not a transporter or burner who processes used oil incidental to normal course of operations.

40 CFR 279.51 - Notification

Refer to Attachment A for a copy of EPA Form 8700-12 as evidence of compliance with this requirement. Perma-Fix is registered with the FDEP as shown in Attachment B. A copy of Perma-Fix's Used Oil General Permit is provided in Attachment C.

40 CFR 279.52(a) - Preparedness and Prevention

Refer to Attachment D for a copy of Perma-Fix's Preparedness and Prevention Plan as evidence of compliance with this requirement.

40 CFR 279.52(b) - Contingency Plan and Emergency Procedures

Refer to Attachment E for a copy of Perma-Fix's Contingency Plan and Emergency Procedures and Spill Prevention, Control, and Countermeasure Plan (SPCC) as evidence of compliance with this requirement.

40 CFR 279.53 - Rebuttable Presumption for Used Oil

Refer to Attachment F for a copy of Perma-Fix's Waste Analysis Plan as evidence of compliance with this requirement.

40 CFR 279.54(a) through (h) - Management Units

Perma-Fix only stores used oil in aboveground tanks and containers. All tanks comply with F.A.C. 62-762 where applicable. All tanks and containers are in good condition without severe rust and apparent structural defects or deterioration. There are no visible leaks. All containers used to store used oil are equipped with steel secondary containment berms capable of containing 20% of the volume of material stored. The secondary containment system for all aboveground tanks is capable of containing 110% of the contents of the largest tank. The containment system consists of a concrete floor (approximately 24 inches thick) and walls (eight inches thick) sufficiently impervious to used oil to prevent any used oil released into the containment system from migrating out and into the soil and/or groundwater. Concrete containment areas are sealed with an epoxy coating to enhance containment of the system. There are no underground tanks located at the site.

Tanks used to process used oil are labeled with the words "Used Oil". All containers containing oily waste are labeled with a description of the waste contained, e.g., oily sludges, oily rags, etc.

Upon detection of a release of used oil to the environment Perma-Fix shall: 1) Stop the release; 2) Contain the released oil; 3) Clean up and manage properly the released used oil and other material; and 4) repair or replace any leaking container or tank prior to returning them to use. If applicable, the facility Contingency Plan will be activated.

Refer to Attachment G for a copy for Perma-Fix's Closure Plan for used oil processing operations.

#### 40 CFR 279.55(a) - Rebuttable Presumption for Used Oil in 279.53

Refer to Attachment F for a copy of Perma-Fix's Waste Analysis Plan as evidence of compliance with this requirement. Sampling methods used to obtain representative samples include colowassas when sampling from containers and tanker trailers. Sampling ports are utilized to obtain samples from a product tank.

#### 40 CFR 279.55(b) - On-specification Used Oil Fuel in 279.72

Refer to Attachment F for a copy of Perma-Fix's Waste Analysis Plan as evidence of compliance with this requirement. Sampling methods used to obtain representative samples include colowassas when sampling from containers and tanker trailers. Sampling ports are utilized when sampling from a product tank.

#### 40 CFR 279.56 - Tracking

Refer to Attachment H for a copy of Perma-Fix's Used Oil Manifest and facility inventory log utilized for the receipt of used oil and the Used Oil Fuel Delivery Manifest utilized to track the delivery of used oil to various industrial furnaces throughout Florida. Additionally, Perma-Fix maintains a used oil recordkeeping form (Attachment I) as required by the FDEP. Perma-Fix shall maintain all applicable documentation for a minimum of three years.

#### 40 CFR 279.57 - Operating Records and Reporting

All records and results of used oil analyses performed as described in the Waste Analysis Plan are maintain in the facility's operating records through manifests, inventory logs, material profile forms, and/or analyses. These records are maintained for a minimum of three years. Additionally, all summary reports and details of all incidents that require implementation of the contingency plan shall be incorporated into the operating record and maintained for three years.

On an annual basis, Perma-Fix shall submit an report to the FDEP (as defined/required by the FDEP) identifying used oil activity for the previous year.

#### 40 CFR 279.58 - Off-site Shipments of Used Oil

Perma-Fix shall utilize its internal transportation resources for the off-site shipment of used oil and/or the resources of a transporter who has obtained an EPA identification number.

#### 40 CFR 279.59 - Management of Residues

Residue from the processing of used oil are managed in accordance with 40 CFR 279.10(e) and characterized in accordance with Perma-Fix's Waste Analysis Plan.

**Section 6. The following describes compliance with Rule 62-710, F.A.C. applicable to 40 CFR 279, Subpart F - Standards for Used Oil Processors and Re-refiners as outlined in 40 CFR 279 and FDEP Used oil Processor Checklist (Rev. 4/26/96)**

#### **Oil Filter Processing Standards - F.A.C. 62-710.850**

1. Perma-Fix is a registered used oil filter processor (Attachment B). Oil filters are drained of residual oil, crushed (optional), and consolidated (i.e., bulked) for further reclamation by a registered processor. No oil filters are discarded via landfilling.
2. Oil filters are stored in containers. The containers are maintained in good condition and are kept closed except when removing material from the container. The containers are labeled "Used Oil Filters" utilizing the label shown in Attachment J by other equivalent labeling means. While stored at Perma-Fix, containers of oil filters are stored in secondary containment areas that consist of steel berms or concrete berms sealed with epoxy.
3. Perma-Fix utilizes the forms provided in Attachment I to document the destination or end use of the processed filters. Records are maintained at the facility for three years.
4. Annual reports are submitted by March 1 for the previous calendar year summarizing the above records (refer to Attachment K).

**Section 6. The following describes compliance with Rule 62-710, F.A.C. applicable to 40 CFR 279, Subpart C - Standards for Used Oil Generators as outlined in 40 CFR 279 and FDEP Used oil Processor Checklist (Rev. 4/26/96)**

#### 40 CFR 279.20 - Applicability

Perma-Fix is not a Household "do-it-yourselfer" used oil generator.

Perma-Fix does not own or operate any vessels.

Perma-Fix does not mix used oil with diesel fuel for use in its vehicles.

Perma-Fix is not subject to used oil regulations as a farmer.

Perma-Fix does not burn used oil for energy recovery.

Perma-Fix does not dispose of used oil as a dust suppressant.

#### 40 CFR 279.21- Hazardous Waste Mixing

Perma-Fix shall not mix hazardous waste with used oil. Procedures identified in the enclosed Waste Analysis Plan also apply to waste generated by Perma-Fix. As a generator of used oil, the rebuttable presumption requirements of 40 CFR 279.21(b) shall be satisfied as outlined in the enclosed Waste Analysis Plan.

#### 40 CFR 279.22 - Used Oil Storage

Refer to the enclosed Contingency Plan and Emergency Procedures and Spill Prevention, Control, and Countermeasure Plan (SPCC) as evidence of compliance with this requirement.

Perma-Fix only stores used oil in tanks and containers. The units are in good condition without severe rust and apparent structural defects or deterioration. There are no visible leaks. All containers used to store used oil are equipped with steel secondary containment berms capable of containing 20% of the volume of material stored. The secondary containment system for all aboveground tanks are capable of containing 110% of the contents of the largest tank. The containment system consists of a concrete floor (approximately 24 inches thick) and walls (eight inches thick) sufficiently impervious to used oil to prevent any used oil released into the containment system from migrating out and into the soil and/or groundwater. Concrete containment areas are sealed with an epoxy coating to enhance containment of the system. There are no underground tanks located at the site.

Tanks used to store used oil are labeled with the words "Used Oil". All containers containing oily waste are labeled with a description of the waste contained, e.g., oily sludges, oily rags, etc.

Upon detection of a release of used oil to the environment Perma-Fix shall: 1) Stop the release; 2) Contain the released oil; 3) Clean up and manage properly the released used oil and other material; and 4) repair or replace any leaking container or tank prior to returning them to use. If applicable, the facility Contingency Plan will be activated.

Refer to the enclosed Closure Plan as evidence of compliance with this requirement.

#### 40 CFR 279.23 - On-site Burning in Space Heater

Perma-Fix does not use any on-site space heaters.

#### 40 CFR 279.24 - Off-site Shipments

Perma-Fix shall utilize its internal transportation resources for the off-site shipment of used oil and/or the resources of a transporter who has obtained an EPA identification number.

Perma-Fix does not use collection centers or aggregation points

Perma-Fix does not currently have any tolling agreements. Any futures agreements established shall be in accordance with 40 CFR 279.24(c).

**Section 6. The following describes compliance with Rule 62-710, F.A.C. applicable to 40 CFR 279, Subpart E - Standards for Used Oil Transporter and Transfer Facilities as outlined in 40 CFR 279 and FDEP Used oil Processor Checklist (Rev. 4/26/96)**

40 CFR 279.40 - Applicability

This Subpart does not apply to Perma-Fix's on-site transportation of used oil.

Perma-Fix is not an used oil collection center.

Perma-Fix does not transport used oil from household "do-it-yourselfers"

Any used oil Perma-Fix receives from abroad shall be managed in accordance with this Subpart once it enters the United States.

Perma-Fix does not dispose of used oil as a dust suppressant.

Perma-Fix is an authorized hazardous waste transporter. However, Perma-Fix does not transport hazardous waste in the same trucks utilized for the transportation of used oil. Hazardous waste is received and transported in drums to a permitted TSDFs, primarily Perma-Fix of Florida. In the event that hazardous waste is ever transported in the same vehicles utilized for used oil, the vehicle will be emptied in accordance with 40 CFR 261.7. The residuals from the "decontamination" of the any vehicle utilized for the transportation will be managed in accordance with 40 CFR 261.

40 CFR 279.41 - Restriction on Transporter Who are Not Also processors or Re-refiners

This section is not applicable since Perma-Fix is a used oil processor.

40 CFR 279.42 - Notification

Refer to Attachment A for a copy of EPA Form 8700-12 as evidence of compliance with this requirement.

40 CFR 279.43 - Used Oil Transportation

Perma-Fix shall deliver used oil to an on-specification used oil burner facility or one of the following entities with an EPA identification number: 1) another transporter; 2) a used oil processor; and/or 3) an off-specification used oil burner facility [40 CFR 279.43(a)].

Perma-Fix shall comply with all applicable packaging, labeling, and placarding requirements of the U.S. Department of Transportation under 49 CFR 100, through 179 as required by 40 CFR 279.43(b).

Refer to Attachment L for a copy of Perma-Fix's Vehicle Spill Contingency Plan as evidence of compliance with 40 CFR 279.43(c).



Perma-Fix does not transport used oil via water or air.

40 CFR 279.44 - Rebuttable Presumption For Used Oil

Refer to Attachment F for a copy of Perma-Fix's Waste Analysis Plan as evidence of compliance with 40 CFR 279.44.

40 CFR 279.45 - Used Oil Transfer Facilities

Refer to Standards for Used Oil Processors and Re-refiners for compliance with these requirements.

40 CFR 279.46 - Tracking

Refer to Attachment H for a copy of Perma-Fix's Used Oil Manifest and facility inventory log for the receipt of used oil and the Used Oil Fuel Delivery Manifest for the delivery of used oil. Additionally, Perma-Fix maintains a used oil recordkeeping form as required by the FDEP (Attachment I). Perma-Fix shall maintain all documentation of a minimum of three years.

40 CFR 279.47 - Management of Residues

Residue from the transportation of used oil are managed in accordance with 40 CFR 279.10(e) and characterized in accordance to the enclosed Waste Analysis Plan.

F.A.C. 62-710.600 - Certified Transporters

Perma-Fix is a certified transporter.

F.A.C. 62-710.600(2)(c) - Training Records

Refer to Attachment M for a copy of Perma-Fix's training program.

F.A.C. 62-710.600(2)(d) - Financial Assurance

Refer to Attachment N for financial assurance documents.

F.A.C. 62-710.500 - Facility Registration Form

Refer to Attachment B for a copy of Perma-Fix's registration form.

**Section 6.     The following describes compliance with Rule 62-710, F.A.C. applicable to 40 CFR 279, Subpart H - Standards for Used Oil Fuel Marketers as outlined in 40 CFR 279 and FDEP Used oil Processor Checklist (Rev. 4/26/96)**

40 CFR 279.70 - Applicability

Perma-Fix does not direct shipments of off-specification used oil from its facility to any used oil burners. Perma-Fix does claim that used oil burned for energy recovery meets the used oil fuel specifications set forth in 40 CFR 279.11

#### 40 CFR 279.71 - Prohibitions

This section is not applicable. Perma-Fix does not direct shipments of off-specification used oil from its facility to any used oil burners.

#### 40 CFR 279.72 - On-specification Used Oil Fuel

Perma-Fix demonstrates that used oil burned for energy recovery meets the fuel specification of 279.11 by performing analyses as identified in the Waste Analysis Plan (Attachment F). Once used oil is shown to meet the specifications of 279.11, it is not longer subject to further regulation under 40 CFR 279. Perma-Fix maintains copies of analyses and supporting documentation for three years.

#### 40 CFR 279.73 - Notification

Refer to the enclosed EPA Form 8700-12 as evidence of compliance with this requirement.

#### 40 CFR 279.74(a) - Off-specification Used Oil Delivery

This section is not applicable. Perma-Fix does not direct shipments of off-specification used oil from its facility to any used oil burners.

#### 40 CFR 279.74(b) - On-specification Used Oil Delivery

Refer to Attachment H for a copy of the Used Oil Manifest and facility inventory logs for the receipt of used oil and the Used Oil Fuel Delivery Manifest for the delivery of used oil. Additionally, Perma-Fix maintains a used oil recordkeeping form (Attachment I) as required by the FDEP. Perma-Fix maintains copies of analyses and supporting documentation for three years.

#### 40 CFR 279.75 - Notices

Before Perma-Fix directs the first shipment of off-specification used oil to a burner, Perma-Fix shall obtain a one-time written and signed notice from the burner certifying that the burner has notified the EPA stating the location and general description of the used oil management activities and that the burner shall burn off-specification used oil only in an industrial furnace or boiler identified in 40 CFR 279.61(a). Perma-Fix shall maintain copies of above referenced information and supporting documentation for three years.

### **Section 7.     Attach a description and general layout of the facility.**

Perma-Fix's Facility (2.5 acres) is located on the southeast corner of Oaks Road and S.W. 47 Avenue in Davie, Florida. The facility's primary activities includes the transportation and processing of used oil for the production of a No. 2 and No. 5 fuel oil, which is subsequently shipped to industrial furnaces throughout Florida. Ancillary activities necessary to support used oil recycling include an on-site wastewater treatment system, sludge management program, and oil filter collection and recycling.

The facility consists of one entrance, an operations office, two aboveground storage tank areas, two loading stations, and numerous ancillary pumps and processing equipment. A general layout of the facility is provided in Figure 1., Site Plan.

**Section 8.     Attach a description of the operations of the facility including how and where the used oil will be tested, stored, and processed.**

Used oil is stored in one of multiple tanks located within the southern most tank storage area. Oily wastewater is stored in both the southern and northern tank storage areas. There are no underground tanks or piping located at the facility. All tanks, piping, and ancillary equipment is located inside secondary containment. Used oil is processed utilizing proprietary physical and chemical methodologies. Used oil is tested in accordance with the enclosed Waste Analysis Plan.

**Section 9.     Attach the Closure Plan for the facility.**

Refer to Attachment G for a copy of the Used Oil Closure Plan.

**Section 10.    Certification**

Refer to Attachment O for a copy of FDEP Form 62-710.900(5) which contains certification authorization.

Please refer to the instructions for Filing Notification before completing this form. The information requested here is required by law (Section 3010 of the Resource Conservation and Recovery Act).



# Notification of Regulated Waste Activity

United States Environmental Protection Agency

Date Received  
(For Official Use Only)

I. Installation's EPA ID Number (Mark 'X' in the appropriate box)

☐

A. First Notification

☒

B. Subsequent Notification  
(Complete Item C)

C. Installation's EPA ID Number

F L D 9 8 1 0 1 8 7 7 3

II. Name of Installation (Include company and specific site name)

P e r m - F i x O f F t. L a u d e r d a l e, I n c.

III. Location of Installation (Physical address not P.O. Box or Route Number)

Street

3 6 7 0 S. W. 4 7 A v e n u e # 2 1 1

Street (Continued)

City or Town

D a v i e

State

Zip Code

F L 3 3 3 1 4 -

County Code

County Name

B r o w a r d

IV. Installation Mailing Address (See Instructions)

Street or P.O. Box

4 0 0 1 S. W. 4 7 A v e n u e # 2 1 1

City or Town

D a v i e

State

Zip Code

F L 3 3 3 1 4 -

V. Installation Contact (Person to be contacted regarding waste activities at site)

Name (Last)

(First)

H a y n e s

M i c h a e l

Job Title

Phone Number (Area Code and Number)

V i c e P r e s i d e n t

3 0 5 - 5 8 3 - 3 7 9 5

VI. Installation Contact Address (See Instructions)

A. Contact Address  
Location Mailing Other

B. Street or P.O. Box

☒ XX

4 0 0 1 S. W. 4 7 A v e n u e # 2 1 1

City or Town

D a v i e

State

Zip Code

F L 3 3 3 1 4 -

VII. Ownership (See Instructions)

A. Name of installation's Legal Owner

P e r m a - F i x O f F t. L a u d e r d a l e I n c.

Street, P.O. Box, or Route Number

4 0 0 1 S. W. 4 7 A v e n u e # 2 1 1

City or Town

D a v i e

State

Zip Code

F L 3 3 3 1 4 -

Phone Number (Area Code and Number)

3 0 5 - 5 8 3 - 3 7 9 5

B. Land Type

P

C. Owner Type

P

D. Change of Owner Indicator

Yes

XX

No

(Date Changed)

Month

Day

Year



# Department of Environmental Protection

Lawton Chiles  
Governor

Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Virginia B. Wetherell  
Secretary

Mr. Michael J. Haynes  
Perma-Fix of Ft. Lauderdale, Inc.  
3701 SW 47th Ave, #109  
Davie FL 33314

April 3, 1996

## BE IT KNOWN THAT

Perma-Fix of Ft. Lauderdale, Inc.  
3670 SW 47th Ave  
Davie

## IS HEREBY REGISTERED AS A USED OIL

Transporter, Transfer Facility, Processor, Marketer,  
Filter Transporter, Filter Transfer Facility, and Filter Processor

pursuant to Chapter 62-710, Florida Administrative Code (F.A.C.)

The Department of Environmental Protection hereby issues

Registration Number FLD981018773 on April 3, 1996

This registration will expire June 30, 1997.

This certificate documents receipt of your annual registration, annual report, training, and demonstration of adequate financial responsibility/insurance coverage as required by Rules 62-710.500, 62-710.520 and 62-710.600, F.A.C. All certified transporters shall comply with the provisions of 62-710.600(4) and (5), F.A.C. This certificate and your cancelled check are your receipts. It shall be displayed in a prominent place at your facility.

*Joan M. Flint*  
Joan M. Flint

Administrative Assistant  
Hazardous Waste Management Section

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

Printed on recycled paper.



# Florida Department of Environmental Regulation

Southeast District • 1900 S. Congress Ave., Suite A • West Palm Beach, Florida 33406

Lawton Chiles, Governor

Telephone: 407/433-2650

Carol M. Browner, Secretary

Fax: 407/433-2666

JUL 02 1991

CERTIFIED MAIL

RETURN RECEIPT REQUESTED

Broward County

SW - Integrated Resource Recovery, Inc.

Permit Files

Expiration Date: JUL 2 1996

GMS I.D. No.: 5006P04072

Mr. Gary L. Moore  
Integrated Resource Recovery, Inc.  
4001 S.W. 47th Avenue  
Suite 211  
Davie, Florida 33314

Dear Mr. Moore:

Re: Notification of Use of General Permit  
Notice No. SO 06-198476

In response to your request, this letter is to advise you that the Department has received your notice of intent to use a general permit as provided in Rule 17-710.800 FAC to operate a used oil recycling facility at 3670 S.W. 47th Avenue, Section 25, Township 50 South, Range 41 East. Please be advised that you are required to abide by all conditions in Rules 17-4.510 through 17-4.540, Florida Administrative Code, the general requirements for general permits; and Rule 17-710, Florida Administrative Code.

Joseph W. Lurix

Solid Waste Permitting

1900 South Congress Avenue, Suite A  
West Palm Beach, FL 33406

JL:rh/2

cc: Chris McGuire, OGC, Tallahassee  
Betsy Golocy, Used Oil, Tallahassee  
Carol Meeds, DER/WPB

# **PREPAREDNESS AND PREVENTION PLAN**

**PERMA-FIX OF FT. LAUDERDALE, INC.  
3701 S.W. 47<sup>th</sup> Avenue, Suite 109  
Davie, Florida 33314**

**APRIL 10, 1996  
(Revision 2.0)**

**Prepared by:**

**Michael J. Haynes  
Operations Manager**

## **TABLE OF CONTENTS**

### **1.0 INTRODUCTION**

- 1.1 Purpose
- 1.2 Facility Information

### **2.0 MAINTENANCE AND OPERATION OF FACILITY [40 CFR 265.31]**

### **3.0 REQUIRED EQUIPMENT [40 CFR 265.32]**

### **4.0 TESTING AND MAINTENANCE OF EQUIPMENT [40 CFR 265.33]**

### **5.0 ACCESS TO COMMUNICATION OR ALARM SYSTEM [40 CFR 265.34]**

### **6.0 REQUIRED AISLE SPACE [40 CFR 265.35]**

### **7.0 ARRANGEMENTS WITH LOCAL AUTHORITIES [40 CFR 265.37]**

## **APPENDIXES**

Appendix A: Facility Emergency Equipment

Appendix B: Daily Inspection Log



# PREPAREDNESS AND PREVENTION PLAN

## 1.0 INTRODUCTION

### 1.1 Purpose

This plan demonstrates compliance with the requirements of 40 CFR 279.52(a) and 40 CFR 265.30 through 265.37 (as reference under F.A.C. 17-730.171(2)(b)).

### 1.2 Facility Information

Perma-Fix is a permitted hazardous waste transporter that operates a ten (10) day transfer facility for drummed hazardous waste. Waste stored in the 10 day transfer area is shipped to Quadrex Environmental Company located in Gainesville, Florida or other permitted treatment, storage, and disposal facilities (TSDs). Perma-Fix also operates an used oil processing facility for the production of fuel oils.

Facility Location: Integrated Resource Recovery, Inc.  
3670 SW 47<sup>th</sup> Avenue  
Davie, Florida 33314

EPA I.D. No. FLD 981 018 773

## 2.0 MAINTENANCE AND OPERATION OF FACILITY [40 CFR 265.31]

Perma-Fix, as owner/operator, shall maintain and operate the facility in a manner that minimizes the possibility of a fire, explosion, or any unplanned sudden, or non-sudden release of hazardous waste or hazardous waste constituents which could threaten human health and the environment.

## 3.0 REQUIRED EQUIPMENT [40 CFR 265.32]

Refer to Appendix A for a summary list of the following items:

Perma-Fix shall maintain an alarm system (i.e., horn) to provide emergency instruction to facility personal.

Perma-Fix shall maintain a telephone and hand-held radio system capable of summoning emergency assistance from the local police department, fire department, and other local response organizations.

Perma-Fix shall maintain an adequate on-site supply of fire extinguishers, fire control equipment, spill control equipment, decontamination equipment, and water pressure.

#### **4.0 TESTING AND MAINTENANCE OF EQUIPMENT [40 CFR 265.33]**

The facility communications and alarm system, fire protection equipment, spill control equipment, decontamination equipment shall be checked daily for proper operation in time of an emergency. Refer to Appendix B for a copy of the Daily Inspection Log.

#### **5.0 ACCESS TO COMMUNICATION OR ALARM SYSTEM [40 CFR 265.34]**

All personnel involved in facility operations shall have immediate access to the alarm and communication system through visual or voice contact with other employees. Facility operations shall be conducted with a minimum of two employees on-site.

#### **6.0 REQUIRED AISLE SPACE [40 CFR 265.35]**

Perma-Fix shall maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to drum storage areas.

#### **7.0 ARRANGEMENTS WITH LOCAL AUTHORITIES [40 CFR 265.37]**

Arrangements with the local police department, fire department, and hospitals shall be accomplished by providing those organizations with Perma-Fix's Contingency Plan. Information provided in the Contingency Plan includes a layout of the facility, on-site emergency equipment, properties and hazards of the material managed on-site, entrance to the facility, evacuation route, and normal working areas.

## **APPENDIX A**

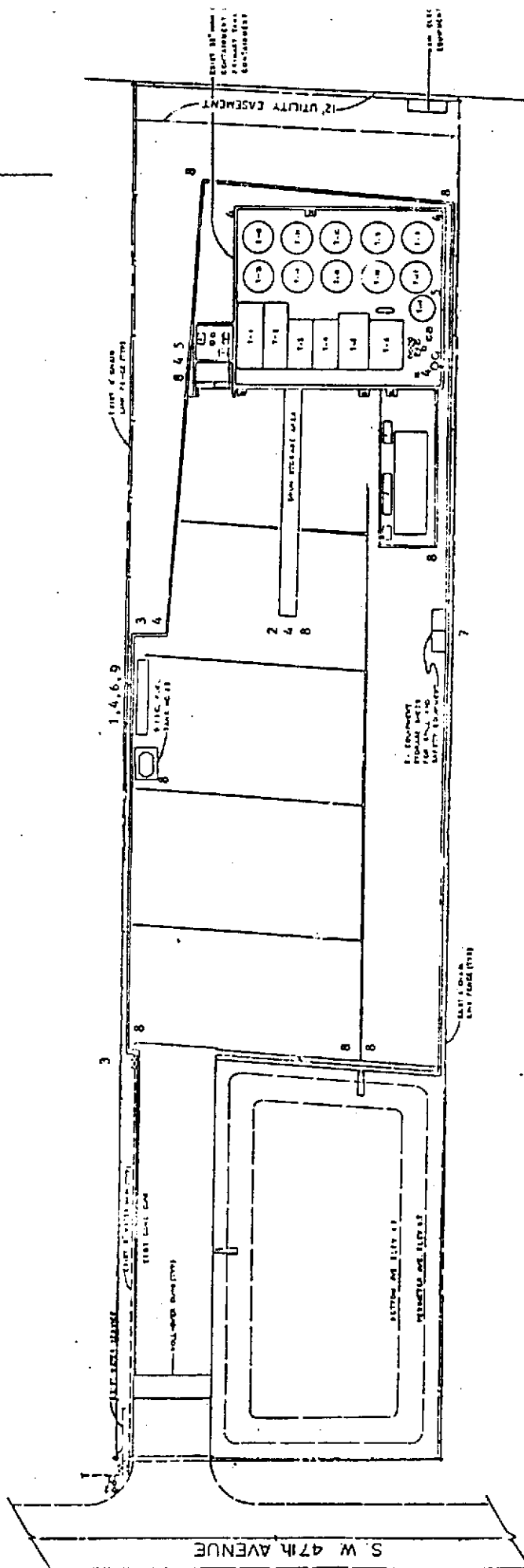
### **Facility Emergency Equipment**

## Facility Emergency Equipment

<u>Equipment</u>	<u>Quantity</u>	<u>Type</u>
Communication system	2	Telephone, radio
Fire alarm	1	Horn
Fire hydrants	2	Water
Fire extinguishers	5	ABC (dry chemical)
Safety showers	2	Water
Eye wash stations	2	Water
Respirator	1	Full face, cartridge
Spill pads	1 roll	Synthetic absorbent
Spill kits (e.g., Oil dry)	9 drums	Clay/vermiculite
Empty drums	25-75	17-H, open top
Spill pumps	2	Diaphragm pumps
First aid kit	1	Industrial kit
Steam cleaner	1	2,200 psi steam pressure washer

Refer to the enclosed facility map for the location of the above referenced equipment. Actual quantity of safety equipment on-site may vary from time to time.

3670 SW 47 Avenue  
Davie, Florida 33314



# Legend

- 1 Communication System
- 2 Fire Alarm
- 3 Fire Hydrants
- 4 Fire Extinguishers
- 5 Safety Showers and Eye Wash Stations
- 6 Respirator
- 7 Spill Pads
- 8 Spill Kits
- 9 First Aid Kit

**APPENDIX B**

**Daily Inspection Log**

12

[illegible]

**See instructions on reverse.**

**Integrated Resource Recovery, Inc., 4001 S.W. 47th Ave., Davie, FL 33314**

ColumnInstructions

1. Enter the date and Time.
2. Enter your name.
3. Identify the number hazardous and non-hazardous waste drums on-site.
4. What is the condition of the drums, containment areas, fittings, and pumps ?  
  
S = satisfactory, U = unsatisfactory.
5. Are there any leaks or spills from the drums, containment areas, fittings, and pumps ? Yes or No.
6. Are safety showers and eye wash stations operational ? Yes or No.
7. Are the emergency response kits operational ? Yes or No.
8. Is the communication system operational ? Yes or No.
9. Are the fire extinguishers operational ? Yes or No.
10. Is the contingency plan posted in a conspicuous place ? Yes or No.
11. Identify any discrepancies in this column. Be descriptive.
12. Identify any resolutions to the discrepancies identified in column 11. List the date and action taken. Be descriptive.



## **CONTINGENCY PLAN AND EMERGENCY PROCEDURES**

**PERMA-FIX OF FORT LAUDERDALE, INC.  
3701 SW 47<sup>th</sup> Avenue, Suite 109  
Davie, Florida 33314**

**January 2, 1996**

**Prepared by:**

**Michael J. Haynes  
Southeast Regional Manager**

## TABLE OF CONTENTS

### **1.0 INTRODUCTION**

- 1.1 Purpose
- 1.2 Scope
- 1.3 Responsibility

### **2.0 GENERAL INFORMATION**

### **3.0 IMPLEMENTATION OF CONTINGENCY PLAN**

### **4.0 ARRANGEMENT WITH LOCAL EMERGENCY RESPONSE AGENCIES**

### **5.0 COPIES OF CONTINGENCY PLAN**

### **6.0 AMENDMENTS TO CONTINGENCY PLAN**

### **7.0 EMERGENCY COORDINATOR (EC)**

### **8.0 EMERGENCY PROCEDURES**

- 8.1 Identifying Releases and Hazards
- 8.2 Notification and Reporting
- 8.3 Emergency Procedures
- 8.4 Emergency Equipment
- 8.5 Evacuation of Facility

### **9.0 RECORDKEEPING**

## APPENDIXES

- |            |   |
|------------|---|
| Appendix A | Correspondence with Local Authorities         |
| Appendix B | Phone Number of Local Authority, Agency, Etc. |
| Appendix C | Emergency Equipment                           |
| Appendix D | Evacuation Routes                             |
| Appendix E | Site Location Map                             |
| Appendix F | Material Inventory List                       |

# CONTINGENCY PLAN AND EMERGENCY PROCEDURES

## 1.0 INTRODUCTION

### 1.1 Purpose

The purpose of this plan is to minimize hazards to human health or the environment from fire, explosions, or any unplanned sudden release of hazardous material/waste to the environment. This plan is to be implemented immediately whenever there is a fire, explosion, or release of material/waste that could threaten human health and the environment.

This document establishes a contingency plan and emergency procedures that complies with the requirements of the following permits and licenses:

- 1) FDEP Hazardous Waste Transporter No. FLD 981 018 773
- 2) FDEP Used Oil Collection/Processing Facility No. 50030-UO
- 3) DNRP Hazardous Material Storage Facility No. STO-2791
- 4) DNRP Hazardous Material Transfer Facility No. HTS-006
- 5) DNRP Industrial Sludge Hauler No. 60045

### 1.2 Scope

This contingency plan and emergency procedures is developed in accordance with:

Code of Federal Regulations: 40 CFR 279.52(b)

Florida Administrative Code: 17-730.171(2)(a) [40 CFR 265 Subpart C , D]

Broward County Codes: 27-306(b)(8), 27-368(c)(4)(e), and 27-368(d)(3)(f)

### 1.3 Responsibilities

The Regional Manager or his designee is responsible for modifying this plan, as needed, to reflect changes in facility operations and/or county, state, or federal regulations. The Regional Manager or his designee is responsible for the implementation of this plan in the event of an emergency and/or accidental release of material/waste. The Facility Manager is responsible for ensuring that all plant employees are familiar with the content of this plan and are able to implement it, if needed.

### 1.3 Responsibilities (continued)

The Facility Manager is responsible for ensuring that all plant employees are familiar with the content of this plan and are able to implement it, if needed. The Facility Manager is responsible for ensuring that this plan is posted and accessible to all employees. In the absence of the Regional Manager, the Facility Manager is responsible for implementing the plan in the event of an emergency and/or accidental release of material/waste.

All plant employee are responsible for reading, understanding, and implementing this plan in the event of an emergency and/or accidental release of material/waste.

## 2.0 GENERAL INFORMATION

Facility Name: Perma-Fix of Ft. Lauderdale, Inc.

Facility Location: 3670 SW 47<sup>th</sup> Avenue  
Davie, Florida 33314

Office Address: 3701 47<sup>th</sup> Avenue, Suite 109  
Davie, Florida 33314

EPA I.D. No. FLD 981 018 773

Facility activities: Used oil processing, hazardous waste transportation/transfer facility.

## 3.0 IMPLEMENTATION OF CONTINGENCY PLAN

The provisions of this plan will be carried out immediately whenever there is a fire, explosion, or release of hazardous material/waste to the environment.

## 4.0 ARRANGEMENT WITH LOCAL EMERGENCY RESPONSE AGENCIES

Arrangements with authorities is established by providing the Davie Police Department, Davie Fire Department, Plantation General Hospital, and Broward General Hospital with a copy of this plan and a letter requesting their assistance in the event of an emergency. Refer to Appendix A for a copy of all correspondence. In the event of revisions to this plan, a copy will be submitted to the above referenced agencies.

## 5.0 COPIES OF CONTINGENCY PLAN

A copy of the contingency plan and all associated revisions will be maintained at the facility and the office. A copy of the plan will be submitted to the Davie Police Department, Davie Fire Department, Plantation General Hospital, Broward General Hospital. Additional copies of this plan are available from the Regional Manager.

## 6.0 AMENDMENTS TO CONTINGENCY PLAN

This plan will be revised, if necessary, whenever:

- 1) Applicable regulations or ordinances are revised;
- 2) The plan fails in an emergency;
- 3) The facility changes in a manner that materially increases the potential for fires, explosions, or the release of hazardous materials/waste, or changes the response necessary in an emergency;
- 4) The Emergency Coordinators change; or
- 5) The list of emergency equipment changes.

In the event of revisions to this plan, a revised copy will be submitted to the authorities identified in Section 4.0. A revised copy of the plan will also be maintained at the facility and office.

## 7.0 EMERGENCY COORDINATOR (EC)

The following identifies the primary and secondary EC:

### Primary EC

Mike Haynes  
Regional Manager  
(305) 474-9947 (Home)  
(305) 583-3795 (Business)  
(305) 875-0121 (Beeper)

### Secondary EC

Shawn L. Lennon  
District Manager  
(305) 680-8950 (Home)  
(305) 583-3795 (Business)  
(305) 497-7080 (Beeper)

At all times, there will be at least one EC either at the facility or on call who is available to respond to an emergency by reaching the facility within a short period of time and has the responsibility for coordinating all emergency response measures. The EC will be familiar with all aspects of this plan, all operations and activities at the facility, the location and characteristic of the waste handled, the location of all records within the facility, and the facility layout. Additionally, the EC has the authority to commit resources needed to carry out this plan.

## 8.0 EMERGENCY PROCEDURES

### 8.1 Identifying Releases and Hazards

Whenever there is a release, fire, or explosion, the EC will immediately identify the character, exact source, amount, and a real extent of any released material/waste. The EC will do this by observation or review of facility records/manifests and, if necessary, by chemical analyses.

Concurrently, the EC will assess possible hazards to human health and the environment that may result from a release, fire, or explosion. The assessment will consider both direct and indirect effects of a release, fire, or explosion such as toxic gases, or the effect of any hazardous surface water runoff from water or chemical agents used to control the situation.

### 8.2 Notification and Reporting

Whenever there is an imminent or actual emergency, the EC or his designee will immediately activate the facility communication system and notify all facility personnel. The facility communication system includes a telephone, a two-way radio system, and horn signals. The EC will also notify the following agencies as indicated:

- 1) Broward County Fire Department via 911 (**immediately**);
- 2) Department of Natural Resource Protection via 765-4900 (**within 24 hours**); and
- 3) Florida Department of Environmental Protection via (407) 433-2650 (**within 24 hours**), or

The Florida Bureau of Disaster and Preparedness via (904) 413-9911 or (800) 320-0519 (**within 24 hours**);

Notification of additional local authorities listed in Appendix B may be conducted, as deemed necessary by the EC.

If the EC determines that the facility has had a release, fire, or explosion which could threaten human health or the environment outside the facility boundaries, he will report his findings as follows:

- 1) If the EC's assessment indicates that evacuation of the local area may be advisable, he will immediately notify the local authorities identified above. Additional assistance from local authorities listed in Appendix B may be obtained, as deemed necessary by the EC. The EC will be available to assist local authorities in deciding whether evacuation of the immediate area is needed.

- 2) The EC will immediately notify the National Response Center at 1-800-424-8802 and report the following information:

- a) Name and telephone number;
- b) Name and address of facility;
- c) Time and type of incident;
- d) Name and quantity of material involved, to the extent known;
- e) The possible hazards to human health and the environment, outside the facility boundaries.

### 8.3 Emergency Procedures

During an emergency, the EC will take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, re-occur, or spread to other hazardous material/waste at the facility. These measures may include stopping operation, collecting and containing released material/waste, and removing or isolating containers. If the facility stops operating, the EC will monitor for leaks, pressure build-up, or ruptures in valves, pipes, etc.

After an emergency, the EC will provide for treatment, storage and disposal of recovered material/waste including contaminated soil, water, or other material. The treatment, storage, disposal of recovered material/waste will be conducted in accordance with applicable county, state, and federal regulations. Waste management companies utilized in the treatment, storage, and disposal of recovered material/waste will be chosen at the EC's discretion. The EC will ensure that, in the affected area(s) of the facility, no material/waste is incompatible with the released material until cleanup procedures are completed. All emergency equipment listed in this plan (Appendix C) will be cleaned, if necessary, and fit for its intended use before operations are resumed.

### 8.4 Emergency Equipment

A list of emergency equipment available on-site is contained in Appendix C.

### 8.5 Evacuation of Facility

The EC is responsible for determining which emergencies require evacuation. The EC may deviate from the evacuation procedures identified below if necessary to bring the situation under control. Evacuation route map and a site location map are illustrated in Appendix D and E, respectively. In the event of evacuation of the plant, the following steps will be taken:

- 1) The signal for evacuation will be given which consists of three long blasts with the air horn. The two-way radio system will be used to notify/divert incoming drivers.
- 2) All vehicle traffic within the Plant will cease. Visitors, contractors, and customers will no longer be allowed into the facility.

- 3) All personnel, visitors, contractors, and customers will immediately leave through the main gate.
- 4) No persons will be allowed to enter the plant without authorization from the EC and senior fire department representative.
- 5) All persons evacuating the plant will assemble southwest of the plant on the west side of 47<sup>th</sup> Avenue at a point chosen by the EC. The assembly point will be within the vicinity of the location identified on the evacuation route map (Appendix D).
- 6) The EC will conduct a head count to confirm that all persons within the facility are present. Any person not accounted for will be immediately reported to the senior fire department representative.
- 7) After the emergency, no personnel will be allowed to re-enter the plant until authorization is obtained from the senior fire department representative and the EC.

## **9.0 RECORDKEEPING**

The EC will submit a written closure plan to the Broward County Department of Natural Resource Protection within 5 days of the incident.

The EC will notify the Regional Administrator and Florida Department of Environmental Protection in writing of the following before operations resume:

- 1) In the affected area(s) of the facility, no material/waste is incompatible with the released material; and
- 2) All emergency equipment listed in this plan is clean and fit for its intended use.

The EC will document in the facility's operating records the time, date, and details of any incident that required the implementation of this plan. Within 15 days after the incident, the EC will submit a written report on the incident to the Florida Department of Environmental Protection. The report will include the following information:

- 1) Name, address, and telephone number of the owner/operator;
- 2) Name, address, telephone number of the facility;
- 3) Date, time, and type of incident;
- 4) Name and quantity of material(s) involved;
- 5) The extent of injuries, if any;



- 6) An assessment of actual or potential hazards to human health and the environment, if any; and
- 7) Estimated quantity and disposition of recovered material resulting from the incident.

## **APPENDIX A**

### **Correspondence with Local Authorities**



# INTEGRATED RESOURCE RECOVERY, INC.

A WHOLLY OWNED SUBSIDIARY OF QUADREX CORPORATION

4001 S.W. 47th Ave., Suite 211 • Davie, FL 33314 • (305) 583-3795 • 1-800-959-9543 • Fax (305) 583-8017

November 20, 1993

Mr. Mike Donati, Chief  
Town of Davie Fire Department  
6905 S.W. 45 Street  
Davie, Florida 33314

## CERTIFIED MAIL

Dear Chief Donati:

The enclosed Contingency Plan and Emergency Procedures is submitted in accordance with 40 CFR 265.53(b) of the Resource Conservation and Recovery Act. This document contains useful information if your department is called upon for assistance in an emergency.

If you have any questions, do not hesitate to contact me at your convenience. Thank you for your time.

Sincerely,

INTEGRATED RESOURCE RECOVERY, INC.

Michael J. Haynes  
Operations Manager

52L 92L 92E 925

Receipt for  
Certified Mail

No Insurance Coverage Provided  
Do not use for International Mail  
(See Reverse)

Sent to	MIKE DONATI		
Address	6905 S.W. 45th St.		
City, State, and Zip Code	DAVIE, FL 33314		
Postage	\$ 1.67		
Certified Fee	1.00		
Special Delivery Fee			
Restricted Delivery Fee			
Return Receipt Showing to Whom & Date Delivered			
Return Receipt Showing to Whom, Date, and Addressee's Address	1.00		
USPS Postage & Fees	\$3.67		
Postmark or Date	11/23/93		

PS Form 3800, June 1991

Glue at line over top of envelope to the right of the return address

CERTIFIED

P 328 728 725

MAIL



# INTEGRATED RESOURCE RECOVERY, INC.

A WHOLLY OWNED SUBSIDIARY OF QUADREX CORPORATION

4001 S.W. 47th Ave., Suite 211 • Davie, FL 33314 • (305) 583-3795 • 1-800-959-9543 • Fax (305) 583-8017

November 20, 1993

Mr. Jeffery Winters, Administrator  
Plantation General Hospital  
401 N.W. 42 Avenue  
Plantation, Florida 33317

## CERTIFIED MAIL

Dear Mr. Winters:

The enclosed Contingency Plan and Emergency Procedures is submitted in accordance with 40 CFR 265.53(b) of the Resource Conservation and Recovery Act. This document contains useful information if your organization is called upon for assistance in an emergency.

If you have any questions, do not hesitate to contact me at your convenience. Thank you for your time.

Sincerely,

INTEGRATED RESOURCE RECOVERY, INC.

*Michael J. Haynes*

Michael J. Haynes  
Operations Manager

P 414 567 859

Receipt for  
Certified Mail



No Insurance Coverage Provided  
Do not use for International Mail  
(See Reverse)

Supplied by MR. JEFFERY WINTERS	
Street and No. 401 N.W. 42ND AVENUE	
P.O. State and ZIP Code PLANTATION, FL 33317	
Postage	\$1.67
Certified Fee	1.00
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	1.00
TOTAL Postage & Fees	\$3.67
Postmark or Date	11/23/93

PS Form 3800, June 1991

Fold at line over top of envelope to the  
right of the return address

CERTIFIED

P 414 567 859

MAIL



# INTEGRATED RESOURCE RECOVERY, INC.

A WHOLLY OWNED SUBSIDIARY OF QUADREX CORPORATION

4001 S.W. 47th Ave., Suite 211 • Davie, FL 33314 • (305) 583-3795 • 1-800-959-9543 • Fax (305) 583-8017

November 20, 1993

Mr. Wil Trower, Administrator  
Broward General Hospital  
1600 S. Andrews Avenue  
Ft. Lauderdale, Florida 33316

## CERTIFIED MAIL

Dear Mr. Trower:

The enclosed Contingency Plan and Emergency Procedures is submitted in accordance with 40 CFR 265.53(b) of the Resource Conservation and Recovery Act. This document contains useful information if your organization is called upon for assistance in an emergency.

If you have any questions, do not hesitate to contact me at your convenience. Thank you for your time.

Sincerely,

INTEGRATED RESOURCE RECOVERY, INC.

*Michael J. Haynes*

Michael J. Haynes  
Operations Manager

P 414 567 860

Receipt for  
Certified Mail

No Insurance Coverage Provided  
Do not use for International Mail  
(See Reverse)

Sent to	Mr. Wil Trower
Street and No.	1600 S. Andrews Ave.
P.O., State and ZIP Code	FT LAUDERDALE, FL 33316
Postage	\$ 1.67
Certified Fee	1.00
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	1.00
TOTAL Postage & Fees	\$ 3.67
Postmark or Date	11/23/93

PS Form 3800, June 1991

Fold at line over top of envelope to the right of the return address

CERTIFIED

P 414 567 860

MAIL



# INTEGRATED RESOURCE RECOVERY, INC.

A WHOLLY OWNED SUBSIDIARY OF QUADREX CORPORATION

4001 S.W. 47th Ave., Suite 211 • Davie, FL 33314 • (305) 583-3795 • 1-800-959-9543 • Fax (305) 583-8017

November 20, 1993

Mr. Jack Mackie, Chief of Police  
Town of Davie Police Department  
6901 S.W. 45 Street  
Davie, Florida 33314

## CERTIFIED MAIL

Dear Chief Mackie:

The enclosed Contingency Plan and Emergency Procedures is submitted in accordance with 40 CFR 265.53(b) of the Resource Conservation and Recovery Act. This document contains useful information if your department is called upon for assistance in an emergency.

If you have any questions, do not hesitate to contact me at your convenience. Thank you for your time.

Sincerely,

INTEGRATED RESOURCE RECOVERY, INC.

Michael J. Haynes  
Operations Manager

P 414 567 858

Receipt for  
Certified Mail

No Insurance Coverage Provided  
Do not use for International Mail  
(See Reverse)

Sent to	JACK MACKIE
Street and No.	6901 S.W. 45th St
P.O., City and Zip Code	DAVIE, FL 33314
Postage	\$1.67
Certified Fee	1.00
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	1.00
TOTAL Postage & Fees	\$3.67
Postmark or Date	11/23/93

PS Form 3800, June 1991

Fold at line over top of envelope to the right of the return address

CERTIFIED

P 414 567 858

MAIL

## **APPENDIX B**

**Phone Number of Local Authorities, Agencies, Etc.**

### Phone Number of Local Authorities, Agencies, Etc.

<u>Local Authority\Agency</u>	<u>Phone Number</u>	<u>Contact Period</u>
Davie Fire Department	911	Immediately
Davie Police Department	911	Immediately
Emergency Medical Service	911	As needed
DNRP	(305) 519-1260	24 hours
FDEP	(407) 433-2650	24 hours
Florida Bureau of Disaster and Preparedness	(904) 413-9911	24 hours
National Response Center	(800) 424-8802	As needed
Plantation General Hospital (Primary Hospital)	(305) 587-5010	As needed
Broward General Hospital (Secondary Hospital)	(305) 355-4400	As needed
<u>Primary Emergency Coordinator</u> Mike Haynes Regional Manager	(305) 474-9947 (Home) (305) 583-3795 (Business) (305) 875-0121 (Beeper)	
<u>Secondary Emergency Coordinator</u> Shawn L. Lennon District Manager	(305) 680-8950 (Home) (305) 583-3795 (Business) (305) 497-7080 (Beeper)	



## **APPENDIX C**

### **Facility Emergency Equipment**

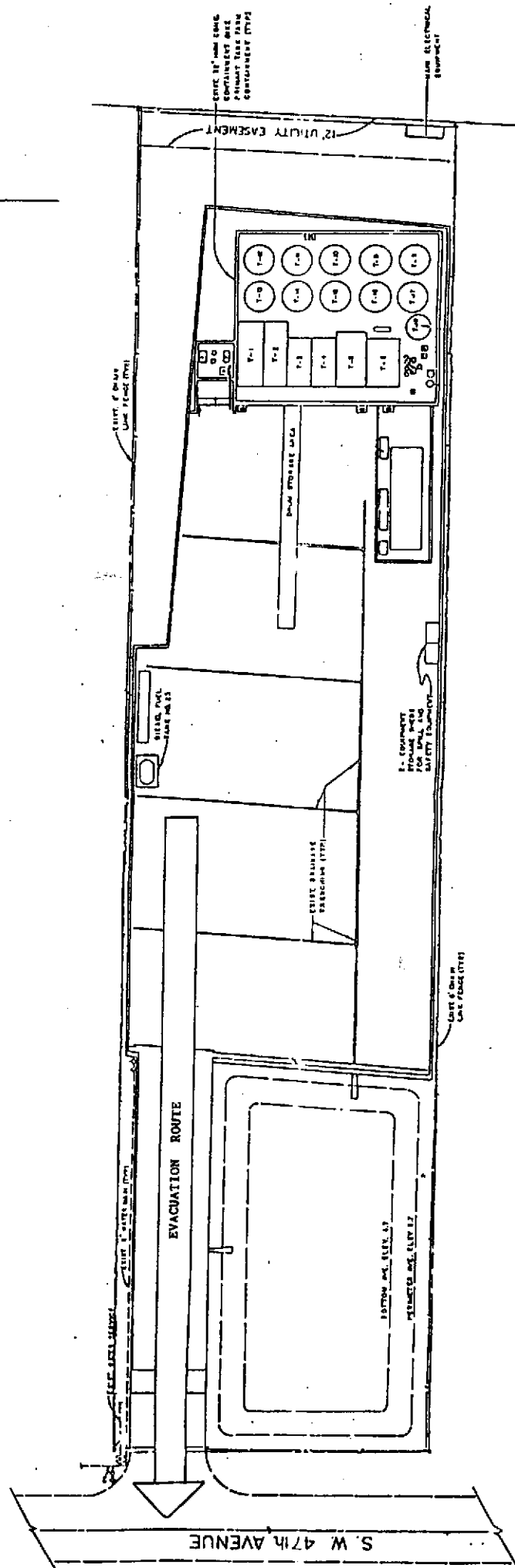
## Facility Emergency Equipment

<u>Equipment</u>	<u>Quantity</u>	<u>Type</u>
Communication system	2	Telephone, radio
Fire alarm	1	Horn
Fire hydrants	2	Water
Fire extinguishers	5	ABC (dry chemical)
Safety showers	2	Water
Eye wash stations	2	Water
Respirator	1	Full face, cartridge
Spill pads	1 roll	Synthetic absorbent
Spill kits (e.g., Oil dry)	9 drums	Clay/vermiculite
Empty drums	25-75	17-H, open top
Spill pumps	2	Diaphragm pumps
First aid kit	1	Industrial kit
Steam Cleaner	1	2,200 psi steam pressure washer

Refer to the enclosed facility map for the location of the above referenced equipment.

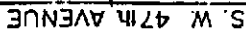
## **APPENDIX D**

### **Evacuation Route**



## **APPENDIX E**

### **Site Location Map**



# 1 Communication System

- 1 Communication System
- 2 Fire Alarm
- 3 Fire Hydrants
- 4 Fire Extinguishers
- 5 Safety Showers and Eye Wash Stations
- 6 Respirator
- 7 Spill Pads
- 8 Spill Kits
- 9 First Aid Kit

PLANTATION

W BROWARD BLVD



PETERS RD

DAVIE BLVD

PORT EVERGLADES EXPWY



CAKES RD

DAVIE

Perma-Fix of Ft Lauderdale, Inc  
3670 SW 47th AVENUE  
Davie, FL 33314  
Ph: (305) 583-3795

SW 45th ST

TURNPIKE

SW 47th AV

RD

GRIFFIN RD



DAVIE RD  
SW 64th AV

FLORIDA'S

SEMINOLE DR

RAVENSWOOD

STIRLING RD



SW 40th AV

HOLLYWOOD

**Appendix F**  
**Material Inventory List**



### Material Inventory List

<u>Product</u>	<u>Time On-site</u>	<u>Average Qty.</u>
Fuel Oil, No. 5	Continuous	25,000 gallons
Fuel Oil, No. 2	Less than 1 day	7,000 gallons
Diesel Fuel	Continuous	5,000 gallons
Potassium Permanganate	Continuous	20 gallons
Paint and Paint Thinners (i.e., toluene and xylene)	10 days or less	1,870 gallons
Sodium Hydroxide	Continuous	250 gallons

NOTE: Refer to the attached Material Safety Data Sheets for information about the above referred products.

## CHEMICAL SERVICES, INC.

120 TODD STREET

DAYTON, OHIO 45403

## GENERAL INFORMATION

Liquid Caustic Soda is a clear, corrosive liquid with no distinct odor.

CAUSTIC SODA - Liquid

Slightly Reactive

1

Nonflammable

0

Highly Hazardous

3

Ratings based on NIOSH "Identification System for Occupationally Hazardous Materials" (1974)

## Data Sheet

340A

## I PRODUCT IDENTIFICATION

MANUFACTURER'S NAME

DIAMOND SHAMROCK CORPORATION

REGULAR TELEPHONE NO

Contact Local Sales Office

EMERGENCY TELEPHONE NO

216-357-7070

ADDRESS

Divisional Technical Center, P. O. Box 191, Painesville, Ohio 44077

TRADE NAME

CAUSTIC SODA - Liquid

SYNONYMS

Sodium Hydroxide; NaOH

## II HAZARDOUS INGREDIENTS

MATERIAL OR COMPONENT

%

HAZARD DATA

SODIUM HYDROXIDE

30

PEL\* - 2.0 mg/m<sup>3</sup> for 15 minutes

\* OSHA Permissible Exposure Limit (PEL)

## III PHYSICAL DATA

BOILING POINT, 760 MM HG

143°C

MELTING POINT

FREEZING POINT

12.1°C (54°F)

SPECIFIC GRAVITY (H<sub>2</sub>O=1)

1.54 @ 15.6°C

VAPOR PRESSURE

13 mm Hg @ 60°C

VAPOR DENSITY (AIR=1)

Not applicable

SOLUBILITY IN H<sub>2</sub>O, % BY WT

Completely soluble

% VOLATILES BY VOL

Not volatile

EVAPORATION RATE: BUTYL ACETATE=11

Does not apply

APPEARANCE AND ODOR

Clear - no odor

pH

5% solution has pH 14

All information, recommendations and suggestions appearing herein concerning our product are based upon tests and data believed to be reliable. However, it is the user's responsibility to determine the safety, toxicity, and suitability for his own use of the product described herein. Since the actual use by others is beyond our control, no guarantee expressed or implied, is made by Diamond Shamrock Corporation as to the effects of such use, the results to be obtained, or the safety and toxicity of the product nor does Diamond Shamrock Corporation assume any liability arising out of use, by others, of the product referred to herein. Nor is the information herein to be construed as absolutely complete.

# Data Sheet

## IV FIRE AND EXPLOSION DATA

FLASH POINT TEST METHOD:

None

AUTOIGNITION TEMPERATURE

FLAMMABLE LIMITS IN AIR % BY VOL

Nonflammable

LOWER

Nonflammable

UPPER

Nonflammable

EXTINGUISHING MEDIA

Use carbon dioxide, "alcohol" foam or dry chemicals in areas where caustic soda is stored. Caustic soda is nonflammable.

SPECIAL FIRE FIGHTING PROCEDURES

Pressure-demand, self-contained respiratory protection and protective clothing should be worn by firefighters in areas where caustic soda is stored. Caustic soda is nonflammable.

UNUSUAL FIRE AND EXPLOSION HAZARD

None

## V HEALTH HAZARD INFORMATION

HEALTH HAZARD DATA PEL = 2.0 mg/m<sup>3</sup> for 15 minutes.

Acute LC<sub>50</sub> > 0.018 < 0.20 mg/L.  
Acute LD<sub>50</sub> - 140-340 mg/kg (oral - rat)  
Acute LD<sub>50</sub> - 1,350 mg/kg (dermal - rabbit)

ROUTES OF EXPOSURE

Caustic soda is a corrosive material.

INHALATION

Airborne concentrations of dust, mist, or spray of caustic soda may cause damage to the upper respiratory tract and even to the lung tissue proper which could produce chemical pneumonia, depending upon severity of exposure.

SKIN CONTACT

Caustic soda is destructive to tissues contacted and produces severe burns.

SKIN ABSORPTION

See "Skin Contact" above.

EYE CONTACT

Caustic soda is destructive to eye tissues on contact. Will cause severe burns that result in damage to the eyes and even blindness.

INGESTION

Caustic soda can cause severe burns and complete tissue perforation of mucous membranes of the mouth, throat, esophagus, and stomach if swallowed.

EFFECTS OF OVEREXPOSURE

ACUTE OVEREXPOSURE

Burns; resulting in frequently deep ulceration and ultimate scarring.

CHRONIC OVEREXPOSURE

The chronic local effect may consist of multiple areas of superficial destruction of the skin or of primary irritant dermatitis. Similarly, inhalation of spray or mist may result in varying degrees of irritation or damage to the respiratory tract tissues.

EMERGENCY AND FIRST AID PROCEDURES

**EYES** Immediately flush eyes with large amounts of water for at least 15 minutes holding eyelids apart to ensure flushing of the entire eye surface. Washing eyes within 1 minute is essential to achieve maximum effectiveness. Seek medical attention immediately.

**SKIN**

Immediately wash contaminated skin with plenty of water. This may be followed with a rinse with vinegar or dilute acetic acid (3% solution) if available. Remove contaminated clothing and footwear and wash clothing before reuse. Discard footwear which cannot be decontaminated. Seek medical attention immediately.

**INHALATION**

Get person out of contaminated area to fresh air. If breathing has stopped, artificial respiration should be started. Oxygen may be administered, if readily available. Seek medical attention immediately.

**INGESTION**

If swallowed, DO NOT induce vomiting. Give large quantities of water. If available, give several glasses of milk. Never give anything by mouth to an unconscious person. Seek medical attention immediately.

SEE PHYSICIAN

# Data Sheet

## VI REACTIVITY DATA

### CONDITIONS CONTRIBUTING TO INSTABILITY

Under normal use conditions, caustic soda is stable.

### INCOMPATIBILITY

When handling caustic soda, avoid contact with aluminum, leather, wool, tin, zinc, and alloys containing these metals. Do not mix with strong acids without dilution and agitation to prevent violent or explosive reaction.

### HAZARDOUS DECOMPOSITION PRODUCTS

None

### CONDITIONS CONTRIBUTING TO HAZARDOUS POLYMERIZATION

None

## VII SPILL OR LEAK PROCEDURES

### STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED

Stop leaks. Contain spill. Remove as much as possible (e.g., shovel up or remove by vacuum truck, if liquid). Neutralize remaining traces of material with dilute acid; then flush area with water followed by liberal covering of sodium bicarbonate. Reuse soiled material, if possible, otherwise place in a closed, labeled container, and store in a safe place to await proper disposal. Persons performing this work should wear adequate personal protective equipment and clothing. Caution: Caustic soda may react violently with acids and water.

### NEUTRALIZING CHEMICALS

Neutralize with any dilute inorganic acid such as hydrochloric, sulfuric, nitric, phosphoric, and acetic acid.

### WASTE DISPOSAL METHOD

Dispose in accordance with all federal, state and local regulations concerning health and pollution. Dispose via approved chemical waste disposal method, if regulations permit.

## VIII INDUSTRIAL HYGIENE CONTROL MEASURES

### VENTILATION REQUIREMENTS

Good industrial hygiene practice dictates that the work area should be isolated and contained, and provided with adequate local exhaust ventilation or other controls to maintain the air concentration of caustic soda below 2.0 mg/m<sup>3</sup> as required by OSHA. Air concentration of carbon monoxide formed by reaction of caustic soda and reducing sugars should not exceed 50 ppm for an eight (8) hour TWA.

### SPECIFIC PERSONAL PROTECTIVE EQUIPMENT

#### RESPIRATORY (SPECIFY IN DETAIL)

Use NIOSH-approved respirator for dusts and mists. Use air purifying respirator where caustic soda is in contact with reducing sugars.

#### EYE

Chemical splash goggles and face shield should be worn when working with or around caustic soda.

#### GLOVES

Gloves coated with rubber, synthetic elastomers, PVC, or other plastic should be worn when handling caustic soda to minimize skin contact.

#### OTHER CLOTHING AND EQUIPMENT

Hard hats, safety shoes, and rubber boots should be worn along with rubber apron when handling caustic soda. Safety showers and eyewash stations should be provided in all areas in which caustic soda is handled.

# Data Sheet

## IX SPECIAL PRECAUTIONS

### PRECAUTIONARY STATEMENTS

#### DANGER!

**Causes Severe Burns to Skin and Eyes**

DO NOT get in eyes, on skin, on clothing.  
Avoid breathing dust, mist, or spray.  
Do NOT take internally.  
Use with adequate ventilation and employ respiratory protection when exposed to dust, mist or spray.  
When handling, wear chemical splash goggles, face shield, rubber gloves and protective clothing.  
Wash thoroughly after handling.  
Avoid contact with strong acids to prevent violent or explosive reactions.  
Keep container closed.

#### First Aid:

##### In case of contact:

For eyes: Immediately flush with plenty of water for at least 15 minutes holding eyelids apart to ensure flushing of the entire eye surface. Seek medical attention immediately.

Skin: Immediately wash with plenty of water. If available, rinse with vinegar or dilute acetic acid (3% solution). Remove contaminated clothing and footwear. Wash clothing before reuse and discard footwear which cannot be decontaminated. Seek medical attention immediately.

Inhalation: Remove person from contaminated area to fresh air. If breathing has stopped, artificial respiration should be started. Oxygen may be administered if readily available. Seek medical attention immediately.

Ingestion: If swallowed, DO NOT induce vomiting. Give large quantities of water. If available, give several glasses of milk. NEVER give anything by mouth to an unconscious person. Seek medical attention immediately.

#### Special instructions for dissolving caustic soda:

When making solution, always add slowly to liquid surface with constant stirring. Never add the liquid to the caustic soda.

Always start with lukewarm liquid (80°-100°F). Never start with hot or cold liquid.

If caustic soda becomes concentrated in one area, or if added too rapidly, or if added to hot or cold liquid, a rapid temperature increase can result in DANGEROUS boiling and/or spattering which may cause an immediate VIOLENT ERUPTION.

Spill or Leak: Leaks should be stopped. Spills, after containment, should be shoveled up and removed to chemical waste area or removed by vacuum truck, if liquid. Neutralize residue with dilute acid, flush spill area with water followed by liberal covering of sodium bicarbonate.

#### For Industrial Use Only

### OTHER HANDLING AND STORAGE REQUIREMENTS

Caustic soda is classified by DOT as a corrosive material.

Considerable heat is generated when water is added to caustic soda; therefore, when making solutions always add the caustic soda to the water with constant stirring. The water should always be lukewarm (80°-100°F). Never start with hot or cold water. If caustic soda becomes concentrated in one area, or if added too rapidly, or if added to hot or cold water, a rapid temperature increase can result in DANGEROUS BOILING and/or spattering or may cause an immediate VIOLENT ERUPTION. Caustic soda can react violently or explosively with acids and many organic chemicals.

Caustic soda reacts with reducing sugars such as fructose, lactose, maltose, galactose, levulose and arabinose to form carbon monoxide. While the potential for worker exposure to carbon monoxide may be small, a potential does exist during cleaning of certain dairy and possibly other industry equipment.

Returnable containers should be shipped in accordance with supplier's recommendations. Return shipments should comply with all federal, state and DOT regulations. All residual caustic soda should be removed from containers prior to disposal.

More information on the hazards and handling of caustic soda appear in Diamond Shamrock Corporation's Caustic Soda Handbook EC-LDC-1c.

# MATERIAL SAFETY DATA SHEET

EM SCIENCE

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Manufacturer.....:

EM SCIENCE  
A Division of EM Industries  
P.O. Box 70  
480 Democrat Rd.  
Gibbstown, N.J. 08027

Preparation Date.: 03/01/91

Date MSDS Printed.: Sep 21, 1993

Information Phone Number.: 609-354-9200  
Hours: Mon. to Fri. 8:30-5  
Chemtrec Emergency Number: 800-424-9300  
Hours: 24 hrs a day

Catalog Number(s):

PX1550 PX1556 PX1555 5084

Chemical Name.....:Potassium Permanganate  
Trade Name.....:Permanganic Acid Potassium Salt  
Chemical Family...:Inorganic Oxidizing Agent  
Formula.....:KMnO4

Molecular Weight.:158.04

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

Component

CAS #

Appr %

Potassium Permanganate

7722-64-7

100%

## 3. HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

STRONG OXIDIZER.

HARMFUL IF INHALED OR SWALLOWED.

IRRITATING TO SKIN, EYES AND MUCOUS MEMBRANES.

Appearance.....:

purple or bronze-like  
crystals; odorless

### POTENTIAL HEALTH EFFECTS (ACUTE AND CHRONIC)

#### Symptoms of Exposure:

-Toxic by ingestion and inhalation

Causes irritation of nasal and respiratory passages, gastrointestinal tract, nausea, diarrhea, possible lung and stomach injury

Irritating on contact with skin, eyes or mucous membranes.

Medical Cond. Aggravated by Exposure:  
Data not available.

Routes of Entry.....:

Inhalation, ingestion or skin contact.

Carcinogenicity.....:

The material is not listed (IARC, NTP, OSHA) as cancer causing agent.

#### 4. FIRST AID MEASURES

##### Emergency First Aid:

Eyes: Immediately flush thoroughly with water for at least 15 minutes.

Skin: Wash thoroughly with soap and water.

Ingestion: If conscious, drink water and induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person.

Dust inhalation: remove to fresh air

GET MEDICAL ASSISTANCE FOR ALL CASES OF OVEREXPOSURE.

#### 5. FIRE FIGHTING MEASURES

Flash Point (F).....:Noncombustible

Flammable Limits LEL (%)..:N/A

Flammable Limits UEL (%)..:N/A

Extinguishing Media.....:

Water spray

Wear self-contained breathing apparatus

Fire Fighting Procedures.:

Strong oxidizer

Fire & Explosion Hazards.:

Thermal decomposition produces toxic fumes.

#### 6. ACCIDENTAL RELEASE MEASURES

##### Spill Response:

Evacuate the area of all unnecessary personnel.

Wear suitable protective equipment listed under Exposure /

Personal Protection.

Eliminate any ignition sources until the area is determined to be free from explosion or fire hazards.

Contain the release and eliminate its source, if this can be done without risk.

Take up and containerize for proper disposal as described under Disposal.

Comply with Federal, State, and local regulations on reporting releases. Refer to Regulatory Information for reportable quantity and other regulatory data.

#### 7. HANDLING AND STORAGE

### Handling & Storage:

Keep container tightly closed.

Store in a cool, well-ventilated area away from organic, combustible and reducing materials

Do not breathe dust.

Do not get in eyes, on skin or on clothing

Retained residue may make empty containers hazardous; use caution!

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### ENGINEERING CONTROLS AND PERSONAL PROTECTIVE EQUIPMENT:

Ventilation, Respiratory Protection, Protective Clothing, Eye Protection

Material should be handled or transferred in an approved fume hood or with adequate ventilation.

Protective gloves (Neoprene, PVC or equivalent) should be worn to prevent skin contact

Safety glasses with side shields should be worn at all times.

### Work / Hygienic Practices:

Wash thoroughly after handling.

Do not take internally.

Eye wash and safety equipment should be readily available.

## EXPOSURE GUIDELINES

### OSHA - PEL:

Component	TWA		STEL		PPM	CL		Skin
	PPM	MG/M <sup>3</sup>	PPM	MG/M <sup>3</sup>		MG/M <sup>3</sup>		
Potassium Permanganate								

### ACGIH - TLV:

Component	TWA		STEL		PPM	CL		Skin
	PPM	MG/M <sup>3</sup>	PPM	MG/M <sup>3</sup>		MG/M <sup>3</sup>		
Potassium Permanganate								

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point (C 760 mmHg): N/A

Melting Point (C): 240C de



Specific Gravity (H2O = 1): 2.7  
Vapor Pressure (mm Hg): N/A  
Percent Volatile by Vol (%): N/A  
Vapor Density (Air = 1): N/A  
Evaporation Rate (BuAc = 1): N/A  
Solubility in Water (%): 6.5  
Appearance: purple or bronze-like crystals; odorless

20C

## 10. STABILITY AND REACTIVITY

Stability: Yes  
Hazardous Polymerization:  
Data not available.

Hazardous Decomposition:  
K<sub>2</sub>O, MnO<sub>x</sub>

Conditions To Avoid:

-Contact with combustible matter  
Explosive in contact with H<sub>2</sub>SO<sub>4</sub> or H<sub>2</sub>O<sub>2</sub>

Materials To Avoid:

- ( ) Water
- (X) Acids
- ( ) Bases
- ( ) Corrosives
- ( ) Oxidizers
- (X) Other :

(specify)-Reducing agents, certain metals, P, C, S, N<sub>2</sub>H<sub>4</sub>, organics

## 11. TOXICOLOGICAL INFORMATION

Toxicity Data:

-oral-rat LD50: 1090 mg/kg      oral-hmn LDLo: 143 mg/kg

Toxicological Findings:

Tests on laboratory animals indicate material may produce adverse mutagenic and reproductive effects.  
Cited in Registry of Toxic Effects of Substances (RTECS)

## 12. DISPOSAL CONSIDERATIONS

EPA Waste Numbers: D001

Treatment:

Specified Technology - Contact your local permitted waste disposal site (TSD) for permissible treatment sites.  
ALWAYS CONTACT A PERMITTED WASTE DISPOSER (TSD) TO ASSURE COMPLIANCE WITH ALL CURRENT LOCAL, STATE AND FEDERAL REGULATIONS.

### 13. TRANSPORT INFORMATION

DOT Shipping Name.....:  
potassium permanganate

DOT Number.....:  
UN1490

### 14. REGULATORY INFORMATION

TSCA Inventory.....:

The CAS number of this product is listed on the TSCA Inventory.

Component	SARA EHS (302)	SARA EHS TPQ (lbs)	CERCLA RQ (lbs)
Potassium Permanganate			100

Component	OSHA Floor List	SARA 313	DeMinimis for SARA 313 (%)
Potassium Permanganate			

### 15. OTHER INFORMATION

Comments:

None

NFPA Hazard Ratings:

Health : 1

Flammability : 0

Reactivity : 0

Special Hazards: OXY

Revision History:

06/01/82 10/23/86 10/27/87

N/A = Not Available

N/E = None Established

The statements contained herein are offered for informational purposes

only and are based upon technical data that EM SCIENCE believes to be accurate. It is intended for use only by persons having the necessary technical skill and at their own descretion and risk. Since conditions and manner of use are outside our control, we make NO WARRANTY, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS OR OTHERWISE.

Portions copyright Ariel Research Corporation, 1991.  
Restricted use conditions apply. Selected regulatory information in this MSDS has been derived from Ariel Research Corporation's International Chemical Regulatory Monitoring System (ICRMS). Use of this data is provided Subject to the terms of the License Agreement between EM Industries and Ariel Research Corporation. Further distribution is prohibited without authorization.

# Fisher Scientific Company

Chemical Manufacturing Division

P.O. Box 375, 1 Reagent Lane  
Fair Lawn, NJ 07410

MATERIAL SAFETY DATA SHEET (Adapted from USDL Form LSD-005-4)

(201) 796-7100

## SECTION I. IDENTIFICATION OF PRODUCT

CHEMICAL NAME

Toluene

FORMULA

 $C_6H_5CH_3$ 

SYNONYM OR CROSS REFERENCE

Methylbenzene

## SECTION II. HAZARDOUS INGREDIENTS

MATERIAL

Toluene

NATURE OF HAZARD

Flammable

## SECTION III. PHYSICAL DATA

BOILING POINT

110°C

MELTING POINT

-95°C

VAPOR PRESSURE(mm Hg)

21.86

SPECIFIC GRAVITY

0.868

VAPOR DENSITY (AIR = 1)

3.1

PERCENT VOLATILE BY VOLUME (%)

100%

WATER SOLUBILITY

0.05%

EVAPORATION RATE

(ether = 1) greater than 1

APPEARANCE Clear, Colorless liquid

## SECTION IV. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (method used)

40°F

FLAMMABLE LIMITS

Uel

Lel

(°F)

6.7

1.4

FIRE EXTINGUISHING MEDIA

CO<sub>2</sub>, dry chemical, alcohol foam

SPECIAL FIRE-FIGHTING PROCEDURES

UNUSUAL FIRE AND EXPLOSION HAZARD

## SECTION V. HEALTH HAZARD

THRESHOLD LIMIT VALUE

100 ppm (air)

HEALTH HAZARDS

Vapors harmful. Avoid prolonged contact with skin.

FIRST AID PROCEDURES

Inhalation: Remove to fresh air. Skin and eyes: flush with water for at least 15 minutes. For eyes, consult a physician.

## SECTION VI. REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	

...COMPATABILITY (materials to avoid)

## HAZARDOUS DECOMPOSITION PRODUCTS

HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	

## SECTION VII. SPILL AND DISPOSAL PROCEDURES

## STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Absorb on a suitable media such as vermiculite. Scoop up and place in suitable container.

## WASTE DISPOSAL METHOD

DISPOSE OF BY MEANS AS TO COMPLY WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS OR CONTACT AN APPROVED AND LICENSED DISPOSAL AGENCY.

## SECTION VIII. PROTECTION INFORMATION

## RESPIRATORY PROTECTION (specify type)

mask with organic vapor canister.

VENTILATION	LOCAL acceptable	SPECIAL
	MECHANICAL (general) acceptable	
		OTHER

PROTECTIVE GLOVES rubber	EYE PROTECTION safety glasses
-----------------------------	----------------------------------

OTHER PROTECTIVE EQUIPMENT

## SECTION IX. HANDLING AND STORAGE PRECAUTIONS

## STORAGE AND HANDLING

## SECTION X. MISCELLANEOUS INFORMATION

INFORMATION FURNISHED BY:  
L. Pillori

TITLE  
Manager of Quality Assurance

The above information is believed to be accurate and represents the best information currently available to us. However, WE MAKE NO WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their



# Fisher Scientific Company

Chemical Manufacturing Division  
P. O. Box 375, 1 Reagent Lane  
Fair Lawn, NJ 07410

MATERIAL SAFETY DATA SHEET (Adapted from USDL Form LSD-005-4)

(201) 796-7100

## SECTION I. IDENTIFICATION OF PRODUCT

CHEMICAL NAME  
**Xylenes**

FORMULA  
 $C_6H_4(CH_3)_2$

SYNONYM OR CROSS REFERENCE

## SECTION II. HAZARDOUS INGREDIENTS

MATERIAL  
**Xylenes**

NATURE OF HAZARD  
**Flammable**

## SECTION III. PHYSICAL DATA

BOILING POINT  
**139-141°C**

MELTING POINT  
**unknown**

VAPOR PRESSURE(mm Hg) **10**

SPECIFIC GRAVITY  
**0.86**

OR DENSITY (AIR = 1) **3.6**

PERCENT VOLATILE BY VOLUME (%)  
**100%**

WATER SOLUBILITY  
**insoluble**

EVAPORATION RATE  
(**ether**) **greater than 1**

APPEARANCE  
**Clear, colorless liquid.**

## SECTION IV. FIRE AND EXPOSURE HAZARD DATA

FLASH POINT (method used)  
**77°F CC**  
(°F)

FLAMMABLE LIMITS

Uel

Lel

**7%**

**1%**

FIRE EXTINGUISHING MEDIA  
**Alcohol foam, dry chemical or carbon dioxide**

SPECIAL FIRE-FIGHTING PROCEDURES

UNUSUAL FIRE AND EXPLOSION HAZARD

## SECTION V. HEALTH HAZARD

THRESHOLD LIMIT VALUE  
**100 ppm; 435 mg/M<sup>3</sup>**

HEALTH HAZARDS

**Harmful if inhaled, irritating to eyes and skin.**

FIRST AID PROCEDURES **If inhaled, remove to fresh air. If not breathing, give artificial respiration. Call a physician. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. For eyes**

## SECTION VI. REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	

COMBATIBILITY (material to avoid)

## HAZARDOUS DECOMPOSITION PRODUCTS

HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	

## SECTION VII. SPILL AND DISPOSAL PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Absorb spill on vermiculite and place in a suitable container.

WASTE DISPOSAL METHOD

DISPOSE OF BY MEANS AS TO COMPLY WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS  
OR CONTACT AN APPROVED AND LICENSED DISPOSAL AGENCY.

## SECTION VIII. PROTECTION INFORMATION

RESPIRATORY PROTECTION (specify type)

Canister mask for organic vapors.

VENTILATION	LOCAL Acceptable	SPECIAL
	MECHANICAL (general) Preferred	OTHER

PROTECTIVE GLOVES

Rubber gloves

EYE PROTECTION

Safety glasses

OTHER PROTECTIVE EQUIPMENT

## SECTION IX. HANDLING AND STORAGE PRECAUTION.

STORAGE AND HANDLING

## SECTION X. MISCELLANEOUS INFORMATION

INFORMATION FURNISHED BY:

TITLE

Gaston L. PilloriManager of Quality Assurance

The above information is believed to be accurate and represents the best information currently available to us. However, WE MAKE NO WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.

REV. NO. 0 DATE: April 9, 1980

72-62-7925-11

MATERIAL SAFETY  
DATA SHEETP.O. BOX 14000  
LEXINGTON, KENTUCKY 40512  
(606) 264-7000Telephone  
1 (800) 274-5283 or  
1-800-ASHLAND

## ALL CLIMATE MOTOR OIL SAE 10W40

Page: 1

THIS MSDS COMPLIES WITH 29 CFR 1910.1200 (THE HAZARD COMMUNICATION STANDARD)

Product Name: ALL CLIMATE MOTOR OIL SAE 10W40

QUADREX ENVIRONMENTAL  
1940 NW 67TH PLACE  
GAINESVILLE, FL 32606-1649  
ATTN: LORI WOOD

08 92 052 8144829-597

Data Sheet No: 0164091-010.000  
Prepared: 11/07/91  
Supersedes: 04/23/90PRODUCT:  
INVOICE: REGST  
INVOICE DATE: 05/28/92  
TO:

## SECTION I-PRODUCT IDENTIFICATION

General or Generic ID: PETROLEUM BASED-LUBRICATING OIL

DOT Hazard Classification: NOT REGULATED

## SECTION II-COMPONENTS

IF PRESENT, IARC, NTP AND OSHA CARCINOGENS AND CHEMICALS SUBJECT TO THE REPORT-  
ING REQUIREMENTS OF SARA TITLE III SECTION 313 ARE IDENTIFIED IN THIS SECTION.  
SEE DEFINITION PAGE FOR CLARIFICATION

INGREDIENT	% (by WT)	PEL	TLV	Note
DETERGENT/ DISPERSANT ENGINE OIL PACKAGE	5-10			( 1 )
ALIPHATIC PETROLEUM DISTILLATES CAS #: 64742-65-0	40-55	5 MG/M3	5 MG/M3	( 2 )
PETROLEUM OIL CAS #: 64742-54-7	25-40	5 MG/M3	5 MG/M3	( 3 )

## Notes:

- 1) THIS PROPRIETARY MIXTURE CONTAINS 25% ZINC COMPOUNDS. ZINC COMPOUNDS ARE REPORTABLE UNDER SECTION 313 OF SARA TITLE III.
- 2) PEL/TLV IS FOR OIL MIST. ACGIH SHORT TERM EXPOSURE LIMIT (STEL) FOR OIL MIST IS 10 MG/CM.
- 3) PEL/TLV IS FOR OIL MIST. ACGIH SHORT TERM EXPOSURE LIMIT (STEL) FOR OIL MIST IS 10 MG/CM.

## SECTION III-PHYSICAL DATA

Boiling Point	for PRODUCT	570.00 Deg F ( 298.88 Deg C ) 2 760.00 mm Hg
Vapor Pressure	NOT APPLICABLE	
Specific Vapor Density		HEAVIER THAN AIR
Specific Gravity		.877 2 60.00 Deg F ( 15.55 Deg C )
Percent Volatiles	NOT APPLICABLE	
Evaporation Rate		SLOWER THAN ETHER
Appearance		LIGHT AMBER
State		LIQUID
Form		HOMO SOLN

## SECTION IV-FIRE AND EXPLOSION INFORMATION

FLASH POINT(COC ) > 400.0 Deg F ( 204.4 Deg C )

EXPLOSIVE LIMIT UNAVAILABLE

EXTINGUISHING MEDIA: REGULAR FOAM OR CARBON DIOXIDE OR DRY CHEMICAL

HAZARDOUS DECOMPOSITION PRODUCTS: MAY FORM TOXIC MATERIALS: CARBON DIOXIDE AND CARBON MONOXIDE, VARIOUS HYDROCARBONS, OXIDES OF SULFUR, NITROGEN AND PHOSPHORUS, ETC.

FIREFIGHTING PROCEDURES: WEAR SELF-CONTAINED BREATHING APPARATUS WITH A FULL FACEPIECE OPERATED IN THE POSITIVE PRESSURE DEMAND MODE WHEN FIGHTING FIRES.

WATER OR FOAM MAY CAUSE FROTHING WHICH CAN BE VIOLENT AND POSSIBLY ENDANGER THE LIFE OF THE FIREFIGHTER, ESPECIALLY IF SPRAYED INTO CONTAINERS OF HOT, BURNING LIQUID.

DENSE SMOKE MAY BE GENERATED WHILE BURNING.

SPECIAL FIRE & EXPLOSION HAZARDS: NEVER USE WELDING OR CUTTING TORCH ON OR NEAR DRUM (EVEN EMPTY) BECAUSE PRODUCT (EVEN JUST RESIDUE) CAN IGNITE EXPLOSIVELY.

HAZARD CODES: HEALTH- 1 FLAMMABILITY- 1 REACTIVITY- 0

Post-It™ brand fax transmittal memo 7671

# of pages 3

CONTINUED ON PAGE

To: Mike Haynes	From: Jennifer
Co: IRR	Co: DEC
Dept:	Phone:



72-62-7925-11

MATERIAL SAFETY  
DATA SHEETSubsidiary of Ashland Inc., Inc.  
P.O. BOX 14000  
LEXINGTON, KENTUCKY 40512  
(606) 264-7000Telephone  
1 (800) 274-5263 or  
1-800-ASHLAND

## ALL CLIMATE MOTOR OIL SAE 10W40

Page: 2

## SECTION V-HEALTH HAZARD DATA

MISSIBLE EXPOSURE LEVEL: NOT ESTABLISHED FOR PRODUCT. SEE SECTION II.

## EFFECTS OF ACUTE OVEREXPOSURE:

THIS PRODUCT IS NOT HAZARDOUS AS DEFINED BY OSHA (29 CFR 1910.1200) BASED ON TESTING OF SIMILAR PRODUCTS AND/OR COMPONENTS.

EYES - NOT EXPECTED TO CAUSE IRRITATION DURING NORMAL CONDITIONS OF USE.  
SKIN - PROLONGED OR REPEATED CONTACT MAY BE MILDLY IRRITATING TO SKIN AND MAY CAUSE DERMATITIS.  
SWALLOWING - NOT EXPECTED TO BE TOXIC BY INGESTION. PRODUCT HAS LAXATIVE PROPERTIES AND MAY CAUSE NAUSEA, ABDOMINAL CRAMPS AND DIARRHEA.  
INHALATION - NOT EXPECTED TO BE AN INHALATION HAZARD AT NORMAL ROOM TEMPERATURE. HOWEVER, IF EXPOSURES EXCEED THE PEL/TLV OF 5 MG/M3 FOR OIL MIST, THEN INHALATION OF MIST MAY RESULT IN RESPIRATORY IRRITATION AND POSSIBLE DISCOMFORT.

## FIRST AID:

IF ON SKIN: THOROUGHLY WASH EXPOSED AREA WITH SOAP AND WATER. REMOVE CONTAMINATED CLOTHING. LAUNDRY CONTAMINATED CLOTHING BEFORE RE-USE.

IF IN EYES: FLUSH WITH LARGE AMOUNTS OF WATER, LIFTING UPPER AND LOWER LIDS OCCASIONALLY. GET MEDICAL ATTENTION, IF IRRITATION PERSISTS.

IF SWALLOWED: DO NOT INDUCE VOMITING, KEEP PERSON WARM AND QUIET, AND GET MEDICAL ATTENTION.

IF BREATHED: IF AFFECTED, REMOVE INDIVIDUAL TO FRESH AIR. IF BREATHING IS DIFFICULT, ADMINISTER OXYGEN. IF BREATHING HAS STOPPED GIVE ARTIFICIAL RESPIRATION. KEEP PERSON WARM, QUIET AND GET MEDICAL ATTENTION.

## EFFECTS OF CHRONIC OVEREXPOSURE:

NONE CURRENTLY KNOWN FOR THE PRODUCT.

CAUTION: USED MOTOR OIL HAS BEEN SHOWN TO CAUSE SKIN CANCER IN CERTAIN LABORATORY ANIMALS CONTINUALLY EXPOSED TO USED MOTOR OIL BY REPEATED APPLICATIONS. AVOID PROLONGED OR REPEATED CONTACT TO SKIN.

## SECTION VI-REACTIVITY DATA

HAZARDOUS POLYMERIZATION: CANNOT OCCUR

STABILITY: STABLE

INCOMPATIBILITY: AVOID CONTACT WITH: , STRONG OXIDIZING AGENTS

## SECTION VII-SPILL OR LEAK PROCEDURES

## STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

ALL SPILL: ABSORB LIQUID ON VERMICULITE, FLOOR ABSORBENT OR OTHER ABSORBENT MATERIAL.

LARGE SPILL: PREVENT RUN-OFF TO SEWERS, STREAMS OR OTHER BODIES OF WATER. IF RUN-OFF OCCURS, NOTIFY PROPER AUTHORITIES AS REQUIRED, THAT A SPILL HAS OCCURRED.

PERSONS NOT WEARING PROTECTIVE EQUIPMENT SHOULD BE EXCLUDED FROM AREA OF SPILL UNTIL CLEAN-UP HAS BEEN COMPLETED. STOP SPILL AT SOURCE, DIKE AREA OF SPILL TO PREVENT SPREADING, PUMP LIQUID TO SALVAGE TANK. REMAINING LIQUID MAY BE TAKEN UP ON SAND, CLAY, EARTH, FLOOR ABSORBENT, OR OTHER ABSORBENT MATERIAL AND SHOVELED INTO CONTAINERS.

## WASTE DISPOSAL METHOD:

SMALL SPILL: DISPOSE OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.

LARGE SPILL: DISPOSE OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.

## SECTION VIII-PROTECTIVE EQUIPMENT TO BE USED

RESPIRATORY PROTECTION: NOT REQUIRED UNDER NORMAL CONDITIONS OF USE. HOWEVER, IF OIL MISTS ARE GENERATED ABOVE RECOMMENDED PEL/TLV OF 5 MG/M3, THEN A NIOSH/MSHA APPROVED RESPIRATOR IS ADVISED IN ABSENCE OF PROPER ENVIRONMENTAL CONTROL. (SEE YOUR SAFETY EQUIPMENT SUPPLIER.)

VENTILATION: NOT REQUIRED UNDER NORMAL CONDITIONS OF USE. HOWEVER, IF UNUSUAL OPERATING CONDITIONS EXIST, THEN PROVIDE SUFFICIENT MECHANICAL (GENERAL AND/OR LOCAL EXHAUST) VENTILATION TO MAINTAIN EXPOSURE BELOW PEL/TLV (S).

PROTECTIVE GLOVES: NOT NORMALLY REQUIRED. HOWEVER, WEAR RESISTANT GLOVES SUCH AS NITRILE RUBBER TO PREVENT IRRITATION WHICH MAY RESULT FROM PROLONGED OR REPEATED SKIN CONTACT WITH PRODUCT.

EYE PROTECTION: NOT REQUIRED UNDER NORMAL CONDITIONS OF USE. HOWEVER, IF MISTING OR SPLASHING CONDITIONS EXIST, THEN SAFETY GLASSES OR CHEMICAL SPLASH GOGGLES ARE ADVISED.

OTHER PROTECTIVE EQUIPMENT: NORMAL WORK CLOTHING COVERING ARMS AND LEGS.

## SECTION IX-SPECIAL PRECAUTIONS OR OTHER COMMENTS

CONTAINERS OF THIS MATERIAL MAY BE HAZARDOUS WHEN EMPTIED. SINCE EMPTIED CONTAINERS RETAIN PRODUCT RESIDUES (VAPOR, LIQUID, AND/OR SOLID), ALL HAZARD PRECAUTIONS GIVEN IN THIS DATASHEET MUST BE OBSERVED.

THE INFORMATION ACCUMULATED HEREIN IS BELIEVED TO BE ACCURATE BUT IS NOT WARRANTED TO BE WHETHER ORIGINATING WITH THE COMPANY OR NOT. RECIPIENTS ARE ADVISED TO CONFIRM IN ADVANCE OF NEED THAT THE INFORMATION IS CURRENT, APPLICABLE, AND SUITABLE TO THEIR CIRCUMSTANCES.

## SECTION X-LABEL INFORMATION

THIS PRODUCT IS NOT HAZARDOUS AS DEFINED BY OSHA 29 CFR 1910.1200 OR FHSA 16 CFR 1500 BASED ON TESTING OF SIMILAR PRODUCTS AND/OR COMPONENTS.

## HANDLING &amp; STORAGE:

72-62-7925-11

MATERIAL SAFETY  
DATA SHEETSubsidiary of Ashland Oil, Inc.  
P.O. BOX 14000  
LEXINGTON, KENTUCKY 40512  
(606) 284-7000Emergency  
Telephone  
1 (800) 274-5263 or  
1-800-ASHLAND

## ALL CLIMATE MOTOR OIL SAE 10W40

Page: 3

## SECTION IX-LABEL INFORMATION (Continued)

DO NOT TRANSFER TO UNLABELED CONTAINER. DO NOT USE CUTTING OR WELDING TORCH ON THIS CONTAINER (EVEN EMPTY). FOR INDUSTRIAL USE ONLY. BEFORE USE, REVIEW MATERIAL SAFETY DATA SHEET FOR MORE DETAILED INFORMATION, INCLUDING CHRONIC HEALTH EFFECTS. 24-HOUR EMERGENCY NUMBER 1-800-274-5263

FIRST AID:

EYES: FLUSH THOROUGHLY WITH WATER. GET MEDICAL ATTENTION IF IRRITATION PERSISTS.

SKIN: WASH THOROUGHLY WITH SOAP AND WATER.

INGESTION: DO NOT INDUCE VOMITING. CALL A PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

CHRONIC INFORMATION:

OVEREXPOSURE CURRENTLY UNKNOWN FOR THE PRODUCT. CAUTION! USED MOTOR OIL HAS BEEN SHOWN TO CAUSE SKIN CANCER IN CERTAIN LABORATORY ANIMALS CONTINUALLY EXPOSED TO USED MOTOR OIL BY REPEATED APPLICATIONS. AVOID PROLONGED OR REPEATED CONTACT TO SKIN. CONTAINS: PETROLEUM OIL

\*\*\* COMPONENTS APPEAR IN SECTION II \*\*\*


OIL SPILL PREVENTION, CONTROL AND  
COUNTERMEASURE (SPCC) PLAN  
(40 CFR 112)

FOR

PERMA-FIX OF FT. LAUDERDALE, INC.  
3670 SW 47 AVENUE  
DAVIE, FLORIDA

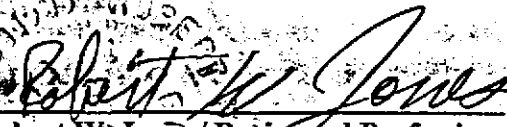
(Revision 2.0)

MANAGEMENT CONCURRENCE BY:

  
Michael J. Haynes / Regional Manager  
Perma-Fix of Ft. Lauderdale, Inc.

Date: 5-1-96

REVIEWED BY:

  
Robert W. Jones / Registered Professional Engineer  
State of Kansas  
No. 8293

Date: 5/1/96

## TABLE OF CONTENTS

	Page
<b>1.0 INTRODUCTION .....</b>	<b>1</b>
1.1 Facility Description .....	1
1.1.1 Waste Unloading, Loading, and Storage .....	1
1.1.2 Waste Processing .....	1
<b>2.0 SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN .....</b>	<b>2</b>
2.1 Past Spill Occurrences .....	2
2.2 Potential Spill Occurrences .....	2
2.3 Containment and Diversion Structures .....	2
2.3.1 Onshore Facilities .....	2
2.3.2 Offshore Facilities .....	2
2.4 Oil Spill Contingency Plan and Manpower .....	3
2.5 Additional Facility Guidelines, Spill Prevention, and Containment Procedures .....	3
2.5.1 Facility Drainage .....	3
2.5.2 Bulk Storage tanks (Onshore) .....	3
2.5.3 Facility Transfer Operations, Pumping, and In-plant Processes .....	4
2.5.4 Facility Tank Truck Loading/Unloading Areas .....	5
2.5.5 Oil Production Facility Drainage .....	5
2.5.6 Oil Drilling and Workover Facilities .....	5
2.5.7 Oil Drilling, Production, and Workover Facilities .....	5
2.5.8 Inspections and Records .....	5
2.5.9 Security .....	6
2.5.10 Personnel Training and Spill Prevention Procedures .....	6

### **Figures**

Figure 1: Site Plan

### **Attachments**

- Attachment A: Inspection Forms
- Attachment B: Perma-Fix List of Emergency Contacts
- Attachment C: List of Agency Emergency Contacts
- Attachment D: On-site Emergency Equipment

# **OIL SPILL PREVENTION, CONTROL AND COUNTERMEASURE (SPCC) PLAN**

## **1.0 INTRODUCTION**

This SPCC Plan has been prepared in accordance with 40 CFR 112.7 for Perma-Fix of Ft. Lauderdale, Inc. (Perma-Fix) to address the storage and management of petroleum material at Perma-Fix's facility in Davie, Florida. The plan describes practices, procedures, structures, and equipment at the facility to prevent, mitigate, and/or preclude adverse impact to water of the United States.

### **1.1 Facility Description**

The Perma-Fix facility is located in an industrial area of Davie, Florida. The facility covers approximately 2.5 acres of which approximately 50 percent is covered by concrete, concrete structures, and/or buildings. The remaining portions of the facility is covered by grass.

Perma-Fix operation consists of three primarily activities: 1) used oil storage/processing subject to 40 CFR 279 of the Resource Conservation and Recovery Act (RCRA); 2) wastewater treatment subject to section 307(b) of the Clean Water Act; and 3) the temporarily storage (10 days) of hazardous waste subject to 40 CFR 262 of RCRA. The layout of the facility is illustrated in Figure 1 which include proposed improvements to be completed over the next twelve to sixteen months.

Generators which send waste to Perma-Fix include automotive repair/maintenance shops/facilities, industrial facilities, paint shops, marinas and ship facilities, environmental cleanup sites, etc.

#### **1.1.1 Waste Unloading, Loading, and Storage**

Upon entering the facility, trailers and tankers are staged in the concrete parking areas of the facility while awaiting access the unloading/loading stations. Bulk liquids (i.e., oil and/or wastewater) are off-loaded and loaded at the stations located at the southeast end of the facility. Liquids are stored in the tank storage area located in the southeast portion of the facility. Drummed hazardous waste is received and temporarily stored in the 10 day transfer station located in the central portion of the facility.

#### **1.1.2 Waste Processing**

Once bulk liquids are off-loaded, they are transferred to various aboveground storage tanks for subsequent processing. Total storage capacity is approximately 470,00 gallons. Processing consists of either the conversion of waste oil into a fuel oil or the treatment of wastewater through the on-site wastewater treatment system. Fuel oil is subsequently shipped to EPA permitted industrial furnaces while wastewater is discharged to the POTW operated by the Town of Davie or the Broward County Department of Environmental Services upon completion of treatment.

Drummed used oil filters are drained of all free flowing oils and consolidated in roll-offs for shipment to EPA permitted metal recycling companies. Drummed non-hazardous waste is either shipped to Perma-Fix of Florida located in Gainesville, Florida for processing and disposal or consolidated in roll-offs located on-site and subsequently shipped to EPA approved industrial landfills or incinerators.

The loading stations, aboveground storage tanks, and all drum storage areas are located in secondary containment. All piping is either located in secondary containment areas or are constructed of double walled piping.

## **2.0 SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN**

This SPCC Plan is presented in the following subsections according to the format detailed under 40 CFR 112.

### **2.1 - Past Spill Occurrences - 112.7(a)**

To date, spills involving significant quantities of oil have not occurred at Perma-Fix. Minor spills, which may have occurred during transfer would have been contained within secondary containment structures.

### **2.2 - Potential Spill Occurrences - 112.7(b)**

Experience indicates that there is a low potential of tank failure ( such as overflow, rupture, leakage) at the facility. This can be attributed to several factors:

1. Tanks operate at ambient temperature and pressure, equipped with level gauges, and an overflow alarm and containment tank;
2. Piping and valves are not in areas for which vehicular traffic is allowed; and
3. Exposed areas of tanks, pumps, valves, and piping are inspected daily and the results are recorded in facility inspection logs;

Spillage of material is most possible during tanker transfer. However, the quantity of material which would typically be spilled is small. Personnel are required to be present during transfer and all transfer activities are conducted in contained areas with concrete barriers and elevation controls to prevent any migration and facilitate cleanup.

### **2.3 - Containment and Diversion Structures - 112.7(c)**

The following prevention systems are used at the facility to prevent a discharge of oil from reaching waters of the United States:

#### **2.3.1 - Onshore Facilities - 112.7(c)(1)**

Secondary containment is provided for all tanks and drums used to storage petroleum related material at the facility as illustrated in Figure 1.

#### **2.3.2 - Offshore Facilities - 112.7(c)(2)**

No offshore facilities are located at Perma-Fix.

#### **2.4 - Oil Spill Contingency Plan and Manpower - 112.7(d)**

This section is not applicable to Perma-Fix. Refer to section 2.3 [112.7(c)]. However, Perma-Fix maintains a contingency plan and emergency procedures that provide detailed instruction for spill response activities. A copy of the plan is maintained on-site.

#### **2.5 - Additional Facility Guidelines, Spill Prevention, and Containment Procedures - 112.7(e)**

In addition to the provisions of 2.3, the following guidelines and procedures will govern unless regulations promulgated by the State of Florida are more stringent.

##### **2.5.1 - Facility Drainage - 112.7(e)(1)(I) through (v)**

No outfalls are present at the facility. Surface water drainage patterns for the facility are illustrated in Figure 1 and prevent drainage from unbermed areas from entering waters of the United States. Rainwater and/or minor spills within secondary containment areas and truck loading areas are pumped up and returned to storage for proper management and disposal. Pumps are manually activated. No valves are used to drain secondary containment areas.

##### **2.5.2 - Bulk Storage Tanks (Onshore) - 112.7(e)(2)**

All storage tanks were constructed and are used in accordance with the implied intent of the manufacturer.

##### **2.5.2.1 - Compatibility of Tanks and Product Stored - 112.(e)(2)(i)**

All tanks are compatible with the material they hold and the conditions in which the can reasonably be expected to be subjected. All the tanks are used to store material at ambient temperature and pressure.

##### **2.5.2.2 - Secondary Containment - 112.7(e)(2)(ii)**

Localized secondary containment structures constructed of concrete and masonry are provided at the facility for all oil storage tanks. In addition, tertiary containment/barriers is also provided for all storage tanks. Loading areas are located in secondary barrier containment. Drum storage is also equipped with secondary containment. All containment areas are of sufficient size to contain the contents of the largest tank plus a accumulation of 11 inches of precipitation (e.g., 25 year storm of 24 hour duration) or 20 % the total drum storage capacity.

##### **2.5.2.3 - Drainage of Rainwater - 112.7(e)(2)(iii)(A) through (D)**

This section is not applicable to Perma-Fix. Refer to section 2.5.1 [112.7(e)(1)(I) through (v)].

##### **2.5.2.4 - Buried and Partially Buried Metallic Storage Tanks - 112.7(e)(2)(iv) and (v)**

There are no buried storage tanks at the facility. There are no partially buried storage tanks at the facility.

2.5.2.6 - Periodic Integrity Testing - 112.7(e)(2)(vi)

All tanks are inspected by the Facility Manager or other qualified personnel as assigned by the Facility Manager on a regular basis to assess tank integrity. Formal daily inspections include:

1. Evidence of leaks or spills,
2. Condition of tanks
3. Condition of piping & pumps
4. Condition of secondary containment areas

All inspections are recorded utilizing the form shown in Attachment A.

2.5.2.7 - Internal Heat Coils - 112.7(e)(2)(vii)

All internal heating coils are located inside secondary containment. Steam return is not discharged to into open water courses.

2.5.2.8 - Fail Safe Engineering - 112.7(e)(2)(viii)

The possibility if a significant discharge is reduced by the following equipment/procedures:

1. Direct visual tank level gauges,
2. Audible overflow alarm and ancillary overflow containment tank,
3. Manned transfer operations, and
4. Regular inspections of tanks and ancillary equipment.

2.5.2.9 - Plant Effluent Discharge into Navigable Waters - 112.7(e)(2)(ix)

The facility does not produce any effluent discharge to navigable waters or the tributaries thereof.

2.5.2.10 - Correction of Tank Deficiencies - 112.7(e)(2)(x)

If it is determined that the integrity of a tank or auxiliary equipment is compromised, the tank or equipment will be taken out of service, the problem evaluated, and the appropriate steps taken to correct all deficiencies.

2.5.2.11 - Mobile/Portable Oil Storage Tanks - 112.7(e)(2)(xi)

There are no mobile/portable storage tanks at the facility.

2.5.3 - Facility Transfer Operations, Pumping, and In-Plant Processes - 112.7(e)(3)

The receipt and dispensing of material is conducted with equipment and by procedures common to the waste management industry.

2.5.3.1 - Buried Piping Installations - 112.7(e)(3)(i) through (iii)

There are no underground pipes at the facility.

Out-of-Service piping shall be removed, capped, or blank-flanged.

Piping supports are designed to allow for expansion and contraction while minimizing abrasion and corrosion.



2.5.3.1 - Inspection of Aboveground Valves and Pipelines - 112.7(e)(3)(iv)

All valves and fittings are periodically inspected for leaks (Attachment A). Pipelines, valves, and piping are manned during material transfers.

2.5.3.1 - Potential for Damage to Underground Piping - 112.7(e)(3)(v)

There is no underground piping at the facility.

2.5.4 - Facility Tank Truck Loading/Unloading Areas - 112.7(e)(4)

Material is transferred from tank trucks and tractor trailers at the site. The tank trucks are operated by contract transporters or Perma-Fix employees. The transfer of bulk material is conducted within the loading stations illustrated in Figure 1.

2.5.4.1 - Tank Truck Loading/Unloading Procedures - 112.7(e)(4)(i)

Loading and unloading procedures meet the requirements of the Department of Transportation (DOT) for the transfer of hazardous and non-hazardous materials. Personnel are trained in accordance with DOT and OSHA requirements.

2.5.4.2 - Rack Area Drainage - 112.7(e)(4)(ii)

The primary loading rack for the facility is located in the center of the loading area as shown in Figure 1. The rack area is constructed with containment and elevation controls that is capable of containing the contents of the largest vehicle in the rack area. Signals and/or signs are posted as a precaution to facilitate transfer operations.

2.5.4.3 - Disconnect Warning - 112.7(e)(4)(iii)

During loading operations, Perma-Fix personnel are required to monitor the operation. Drivers are required to ensure that Perma-Fix personnel are familiar with connections and disconnections of transfer lines if there is any deviation from generally accepted industrial standards.

2.5.4.4 - Examination of Tank Truck Drains - 112.7(e)(4)(iv)

Prior to departure, the driver of the tank truck is required to examine the lowest most drain and other outlets for leaks. Where necessary, outlets are adjusted to prevent leakage while in transit.

2.5.5 - Oil Production Facility Drainage - 112.7(e)(5)(i) through (iv)

The facility is not an oil production facility, therefore, this section is not applicable.

2.5.6 - Oil Drilling and Workover Facilities - 112.7(e)(6)(i) through (iii)

The facility is not an oil drilling or workover facility, therefore, this section is not applicable.

2.5.7 - Oil Drilling, Production, and Workover Facilities - 112.7(e)(7)(i) through (xviii)

The facility is not an oil drilling, production, or workover facility, therefore, this section is not applicable.

2.5.8 - Inspections and Records - 112.7(e)(8)

The inspection program is intended to provide a mechanism to prevent and detect system malfunctions, equipment deterioration and operator errors and early warning of the potential for such events in order that corrective and preventive actions may be taken. The inspection program focuses on safety, emergency equipment and environmental monitoring. The program is implemented by qualified and

trained individuals assigned the responsibility to detect any unsafe conditions at the facility and to help prevent adverse consequences. The designated individuals have the training and authority to :

1. Implement the required inspections,
2. Perform necessary evaluations and hazard assessments, and
3. Recommend appropriate corrective or remedial actions.

The inspection is performed according to a predetermined schedule based on engineering knowledge, operational experience with the systems and processes involved, and other applicable regulatory requirements. Each item listed on the inspection form is evaluated in such a manner and on a frequency necessary to alert facility personnel prior to the development of a serious problem. The level of response to a problem is determined by the nature and seriousness of the problem identified, with the protection of personnel and the prevention of adverse impact being a paramount concern.

#### 2.5.8.1 - Administration of Inspection Program, Documentation, and Recordkeeping

The Facility Manager is responsible for implementation of the inspection program as well as directing the required corrective measures. Inspection logs are illustrated in Attachment A. All inspection logs are retained for a minimum of three years.

#### 2.5.9 - Security - 112.7(e)(9)

All waste handling and storage facilities are located within the general security perimeter of the facility. The facility is fenced with a six foot chain link fence topped by three strands of barbed wire. As shown in Figure 1, the parameter fence has one gate which is used for vehicle traffic. Normal and routine access to the facility is monitored by plant personnel. The gate is locked at the end of the operating period. Local law enforcement occasionally checks the plant security during non-operating periods. The chain link fence will be replaced by an eight foot high prefabricated concrete fence. All containment systems , valves, piping, electrical control systems are located within areas controlled by the security fence. There are no delivery pipelines at the facility. Adequate lighting is provided at all loading, unloading, and processing areas which are operated at night time hours and for security purposes.

#### 2.5.10 - Personnel Training and Spill Prevention Procedures - 112.7(e)(10)

Newly hired operational personnel participate in spill prevention and control training program. All employees participate in a regularly scheduled review for updating procedures. Facility personnel are trained in the general orientation and operation of the facility. An on-the-job training program related to the specific duties of each job function is specifically provided in combination with a standardized written, visual and audible training. In addition, every operational employee participates in a continuing training to maintain proficiency, to learn new techniques and procedures, and to re-enforce safety and quality consciousness.

The Regional Manager and District Manager are designated Emergency Coordinators for the site and are responsible for spill prevention and control, directing response to any site emergency and for reporting oil spills to the appropriate officials. A list of Perma-Fix contacts that may be required during an emergency is provided in Attachment B. The names and addresses of officials who must be notified after emergency response procedures have been completed is contained in Attachment C.

The facility weekly and monthly meetings are used as a forum to assure adequate understanding of SPCC procedures. Attachment D provides a list of emergency equipment available at the facility.

# DAILY INSPECTION FORM

**See instructions on reverse.**

**PERMA-FIX Environmental Services, 4001 S.W. 47th Ave., Davie, FL 33314  
(305) 583-3795**

ATTACHMENT A

<u>Column</u>	<u>Instructions</u>
1.	Enter the date and Time.
2.	Enter your name.
3.	Identify the number hazardous and non-hazardous waste drums on-site.
4.	What is the condition of the drums, containment areas, fittings, and pumps ?  S = satisfactory, U = unsatisfactory.
5.	Are there any leaks or spills from the drums, containment areas, fittings, and pumps ? Yes or No.
6.	Are safety showers and eye wash stations operational ? Yes or No.
7.	Are the emergency response kits operational ? Yes or No.
8.	Is the communication system operational ? Yes or No.
9.	Are the fire extinguishers operational ? Yes or No.
10.	Is the contingency plan posted in a conspicuous place ? Yes or No.
11.	Identify any discrepancies in this column. Be descriptive.
12.	Identify any resolutions to the discrepancies identified in column 11. List the date and action taken. Be descriptive.

## **APPENDIX B**

### **List of Perma-Fix Contacts**

#### **PERMA-FIX OF FT. LAUDERDALE, INC.**

The following Perma-Fix personnel (in descending order) serve as the Emergency Coordinator and Alternate Emergency Coordinators. These personnel are authorized to commit the necessary resource to respond to a spill. These individuals shall be contacted in the event of a release. **Priority of Notification is in descending order as listed below.**

Facility Phone: (305) 583-3795

Facility Fax: (305) 583-8017

<u>NAME</u>	<u>POSITION</u>	<u>HOME</u>	<u>PAGER</u>
Shawn Lennon	Emergency Coordinator	(305) 680-8950	(305)497-7080
Mike Haynes	Alternate Coordinator	(305) 474-9947	(305)875-0121
John McDonald	Alternate coordinator	(305)340-9914	(305) 497-7082

Spill management support crew shall consist of facility operations personnel.

#### **SPILL RESPONSE CONTRACTOR**

Dan Mark Inc.	Point of Contact:	Mr. Brian Finney
One Washington Avenue	Telephone:	(305) 242-0014
Homestead, Florida 33030		(24 Hours)

Response Times:      Davie = 1.5 Hours

## ATTACHMENT C

### Phone Number of Local Authorities, Agencies, Etc.

<u>Local Authority\Agency</u>	<u>Phone Number</u>	<u>Contact Period</u>
Davie Fire Department	911	Immediately
Davie Police Department	911	Immediately
Emergency Medical Service	911	As needed
DNRP	(305) 519-1260	24 hours
FDEP	(407) 433-2650	24 hours
Florida Bureau of Disaster and Preparedness	(904) 413-9911	24 hours
National Response Center	(800) 424-8802	As needed
Plantation General Hospital (Primary Hospital)	(305) 587-5010	As needed
Broward General Hospital (Secondary Hospital)	(305) 355-4400	As needed
<u>Primary Emergency Coordinator</u> Shawn L. Lennon District Manager	(305) 680-8950 (Home) (305) 583-3795 (Business) (305) 497-7080 (Pager)	
<u>Alternate Emergency Coordinator</u> Mike Haynes Regional Manager	(305) 474-9947 (Home) (305) 583-3795 (Business) (305) 875-0121 (Pager)	
<u>Alternate Emergency Coordinator</u> John McDonald Project Manager	(305) 340-9914 (Home) (305) 583-3795 (Business) (305) 497-7082 (Pager)	

## APPENDIX D

### Facility Emergency Equipment

<u>Equipment</u>	<u>Quantity</u>	<u>Type</u>
Communication system	2	Telephone, radio
Fire alarm	1	Horn
Fire hydrants	2	Water
Fire extinguishers	5	ABC (dry chemical)
Safety showers	2	Water
Eye wash stations	2	Water
Respirator	1	Full face, cartridge
Spill pads	1 roll	Synthetic absorbent
Spill kits (e.g., Oil dry)	9 drums	Absorbent (i.e., clay)
Empty drums	25-75	17-H, open top
Spill pumps	2	Diaphragm pumps
First aid kit	1	Industrial kit
Steam Cleaner	1	2,200psi pressure washer

Actual amount of safety equipment on-site may vary from time to time.

## **FIGURE 1**

### **Site Plan**

**Refer to Figure 1. (Drawing No. 71D1003) submitted as part of this General Permit Application**





**WASTE ANALYSIS PLAN  
and  
MATERIAL PROFILING**

**Perma-Fix of Fort Lauderdale, Inc.  
3670 S.W. 47 Avenue  
Davie, Florida 33314**

**Revised April 10, 1996**

**Prepared by:**

**Michael J. Haynes  
Vice President / Southeast Regional Manager**

## TABLE OF CONTENTS

- 1.0 Introduction
- 2.0 Used Oil and Oily Waste
  - 2.1 Rebuttable Presumption
  - 2.2 On-Specification Used Oil
  - 2.3 Analysis Plan
    - 2.3.1 Used Oil and Oily Waste Received from Generators
      - 2.3.1.1 Used Oil and Oily Wastewater
      - 2.3.1.2 Oil Filters
      - 2.3.1.3 Oily Solids/Sludges Destine for Recycle
      - 2.3.1.4 Oily Solids/Sludges Destine for Disposal
    - 2.3.3 Processed Used Oil (i.e., Fuel Oil)
- 3.0 Non-Hazardous Wastewater
- 4.0 Petroleum Contact Water
- 5.0 Non-hazardous Solids and Sludges
- 6.0 Paint Waste and other Hazardous Waste
- 7.0 Antifreeze and Coolants
- 8.0 Commercial Chemical Products and Off-specification Products
- 9.0 Empty Drums
- 10.0 Batteries
  - 10.1 Lead Acid Batteries
  - 10.2 Nicad (Nickel/Cadmium) batteries
- 11.0 Prohibited Waste

- Appendix A Analytical Test Methods
- Appendix B Material Profile Form
- Appendix C Facility Inventory Logs and Monthly Fuel Oil Analysis
- Appendix D Hazardous Waste Facility Material Profile Form

# WASTE ANALYSIS PLAN & MATERIAL PROFILING

## 1.0 Introduction

Perma-Fix of Fort Lauderdale, Inc. (Perma-Fix) is a used oil facility located in the Town of Davie, Florida. As a used oil filter and used oil processor, transporter, and marketer, Perma-Fix is subject to 40 CFR 279 and applicable state regulations covering used oil management. Specifically, 40 CFR 279.55 requires Perma-Fix, as a used oil processing facility, to write, maintain, and adhere to a Waste Analysis Plan. As stated in 40 CFR 279.55, the owner/operator of a used oil processing facility must develop and follow a written Waste Analysis Plan describing the procedures that shall be used to comply with the analytical requirements of 40 CFR 279.53, the rebuttable presumption; and 40 CFR 279.72, the determination of on-specification used oil. This waste analysis plan is developed to satisfy the requirements of 40 CFR 279.55 by establishing methods for documenting the analytical requirements of 40 CFR 279.53 and 279.72.

Additionally, Perma-Fix is a hazardous waste transporter, non-hazardous sludge processor and wastewater treatment facility [CWA, Section 307(b)]. Therefore, this Waste Analysis Plan is also designed to ensure compliance with RCRA waste characterization and management regulations.

## 2.0 Used Oil and Oily Wastewater

Used oil and oily waste includes, but is not limited to, used oil, oily wastewater, oil filters, and oil contaminated solids/sludges.

### 2.1 Rebuttable Presumption

As stated in 40 CFR 279.10(b)(ii), used oil containing more than 1,000 ppm total halogens is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in Subpart D of 40 CFR 261. This presumption may be rebutted by demonstrating that the used oil does not contain hazardous waste. For example, by using an analytical method from SW-846, Edition III, to show that the used oil does not contain significant concentrations of halogenated constituents listed in Appendix VIII of 40 CFR 261 (primarily those halogenated solvents listed under 40 CFR 261 as waste codes F001 and F002).

### 2.2 On-Specification Used Oil

According to 40 CFR 279.11, used oil burned for energy recovery and any fuel produced from used oil by processing, blending, or other treatment is not subject to regulation under 40 CFR 279 if it can be shown that the used oil does not exceed any of the allowable levels for the constituents shown in Table 1.

2.2 On-Specification Used Oil (continued)

TABLE 1.

<u>Constituents/Property</u>	<u>Allowable Level</u>
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Flash Point	100° F minimum
Total Halogen	4,000 ppm maximum

Pursuant to 40 CFR 279.72, a generator, transporter, processor/re-refiner, or burner may determine that used oil that is to be burned for energy recovery meets the specifications of Table 1 by performing analyses or obtaining copies of analyses or other information documenting that the used oil meets the specifications.

2.3 Waste Analysis Plan

Perma-Fix utilizes on-site, contract laboratories, and/or laboratory capabilities of its affiliated companies to satisfy the requirements of this waste analysis plan. All laboratories shall utilize the methodologies and procedures found in US EPA publication SW-846, Third Edition. Examples of methodologies utilized on-site by Perma-Fix and by contract laboratories are identified in Appendix A.

2.3.1 Used Oil and Oily Waste

## 2.3.1.1 Used Oil and Oily Wastewater

Before Perma-Fix accepts used oil from a generator, a sample of the oil is examined to determine whether or not the total halogen content is less than 1,000 ppm. Perma-Fix utilizes SW-846 Method 9077 "Test Method for Total Chlorine in New and Used Petroleum Products" and equivalent method(s) to determine the halogen content. If the oil, per method 9077, contains less than 1,000 ppm total halogens, Perma-Fix shall accept the material for processing. If the used oil contains more than 1,000 ppm total halogens, Perma-Fix shall forward the used oil sample to a contract laboratory or permitted hazardous waste facility for analysis by Method 8010 or an equivalent method(s) to check for significant concentrations of 40 CFR 261, Appendix VIII halogenated constituents. Significant concentration of halogenated constituents, as outlined by the U.S. EPA, is as any single halogenated constituent with a concentration exceeding 100 ppm [57 FR 41579].

If the used oil does not contain significant concentrations of 40 CFR 261, Appendix VIII halogenated compounds, Perma-Fix shall accept the used oil. If the used oil contains significant concentrations of 40 CFR 261, Appendix VIII halogenated compounds, Perma-Fix shall inform the generator that the used oil must be managed as a hazardous waste through the Perma-Fix network of facilities or other permitted hazardous waste facilities.

Documentation of this waste analysis shall be through facility inventory logs and/or Material Profile Form (or their equivalent) for used oil and oily waste (Appendix B).

- NOTE:**
- 1) **Compressor and refrigerant oils contaminated with chlorofluorocarbons (CFCs) shall be managed as hazardous waste. Refer to Section 6.0 for waste analysis information regarding hazardous waste. Perma-Fix may revise this standard operating procedure in accordance with state and federal regulations.**
  - 2) **Hazardous waste from Conditionally Exempt Small Quantity Generators (CESQGs) shall not be mixed with used oil.**
  - 3) **Perma-Fix does not accept used oil commingled with antifreeze without analytical data indicating that the antifreeze was non-hazardous waste prior to mixing with the used oil.**

#### 2.3.1.2 Oil Filters

Before accepting used oil filters (crushed or uncrushed) for transportation and recycling as scrap metal, the oil filters shall be "gravity hot drained" by the generator pursuant to 40 CFR 279.10(c)(1)(i). Pursuant to 40 CFR 279.10(c)(1)(i) and 40 CFR 261.4(b)(13), oil filters are not subject to regulation as hazardous waste under 40 CFR 261 or used oil under 40 CFR 279. A Material Profile Form is not required for this waste.

However, if any indication (e.g., visual, odor, etc.) exists that the oil filters have been commingled with waste listed in Subpart D of 40 CFR 261, the filters shall be rejected. A sample of the commingled waste shall be obtained for analysis pursuant to Section 6.0.

#### 2.3.1.3 Oily solids/Sludges Destine for Recycle

Before Perma-Fix accepts oily solids/sludges from a generator, a sample of the material is examined to determine whether or not the total halogen content is less than 1,000 ppm. Perma-Fix utilizes SW-846 Method 9077 "Test Method for Total Chlorine in New and Used Petroleum Products" and equivalent method(s) to determine the halogen content of the material. If the material contains less than 1,000 ppm total halogens, Perma-Fix shall accept the material for recycling.

If the material contains more than 1,000 ppm total halogens, Perma-Fix shall forward a sample to a contract laboratory or permitted hazardous waste facility for analysis by Method 8010 or an equivalent method(s) to check for significant concentrations of 40 CFR 261, Appendix VIII halogenated constituents. **Significant concentrations of halogenated constituents, as outlined by the U.S. EPA, is as any single halogenated constituent with a concentration exceeding 100 ppm [57 FR 41579].**

If the material does not contain significant concentrations of 40 CFR 261, Appendix VIII halogenated compounds, Perma-Fix shall accept the material for recycling. If the material contains significant concentrations of 40 CFR 261, Appendix VIII halogenated compounds, Perma-Fix shall inform the generator that the material must be managed as a hazardous waste through the Perma-Fix network of facilities or other permitted hazardous waste facilities.

Documentation of this waste analysis shall be through facility inventory logs and/or Material Profile Form (or their equivalent) for used oil and oily waste (Appendix B).

**NOTE: Hazardous waste sludges/solids from Conditionally Exempt Small Quantity Generators (CESQGs) shall not be mixed with oily waste.**

#### 2.3.1.4 Oily Solids/Sludges Destine for Disposal

Although used oil is commonly recovered from oily solids/sludges (e.g., absorbent material, rags, etc.), oily solids/sludges may be managed as waste destined for disposal, not recycling. Therefore, these materials, when destine for disposal, shall be analyzed for RCRA metals and organic constituents in accordance with the Toxicity Characteristic Leachate Procedure (TCLP) as well as for ignitability, if applicable. If process knowledge is available indicating the nature and/or physical characteristics of the waste, the above mentioned analytical requirements may be reduced. However, the minimum analytical requirements shall be RCRA metals and volatile organics in accordance with TCLP.

Documentation of this waste analysis shall be through Material Profile Form, its equivalent (Appendix B).

If the material is determined to be hazardous, it shall be managed as hazardous waste pursuant to Section 6.0.

#### 2.3.3 Processed Used Oil (i.e., Fuel Oil)

Processed used oil is stored in a product tank until shipment to an industrial furnace. Each time a tanker trailer is loaded with processed used oil for shipment to an industrial furnace, the used oil shall be tested to demonstrate that the total halogen content is less than 1,000 ppm. Perma-Fix utilizes SW-846 Method 9077 "Test Method for Total Chlorine in New and Used Petroleum Products" to determine the halogen content.

Furthermore, two used oil samples are analyzed monthly by a contract laboratory to demonstrate the used oil meets the requirements of Table 1. In addition to the requirements of Table 1, the samples shall be analyzed for polychlorinated biphenyls (PCBs), BTUs, sulfur, viscosity. All analyses shall be conducted in accordance with SW-846 or ASTM protocols, as applicable.

Documentation of this waste analysis shall be through facility inventory logs and monthly analytical data maintained as part of the facility records, as shown in Appendix C.

### **3.0 Non-hazardous Wastewater**

Incoming wastewater shall be analyzed for RCRA metals and organic constituents in accordance with the Toxicity Characteristic Leachate Procedure (TCLP). Additional testing for ignitability and corrosivity is also required. If process knowledge is available indicating the nature and/or physical characteristics of the waste, the above mentioned analytical requirements may be reduced. However, the minimum analytical requirement shall include RCRA metals and volatile organics in accordance with TCLP.

### **4.0 Petroleum Contact Water**

For wastewater subject to the Petroleum Contact Rule (PCW) under F.A.C. 62-740 (i.e., virgin fuel and water mixtures), generators shall provide analytical data or process knowledge demonstrating that the PCW does not contain hazardous constituents above those found in the petroleum source of the PCW or other hazardous constituents not normally found in the PCW.

Documentation of this waste analysis shall be the Material Profile Form (Appendix B).

If it is determined that the wastewater is hazardous, refer to Section 6.0 for more waste analysis information.

### **5.0 Non-hazardous Solids/Sludges**

Solids/sludge shall be analyzed for RCRA metals and organic constituents in accordance with the Toxicity Characteristic Leachate Procedure (TCLP) and for ignitability and corrosivity, if applicable. If process knowledge is available indicating the nature and/or physical characteristics of the waste, the above mentioned analytical requirements may be reduced. However, the minimum analytical requirement shall be RCRA metals and volatile organics in accordance with TCLP.

Documentation of this waste analysis shall be the Material Profile Form (Appendix B).

If the waste is determined to be hazardous, refer to Section 6.0 for additional waste analysis information.

## 6.0 Paint Waste and other Hazardous Waste

Analytical testing for these waste shall be dictated by the waste analysis plan of the hazardous waste facility receiving the waste. Documentation of this waste shall be the Material Profile Form required by the hazardous waste facility. Refer to Appendix D for an example of such Material Profile Form.

- NOTE:**
- 1) **Compressor and refrigerant oils contaminated with chloroflorocarbons (CFCs) shall be managed as hazardous waste in accordance with this section.**
  - 2) **Hazardous waste from Conditionally Exempt Small Quantity Generators (CESQGs) shall not be mixed with used oil.**

## 7.0 Antifreeze and Coolants

These materials shall be analyzed for RCRA metals and organic constituents in accordance with the Toxicity Characteristic Leachate Procedure (TCLP). Additional testing for ignitability and corrosivity may also be required. If process knowledge is available indicating the nature and/or physical characteristics of the waste, the above mentioned analytical requirements may be reduced. However, the minimum analytical requirement shall include RCRA metals and volatile organics in accordance with TCLP.

Documentation of this waste analysis shall be the Material Profile Form (Appendix B).

If it is determined that the waste is hazardous, refer to Section 6.0 for more waste analysis information.

## 8.0 Commercial Chemical Products and Off-Specification Products

Commercial chemical products are materials that were never used and are in their original packaging or container. Off-specification products are materials that are no longer suitable for their original intent due to chemical degradation or contamination with non-hazardous materials (e.g., water, dirt, etc.). An example of an off-specification product is waste fuels. Off-specification products do not include wastes or spent materials which were generated through the use of the product or from a manufacturing or industrial process.

Pursuant to 40 CFR 261.2(c)(3), commercial chemical products destined for reclamation are exempt from regulation as a waste.

No analytical testing is required for off-specification fuels. Documentation of waste analysis for commercial chemical products and off-specification products, other than fuels, shall be the Material Profile Form in Appendix C. Material Safety Data Sheets (MSDSs) may provide sufficient information to characterize off-specification products. However, if the MSDS information is incomplete, additional analysis may be



required. The additional analysis conducted to supplement the MSDS data shall be determined on a case-by-case basis taking into consideration the type of off-specification product and process knowledge.

## 9.0 Empty Drums

A drum that has held a **hazardous** waste listed in 40 CFR 261.31, 261.32, or 261.33(e) is empty if all the waste in the drum has been removed to the fullest extent possible using practices such as pumping, pouring, aspirating; and no more than one (1) inch of residue remains in the bottom of the container.

A drum that has held an **acutely hazardous** waste listed in 40 CFR 261.31, 261.32, or 261.33(e) is empty if all the waste in the drum has been removed to the fullest extent possible and triple rinsed using a material (e.g., solvent) capable of effectively removing the residual waste.

If the above conditions are met, a Material Profile Form is not required. If the above conditions are not met, the drum and waste contained therein must be managed as hazardous waste. Refer to Section 6.0 for more waste analysis information.

## 10.0 Batteries

### 10.1 Lead Acid Batteries

Pursuant to 40 CFR 261.6(a)(2)(iv), spent acid batteries (e.g., automotive batteries) destined for reclamation are subject to regulation under 40 CFR 266, Subpart G in lieu of the hazardous waste regulations under 40 CFR 261.

Spent lead acid batteries must be overpacked in a 17-H, 55 gal. drum. Leaking batteries shall not be accepted under this waste analysis criteria. Leaking shall be managed in accordance with Section 6.0 as a D002 hazardous waste.

If any indication (e.g., visual, odor, etc.) exists that the batteries have been commingled with other waste, the batteries shall be rejected. A sample of the commingled waste shall be obtained for waste analysis pursuant with Section 6.0.

### 10.2 Nicad (Nickel/Cadmium) Batteries

Nicad batteries must be overpacked in a 17-H, 55 gal. drum and managed as a D006 hazardous waste. Analytical testing for this waste shall be dictated by the waste analysis plan of the hazardous waste facility receiving the waste. Documentation of the waste analysis shall be the Material Profile Form required by the hazardous waste facility. Appendix D contains an example of such Material Profile Form.

If any indication (e.g., visual, odor, etc.) exists that the batteries have been commingled with other waste, the batteries shall be rejected. A sample of the commingled waste shall be obtained for waste analysis pursuant with Section 6.0.

#### 11.0 Prohibited Waste

Perma-Fix of Fort Lauderdale does not accept radioactive or PCB contaminated waste, or hazardous waste for processing/treatment on-site.

***NOTE: Any waste not addressed in this Waste Analysis Plan is prohibited from transportation and/or treatment by Perma-Fix of Fort Lauderdale without authorization by the Regional Manager.***

**APPENDIX A**

**Analytical Test Methods**

## TCLP ANALYSIS AND PRICING

EPA HAZARDOUS WASTE NO.	CONTAMINANT	CHEMICAL ABSTRACTS SERVICE NUMBER	REGULATORY LEVEL (MG/L)	METHOD OF ANALYSIS
D004	Arsenic	7440-38-2	5.0	1311/7061
D005	Barium	7440-39-3	100.0	1311/7080
D006	Cadmium	7440-43-9	1.0	1311/7130
D007	Chromium	7440-47-3	5.0	1311/7190
D008	Lead	7439-92-1	5.0	1311/7421
D009	Mercury	7439-97-6	0.2	1311/7470
D010	Selenium	7782-49-2	1.0	1311/7741
D011	Silver	7440-22-4	5.0	1311/7760
D018	Benzene	71-43-2	0.5	1311/8260
D019	Carbon Tetrachloride	56-23-5	0.5	1311/8260
D021	Chlorobenzene	109-90-7	100	1311/8260
D022	Chloroform	67-66-3	6.0	1311/8260
D027	1,4-Dichlorobenzene	106-46-7	7.5	1311/8260
D028	1,2-Dichloroethane	107-06-2	0.5	1311/8260
D029	1,1-Dichloroethylene	75-35-4	0.7	1311/8260
D035	Methyl Ethyl Ketone	78-9393	200.0	1311/8260
D039	Tetrachloroethylene	127-18-4	0.7	1311/8260
D040	Trichloroethylene	79-01-6	0.5	1311/8260
D043	Vinyl Chloride	75-01-4	0.2	1311/8260
D020	Chlordane	57-75-9	0.03	1311/8270
D023	o-Cresol	95-48-7	200.0	1311/8270
D024	m-Cresol	108-39-4	200.0	1311/8270
D025	p-Cresol	106-44-5	200.0	1311/8270
D026	Cresol	—	200.0	1311/8270
D030	2,4-Dinitrotoluene	121-14-2	0.13	1311/8270
D012	Endrin	72-20-8	0.02	1311/8270
D031	Heptachlor (and its hydroxide)	76-44-8	0.008	1311/8270
D032	Hexachlorobenzene	118-74-1	0.13	1311/8270
D033	Hexachlorobutadiene	87-68-3	0.5	1311/8270
D034	Hexachloroethane	67-72-1	3.0	1311/8270
D013	Lindane	58-89-9	0.4	1311/8270
D014	Methoxychlor	72-43-5	10.0	1311/8270
D036	Nitrobenzene	98-95-3	2.0	1311/8270
D037	Pentachlorophenol	87-86-5	100.0	1311/8270
D038	Pyridine	110-86-1	5.0	1311/8270
D015	Toxaphene	8001-35-2	0.5	1311/8270
D041	2,4,5-trichlorophenol	95-95-4	400.0	1311/8270
D042	2,4,6-trichlorophenol	88-06-02	2.0	1311/8270
D016	2,4-D	94-75-7	10.0	1311/8150
D017	2,4,5-TP (silvex)	93-72-1	1.0	1311/8150

METHODOLOGY TITLE	EPA/STANDARD METHODS TEST METHOD		
	DRINKING WATER	NON- POTABLE WATER	OTHER**
Purgeable Organics	502.2	601&602/8021	8010&20/8021
Purgeable Halocarbons	502.2	601/8021	8010/8021
Purgeable Aromatics	502.2	602/8021	8020/8021
Purgeable Organics by GC/MS	524.2	624/8260	8260
EDB, DBCP	504	8011	8011
Organochlorine Pesticides	505	608	8080
PCBs (ONLY)	508A	608	8080
Nitrogen, Phosphorus & Triazine Pesticides	507	619	-
Organophosphorus Pesticides	-	614	8141
Chlorophenoxy Herbicides	515.1	615	8150
Carbamate Pesticides	531.1	-	-
Glyphosate	547	-	-
Endothall	548	-	-
Diquat/Paraquat	549	-	-
Chlorination Disinfection Byproducts	551	-	-
Nonhalogenated Solvents	-	8015	8015
Phenols	-	604*	*
Benzidines	-	605*	*
Phthalate Esters	-	606*	*
Nitrosamines	-	607*	*
Nitroaromatics and Isophorone	-	609*	*
Polynuclear Aromatic Hydrocarbons	-	610*	*
Haloethers	-	611*	*
Chlorinated Hydrocarbons	-	612*	*
Semi-Volatile Extractable Compounds	625	625/8270	8270
"Tentatively Identified" Compounds" (Volatile)	524.2 Library Search	8260 Library Search	8260 Library Search
"Tentatively Identified Compounds" (Semi-Volatile)	625 Library Search	8270 Library Search	8270 Library Search

INORGANIC CONSTITUENT	EPA/STANDARD METHODS TEST METHOD	
	WATER	OTHER **
Acidity	305.1	-
Acids, % and Type	Combined	Combined
Alkalinity (CaCO <sub>3</sub> )	310.1	-
Alkalinity, Phenolphthalein	310.1	-
Biochemical Oxygen Demand (BOD-5)	405.1	-
Boron	212.3	-
BTU	PARR	PARR
Chemical Oxygen Demand	410.1	-
Chloride	325.3	9252
Chlorine, Residual	330.3	-
Chromium, Hexavalent	SM 312B	7196
Coliform, Fecal	SM 909C	-
Coliform, Total	SM 909A	-
Color	110.3	Description
Conductivity	120.1	-
Corrosivity (RCRA)	Index	Index
Corrosivity (Towards Steel)	1110	1110
Cyanide, Total	335.3	9010
Cyanide, Amenable to Chlorination	335.3	9010
Flashpoint (PMCC)	ASTM D-93-79	ASTM D-93-79
Fluoride	340.2	-
Formaldehyde	PG2118	PG2118
Gross Alpha	900.0	-
Gross Beta	900.0	-
Halogens, Total	325.3 (MOD)	5050/9252
Halogens, Organic	325.3 (MOD)	5050/9252
Hardness, Total	130.2	-
Hardness, Calcium	130.2	-
Hydrocarbons, Total Recoverable Petroleum	418.1	9073
Hydrogen Sulfide	376.1	9030

**APPENDIX B**  
**Material Profile Form**

## MATERIAL PROFILE FORM

<b>A GENERAL INFORMATION</b> Customer _____ Billing Address _____ Customer Contact Person _____ Address _____ Address _____ City _____ State _____ Zip _____ Phone ( ) _____				Generation/Facility (if different) _____ EPA ID# _____ Generator Contact Person _____ Pick-up Address (if different) _____ City _____ State _____ Zip _____ Note: P.O. Box unacceptable for pick-up address Phone ( ) _____ SIC# _____ Purchase Order # _____																																																																																																																																											
<b>B WASTE DESCRIPTION</b> NAME OF WASTE _____ PROCESS GENERATING WASTE _____																																																																																																																																															
<b>C GENERAL CHARACTERISTICS</b> (at 70°F unless otherwise specified) COLOR _____ ODOR _____ <input type="checkbox"/> NONE <input type="checkbox"/> MILD <input type="checkbox"/> STRONG <input type="checkbox"/> LIQUID _____ % FREE STATE <input type="checkbox"/> Solid <input type="checkbox"/> Sludge <input type="checkbox"/> Powder PHASES <input type="checkbox"/> Single Layer <input type="checkbox"/> Double Layer <input type="checkbox"/> Multi-layer If multi, how many? _____																																																																																																																																															
<b>D SPECIAL HANDLING INSTRUCTIONS</b> If special handling techniques are required, i.e. overpacking, specify: _____ Is a representative sample provided? <input type="checkbox"/> YES <input type="checkbox"/> NO If no, explain: _____																																																																																																																																															
<b>E RCRA INFORMATION</b> Is this a USEPA hazardous waste? <input type="checkbox"/> YES <input type="checkbox"/> NO USEPA hazardous waste codes: _____ _____ _____ _____				<b>F SHIPPING INFORMATION</b> DOT hazardous material? <input type="checkbox"/> YES <input type="checkbox"/> NO PROPER SHIPPING NAME _____ HAZARD CLASS _____ ID# _____ RQ _____ ANTICIPATED VOLUME _____ Gal. _____ Yds. _____ Lbs. _____ Drums(s) _____ Bulk _____ One time _____ Mthly _____ Yrly Other _____ Type and size of container: _____ Weight/container: _____ /gallon																																																																																																																																											
<b>PHYSICAL PROPERTIES - CHEMICAL COMPOSITION</b>																																																																																																																																															
<b>1 pH</b> <input type="checkbox"/> 2 <input type="checkbox"/> >12.5 <input type="checkbox"/> 2 - 6 <input type="checkbox"/> actual <input type="checkbox"/> 6 - 8 <input type="checkbox"/> 8 - 10 <input type="checkbox"/> 10 - 12.5		<b>2 FLASHPOINT</b> (Degrees Fahrenheit) <input type="checkbox"/> less than 100 <input type="checkbox"/> 100 - 140 <input type="checkbox"/> 140 - 200 <input type="checkbox"/> more than 200 <input type="checkbox"/> actual		<b>3 BTU's 1000/lb</b> <input type="checkbox"/> <1 <input type="checkbox"/> >18 <input type="checkbox"/> 1 - 4 <input type="checkbox"/> actual <input type="checkbox"/> 4 - 8 <input type="checkbox"/> 8 - 12 <input type="checkbox"/> 12 - 18		<b>4 HALOGENS (%)</b> Chlorine _____ Bromine _____ Fluorine _____ Iodine _____ Total _____		<b>5 OTHER COMPONENTS</b> PCBs _____ (ppm) Others: _____ _____ _____																																																																																																																																							
<b>6 RCRA METALS</b> <input type="checkbox"/> TCLP (mg/l) <input type="checkbox"/> TOTALS (mg/kg or mg/l) Arsenic (As) _____ Barium (Ba) _____ Cadmium (Cd) _____ Chromium (Cr) _____ Lead (Pb) _____ Mercury (Hg) _____ Selenium (Se) _____ Silver (Ag) _____				<b>7 Clean Water Act (CWA) Metals</b> (If available) in mg/l Copper _____ Zinc _____ Nickel _____																																																																																																																																											
<b>8 ORGANIC TCLP COMPONENTS</b> <input type="checkbox"/> TCLP (mg/l) <input type="checkbox"/> TOTALS (mg/kg or mg/l)						<b>NOTES</b>																																																																																																																																									
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Code</th> <th>Level(mg/l)</th> <th>Name</th> <th>concentration</th> <th>Code</th> <th>Level(mg/l)</th> <th>Name</th> <th>concentration</th> </tr> </thead> <tbody> <tr><td>D018</td><td>0.5</td><td>Benzene</td><td>_____</td><td>D032</td><td>0.13</td><td>Hexachlorobenzene</td><td>_____</td></tr> <tr><td>D019</td><td>0.5</td><td>Carbon tetrachloride</td><td>_____</td><td>D033</td><td>0.5</td><td>Hexachlorobutadiene</td><td>_____</td></tr> <tr><td>D020</td><td>0.03</td><td>Chlordane</td><td>_____</td><td>D034</td><td>3.0</td><td>Hexachloroethane</td><td>_____</td></tr> <tr><td>D021</td><td>100.0</td><td>Chlorobenzene</td><td>_____</td><td>D013</td><td>0.4</td><td>Lindane</td><td>_____</td></tr> <tr><td>D022</td><td>8.0</td><td>Chloroform</td><td>_____</td><td>D014</td><td>10.0</td><td>Methoxychlor</td><td>_____</td></tr> <tr><td>D023</td><td>200.0</td><td>o - Cresol</td><td>_____</td><td>D035</td><td>200.0</td><td>Methyl ethyl ketone</td><td>_____</td></tr> <tr><td>D024</td><td>200.0</td><td>m - Cresol</td><td>_____</td><td>D036</td><td>2.0</td><td>Nitrobenzene</td><td>_____</td></tr> <tr><td>D025</td><td>200.0</td><td>p - Cresol</td><td>_____</td><td>D037</td><td>100.0</td><td>Pentachlorophenol</td><td>_____</td></tr> <tr><td>D026</td><td>200.0</td><td>Cresol (total)</td><td>_____</td><td>D038</td><td>5.0</td><td>Pyridine</td><td>_____</td></tr> <tr><td>D016</td><td>10.0</td><td>2,4 - D</td><td>_____</td><td>D039</td><td>0.7</td><td>Tetrachloroethylene</td><td>_____</td></tr> <tr><td>D027</td><td>7.5</td><td>1,4 - Dichlorobenzene</td><td>_____</td><td>D015</td><td>0.5</td><td>Toxaphene</td><td>_____</td></tr> <tr><td>D028</td><td>0.5</td><td>1,2 - Dichloroethane</td><td>_____</td><td>D040</td><td>0.5</td><td>Trichloroethylene</td><td>_____</td></tr> <tr><td>D029</td><td>0.7</td><td>1,1 Dichloroethylene</td><td>_____</td><td>D041</td><td>400.0</td><td>2,4,5 - Trichlorophenol</td><td>_____</td></tr> <tr><td>D030</td><td>0.13</td><td>2,4 - Dinitrotoluene</td><td>_____</td><td>D042</td><td>2.0</td><td>2,4,6 - Trichlorophenol</td><td>_____</td></tr> <tr><td>D012</td><td>0.02</td><td>Endrin</td><td>_____</td><td>D017</td><td>1.0</td><td>2,4,5 - TP (Silvex)</td><td>_____</td></tr> <tr><td>D031</td><td>0.008</td><td>Heptachlor</td><td>_____</td><td>D043</td><td>0.2</td><td>Vinyl chloride</td><td>_____</td></tr> </tbody> </table>						Code	Level(mg/l)	Name	concentration	Code	Level(mg/l)	Name	concentration	D018	0.5	Benzene	_____	D032	0.13	Hexachlorobenzene	_____	D019	0.5	Carbon tetrachloride	_____	D033	0.5	Hexachlorobutadiene	_____	D020	0.03	Chlordane	_____	D034	3.0	Hexachloroethane	_____	D021	100.0	Chlorobenzene	_____	D013	0.4	Lindane	_____	D022	8.0	Chloroform	_____	D014	10.0	Methoxychlor	_____	D023	200.0	o - Cresol	_____	D035	200.0	Methyl ethyl ketone	_____	D024	200.0	m - Cresol	_____	D036	2.0	Nitrobenzene	_____	D025	200.0	p - Cresol	_____	D037	100.0	Pentachlorophenol	_____	D026	200.0	Cresol (total)	_____	D038	5.0	Pyridine	_____	D016	10.0	2,4 - D	_____	D039	0.7	Tetrachloroethylene	_____	D027	7.5	1,4 - Dichlorobenzene	_____	D015	0.5	Toxaphene	_____	D028	0.5	1,2 - Dichloroethane	_____	D040	0.5	Trichloroethylene	_____	D029	0.7	1,1 Dichloroethylene	_____	D041	400.0	2,4,5 - Trichlorophenol	_____	D030	0.13	2,4 - Dinitrotoluene	_____	D042	2.0	2,4,6 - Trichlorophenol	_____	D012	0.02	Endrin	_____	D017	1.0	2,4,5 - TP (Silvex)	_____	D031	0.008	Heptachlor	_____	D043	0.2	Vinyl chloride	_____	<b>OTHER ORGANIC/INORGANIC COMPONENTS</b> Name _____ % _____ _____ _____	
Code	Level(mg/l)	Name	concentration	Code	Level(mg/l)	Name	concentration																																																																																																																																								
D018	0.5	Benzene	_____	D032	0.13	Hexachlorobenzene	_____																																																																																																																																								
D019	0.5	Carbon tetrachloride	_____	D033	0.5	Hexachlorobutadiene	_____																																																																																																																																								
D020	0.03	Chlordane	_____	D034	3.0	Hexachloroethane	_____																																																																																																																																								
D021	100.0	Chlorobenzene	_____	D013	0.4	Lindane	_____																																																																																																																																								
D022	8.0	Chloroform	_____	D014	10.0	Methoxychlor	_____																																																																																																																																								
D023	200.0	o - Cresol	_____	D035	200.0	Methyl ethyl ketone	_____																																																																																																																																								
D024	200.0	m - Cresol	_____	D036	2.0	Nitrobenzene	_____																																																																																																																																								
D025	200.0	p - Cresol	_____	D037	100.0	Pentachlorophenol	_____																																																																																																																																								
D026	200.0	Cresol (total)	_____	D038	5.0	Pyridine	_____																																																																																																																																								
D016	10.0	2,4 - D	_____	D039	0.7	Tetrachloroethylene	_____																																																																																																																																								
D027	7.5	1,4 - Dichlorobenzene	_____	D015	0.5	Toxaphene	_____																																																																																																																																								
D028	0.5	1,2 - Dichloroethane	_____	D040	0.5	Trichloroethylene	_____																																																																																																																																								
D029	0.7	1,1 Dichloroethylene	_____	D041	400.0	2,4,5 - Trichlorophenol	_____																																																																																																																																								
D030	0.13	2,4 - Dinitrotoluene	_____	D042	2.0	2,4,6 - Trichlorophenol	_____																																																																																																																																								
D012	0.02	Endrin	_____	D017	1.0	2,4,5 - TP (Silvex)	_____																																																																																																																																								
D031	0.008	Heptachlor	_____	D043	0.2	Vinyl chloride	_____																																																																																																																																								

I hereby certify that all the information in this and in all the attached documents is complete and accurate, and that all known or suspected hazards have been disclosed. Information provided that is not supported by analytical/technical data is based on "applying knowledge of the hazard characteristic of the waste in light of the materials or the processes used [40 CFR 262.11(c)(2)]."

AUTHORIZED SIGNATURE

TITLE

DATE



**INSTRUCTIONS**

The Material Profile Form (MPF) has been specifically designed to provide Perma-Fix Environmental Services. (*Perma-Fix*), with information necessary to transport, store, treat, and/or recycle your waste stream in full compliance with county, state and federal regulations.

Except as noted below, a separate MPF is required for each waste stream. A revised MPF must be submitted (1) wherever there is a change in the characteristics of the waste stream or a change in the process that may result in a change in the waste stream characteristics or (2) there is a change in state or federal regulations that changes the regulated status of the waste stream or any constituents thereof. The MPF must be submitted and approved before shipment of waste to *Perma-Fix*.

*Perma-Fix* may request a representative sample of each waste stream that is submitted for profiling. If requested, the sample may be collected by the generator or *Perma-Fix*. *Sample collection will be conducted in accordance with the appropriate methods found in "Test Methods for Evaluation of Solid Waste, Physical Chemical Methods (EPA Publication SW-846)." If the sample requires TCLP analysis, sample volume must be at least 1 liter and the sample container must be borosilicate glass. If the generator chooses to collect the sample, the sample must be packaged, labeled and shipped to Perma-Fix in accordance with provisions of 40 CFR 261.4(d) and applicable USDOT and USPS regulations. The sample label must show generator's name, address, telephone number, contact person, a description of the sample, and the date and time the sample was collected.*

When form is completed, a signed original will be submitted with the sample (if requested) to:

Perma-Fix Customer Services  
4001 S.W. 47th Ave., Suite 211  
Davie, FL 33314.

A copy of the original will be returned to the generator upon approval of the waste stream.

**ANSWERS MUST BE PROVIDED FOR ALL QUESTIONS/ITEMS ON THE ATTACHED FORM.** Print (pen only) or type (12 pitch) the answer or check the appropriate boxes so that all pages are clearly legible. If a particular question is not applicable to your waste stream, response with "N/A" is acceptable. If you do not know the answer to a question, response with "U" is acceptable. **NOTE:** In instances where the information is essential for proper evaluation of the waste, a "U" response may result in a request for additional information and/or testing of the waste. If MSDSs, analytical data or other information is submitted, so indicate on the form. **Make sure the form is filled out completely and the label is securely attached to sample container.**

**PART A - General Information**

Customer Name & Billing Address: This is of the party contracting with *Perma-Fix* for service.

Generator/Facility & Pick - Address: Provide only if different from the Customer.

If applicable, include Purchase Order number for sample analysis or waste disposal charges.

Include the EPA ID# for the facility at which the waste was generated. If the facility is classified as a "Conditionally Exempt Small Quantity Generator," indicate CESQG in the EPA ID # space.

**PART B - Waste Description**

Waste Name: The name for the waste commonly used by the generator. If possible, the name should describe the nature and composition of the waste.

Process Generating Waste: A description of the process or source generating the waste. If the amount or composition of the waste varies, specify in what way and at what frequency. **NOTE:** *Perma-Fix routinely analyzes incoming shipments. In the event the result of such analysis reveals a significant discrepancy from the information provided by the generator, the waste may be rejected for treatment/disposal and returned to the generator or transferred to another facility. Actions taken in response to significant discrepancies may be at the generators expense.*

**PART C - General Characteristics**

Color: Indicate the color of the material.

Odor: A description, such as sweet, nauseating, onion-like, etc., along with an indication of its strength or intensity.

Liquid: Indicate, in percentage, the volume of the free liquids present when the waste was packaged. If the waste is 100% liquid, indicate "100%."

State: Indicate if the material is solid, sludge or powder.

Layers: Indicate the number of "layers" in the waste.

**PART D - Special Handling Information**

Provide any special handling techniques that should be used during the transportation and storage of the waste. For example, if the waste is incompatible with certain types of containers or if it will react upon coming into contact with other materials. Attach any information that

will fully describe any hazards or explain appropriate safeguards. **NOTE:** *Absence of any information under this PART will imply that, to your knowledge and belief, there are no hazards or adverse effects associated with the waste.*

**PART E - RCRA Information**

Show all listed and characteristic waste codes if the waste meets the definition of a hazardous waste. **NOTE:** The concentration of each TCLP constituent (40 CFR 261.24) must be provided in Part G, #6 & #8.

**PART F - Shipping Information**

Proper Shipping Name, Hazard Class, ID#, R/Q: For hazardous waste or hazardous material only, enter the DOT Shipping Name, ID No., Packaging Group, Hazard Class, and R.Q. (Reportable Quantity). **NOTE:** *This information must be consistent with information contained on any manifest covering the shipment of the waste. Complete all of the remaining information in this part.*

**PART G - Physical Properties - Chemical Composition**

Items 1-5: Check the block that most accurately describes the range of characteristics in question. Also give actual values determined from the sample analysis, MSDSs or process knowledge.

Item 3: Check the box that is closest to the BTU value of the material on a per pound basis. **NOTE:** These numbers depict BTUs multiplied by 1000.

Item 6: Values may be expressed in TCLP units (mg/l) or TOTALS (mg/kg or mg/l). For solids or liquids containing in excess of 0.5% solids, it is recommended that TCLP analysis is used in order to eliminate the need for duplicate analysis in the event TOTALS analysis shows elevated constituent concentrations.

Item 7: If available on liquid waste, show the concentrations, in mg/l, of these Clean Water Act (CWA) metals.

Item 8: If the waste stream contains any of the constituents listed in this section, show the concentration. Indicate whether concentrations are based on TCLP or TOTALS analysis.

Item 9: List other organic components in the waste stream and their concentrations by percentage.

***Be sure to sign the bottom of the form. Sample data will not be reviewed without this signature and certification.***

**APPENDIX C**

**Facility Inventory Logs and Monthly Fuel Oil Analysis**

**ANALYTICAL SUMMARY**

**IRR #2 Fuel Oil Specifications**

**Sample ID: Certification #2**

**Access Number: 953-51**

**Date Sampled: 08 Mar 95**

<u>COMPOUNDS</u>	<u>METHOD</u>	<u>RESULTS</u>	<u>UNITS</u>
Total Halogens	EPA 9076	162.8	ppm
Heat of Combustion	ASTM 240D	142,550	BTU/gal
Viscosity	ASTM 445D	67.1	S.U.S.
Flash point	EPA 1010	190	°F
PCBs	EPA 8080	N/D	ppm
Sulfur	ASTM 4294D	0.27	%(w)
Arsenic	EPA 7061	N/D	ppm
Cadmium	EPA 7131	N/D	ppm
Chromium	EPA 7190	0.21	ppm
Lead	EPA 7420	2.69	ppm

**N/D - None Detected**

**Analyses performed by Precision Petroleum Laboratories.**

**ANALYTICAL SUMMARY**

**IRR #5 Fuel Oil Specifications**

**Sample ID: Certification #5**  
**Access Number: 953-52**  
**Date Sampled: 08 Mar 95**

<u>COMPOUNDS</u>	<u>METHOD</u>	<u>RESULTS</u>	<u>UNITS</u>
Total halogens	EPA 9076	220.1	ppm
Heat of combustion	ASTM 240D	144,219	BTU/gal.
Viscosity	ASTM 445D	265.0	S.U.S.
Flash point	EPA 1010	215	°F
PCBs	EPA 8080	N/D	ppm
Sulfur	ASTM 4294D	0.4088	%(wt)
Arsenic	EPA 7061	N/D	ppm
Cadmium	EPA 7131	N/D	ppm
Chromium	EPA 7190	0.32	ppm
Lead	EPA 7420	4.06	ppm

**N/D - None Detected**

**Analyses performed by Precision Petroleum Laboratories.**

**APPENDIX D**

**Hazardous Waste Facility Material Profile Form**

## MATERIAL PROFILE FORM INSTRUCTIONS

This Material Profile Form (MPF) has been specifically designed to provide Perma-Fix with information necessary to transport, store and recycle your waste stream in full compliance with state and federal regulations.

Except as noted below, a separate MPF is required for each waste stream. A revised MPF must be submitted (1) whenever there is a change in the characteristics of the waste stream or a change in the process which might result in a change in waste stream characteristics or (2) there is a change in state or federal regulations which changes the regulated status of the waste stream or any constituents thereof. The MPF must be submitted to Perma-Fix for entry into the internal review process, before a sales order can be initiated. No material can be received by Perma-Fix unless specifically authorized by a Perma-Fix approval.

A representative sample of the waste stream, collected in accordance with appropriate methods found in "Test Methods for Evaluation of Solid Waste, Physical/Chemical Methods", EPA publication SW-846, must be submitted with each MPF that is submitted to the Perma-Fix Laboratory. If this sample requires TCLP analysis, sample volume must be at least 1 quart and sample container must be borosilicate glass. The sample must be packaged, labeled and shipped in accordance with provisions of 40 CFR 261.4 (d) (2) and applicable USDOT and USPS regulations. The "pull-off" label provided below must be completed, signed and attached to the sample container.

When instructions and form are completed, remove last page (yellow customer copy) and keep with instruction page for your records. Return remainder of the form (blue, pink and green copies) with the representative sample to Perma-Fix, Attention: Customer Service Manager at address on label.

**MAKE SURE LABEL AND FORM ARE FILLED OUT CORRECTLY AND LABEL IS APPLIED TO SAMPLE CONTAINER.**

SEE

NAME OF COMPANY

MAKE

REVERSE

SURE SAMPLE

SIDE

ADDRESS CITY STATE ZIP

CONTAINER

FOR

TELEPHONE NO. DATE SAMPLE COLLECTED DATE SAMPLE SHIPPED

IS CLEAN

IMPORTANT

SAMPLE COLLECTED BY TITLE

BEFORE

INSTRUCTIONS

DESCRIPTION OF SAMPLE

APPLYING LABEL

SHIP SAMPLE TO:  
Customer Service Mgr.  
Perma-Fix  
1940 NW 67th Place  
Gainesville, FL 32653  
(804) 373-8088

I certify that the sample contained herein was collected in accordance with methods approved in SW 846 and is representative of the waste described in Perma-Fix.

Material Profile Form Number

16927

SIGNATURE

PRINT NAME & TITLE

CAUTION: LEAVE A MINIMUM OF 1" HEADSPACE WHEN FILLING

INSTRUCTION PAGE (TO BE RETAINED BY CUSTOMER)

## INSTRUCTIONS (continued)

**ANSWERS MUST BE PROVIDED FOR ALL QUESTIONS/ITEMS ON THE ATTACHED FORM.** Remove instructions (page 1) and print (pen only) or type (12 pitch) the answer or check the appropriate boxes so that all pages are clearly legible. If a particular question is not applicable to your waste stream, you may so signify with the response "NA". If additional information is submitted to complete answer (i.e. MSDS's, other laboratory analysis, etc.), indicate on the form that the additional information is attached as Attachment 1, Attachment 2, etc. When instructions and form are completed, remove last page (yellow customer copy) and keep with instructions page for your records. Return remainder of the form (blue, pink and green copies) to Perma-Fix's Customer Service Manager at address on label.

**MAKE SURE LABEL AND FORM ARE FILLED OUT COMPLETELY AND LABEL IS APPLIED TO SAMPLE CONTAINER.**

### PART A - GENERAL INFORMATION

**Billing Address** - This section is to be completed by the party who has (may) contracted directly with Perma-Fix for desired services.

**Pick-up Address** - This section pertains specifically to the facility from which the waste will be shipped. Pick-up address must be a street address (not a post office box). Include the USEPA ID#, or explain if not included. Also, please include the Purchase Order Number for sample analysis.

### PART B - WASTE DESCRIPTION

**Waste Name** - Give name for the waste that is commonly used at the facility and which describes the nature or composition of the waste.

**Process Generating Waste** - Describe the process or source generating the waste. If the amount or composition of waste varies, please specify in what way and at what frequency. Note: In accordance with RCRA regulations, Perma-Fix routinely analyzes incoming shipments. If such analyses indicate a significant difference from the information described in the MPF, Perma-Fix may be required to reject the shipment.

### PART C - GENERAL CHARACTERISTICS

**Odor** - Describe as completely as possible (sweet, nauseating, onion-like, etc.). Indicate the strength/intensity of the odor by checking appropriate space.

**% Free Liquid** - Estimate percent volume of free liquids in waste as packaged for shipment. If the waste is 100% liquid, indicate "NA" in the space provided for % free liquid.

**Phases** - If the waste contains more than one phase or layer, check the appropriate box.

### PART D - SPECIAL HANDLING INFORMATION

Indicate special handling techniques which should be employed during the transportation and storage of the waste. If the waste is incompatible with certain types of containers or will react when it comes into contact with other materials, please indicate. Attach additional information as necessary to fully describe hazards and appropriate safeguards. Absence of hazard information requested under Part D will imply that, to your knowledge and belief, there are no hazards or adverse effects associated with the waste.

### PART E - RCRA INFORMATION

List all applicable waste codes, both listed and characteristic, if the waste meets the definition of a hazardous waste. Note: The concentration of each constituent imparting a TCLP Toxicity Characteristic (40 CFR 261.24) must be provided under Part H.

### PART F - SHIPPING INFORMATION

**Shipping Name** - If the waste is a hazardous waste or hazardous material as defined in 40 CFR 172, enter the D.O.T. Shipping Name, Hazard Class, ID No. and R.Q.(Reportable Quantity). Note: This information must be consistent with information contained on any manifest covering the shipment of the waste.

### PART G - PHYSICAL / CHEMICAL PROPERTIES

**Items 1-6 and 8** - Use analytical methods described in SW-846 whenever applicable and ASTM methods in all other cases.

**Items 1-5** - Check the block that most accurately describes the range of characteristics in question. Also give actual value determined from the sample analyses.

**Item 3** - Applicable only to liquids or liquid portions of the waste. If pH is less than 2 or greater than 12.5 Perma-Fix may not accept the waste stream.

**Item 4** - Check the box that is closest to the BTU value of the material on a per pound basis. Note: These numbers depict BTUs multiplied by 1000.

**Item 6-8** - Check the appropriate box that accurately describes the waste stream. All values should be filled in as ppm levels. Be sure to check whether the metals results are on a totals or a TCLP basis.

### PART H - ORGANIC ANALYSIS

**Item-1** On the blank lines following the TCLP components, list the organic components in the waste stream and the appropriate percentages. (must total 100%)

**Item-2** Check the appropriate box to indicate what analyses must be performed on the TCLP extract of your sample. If a lab other than Perma-Fix's is used for the TCLP analysis, attach those results. If the generator chooses to rely on his knowledge to classify his waste, the signature block must be completed.

**Item-3** To be completed by Perma-Fix for material subject to ten day transfer.

**Be sure to sign the bottom of the form. Samples cannot be reviewed without a signature.**



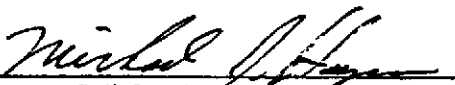


**CLOSURE PLAN  
USED OIL, GENERAL PERMIT**

**PERMA-FIX OF FT. LAUDERDALE, INC.  
3701 SW 47<sup>th</sup> Avenue, Suite 109  
Davie, Florida 33314**

**April 10, 1996**

**Prepared by:**

  
**Michael J. Haynes  
Vice President / Regional Manager**

# CLOSURE PLAN/USED OIL FACILITY

## 1.0 INTRODUCTION

### 1.1 Purpose

This closure plan is drafted in accordance with F.A.C. 62-710.800(3)(a) for Perma-Fix of Ft. Lauderdale, Inc. (Perma-Fix), a used oil processor.

### 1.2 Scope

This closure plan describes the manner in which the used oil portion of the facility will be closed in order to satisfies the requirements of closure performance pursuant to F.A.C. 62-710.800(3)(a).

### 1.3 Facility Information

Perma-Fix is a used oil processor, transporter, and oil filter recycler.

Facility Location: Perma-Fix of Fort Lauderdale, Inc.  
3670 SW 47<sup>th</sup> Avenue  
Davie, Florida 33314

EPA I.D. No. FLD 981 018 773

## 2.0 CLOSURE PERFORMANCE STANDARDS

Perma-Fix, as owner/operator of facility, shall close the used oil portion of the facility in a manner that: 1) minimizes the need for further maintenance; 2) ensures there shall be no contaminated groundwater; 3) all soils shall be free of oil; and 4) equipment shall be emptied, cleaned, and/or dismantled.

## 3.0 CLOSURE PLAN

Upon closure, the used oil portion of the facility shall be closed. Partial closure may occur if areas of the facility are closed as a result of facility modifications.

### 3.1 Used Oil Disposal

The maximum storage capacity of the facility is approximately 450,000 gallons of used oil and oily wastewater. All used oil and material subject to the used oil regulations in storage at the time of closure shall be transported by a permitted used oil transporter and

recycled by a used oil processing and/or burner facility permitted by the FDEP. Material subject to the used oil regulations that are generated during closure of the facility shall be transported by a permitted used oil transporter and recycled by a used oil processing and/or burner facility permitted by the FDEP. No off-site waste management units will be used during the closure process.

### 3.2 Decontamination

Once the facility is empty of all material, the containment units will be cleaned utilizing a 2,200 psi pressure washer or equivalent equipment. The tanks, pipelines, equipment and storage area will be cleaned in a systematic manner to ensure the material is thoroughly removed. Wash water generated from the cleaning process will be collected and pumped directly into tanker trailer for subsequent transportation and recycling. Secondary containment areas will be pressure washed until wash water show visual evidence of oil contamination.

As a alternative closure method, all tanks, piping, and equipment may be reused, if suitable. All tanks, piping, and equipment shall be emptied of all free flowing used oil prior to their removal from the facility for reuse. If the tanks, piping, and/or equipment can not be reused, it shall be recycled as scrape metal.

### 3.3 Environmental Monitoring & Analysis

*test method* { At the time of closure, groundwater monitoring wells located in the vicinity of used oil management activities shall be test for the presents of used oil by test methods 601, 602, 610, and 418.1. Additionally, four soil samples shall be obtained from areas in the vicinity of the used oil management activities. If the test results from groundwater and soil samples do not exceed regulatory levels, "clean closure" will be assumed.

If the test results from these samples exceed regulatory levels, Perma-Fix shall contact the Florida Department of Environmental Protection and re-evaluate the closure process.

① Characterization of residue



**PERMA-FIX OF FT. LAUDERDALE, INC.**

E.P.A. I.D. # FLD 881 018 773 • D.E.P. I.D. #50030 U.O.  
LICENSED AND INSURED  
3670 SW 47th AVE. • DAVIE, FL 33314  
(954) 583-3795

**M A N I F E S T**

**COMMENTS**

**NO. W**

**DATE**

**CUSTOMER  
ADDRESS  
CITY  
STATE  
CUST. NO.**

**ZIP CODE  
S.S.N.**

**PRODUCT GALLONS PRICE TOTAL AMT.**

**TOTAL GALLONS  
TO BE CHARGED**

**REMOVED QUANTITY SHOWN ABOVE**

**CHANGED AMOUNT**

**CUSTOMER SIGN HERE AFTER REMOVAL**

☐ COMBUSTIBLE LIQUID, N.O.S.  
NA 1993, PG III (ERG # 27)  
(SPECIFY)

☐ DIESEL FUEL  
3, NA 1993, PG III (ERG # 27)  
(SPECIFY)

☐ NON-HAZARDOUS MATERIAL  
(SPECIFY)

**PAYMENT**

☐ CASH ☐ CHARGE

☐ CHECK ☐ CREDIT



**PRODUCT NO. PURCHASE ORDER NO.**

**TELEPHONE #**

**TRUCK NO.**

**CHECK NO.**

**For oil and oily waste only**

By signing this manifest, I certify that the oil and/or oily waste manifested herein has not been mixed with halogenated hazardous waste listed in Supplement D of 40 CFR 261.

**SERVICE**

**SERVICE TERM (WEEKS)**

**CLIMATE SERVICE TO**

**WEEKS INITIAL**

**YOUR SALE NO.**

**GALLON READINGS - FINISH**

**PREVIOUS SALES NO.**

**READING AT START OF DELIVERY**

**SERVICE CHARGE  
CHANGE AUTHORIZATION**

**FROM TO INITIAL**

**ORIGINAL**



# Used Oil Fuel Delivery Manifest

**PERMA-FIX OF FT. LAUDERDALE, INC.**

4001 S.W. 47th Avenue • Suite 211 • Davie, Florida 33314

(305) 583-3795 • Telefax (305) 583-8017 • 1-800-959-9543

**DELIVERY MANIFEST**

**4622**

Customer Name

Customer Number

EPA Fuel Specification Test Data:

Plant No. and Address

Laboratory Analysis No.

Laboratory Test Date

EPA Test Method

Billing Address

Halogen Test Data:

Customer P.O. No.

Test Kit Used

Person Performing Test

Date Of Test

Amount Of Oil Tested

Dilute Solution Used

Halogen Concentration

TIME OF DELIVERY:

DATE OF DELIVERY:

DRIVER

Fuel Code	Quantity	Gal.	Description of Fuel
DOT Identification: Oils, N.O.S., Combustible Liquid, N.A.1270			

## CUSTOMER ACKNOWLEDGEMENT:

Customer, or Agent acting in Customer's behalf, hereby acknowledges that the above-described fuel was delivered in a sealed tanker with all seals in tact.

Customer/Agent Signature

Date Received

Customer/Agent Printed Name

is acknowledged and agreed that this bill shall be paid within thirty days of mailing and shall be delinquent ten days thereafter. In the event the bill is not paid within the aforementioned period Perma-Fix of Ft. Lauderdale, Inc. shall be entitled to interest at 1.5% per month on the outstanding balance and all costs and attorney's fees incurred in collecting this bill, whether or not suit be brought, including those incurred on appeal and in post-judgement collection. Venue of suit shall be the choice of Perma-Fix of Ft. Lauderdale, Inc.

WHITE / ACCOUNTING

YELLOW / FILE

PINK / CUSTOMER



**PERMA-FIX**  
ENVIRONMENTAL SERVICES  
FORMERLY INTEGRATED RESOURCE RECOVERY, INC.

0103145

May 24, 1995

Ms. Joan Flint, Used Oil Coordinator  
Bureau of Solid and Hazardous Waste  
Florida Department of Environmental Protection  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

**CERTIFIED MAIL**

Dear Ms. Flint:

*Approved  
6/7/95  
Joan M. Flint*

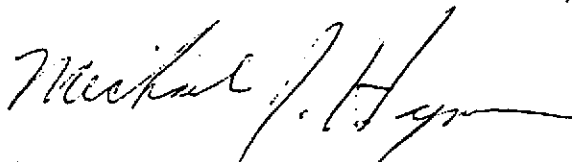
Please find enclosed a completed Used Oil Annual Registration [DER form 62-710.900(1)], Used Oil Check List, and a copy of our used oil record keeping form (for your files). Additionally, please find enclosed check No. 5315 in the amount of \$100.00 for the annual registration fee.

A Used Oil Certificate of Liability Insurance [DER for, 17-710.900(4)], and an original accord insurance certificate identifying your agency as the certificate holder is currently on-file with your agency.

If you have any questions, please do not hesitate to contact me. Thank you for your time.

Sincerely yours,

**PERMA-FIX OF FORT LAUDERDALE, INC.**



Michael J. Haynes  
General Manager

MJH/LTR/OILREGIS.095

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

PAGE:

USED OIL RECORD KEEPING FORM

TRANSPORTER OR RECYCLER NAME  
REGISTRATION NUMBER

PERMA-FIX OF FT. LAUDERDALE, INC.  
50030-U0

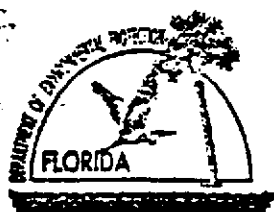
USED OIL SOURCE: NAME, STREET ADDRESS, CITY, STATE, ZIP	QUANTITY GALLONS	FILTERS DRUMS	TYPE CODE	END USE CODE	DATE SHIPPED OR SHIPPED	DESTINATION OF THE USED OIL
JAPANESE QUALITY CAR 505 INDUSTRIAL AVENUE BOYNTON BEACH, FL 33426	0	1	A	N	04/10/95	Perma-Fix of Ft. Lauderdale
JUPITER CHEVRON SERVICE 3 N. ALTERNATE AVE JUPITER, FL 33450	0	1	A	N	04/17/95	Perma-Fix of Ft. Lauderdale
JUPITER DODGE 1555 WEST INDIANTOWN ROAD JUPITER, FL 33450	0	2	A	N	04/11/95	Perma-Fix of Ft. Lauderdale
KARE PRO 1415 DECKER AVENUE STUART, FL 34994	0	2	A	N	04/26/95	Perma-Fix of Ft. Lauderdale
KELLY TRACTOR 801 E. SUGARLAND HIGHWAY CLEWISTON, FL 33440	0	1	A	N	04/13/95	Perma-Fix of Ft. Lauderdale
KENDALL TOYOTO/LEXUS 10943 S. DIXIE HIGHWAY MIAMI, FL 33156	0	4	A	N	04/04/95	Perma-Fix of Ft. Lauderdale
KENDALL TOYOTO/LEXUS 10943 S. DIXIE HIGHWAY MIAMI, FL 33156	0	1	A	N	04/18/95	Perma-Fix of Ft. Lauderdale
KIRCHMANS AUTO 2519 NORTH 441 BELLE GLADE, FL 33430	0	1	A	N	04/18/95	Perma-Fix of Ft. Lauderdale
LAUDERDALE ENFORTE LTD BMW 1072 S. ANDREWS AVENUE FT LAUDERDALE, FL 33316	0	2	A	N	04/11/95	Perma-Fix of Ft. Lauderdale
LEXUS OF PALM BEACH 2345 OKEECHOBEE BLVD. WEST PALM BEACH, FL 33409	0	1	A	N	04/05/95	Perma-Fix of Ft. Lauderdale
LEXUS OF PALM BEACH 2345 OKEECHOBEE BLVD. WEST PALM BEACH, FL 33409	0	1	A	N	04/19/95	Perma-Fix of Ft. Lauderdale
LIGHTHOUSE POINT CITGO 2101 SAMPLE ROAD POMPANO BEACH, FL	0	1	A	N	04/21/95	Perma-Fix of Ft. Lauderdale
LUBE IN TEN 2354 N. MILITARY TRAIL WEST PALM BEACH, FL 33409	0	1	A	N	04/10/95	Perma-Fix of Ft. Lauderdale
LUBE IN TEN 2354 N. MILITARY TRAIL WEST PALM BEACH, FL 33409	0	1	A	N	04/26/95	Perma-Fix of Ft. Lauderdale
MARGATE LINDCOLN/MERCURY 2250 NORTH STATE ROAD 7 MARGATE, FL 33063	0	2	A	N	04/20/95	Perma-Fix of Ft. Lauderdale
MASSIE-YARDLEY CHRYSLER DODGE 8401 S.E. FEDERAL HIGHWAY HUBB SOUND, FL 33455	0	1	A	N	04/19/95	Perma-Fix of Ft. Lauderdale
MOODY HONDA 500 N. FEDERAL HIGHWAY FT LAUDERDALE, FL 33301	0	1	A	N	04/14/95	Perma-Fix of Ft. Lauderdale



**PERMA-FIX**  
ENVIRONMENTAL SERVICES

BROWARD (954) 583-3795 • TOLL FREE (800) 959-9543 • FAX (954) 583-8017

**WASTE OIL  
FILTERS ONLY**



Florida Department of Environmental Protection  
Twin Towers Office Bldg. • 2800 Blair Stone Road • Tallahassee, Florida 32399-2400

DEP Form # 62-710.900(3)  
Form Title Annual Report by  
Used Oil and Used Oil Filter Handlers  
Effective Date June 1, 1995

## Annual Report by Used Oil and Used Oil Filter Handlers\*

(Handlers are any persons subject to the registration requirements of Rule 62-710.500 and 62-710.650, F.A.C. (see Section A, Box 5 below))

For reporting period January 1, 199\_\_ through December 31, 199\_\_

Use the information reported in your Record Keeping forms (62-710.900(2)) to complete this document

### SECTION A To be completed by all registered persons

1. Company Name: Perma-Fix of Ft. Lauderdale Telephone No. (954) 583-3795  
Mailing Address 3701 S.W. 47th Avenue #109  
Davie, Florida 33314 3. EPA ID # FLD 981 018 773

☐ Check box if changed since last registration

4. Name of person preparing report (please print) Michael J. Haynes

Affiliation with business Southeast regional Manager

Phone number (if different than Number 2, above) ( ) SAME

5. Type of operation (check as many as apply)

Used Oil : ☒ Transporter ☒ Transfer Facility ☒ Processor ☒ Marketer ☐ Burner of off-spec used oil

Used Oil Filter : ☒ Processor

### SECTION B To be completed by all registered used oil handlers.

Note: Filter operations complete Section C (Optional)

SECTION B To be completed by all registered used oil handlers. Note: Filter operations complete Section C (Optional)		Automotive	Industrial	Mixed
1. Amount (in gallons) of Used Oil and Oily Waste Collected		2,833,081	1,388,942	-0-
2. Amount (in gallons ) of Used Oil and Oily Waste Marketed, Disposed of or End Used				
N - Not an end use, transferred to another facility		-0-	-0-	662,560
O - Marketed as an on-spec used oil fuel		1,936,714	105,203	-0-
F - Marketed as an off-spec used oil fuel		-0-	-0-	-0-
I - Marketed for an industrial process		-0-	-0-	-0-
B - Burned as off-spec used oil fuel		-0-	-0-	-0-
D - Disposal		-0-	-0-	-0-
	Landfilled	-0-	-0-	-0-
	Wastewater-Treatment Unit	867,746	615,179	-0-
	Incinerator	-0-	-0-	-0-
	Other	-0-	-0-	-0-
3. Total amount (in gallons) of used oil collected (Total of boxes from Part 1 of this section) 4,222,023		4. Total amount (in gallons) of used oil end used (Total of boxes from Part 2 of this section) 4,187,402		
5. End of year, on hand estimate (Difference between the amounts in boxes 3 and 4 above) 34,621				

### Section C (Optional)

To be completed by Filter Handlers (use table in Direction 1 to convert tons of filters to numbers)

1. Number of used oil filters collected	696,300
2. Number of used oil filters end used	
transferred to another registered facility	696,300
burned for energy recovery in WTE	-0-
recycled at metal foundry	-0-
TOTAL	696,300
3. End of year, on hand estimate (difference between totals of lines 1 and 2)	
4. Gallons of used oil collected as a result of filter processing	9,780
5. Gallons of used oil transferred to a used oil handler	-0-
6. Volume of oily waste collected as a result of filter processing	-0-
7. Volume of oily waste managed	-0-
8. Description of oily waste management OIL FROM OIL FILTER PROCESSING IS RECYCLED ON SITE IN THE FORMATION OF FUEL OIL WHICH IS SUBSEQUENTLY SHIPPED TO INDUSTRIAL FURNACES THROUGHOUT FLORIDA	

### Directions for completing section C (Optional)

1. List the number of used oil filters collected using the following table

One 55-gallon drum of crushed used oil filters = approximately 400 used oil filters
One 55-gallon drum of uncrushed used oil filters = approximately 250 used oil filters
One ton of drained used oil filters = approximately 2,350 used oil filters

2. List the number of used oil filters according to how they were managed by your operation. Enter the sum of all end use categories in the bold block.
3. Enter the number of filters on hand at your site as of Dec. 31 of last year.
4. Fill in the gallons of used oil collected by your filter operation.
5. Enter the gallons of used oil transferred to a used oil transporter or processor.
6. List the volume (gallons or cubic yards) of the oily wastes collected through your filter handling. Oily wastes are defined in 62-710.200(1) and include bottom sludges, sorbents, wipes etc.
7. List the volume (gallons or cubic yards) of the oily waste managed by your operation.
8. Describe how these oily wastes were managed (sent to WTE, hazardous waste facility etc.).

Any questions concerning this form may be referred to the Used Oil Coordinator, Hazardous Waste Management Section, Bureau of Solid and Hazardous Waste, Department of Environmental Protection, 2600 Blair Stone Road, Tallahassee, FL, 32399-2400, (904) 488-0300.

<b>1 FROM (Company)</b> <b>PERMA FIX ENVIRONMENTAL</b> Street Address: <b>STE 109</b> <b>3701 SW 47TH AVE</b> City: <b>FL</b> State: <b>33314</b>		<b>Preprint Form No. 5143967</b>		<b>Origin</b> <b>FL</b>		<b>Alt. Number</b> <b>7957680275</b>	
<b>2 TO (Company)</b> Street Address: <b>Florida Dept. of Environmental Protection</b> <b>Attn: Bob Stone</b> P.O. Box 1 City: <b>State: FL</b> Zip Code (Required): <b>305-583-3795</b>		<b>4 Method of Payment</b> <input checked="" type="checkbox"/> Bill <input type="checkbox"/> Receiver <input type="checkbox"/> Bill 3rd Party <input type="checkbox"/> Paid in Advance <input type="checkbox"/> Bill		Assumed sender unless otherwise noted <b>115549501</b>		<b>5 Service Type</b> <input checked="" type="checkbox"/> Express <input type="checkbox"/> Registered Mail <input type="checkbox"/> Registered Mail with Signature <input type="checkbox"/> Registered Mail with Signature and Insurance <input type="checkbox"/> Registered Mail with Signature and Insurance and Signature	
<b>3 Sender's Signature</b> <i>Steve Hays</i> Date: <b>9/29/89</b> Time: <b>7:40</b>		<b>6 Special Instructions</b> <input type="checkbox"/> Saturday (even) <input type="checkbox"/> Sunday (even) <input type="checkbox"/> Lab Pack <input type="checkbox"/> Hold at Airborne <input type="checkbox"/> Hold at Terminal		<b>7 Weight (lbs.)</b> <b>FK7000</b>		<b>8 CHECK IF</b> <input checked="" type="checkbox"/> REGISTERED MAIL <input type="checkbox"/> EXPRESS MAIL	
<b>9 Description</b> <b>1 Gallon of 100% Pure Ethanol</b>		<b>10 Declared Value</b> <b>\$100</b>		<b>11 Insurance</b> <input type="checkbox"/> \$ <input type="checkbox"/> \$ <input type="checkbox"/> \$		<b>12 Shipment Valuation</b> <input type="checkbox"/> Airborne <input type="checkbox"/> Terminal	

## **VEHICLE SPILL CONTINGENCY PLAN**

**PERMA-FIX OF FORT LAUDERDALE, INC.  
3701 SW 47<sup>th</sup> Avenue, Suite 109  
Davie, Florida 33314**

**Revised April 10, 1996**

**Prepared by:**

**Michael J. Haynes  
Vice President / Regional Manager**

## **TABLE OF CONTENTS**

### **1.0 INTRODUCTION**

- 1.1 Purpose
- 1.2 Scope
- 1.3 Responsibility

### **2.0 GENERAL INFORMATION**

### **3.0 ARRANGEMENT WITH LOCAL EMERGENCY RESPONSE AGENCIES**

### **4.0 COPIES OF CONTINGENCY PLAN**

### **5.0 AMENDMENTS TO CONTINGENCY PLAN**

### **6.0 SPILL COORDINATOR (SC)**

### **7.0 SPILL PROCEDURES**

- 7.1 Identifying Releases and Hazards
- 7.2 Notification and Reporting
- 7.3 Spill Procedures
- 7.4 Spill Equipment

### **8.0 RECORDKEEPING**

## **APPENDICES**

Appendix A            Phone Number of Local Authority, Agency, Etc.

Appendix B            Spill Equipment

# VEHICLE SPILL CONTINGENCY PLAN

## 1.0 INTRODUCTION

### 1.1 Purpose

The purpose of this plan is to minimize hazards to human health or the environment from any unplanned sudden spill of hazardous material from the transport vehicles. This plan is to be implemented immediately whenever there is a spill over 25 gallons of material. This plan does not apply to spills that are associated with the loading and unloading of vehicles at the Perma-Fix's facility.

### 1.2 Scope

This plan is developed in accordance with Broward County Code 27-368(d)(3)(f) and Perma-Fix's Industrial Sludge Haulers License No. 60045-92 (DNRP) and Used Oil Transporter Permit (FDEP).

### 1.3 Responsibilities

The Regional Manager or his designee is responsible for modifying this plan, as needed, to reflect changes in transportation operations and/or county hazardous material codes.

The Facility Manager or his designee is responsible for the implementation of this plan in the event of a spill of hazardous material. Furthermore, the Facility Manager is responsible for ensuring that all transport drivers are familiar with the content of this plan and are able to implement it, if needed. The Facility Manager is responsible for ensuring that this plan is posted and accessible to all transport drivers. In the absence of the Regional Manager, the Facility Manager is responsible for implementing the plan in the event of a spill of material.

All transport drivers are responsible for reading, understanding, and implementing this plan in the event of a spill of material.

## 2.0 GENERAL INFORMATION

Facility Name: Perma-Fix of Fort Lauderdale, Inc.

Facility Location: 3670 SW 47<sup>th</sup> Avenue  
Davie, Florida 33314

Office Address: 3701 47<sup>th</sup> Avenue, Suite 109  
Davie, Florida 33314

EPA I.D. No. FLD 981 018 773

Facility activities: Used oil processing, wastewater treatment, and hazardous/non-hazardous waste transportation/transfer facility.

### 3.0 ARRANGEMENT WITH LOCAL EMERGENCY RESPONSE AGENCIES

Arrangements with authorities are established by providing the Broward County Department of Natural Resource Protection and the FDEP with a copy of this plan, upon requested.

### 4.0 COPIES OF CONTINGENCY PLAN

A copy of the contingency plan and all associated revisions will be maintained at the facility, administration office, and in all licensed vehicles. Additional copies of this plan are available from the Facility Manager.

### 5.0 AMENDMENTS TO CONTINGENCY PLAN

This plan will be revised, if necessary, whenever:

- 1) Applicable Broward County Codes and/or FDEP regulations are revised;
- 2) As the result of a spill, the plan is determined to be ineffective.

In the event of revisions to this plan, a revised copy will be provided to all transport driver and other employee with responsibilities identified in this plan. A revised copy of the plan will also be maintained at the facility and administration office.

### 6.0 SPILL COORDINATOR (SC)

The following identifies the primary and secondary SC:

#### Primary SC

Michael J. Haynes  
Regional Manager  
(305) 474-9947 (Home)  
(305) 583-3795 (Business)  
(305) 875-0121 (Beeper)

#### Secondary SC

Terry Funderburk  
Facility Manager  
(305) 683-7054 (Mobil)  
(305) 791-1327 (Business)  
(305) 897-8123 (Beeper)

At all times, there will be at least one SC either at the facility or on call who is available to respond to a spill by reaching the spill location within a reasonable period of time and has the responsibility for coordinating all response measures. The SC will be familiar with all aspects of this plan and the nature of the material. Additionally, the SC has the authority to commit resources he deems necessary to carry out this plan.



## 7.0 SPILL PROCEDURES

### 7.1 Identifying Spills and Hazards

Whenever there is a spill over 25 gallons, the SC will immediately identify the character, source, amount, and a real extent of the spilled material. The SC will do this by any one of the following means or any combination thereof: 1) direct observation; 2) review of transportation records/manifests; and/or 3) chemical analyses.

Concurrently, the SC will assess possible hazards to human health and the environment that may result from a spill. The assessment will consider both direct and indirect effect such as the effect on surface water runoff or chemical agents possibly used to control the situation.

### 7.2 Notification and Reporting

Whenever there is a spill over 25 gallons, the transport driver will **IMMEDIATELY** notify Perma-Fix of Ft. Lauderdale, Inc. and the SC. The SC or his designee will notify the following agencies/companies as indicated:

- 1) Perma-Fix of Ft. Lauderdale, Inc., Inc. via (904) 583-3795 (**IMMEDIATELY**); and
- 2) Broward County Department of Natural Resource Protection via 765-4900 (**within 24 hours**);
- 3) National Response Center via (800) 424-8802 (**IMMEDIATELY**).

Notification of additional local authorities listed in Appendix A may be conducted, solely at the SC's discretion. If the SC determines that a spill over 25 gallons has occurred which could threaten human health or the environment, he will report his findings to the authorities identified above and in the area in which the spill occurred. The SC will be available to assist local authorities in deciding the correct response for the area immediately impacted by the spill.

### 7.3 Spill Procedures

During a spill response and/or cleanup operation, the SC will take all reasonable measures necessary to ensure that the spill does not re-occur and minimizes its spread to other areas. These measures may include collecting and containing spilled material, removing or isolating containers, the construction of temporary containment barriers, etc.

After a spill, the SC will provide for treatment, storage and disposal of recovered material including contaminated soil, water, or other material. The treatment, storage, disposal of recovered material will be conducted in accordance with applicable county, state, and federal regulations. Waste management companies utilized in the treatment, storage, and disposal of recovered material will be chosen at the SC's discretion. The SC will ensure that no material used during the cleanup operation is incompatible with the spilled material.

#### 7.4 Spill Equipment

A list of emergency equipment available on each vehicle is contained in Appendix B.

### 8.0 RECORDKEEPING

The SC will document in the facility's operating records the time, date, and details of any spill that required the implementation of this plan. Within 15 days after the spill, the SC will submit a written report on the spill to the Broward County Department of Natural Resource Protection. The report will include the following information:

- 1) Name, address, and telephone number of the owner/operator;
- 2) Name, address, telephone number of the facility;
- 3) Date, time, and type of spill;
- 4) Name and quantity of material(s) spilled;
- 5) The extent of injuries, if any;
- 6) An assessment of actual or potential hazards to human health and the environment, if any; and
- 7) Estimated quantity and disposition of recovered material resulting from the spill.

Similarly, a written report shall be give, if required by 49 CFR 171.16, to the Director, Office of hazardous Material Regulations, Material Transportation Bureau, Department of Transportation

## APPENDIX A

### Phone Number of Local Authorities, Agencies, Etc.

<u>Local Authority\Agency</u>	<u>Phone Number</u>	<u>Contact Period</u>
Davie Fire Department	911	Immediately
Davie Police Department	911	Immediately
Emergency Medical Service	911	As needed
DNRP	(305)765-4900	24 hours
FDEP	(407)433-2650	24 hours
Florida Bureau of Disaster and Preparedness	(800)320-0519	24 hours
National Response Center	(800)424-8802	As needed
Plantation General Hospital (Primary Hospital)	(305)587-5010	As needed
Broward General Hospital (Secondary Hospital)	(305)355-4400	As needed
<u>Primary Spill Coordinator</u> Michael J. Haynes Regional Manager	(305) 474-9947 (Home) (305) 583-3795 (Business) (305) 875-0121 (Beeper)	
<u>Secondary Spill Coordinator</u> Terry Funderburk Facility Manager	(305) 683-7054 (Mobil) (305) 791-1327 (Business) (305) 897-8123 (Beeper)	

## APPENDIX B

### Spill Equipment

<u>Equipment</u>	<u>Quantity</u>	<u>Type</u>
Communication system	1	Radio
Fire extinguishers	1	ABC (dry chemical)
Spill pads	1/4 box	Synthetic absorbent
First aid kit	1	Compact kit

## Health & Safety Training

The following identifies the categories and topic of training provided to Perma-Fix employees. Specific training required per individual employees is based on the employees job function and applicable regulations.

### Contents:

Introduction	The Convincer Right-To-Know: MSDS, Hazcom Labels
Module 1:	RCRA Introduction Forklift Training, Part 1, 2, 3, & 4 Hazardous Waste Safety, Parts 1 & 2 DOT Regulations: Placarding Flammable Materials Hazardous Flammable Materials Extinguishers Chemical Safety, Parts 1, 2, & 3
Module 2:	Keeping Track of Hazardous Waste Occupational Heat Stress
Module 3:	Safety/Clothing/Equipment Bonding and Grounding Lifting Safety Drum Handling Safety Drums and other Spills SCBA & Respirator Training Hazardous Waste
Module 4:	Contingency Plan & Spills Perma-Fix Contingency Plan First Aid, Parts 1, 2, & 3
Module 5:	Right-to-Know Hazardous Waste Training Protecting the Environment
Module 6:	MTRF Operations and Response Plan
Module 7:	Confined Space Procedures and Training
Module 8:	U.S. DOT HM-126F
Module 9:	Used Oil Management Training
Module 9:	On-The-Job Training

*copy of  
copy of  
personal record  
as signed*

## FLORIDA USED OIL COLLECTORS CERTIFICATION EXAMINATION

NAME: \_\_\_\_\_ DATE: \_\_\_\_\_

- 
- 1 True or False..... It is allowable to mix chlorinated solvents in used oil
  - 2 Used oil transporters must:
    - a) Belong to a trade union.
    - b) Register with the Florida Department of Environmental Regulation.
    - c) Register with the Department of Commerce.
    - d) Register as a Hazardouse Waste transporter with the I.R.S. .
  - 3 Used oil may be discharged to the ground:
    - a) only if oil is on specification.
    - b) if it is used for weed abatement.
    - c) it does not contain chlorinated solvents.
    - d) Never.
  - 4 A Dexsil kit shoould be used when checking for:
    - a) Lead Content.
    - b) Water.
    - c) Flashpoint.
    - d) Halogens.
  - 5 Used oil is:
    - a) waste from garages and filling stations.
    - b) any refined crude oil which has become unsuitable for its original purpose.
    - c) of no commercial value.
    - d) to be stored in above ground tanks only.
  - 6 It is alright to discharge oily water from waste oil trucks providing:
    - a) It contains no antifreeze.
    - b) It appears clear to the eye.
    - c) It carries no odor.
    - d) Under NO conditions.
  - 7 No later than July 1 of each year:
    - a) all waste oil trucks must be inspected by the D.O.T. .
    - b) registered collectors and transporters must file an annual report for the preceeding year.
    - c) all manifest taxes must be paid.
    - d) waste oil generators must have their tanks inspected.
  - 8 A person may market off specification used oil for energy recovery only if:
    - a) it has under 1,000 ppm of chlorides.
    - b) he signed a contract with his customer.

- c) he has receipts for all oil collected.
- d) the burner or other marketer has notified the E.P.A. of their used oil activities and has an E.P.A. Identification number.

9 The parameters for on specification used oil fuel are:

- a) arsenic 5ppm
- cadmium 2ppm
- lead 100ppm
- chromium 10ppm
- flash point 100 F degrees
- total halogens 4000ppm

- b) mercury 4ppm
- solids 2%
- silver 45ppm
- glucose 10ppm
- lead 10ppm
- flashpoint 75 F degrees

- c) arsenic 50ppm
- cadmium 10ppm
- lead 200ppm
- chromium 50ppm
- flash point 200 F degrees
- total halogens 100ppm

10 Financial responsibility means that:

- a) you always have at least \$100.00 in your vehicle.
- b) your customers pay net 10 days.
- c) you have filed proper tax return with the I.R.S. .
- d) your trucks are properly insured.

11 When pumping:

- a) never leave your truck.
- b) you may smoke if you are 12 inches from the source.
- c) you should open discharge valves to release pressure.
- d) allow customer to clean any drips.

12 Waste oil drivers must:

- a) have a valid commercial driver's license.
- b) be certified by their company.
- c) be familiar with environmental laws.
- d) all of the above.

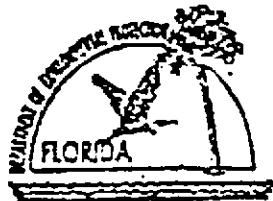
13 When transporting liquid loads:

- a) No extra braking distance is required because the weight of the load will help to stop the truck.
- b) driving around curves at 55mph is acceptable.
- c) use excessive and extreme caution on ramps and inclines due to the weight of the load.
- d) add 5 miles to the posted speed limit in order to allow extra time to evaluate each site

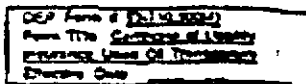
to be pumped.

- 14 Used oil when mixed with gasoline or other flammable material will:
- a) raise the flash point above 280 degrees.
  - b) lower the flash point of the used oil.
  - c) improve the oil for the end user.
  - d) increase the BTU value of the oil.
- 15 Which of the following is a proper method for disposing of used oil?
- a) Road oiling for dust control.
  - b) As an asphalt sealant on roads.
  - c) For use as a fuel in permitted industrial burners.
  - d) On the ground for weed abatement and pest control.





Florida Department of Environmental Protection  
Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400



## Certificate of Liability Insurance Used Oil Transporters

Please Print or Type Form

1. Commerce & Industry Ins. Co. (the insurer), 70 Pine Street New York, New York 10270  
(Name of the Insurer) (Address of the Insurer)

I hereby certify that it has issued liability insurance covering bodily injury and property damage for sudden accidental occurrences  
to Perma-Fix of Fort Lauderdale, Inc. 3701 S.W. 47th Avenue, Davie, FL 33314  
(Name of the Insured) (Address of the Insured)

whose EPA ID number is FLD-981018773 in connection with the insured's obligation to demonstrate financial responsibility  
under Florida Administrative Code Rule 62-710.600(2)(c).

This insurance is primary and the company shall be liable for amounts up to \$ 1,000,000 less a deductible or retention  
of \$ \_\_\_\_\_ for each accident exclusive of legal defense costs. If a deductible or retention applied, its amount may not  
exceed 10% of the equity of the insured. The coverage is provided under policy number CA 505 14 30 issued  
on January 1, 1996. The expiration date of said policy is January 1, 1997 or the annual renewal  
(Date) (Date)  
date is January 1, 1997.  
(Date)

This insurance is excess and the company shall not be liable for amounts in excess of \$ 6,000,000 for each  
accident in excess of the underlying limit of \$ 1,000,000 for each accident, exclusive of legal defense costs. The  
coverage is provided under policy number BE 606 14 13 issued on January 1, 1996  
(Date)  
The expiration date of said policy is January 1, 1997 or the annual renewal date is January 1, 1997  
(Date) (Date)

2. The insurer further certifies the following with respect to the insurance described in Paragraph 1:

- Bankruptcy or insolvency of the insured shall not relieve the insurer of its obligations under the policy.
- The insurer is liable for the payment of amounts within any deductible applicable to the policy, with a right of reimbursement by the insured for any such payment made by the insurer.
- Whenever requested by the Secretary (or designee) of the Florida Department of Environmental Protection (FDEP), the insurer agrees to furnish to the Department a signed duplicate original of the policy and all endorsements.
- Cancellation of the insurance, whether by the insurer or the insured or by any other termination of the insurance (e.g. expiration, non-renewal), will be effective only upon written notice and only after the expiration of thirty-five (35) days after a copy of such written notice is received by the Secretary of the FDEP as evidence by certified mail return receipt.
- The insurer shall not be liable for the payment of any judgment or judgments against the insured for claims resulting from accidents which occur after the termination of the insurance described herein, but such termination shall not affect the liability of the insurer for the payment of any such judgments resulting from accidents which occur during the time the policy is in effect.

I hereby certify that the insurer is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States including Florida.

Rhonda D. Fleming  
(Signature of Authorized Representative or Insurer)

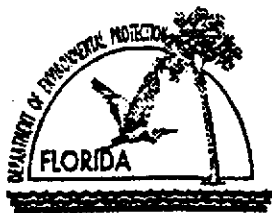
Authorized Representative of

Rhonda D. Fleming  
(Type name) (Social Security Number)

Commerce and Industry Insurance Company  
(Name of Insurer)

Sr. Underwriting Assistant  
(Title)

500 W. Madison St., Suite 1000, Chicago, IL 60661-2511  
(Address of Representative)  
01/09/96



Florida Department of Environmental Protection  
Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

DEP Form # 62-710.900(1)  
Form Title Used Oil Processing Facility  
General Permit Notification  
Effective Date \_\_\_\_\_

## Used Oil Processing Facility General Permit Notification

Pursuant to Rule 62-710.800, Florida Administrative Code, the owners or operators of a used oil processing facility shall submit the following information to the Waste Program Administrator of the appropriate District Office of the Department. A fee of \$100.00 shall also be submitted.

1. Status of the operation: ☒ Existing ☐ Proposed
2. Type of notification: ☒ Operation ☐ Closure ☒ Modification
3. Date of beginning operation: 01-18-85
4. a. Facility name: Perma-Fix of Fort Lauderdale, Inc.  
b. Facility EPA I.D. Number: FLD 981 018 773  
c. Facility telephone number: ( 954 ) 791 1327  
d. Facility location:  
Street address (main entrance): 3670 S.W. 47 Avenue  
City Davie County Broward Zip Code 33314  
Section 25 Township 50 South Range 41 East  
Latitude 04 34 01 Longitude 80 12 37  
e. Name of Facility Owner or Operator: Perma-Fix of Fort Lauderdale, Inc.  
f. Address of Facility Owner or Operator: 3701 S.W. 47 Avenue Suite 109  
City Davie State Florida Zip Code 33314  
g. Telephone number of Facility Owner or Operator: ( 954 ) 583 3795
5. a. Name of Property Owner (if different than facility owner or operator): Same  
b. Address of Property Owner: 3701 S.W. 47 Avenue Suite 109  
City Davie State Florida Zip Code 33314  
c. Telephone number of Property Owner: ( 954 ) 583 3795
6. Attach a description of how the state and federal used oil management requirements of Rule 62-710, F.A.C. and 40 CFR Part 279 will be met. See Enclosures
7. Attach a description and general layout of the facility and equipment. See Enclosures

8. Attach a description of the operation of the facility including how and where the used oil will be tested, stored and processed.      **See Enclosures**
9. Attached the Closure Plan for the facility. This plan must demonstrate that:      **See Enclosures**
1. There will be no need for further facility maintenance;
  2. Used oil will not contaminate surface or ground water; and
  3. All soils will be free of oil and equipment will be emptied and cleaned or dismantled.

Any modification to this plan must be submitted to the Waste Program Administrator at the appropriate District Office of the Department.

10. Certification:

To the best of my knowledge and belief, I certify the information provided in this notification is true, accurate and correct.

I agree that any duly authorized representative of the Department may at any reasonable time enter and inspect, for the purpose of ascertaining the state of compliance with the law or rules and regulations of the Department, the property, premise or place identified on this form.

Michael J. Haynes

(Name of Authorized Agent)

Michael J. Haynes

(Signature of Authorized Agent)

4-23-96

(Date)

## USED OIL PROCESSOR CHECKLIST

Facility Name: Perma-Fix of Ft Lauderdale Date: 5/2/96  
Facility Representative: Michael J. Haynes Facility ID: \_\_\_\_\_  
Inspector: \_\_\_\_\_ Registration # FLD 981 018 773

### 40 CFR 279 Subpart F – Processor Standards

1. Is the facility exempt under any of the following? (279.50(a)) Y \_\_\_\_\_ N X  
Transporter or burner processing incidental to normal course of operations? Y \_\_\_\_\_ N X  
Processors who also generate, transport, market, dispose or burn used oil must comply with the applicable Subparts of Part 279.
2. Does the processor have an EPA ID Number? (279.51(a)) Y X N \_\_\_\_\_
3. Is the processor Registered? (62-710.500(1)(b)) Y X N \_\_\_\_\_
4. Does the processor have a general permit? 62-710.800(1)) Y X N \_\_\_\_\_
5. For new facilities, was the notification of intent to use the general permit submitted 30 days prior to beginning operation? For existing facilities, was the notification for renewal submitted 30 days prior to expiration of the general permit?(62-710.800(2)) Y X N \_\_\_\_\_

### Oil Filter Processing Standards— 62-710.850 F.A.C.

1. Does the facility process used oil filters by removing oil, draining, crushing or element separation? Describe in narrative. Generators who process their own filters are not regulated provided the filters are not disposed of in a landfill but are managed by a registered processor. Y X N \_\_\_\_\_  
Is the facility a registered used oil filter processor? (62-710.850) Y X N \_\_\_\_\_
2. Are the filters stored in above ground containers which are: (62-710.850(6))  
In good condition? Y X N \_\_\_\_\_  
Closed or otherwise protected from weather? Y X N \_\_\_\_\_  
Labeled "Used Oil Filters"? Y X N \_\_\_\_\_  
Stored on an oil impervious surface? Y X N \_\_\_\_\_
3. Are records maintained on DEP Form 62-710.900(2) or equivalent that include: (62-710.850(5)(a))  
Destination or end use of the processed filters? Y X N \_\_\_\_\_  
Name and street address of each destination or end user? Y X N \_\_\_\_\_  
Are copies kept at the facility's street address for 3 years? (62-710.850(5)(b)) Y X N \_\_\_\_\_
4. Is an Annual Report submitted by March 1 for the previous calendar year summarizing the above records? (62-710.850(5)(c)) Y X N \_\_\_\_\_

**Oil Management Standards - 279.54**

1. Is used oil stored only in tanks or containers? (Circle applicable units) Y X N \_\_\_\_\_
2. If the facility has tanks, do they comply with 82.761 and 62.762 F. A. C. rules?  
(Applicable to USTs over 100 g and ASTs over 550 gallons. Describe in narrative, including number and size of tanks, noting registration numbers if applicable, and compliance status.)  
  
Is secondary containment consisting of a floor and dike which are impervious to oil provided for ASTs? Applies to all ASTs regardless of size per 279.54(d & e) Y X N \_\_\_\_\_
3. Are containers and tanks in good condition and not leaking? (279.54(b)) Y X N \_\_\_\_\_
4. Are containers provided with secondary containment consisting of walls and floor at a minimum? (279.54(c)) Y X N \_\_\_\_\_  
  
Is the containment system impervious to oil so as to prevent migration? Y X N \_\_\_\_\_
5. Are ASTs, UST tank fill lines and containers labeled "used oil"? (279.54(f)) Y X N \_\_\_\_\_
6. Does the facility stop operations and clean up releases of used oil, repairing or replacing any leaking units as applicable? (279.54(g)) Y X N \_\_\_\_\_

**General Facility Standards - 279.52**

1. Is the facility maintained and operated to prevent a fire, explosion or planned or unplanned release of used oil to the air, soil, or water which could threaten human health or the environment? (279.52(a)(1)) Y X N \_\_\_\_\_
2. Does the facility have an internal communication or alarm system capable of giving immediate emergency instruction to facility personnel? (279.52(a)) Y X N \_\_\_\_\_
3. Is there a telephone, alarm, 2-way radio or other device at the scene of operations immediately available and capable of summoning assistance from local fire departments? (279.52(a)(2)(ii)) Y X N \_\_\_\_\_  
  
Is there immediate access to this equipment by all personnel who are engaged in pouring, mixing, spreading or otherwise handled, either directly or by voice or visual contact with another employee? (279.52(a)(4)) Y X N \_\_\_\_\_
4. Describe fire control equipment. Is it adequate? (279.52(a)(2)(iii)) Y X N \_\_\_\_\_
5. Is spill control and decontamination equipment present? (279.52(a)(2)(iii)) Y X N \_\_\_\_\_
6. If sprinklers, water hoses or foam producing equipment is part of the facility fire control equipment, is water available at adequate volume and pressure? (279.52(a)(2)(iii)) Y X N \_\_\_\_\_
7. Is the emergency equipment inspected and tested periodically?  
Frequency? Communication System-Daily  
Fire Extinguisher-Annual Certification Y X N \_\_\_\_\_

10. If not, has the facility attempted to do so and is the refusal documented? Y N/A N

### Contingency Plans and Emergency Response – 279.52(b)

9. Were written reports made within 15 days to the DEP? (279.52(b)(6)(ix)) Y N/A N

**Rebuttable Presumption and Analysis Plan -- 279.53, 279.55**

1. Does the processor have a written analysis plan to determine whether used oil stored at the facility has a total halogen content above or below 1,000 ppm and whether the facility's used oil fuel meets the used oil specification? (279.55)(a) Y X N
2. Is the 1,000 ppm halogen determination made by testing? Y X N       
If so, does the analysis plan cover: (279.55(a)(2))  
Sampling methods? Y X N       
Frequency of sampling? Y X N       
Analytical Methods? Y X N       
Is the 1,000 ppm halogen determination made by process knowledge? Y      N X  
If so, is the type of information that will be used to determine the halogen content stated in the analysis plan? (279.55(a)(3)) Y      N X
3. Have any analyses showed exceedances of the 1,000 ppm level? Y X N       
If so, was the oil managed as hazardous waste? Y      N X  
If not, was the oil exempt? Describe basis for presumption rebuttal in narrative. (ex. analysis refrigerant oil, etc.) N/A      Y      N X  
Rebutt Presumption via analysis
4. Is the used oil fuel specification determination made by testing? Y      N X  
If so, does the analysis plan cover: (279.55(b)(2))  
Sampling methods? Y X N       
Whether the oil will be tested before or after processing? Y X N       
Frequency of sampling? Y X N       
Analytical Methods? Y X N       
Is the used oil fuel specification determination made by process knowledge? Y      N X  
If so, is the type of information that will be used to determine the halogen content stated in the analysis plan? (279.55(b)(3)) Y      N
5. Are all oil processing residues managed as used oil, reclaimed, or used as asphalt manufacture feedstock? (279.59) N/A      Y X N       
If not, has the processor conducted a hazardous waste determination? (279.10(e)) N/A      Y      N
6. Are test records or copies of records providing basis for determinations kept for 3 years? Y X N

**Recordkeeping and Reporting – 279.57, 62-710.510-520 F.A.C.**

**1. Do used oil acceptance records include: (279.56(a))**

Name & address of the generator or off site source of the used oil?	Y <u>X</u> N <u>  </u>
EPA ID # of oil provider (if applicable)?	Y <u>X</u> N <u>  </u>
Name & Address of the transporter delivering the oil to the facility?	Y <u>X</u> N <u>  </u>
EPA ID # of the transporter delivering the oil	Y <u>X</u> N <u>  </u>
Quantity of oil shipped?	Y <u>X</u> N <u>  </u>
Type of oil received (62-710.510(1)(c))	Y <u>X</u> N <u>  </u>
Date of shipment?	Y <u>X</u> N <u>  </u>

**2. Do used oil delivery records include: (279.56(b), also check marketer requirements)**

Name & Address of receiving facility? (burner, processor or disposal site)	Y <u>X</u> N <u>  </u>
EPA ID # of receiving facility?	Y <u>X</u> N <u>  </u>
Name & Address of transporter delivering the oil?	Y <u>X</u> N <u>  </u>
EPA ID # of transporter?	Y <u>X</u> N <u>  </u>
Quantity of oil delivered?	Y <u>X</u> N <u>  </u>
End Use of the oil? (62-710.510(1)(e))	Y <u>X</u> N <u>  </u>
Date of delivery?	Y <u>X</u> N <u>  </u>

**3. Does the facility keep records on DEP Form 62-710.900(2) or equivalent? (62-710.501(1))** Y X N   

**4. Does the facility submit an annual report by March 1 summarizing the on site records for the previous calendar year? (62-710.520)** Y X N   

If not, Is the facility an electric utility processing only self generated used oil for recycling, which is exempt from state registration and reporting requirements? (62-710.530)? Y    N X

**5. Does the transporter keep copies of the record and reports for three years at the street address of the facility? (62-710.510(2))** Y X N   

**Closure – 62-710.800(3) F.A.C. and 279.54(h)**

**1. Has the facility submitted a written closure plan? (62-710.800(3)(a))** Y X N   

**2. Does the plan include procedures for removing containers of oil and residues?** Y X N   

Cleaning and decontaminating tanks and ancillary equipment? Y X N   

Removing contaminated soils? Y X N   

Eliminating the need for further maintenance? Y X N   

If the facility operated tank systems, and not all contaminated soils can be practicably removed, the owner or operator must close the facility as a hazardous waste landfill.



## USED OIL TRANSPORTER CHECKLIST

Facility Name: Perma-Fix of Ft. Lauderdale Date: 5/2/96  
Facility Representative: Michael J. Haynes Facility ID #: \_\_\_\_\_  
Inspector: \_\_\_\_\_ Registration # FLD 981 018 773

### 40 CFR 279 Subpart E -- Transporter Standards

1. Is the facility exempt under any of the following? (279.40(a)) Y      N X  
On site transport?  
Generator transporting < 55 g /lme to a collection center?  
Transporter of < 55 g /lme from generator to aggregation point owned  
by same generator ?
2. If the transporter also transports hazardous waste in the same trucks as  
are used to transport used oil, are the vehicles emptied per 261.7 after  
HW shipments? (If not, the used oil must be managed as hazardous) Y X N
3. Does the transporter process used oil incidental to transport? (279.41) Y      N N/A  
Are any residues managed as used oil, reclaimed, or used as  
asphalt manufacture feedstock? N/A X Y      N       
If not, has the transporter conducted a hazardous waste  
determination? (279.10(e)) N/A X Y      N
4. Has the facility notified of used oil activities? Check EPA  
form 8700-12 Y X N
5. Does the transporter only deliver used oil to other transporters,  
oil processors, off specification used oil burners with EPA ID  
Numbers, or to on-specification oil burners? (279.43(a)) Y X N
6. Does the transporter comply with DOT requirements? (279.43(b)) Y X N
7. If any oil is discharged during transport, does the transporter: (279.43(c))  
Notify National Response Center and State Warning Point and Coast  
Guard per 33 CFR 153.203, as applicable? Y X N       
Report to DOT in writing per 49 CFR 171.167 Y X N       
Clean up any discharges until the discharge poses no threat? Y X N
8. Does the facility also transport used oil filters? Y X N       
If so, are the filters stored in above ground containers which are: (62-710.850(6))  
In good condition? Y X N       
Closed or otherwise protected from weather? Y X N       
Labeled "Used Oil Filters"? Y X N       
Stored on an oil impervious surface? Y X N

**Transporter Recordkeeping - 279.46**

1. Do used oil acceptance records include: (279.46(a))

Name & Address of facility providing the oil for transport?	Y <u>X</u> N <u>  </u>
EPA ID # of oil provider (if applicable)?	Y <u>X</u> N <u>  </u>
Quantity of oil shipped?	Y <u>X</u> N <u>  </u>
Date of shipment?	Y <u>X</u> N <u>  </u>
Signature of oil provider, dated upon receipt?	Y <u>X</u> N <u>  </u>

2. Do used oil delivery records include: (279.46(b))

Name & Address of receiving facility or transporter?	Y <u>X</u> N <u>  </u>
EPA ID # of receiving facility or transporter?	Y <u>X</u> N <u>  </u>
Quantity of oil delivered?	Y <u>X</u> N <u>  </u>
Date of delivery?	Y <u>X</u> N <u>  </u>
Signature of oil receiver, dated upon receipt?	Y <u>X</u> N <u>  </u>

3. Do the above records also include state required information on the type of oil and destination or end use? (62-710.510(1)(c & e))

Y X N   

4. Does the facility keep records on DEP Form 62-710.900(2) or equivalent? (62-710.501(1))

Y X N   

5. Does the facility submit an annual report by March 1 summarizing the on site records for the previous calendar year? (62-710.520)

Y X N   

If not, is the facility an electric utility transporting only self generated used oil for recycling, which is exempt from state registration and reporting requirements? (62-710.530)?

Y    N N/A

7. Does the transporter keep copies of the record and reports for three years at the street address of the facility? (62-710.510(2))

Y X N   

**Transporter Certification (62-710 F.A.C.)**

1. Is the transporter certified? (local governments, and < 55g/time transporters are exempt) (62-710.600)

Y X N   

2. Does the facility maintain training records? (62-710.600(2)(c))

Y X N   

3. Does the facility maintain insurance or financial assurance of \$100,000 combined single limit? (62-710.600(2)(d))

Y X N   

4. Is the facility registration form and ID number displayed? (62-710.500)

Y X N

## Transfer Facility Standards - 279.45

1. Does the transporter store used oil at any transportation related facility (including parking lots) for more than 24 hours and not longer than 35 days during the normal course of transport? Transfer facilities storing used oil more than 35 days must comply with 279 Subpart F. Perma-Fix is a used oil processor. N/A X Y      N       
Is the transfer facility registered per 62-710.500(1)(a) F. A. C.? Y X N
2. Does the transporter determine whether used oil stored at a transfer facility has a total halogen content above or below 1,000 ppm? Y X N       
Is this done by testing? Y X N       
Is this done by process knowledge? Describe basis in narrative. Y      N X       
Are test records or copies of records providing basis for determination kept for 3 years? Y X N
3. Have any analyses showed exceedances of the 1,000 ppm level? Y X N       
If so, was the oil managed as hazardous waste? Y      N X       
If not, was the oil exempt? Describe in narrative. N/A X Y      N       
Used oil rebutted by further analysis
4. Is used oil stored only in tanks or containers? (Circle applicable units) Y X N
5. If the facility has tanks, do they comply with 62-761 and 62.762 F. A. C rules? (Describe in narrative, including number and size of tanks, noting registration numbers if applicable, and compliance status.) Y X N       
Is secondary containment provided and adequate? Y X N
6. Are containers, and tank trailers in good condition and not leaking? Y X N
7. Are containers provided with secondary containment consisting of walls and floor at a minimum? Y X N       
Is the containment system impervious to oil so as to prevent migration? Y X N
8. Are ASTs, UST tank fill lines and containers labeled "used oil"? Y X N
9. Are used oil filters stored more than 10 days? Yes  
If so, is the facility a registered used oil filter transfer facility? (62-710.850) N/A      Y X N
10. Does the facility stop operations and clean up releases of used oil, repairing or replacing any leaking units as applicable? Y X N

## USED OIL MARKETER CHECKLIST

Facility Name: Perma-Fix of Ft Lauderdale, Inc Date: 5/2/96  
Facility Representative: Michael J. Haynes Facility ID #: \_\_\_\_\_  
Inspector: \_\_\_\_\_ Registration # FLD 981 018 773

### 40 CFR 279 Subpart H -- Marketer Standards

1. Does the facility direct shipments of off-specification used oil to used oil burners? (except processors who burn incidentally) Y \_\_\_\_\_ N X  
Or does the facility first claim that used oil that is to be burned for energy recovery meets the used oil fuel specification Y X N \_\_\_\_\_
2. Check other Subparts the marketer complies with. (Must comply with at least one and have EPA ID #)  
X C - Generator X E - Transporter X F - Processor \_\_\_\_\_ G - Burner
3. Is the facility registered? (62-710.500(1)(c)) Y X N \_\_\_\_\_
4. Does the marketer only send off specification oil to burners with EPA ID Numbers (279.71(a)) Y N/A N \_\_\_\_\_  
And approved Industrial Furnaces or Boilers(279.71(b)) Y N/A N \_\_\_\_\_
5. Does the marketer claim the used oil meets the specification by analysis? Y X N \_\_\_\_\_  
Or by obtaining copies of generator performed analyses? (279.72(a)) Y X N \_\_\_\_\_
6. Does the marketer have copies of written and signed certifications from all off specification oil burners to which he has directed shipments stating that the burner: (279.75)  
Has notified EPA of its used oil management activities? Y N/A N \_\_\_\_\_  
Will only burn off spec oil in an approved device? Y N/A N \_\_\_\_\_
7. Do Off specification oil delivery records include: (279.74(a))  
Name & Address of transporter delivering oil? Y N/A N \_\_\_\_\_  
EPA ID # of transporter? Y N/A N \_\_\_\_\_  
Name & Address of receiving burner? Y N/A N \_\_\_\_\_  
EPA ID # of receiving burner? Y N/A N \_\_\_\_\_  
Quantity of oil shipped? Y N/A N \_\_\_\_\_  
Date of shipment? Y N/A N \_\_\_\_\_
8. Do on specification oil delivery records include: (279.74(b))  
Name & Address of receiving facility? Y X N \_\_\_\_\_  
Cross reference to analysis or other information used to determine that the oil meets the specification? Y X N \_\_\_\_\_  
Quantity of oil shipped? Y X N \_\_\_\_\_  
Date of shipment? Y X N \_\_\_\_\_
9. Does the marketer keep copies of records for three years? (279.72(b)) Y X N \_\_\_\_\_
10. Does the facility maintain records on DEP Form 62-710.900(2), including type of oil and destination or end use? Y X N \_\_\_\_\_
11. Does the facility submit annual reports by March 1? Y X N \_\_\_\_\_



STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
STORAGE TANK REGULATION PROGRAM

Account Owner ID 41304

\*1995-96 Storage Tank Registration Placard enclosed\*

PERMA-FIX OF FORT LAUDERDALE INC  
4001 SW 47TH AVE  
DAVE, FL 33314

Facility ID: 9102123  
PERMA-FIX OF FORT LAUDERDALE  
3670 SW 47TH AVE  
DAVE, FL 33314  
BROWARD County

Facility Type: Fuel user/non-retail

Placard No: 28988  
Placard Issued: August 2, 1995  
Registration Paid: \$300

Active tanks on site: 12

**STORAGE TANK FACILITY ACCOUNT OWNER: PLEASE RETAIN THE TOP STUB FOR YOUR RECORDS**

This is to certify that the facility named herein has one or more regulated storage tanks and/or compression vessels registered with the Florida Department of Environmental Protection.

Tanks required to register with the Department include those that contain vehicular fuel for land, sea or air use; other petroleum or petroleum-based products; pollutants such as pesticide(s), ammonia, or chlorine; a hazardous substance such as listed on the federal CERCLA list; or a mineral acid such as hydrobromic acid, hydrochloric acid, hydrofluoric acid, phosphoric acid, or sulfuric acid.

PLEASE NOTE: UST systems installed between 1976 and 1980 must be replaced with a new secondary containment system by 12/31/1995.

The FLORIDA DEP is now "online" with rules, information on the Petroleum Cleanup Program, and Storage Tank Registration data. INTERNET USERS: find DEP on the Wide World Web at <http://www.dep.state.fl.us/>. For more program information, such as:

PETROLEUM CLEANUP NEWS; go to: People, Places, Organizations : Organizational Structure : Division of Waste Management : Local, State, Federal Programs. (Also call the Division of Waste Management, 904-487-3299, for Cleanup Sites/Program information.)

More Internet: TANK REGISTRATION DATA; go to: Information Directory : Standard Reports : Storage Tank Inventory. See also the free DEP Bulletin Board Service, ECOSYSTEM MANAGEMENT AND ENVIRONMENTAL EDUCATION BBS, accessed at 904-922-7108.

The Storage Tank Registration placard below must be posted at the facility.  
It must be placed out of the weather and in plain view of inspectors entering the facility.



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION  
STORAGE TANK REGISTRATION PLACARD

Facility ID: 9102123

Facility: PERMA-FIX OF FORT LAUDERDALE  
3670 SW 47TH AVE  
DAVE, FL 33314  
BROWARD County

Active Tanks: 12

Facility Type: C Fuel user/non-retail

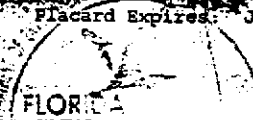
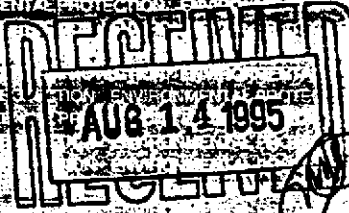
Account Owner: 41304

PERMA-FIX OF FORT LAUDERDALE INC

Placard No: 28988

Placard Issued: August 2, 1995

Placard Expires: June 30, 1996



*Virginia B. Wetherell*  
Virginia B. Wetherell, Secretary  
Department of Environmental Protection

Perma-Fix of Ft. Lauderdale, Inc.  
3670 SW 47 Avenue  
Davie, Florida 33314

#### Waste Oil Recycling Unit

Tank No.	Tank Capacity (Gal.)	Product Stored	Tank Install Date	Product Stored Code	Tank Diameter & Length	Tank Thickness	Above or Under Ground
T1	8,000	Waste oil	Jan-89	I	8' x 21.5'	3/8"	Above
T2	8,000	Waste oil	Jan-89	I	8' x 21.5'	3/8"	Above
T3	6,000	Waste oil	Apr-89	I	8' x 16'	3/8"	Above
T5	10,000	Waste oil	Jun-87	I	10' x 18'	3/8"	Above
T6	9,500	Waste diesel	Jun-87	d	10.5' x 14.6'	3/8"	Above
T8	20,000	Waste oil & diesel	Jun-87	I/d	10.5' x 31'	3/8"	Above
T10	20,000	Waste oil	Jun-87	I	10.5' x 31'	3/8"	Above
T11	20,000	Waste oil	Jun-87	I	10.5' x 31'	3/8"	Above
T12	20,000	Waste oil	Mar-89	I	10.5' x 31'	3/8"	Above
T13	20,000	Waste oil	Mar-89	I	10.5' x 31'	3/8"	Above
T19	2,000	Waste oil	Apr-89	I	5.33' x 12'	3/8"	Above
T20	1,000	Veh. diesel	Feb-92	d	5.33' x 6'	3/8"	Above

Product Stored Code: z - Wastewater I - Waste oil d - Waste diesel

#### Wastewater Treatment Unit

Tank No.	Tank Capacity (Gal.)	Product Stored	Tank Install Date	Product Stored Code	Tank Diameter & Length	Tank Thickness	Above or Under Ground
T4	6,000	Wastewater	Apr-89	z	8' x 16'	3/8"	Above
T7	10,000	Wastewater	Jan-93	z	8' x 26'	1/4"	Above
T9	20,000	Wastewater	Mar-89	z	10.5' x 31'	3/8"	Above
T14	20,000	Wastewater	Mar-89	z	10.5' x 31'	3/8"	Above
T15	20,000	Wastewater	Apr-89	z	10.5' x 31'	3/8"	Above
T16	20,000	Wastewater	Apr-89	z	10.5' x 31'	3/8"	Above
T17	20,000	Wastewater	Apr-89	z	10.5' x 31'	3/8"	Above
T18	6,500	Wastewater	Apr-89	z	8.5' x 16'	3/8"	Above
S1	2,000	Oil/H2O separator.	Apr-89	z	4.3'x 6.3'x 10.5'	3/8"	Above
S3	1,000	Wastewater	Apr-89	z	3.8'x 12'	3/8"	Above

Product Stored Code: z - Wastewater I - Waste oil d - Waste diesel

#### Proposed Wastewater Treatment Tanks Currently Under Construction

Tank No.	Tank Capacity (Gal.)	Product Stored	Tank Install Date	Product Stored Code	Tank Diameter & Length	Tank Thickness	Above or Under Ground
W1	101,000	Wastewater	TBD	z	TBD	TBD	Above
W2	30,000	Wastewater	TBD	z	TBD	TBD	Above
W3	30,000	Wastewater / Eff.	TBD	z	TBD	TBD	Above
B1	30,000	Wastewater / Bio.	May-96	z	12'x35'	5/16"	Above
B1	30,000	Wastewater / Bio.	May-96	z	12'x35'	5/16"	Above

Product Stored Code: z - Wastewater I - Waste oil d - Waste diesel