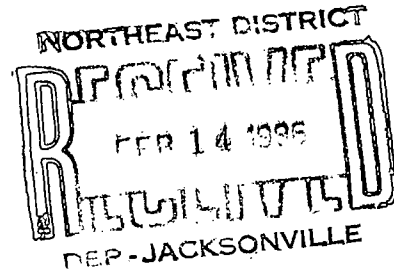


**PERMA-FIX™**  
ENVIRONMENTAL SERVICES, INC

February 13, 1996

Mr. Michael J. Fitzsimmons  
Waste Program Administrator  
Florida Department of Environmental Protection  
Northeast District  
7825 Baymeadows Way, Suite B200  
Jacksonville, Florida 32256-7590



**Certified Mail**

**RE: Part B Permit Renewal (NOD dated December 8, 1995)  
Perma-Fix of Florida, Inc. (PFF) Formerly Quadrex Environmental Company  
Response to Second Notice of Deficiency  
EPA ID Number FLD-980-711-071**

Dear Mr. Fitzsimmons:

This letter is in response to the correspondence referenced above requesting additional information for inclusion in the Perma-Fix of Florida, Inc. facility Part B Permit Renewal. The information requested and corresponding revisions to the application are provided in this submittal. Please discard and replace the sections listed on page two.

If you have any questions regarding these matters, please contact Jennifer Hazard at (352) 395-1356 or myself at (352) 373-6066.

Sincerely,

Michael J. Haynes  
SE Regional Vice President

c: Ashwin Patel - FDEP  
Stanley Tams - FDEP

**Replace the following material in the 10/09/95 Permit Application:**

Replace entire text section, to include cover pages, Table of Contents, Part I and Part II.

Replace the first page of Appendix A with the new first page of Appendix A.

Replace page 3 of the Inspection Plan, Appendix with the new page 3.

Add Lab Organizational Chart to Appendix E.

Replace Appendix F, Waste Analysis Plan, with the new Waste Analysis Plan.

Replace Appendix J, SWMU data, with the new Appendix J.

Add Appendix L - A-1 Able Services, Inc.

Add Appendix M - Subpart BB information.

Add Appendix N - LEPC and GFR Letters.

Add Appendix O - Temperature and Sensor Information.

Replace Figure 4 , Surrounding Land Use, with the new Figure 4.

Replace Figure 5 , Site Boundaries and Traffic Pattern, with the new Figure 5.

Replace Figure 19, Site Survey, with the new Figure 19.

Add Figure 20, LSF Processing and Warehouse Area, after Figure 19.

**Replace the following material in the 10/09/95 NOD Response:**

Replace Attachment B, Non-Hazardous Waste, with the new Attachment B.

1. C.1 *figure 4 - Provide a legend which explains the abbreviations used for zoning designations.*

Figure 4 has been revised to include a legend which explains the abbreviations used for the city zoning designations.

2. D.2 *section D.2 - Although the hopper/drainier and the can crusher are non-hazardous process units, they are currently staged within the permitted storage building. Therefore, briefly describe the above units and state their locations.*

Text in this section has been revised as requested and is shown below.

PFF operates a portable hopper/drainier unit. The portable hopper/drainier is a pneumatic barrel dumper with a catch basin on wheels. This unit is used as a final drain of the non-hazardous triple rinsed crushed glass and plastic from the LSV operation. The hopper/drainier is used and stored in Zone One as indicated on Figure 19.

PFF operates a can crusher - electric over hydraulic controlled press unit. The can crusher is used to crush non RCRA materials down to a cube form for shipment off site. The can crusher is located on the east side of the warehouse as indicated on Figure 19.

3. *section D.2 - During the Department's August 30, 1995 compliance inspection at Perma-Fix of Florida (PFF), the facility stated that used oil from the used oil filter crushing operation will be "fuel blended". Clarify how used oil from filter crushing operations is handled; e.g., is the used oil placed in PFF's non-hazardous wastewater tank (the "blue" tank)? If any used oil is placed into the 3000 gallon permitted tank system (the LSF tank), describe the process in detail.*

PFF pumps the used oil from the oil filter crushing operation into 55 gallon labeled drums on pallets. The drums are then taken to Zone One and pumped to a tanker. No used oil from the oil filter crushing operation is placed in the non-hazardous wastewater tank or the 3,000 gallon RCRA tank.

4. *section D.2. - PFF is currently adding waste LSF from the LSF tank to containers with waste solids/sludge that have settled on the bottom of the container. It is then mixed to increase the "pumpability" of the waste solids/sludges. This is considered treatment under hazardous waste regulations. Therefore, describe this mixing procedure in detail.*

*Also, if at any time PFF mixes waste that has a heating value of less than 5000 BTU/lb as received with high heating value wastes such as LSF, then the facility must notify the disposal facility burning the blended hazardous waste fuel. This can be done by explicitly stating that waste with less than 5000 BTU/lb heating value was mixed into the hazardous waste fuel shipment. This statement must accompany the hazardous waste manifest to the disposal facility, and it must be kept with the manifest in PFF's operation record. [see comment 22 also]*

*Additionally, mark the appropriate boxes) under Treatment of the 1st page of Appendix A (Part I, item A.1) Note that no additional permit application fee is necessary.*

PFF currently uses a single action pneumatic cylinder Sharr Mixer (or equivalent equipment). The normal mixing procedure is described below. Drums are placed under the mixer, and are closed with the aid of the pneumatic cylinder. The mixer is turned on at a low RPM, and an appropriate fluid (dispersant) is added. During processing, additional fluid is added (as needed) while RPMs are increased until the materials is pumpable. The material is then pumped from the drum to the holding tank or tanker truck. The specific dispersant added is selected to optimize blending characteristics. The PFF blending process, including the proportion and type of dispersant is a PFF trade secret.

Phase separation processing (e.g., water/organic or sludge/liquid separation) may also be conducted at PFF in conjunction with fuel blending activities. Sludges and solids may be separated by decanting liquids and processing each phase separately; free phase water may be removed by decanting or pouring to facilitate efficient disposal of the waste stream matrix for off-site disposal. These types of phase separation may be considered physical treatment in accordance with 40 CFR 264 Appendix I, Table 2.

When PFF blends high BTU materials with low BTU materials, PFF will notify the appropriate TSDF in writing per shipment of such actions.

Text on first page of Appendix A (Part I, item A.1) has been revised as requested.

5. D.3. *attachment B. - Although the Department will not limit the types of compatible non-hazardous waste that can be stored in the permitted storage facility, the types of waste must be specified. The last bullet stating "all other forms and types of non-hazardous and non-regulated waste" is not acceptable.*

Text in Attachment B has been revised as requested.

- ...
- inks and pigments
  - ~~all other forms and types of non-hazardous and non-regulated waste.~~
  - ~~all other forms of compatible non-hazardous and non-regulated waste.~~

6. A.1 *section A.1 - Provide a separate drawing which shows the interior layout of the warehouse, including the LSF processing area, the oil filter crusher, the household hazardous waste accumulation area, etc.*

PFF has added Figure 20 to provide a drawing of the interior layout of the warehouse, including the LSF processing area, the oil filter crusher and the household hazardous waste accumulation area.

7. *section A.1.a and figure 5 - Although figure 5 is shown at a scale of 1" to 200', it only shows PFF's buildings and structures. The figure should also show and identify other buildings/structures within 1000' around the permitted storage building.*

PFF has revised Figure 5 to identify other buildings/structures within 1000' of the facility.

- 8 *section A.1.a and figure 2 - The revised figure 2 is shown at a scale of 1' to 500' rather than 1" to 200'. It also shows that the 100 year flood plain elevation to be about 500' away from PFF's property boundary. This contradicts previously submitted information (figure 2 from PFF's 6/1/95 submittal) which shows the 100 year flood plain covering most of lot #1 and a small part of lot #2. Explain the discrepancy. [see comment 14 also].*

The information in PFF's 06/01/95 submittal was from the 1984 FIA 100 year flood plain, which indicated that most of lot #1 and a portion of lot #2 was in the 100 year flood zone. That map shows this area prior to any industrializing of the land. This map was submitted in error and the map submitted in PFF's 10/09/95 submittal is the correct 100 year flood plain. Due to land improvements and storm drainage that was made on this industrial park after the development of the 1984 FIA 100 year flood plain map, no portion of PFF is located in the 100 year flood plain.

The map submitted in the 10/09/95 submittal is shown at a scale of 1' to 200'.

9. A.2.a *page II.A.3 - Under Disposal - Hazardous, waste drums (10%) should total 87 drums, equaling 4785 gallons, and resulting in a cost of \$5981. The Subtotal Disposal should therefore be \$172,991.*

Text has been revised as requested and shown below. All figures have been changed to show adjustment.

... Water drums (10%) 857 X 55 gallons  
= 4,675~~785~~ gallons at \$1.25 \$5,844~~281~~

10. *pages II.A.3, II.A.4 and II.A.5 - Using a decontamination water application rate of 0.25 gallons/ft<sup>2</sup> seems too low. According to U.S. EPA Region IV's May 1994 document, "Evaluating Cost Estimated for Closure and Post-Closure Care of RCRA Hazardous Waste Management Units", a conservative value of 4 gallons/ft<sup>2</sup> should be used. PFF should choose a more reasonable application rate and adjust the decontamination waste disposal costs accordingly.*

A decontamination water rate of 0.25 to 0.5 gallons/square feet utilizes new pressure cleaning technology based on high pressure and low water consumption in lieu of old technology based on low pressure and high water consumption. Therefore, a value of 0.5 gallons/square feet for decontamination water is incorporated into the closure cost estimate. Appendix L references a letter from A-1 Able Services, Inc. as supportive documentation. A-1 Able Service, Inc. is a pressure cleaning company, located in south Florida, that utilizes state-of-the-art technology. Perma-Fix of Florida is familiar with A-1 Able Service, Inc. and its capabilities through its affiliated company, Perma-Fix of Ft. Lauderdale, Inc.

Throughout the closure cost estimate, the volume of water utilized in the decontamination of the storage tank, container storage area, processing areas, loading/unloading areas, transfer area, and processing equipment, etc. has been adjusted based on the surface area to be triple rinsed at rate of 0.5 gallons of water per square foot. Similarly, the closure cost estimate has been adjusted to account for higher disposal and transportation costs associated with the increased water volume.

11. *Pages II.A.3, II.A.4 and II.A.5 - It appears that the transportation costs for the decontamination water has not been included.*

Transportation cost for decontamination water has been added to the text as a single line item, Total Rinsate Transportation. This line item reflects the transportation cost for the total volume of rinsate.

12. *page II.A.4 - Under Tank Cleaning, does the 300 gallons per rinse include cleaning of all piping and the tanks secondary containment area?*

The closure cost estimate has been adjusted to include 2,058 gallons of rinsate for the decontamination of the storage tank and containment structure. This volume of rinsate is based on the surface area to be triple rinsed at a rate of 0.5 gallons of water per square foot. The closure cost estimate also has been adjusted to account for higher disposal and transportation costs associated with the increased water volume.

13. *page II.A.6 - Under - Miscellaneous Cost - Analytical, justify the number of samples. In addition, \$810/sample seems too low for Appendix VIII/IX analyses. Adjust the cost accordingly. [see comment 27 also].*

The closure cost estimate has been revised to reflect a samples cost of \$1,120 per sample. Parameters to be analyzed include total organic carbon (TOC), total organic halogens (TOX), and Appendix VIII constituents stored at PFF. The cost for thirty eight (38) samples is included in the closure cost estimate based on the following sample allocation:

| <u>Location or Structure</u>       | <u>Samples</u> | <u>Sample Matrix</u> |
|------------------------------------|----------------|----------------------|
| Container storage area (3 zones)   | 3              | Rinsate              |
| Storage tank                       | 1              | Rinsate              |
| Storage tank secondary containment | 1              | Rinsate              |
| Piping                             | 3              | Rinsate              |
| Process Equipment                  | 5              | Rinsate              |
| 10-day transfer area               | 1              | Rinsate              |
| Can crusher                        | 1              | Rinsate              |
| Loading areas                      | 5              | Rinsate              |
| Concrete chips                     | 10             | Solid                |
| Background soil samples            | 3              | Solid                |
| Grid soil samples                  | 5              | Solid                |
| Total Number of Samples            | 38             |                      |

14. A.3 *page II.A.6 and figure 2 - Submit a Federal Insurance Administration (FIA) map showing the 100 year flood plain, or demonstrate that Darabi and Associates developed figure 2 from FIA data and/or maps. Otherwise, show all data sources, calculations, and techniques used to determine the 100 year flood plain.*

PFF has contracted Frank Darabi and Associates to perform a current survey and calculation of the facility, to reassure the department that PFF is not in the 100 year flood plain. Upon completion of Darabi's report, PFF will submit the findings to the department.

15. A.4.b *appendix C - Although PFF has agreed to report any hazardous waste release of over one (1) pound from tank systems, PFF must also report any hazardous waste release of over five (5) gallons from containers to the Department. This is necessary to provide reasonable assurance to the Department that PFF is operating in a safe manner.*

Section A.4.b. Appendix C - Reporting requirements for spills from tank systems are located in Section C13d of Part II., Section C., Tanks. PFF has added the following language as an additional bullet item to Section B4d Response Measures in Part II. Section B, Containers.

Any release of hazardous waste from containers to the environment, unless the quantity is less than or equal to five (5) gallons and the spill is immediately contained and cleaned up, will be reported to the FDER within 24 hours of its detection. A report of a release in excess of the RQ as specified in 40 CFR Part 302 will satisfy this requirement.

16. A.4.e *section A.4.e - Provide the name, job title, and job duties and description of each Perma-Fix Analytical Services employee who handles and manages hazardous waste. Specify what type of hazardous waste training they will receive.*

A Perma-Fix Analytical Services organizational chart has been added to Appendix E.

The following text has been added to section A.4.e as requested:

■ Job Descriptions for Perma-Fix Analytical Services, Inc.

Information and training is provided to Perma-Fix Analytical Services, Inc. employees to ensure that all individuals who are at risk in working around hazardous chemicals are adequately informed of the hazards of the chemicals in their work area, of the risks involved in working with these chemicals, and what to do if an accident occurs.

Such information shall be provided at the time of an employee's initial assignment to a work area where hazardous chemicals are present and prior to assignments involving new exposure situations. The frequency of refresher information and training shall be one year. Supervisors are responsible for ensuring that their employees are informed and trained.



Employees shall be informed and trained in the following areas:

- the location and availability of this Laboratory Chemical Hygiene Plan;
- the availability of permissible exposure limits for OSHA regulated substances or recommended exposure limits for other hazardous chemicals where there is no applicable OSHA standard;
- signs and symptoms associated with exposures to hazardous chemicals used in the laboratory;
- the location and availability of known reference material on the hazards, safe handling, storage, and disposal of hazardous chemicals found in the laboratory including, but not limited to, MSDSs received from the chemical supplier;
- the physical and health hazards of chemicals in the work area; and
- the measures employees can take to protect themselves from these hazards, including specific procedures the employer has implemented to protect employees from exposure to hazardous chemicals, such as appropriate work practices, emergency procedures, and personal protective equipment to be used.

• **Laboratory Manager**

Provides overall supervision and guidance of all activities performed at Perma-Fix Analytical Services. Responsible for assignment and delegation to responsible individuals for those tasks not directly performed. Maintains responsibility for overall training and compliance.

• **Assistant Laboratory Manager**

Directs daily functions related to in-house laboratory verification activities. Maintains overall responsibility for the documentation and reporting aspects for the operation, including development of appropriate forms, their completion and accuracy and retention.

● Senior Technology Associate

Conducts R. & D. experiments of new process ideas for various divisions of Perma-Fix. Responsible for documentation and organization of these experiments. Implements EPA methods; develops new methods and performs sample analysis for Perma-Fix Analytical Services.

● Senior Laboratory Technician

Responsible for sample tracking, analysis of samples and summary of data for final reports; keeping lab clean; inventory of lab consumables; maintenance of lab instrumentation.

17. A.5      *section A.5 - The text of this section does not reference attachment G, nor does attachment G contain "typical" waste profiles. Provide the sample waste profiles requested in this section.*

PFF would prefer not to have a typical waste profile submitted as part of our permit application and subsequently incorporated into the final permit and, for that reason, PFF submitted three (3) examples of a typical waste profile as Attachment G in the NOD response dated October 9, 1995.

18. A.6      *appendix F, page 9, footnote 6 - A composite sample as defined in the text is not acceptable for waste analysis. Grab samples from individual containers must be used for this purpose.*

Section A.6 - Text in the document has been revised as requested and is shown below.

Section A.6. - ~~PFF protocol for sample collection includes visual evaluation of all samples composite for analysis. Individual samples may be analyzed if visual evaluation identifies potentially non-conforming wastes. In addition, samples from individual containers will be analyzed when analytical results for the composite sample indicates a problem with the waste.~~

Standard facility waste sampling protocol (for waste acceptance) requires that a minimum percentage of the containers in a shipment will be sampled, ~~and if applicable, composite~~ for analysis. For shipments of one hundred containers or more, the sampling percentage is ten percent (10 %); twenty (20 %) of containers will be sampled for shipments of less than one hundred containers. "Grab <sup>sample</sup>"

~~from each container sampled will be evaluated from up to ten containers of a single waste stream may be consolidated as a "composite<sup>simple</sup>" for analysis. If analytical results of a composite do not meet pre-acceptance parameters, individual containers will be sampled for analysis to identify potential problem containers of the waste stream.~~

<sup>1</sup> Grab Sample - A grab sample is a representative sample obtained from a single container or tank.

~~<sup>2</sup> Composite Sample - A composite sample is a combination of two or more grab samples. The grab samples are combined in such a way as to serve as a representative samples of the combination of tanks or containers. The procedure used is designed to obtain a representative sample of an entire waste stream.~~

19. *appendix F, page 11 - Explain the statement "... a discrepancy from the waste profile sheet beyond the standard deviation of the respective analysis,...". Does the above mean that when a fingerprint analysis result is outside of acceptable accuracy and precision of the analytical method used for the parameter, then the waste fails the fingerprint analysis? In any case, explicitly state the acceptable deviation from the waste profile value/range for each parameter. For example, the flash point determined during fingerprint analysis may vary  $\pm 15\%$  from the waste profile value/range.*

Any material in which the fingerprint analysis result is 15% outside of the profile range will constitute a discrepancy and managed in accordance with 40 CFR 264.72.

20. *appendix F, page 11 - Provide time estimates on the steps PFF takes to refuse (for whatever reason) and transport rejected waste back to the generator. The entire process should be accomplished within five (5) days of receiving the shipment.*

Appendix F, Page 11 - As requested, the following language has been added to Section II.E.3.

... the discrepancies shall be handled in accordance with 40 CFR 264.72 which requires notification of the administrative authority if the discrepancy is not resolved within 15 days. ~~The time required to complete the paperwork evaluation, sampling, analysis (if applicable), and waste shipment approval is usually within 15 working days. From the time a shipment arrives on site, the following general timeframe is observed~~

| Activity                  | Bulk/Containers | Elapsed Working Days |
|---------------------------|-----------------|----------------------|
| Truck arrives on-site     |                 | 0                    |
| Waste sampled             |                 |                      |
|                           | Bulk            | 1                    |
|                           | Containers      | 2                    |
| Laboratory analyses       |                 | 5                    |
| Resolve discrepancy       |                 | 14                   |
| Shipped back to generator |                 | 15                   |

21. *appendix F, WAP-5 - The following parameters need to be part of the fingerprint analysis, i.e., acceptance protocol: specific gravity, color, pH, percent water, flash point, sulfide screen, cyanide screen, fuel compatibility, chlorides/halogens. These parameters are not optional.*

Appendix F, WAP-5 - PFF uses generator knowledge in addition to analytical results to properly manage hazardous waste at the facility. The pre-acceptance analyses may be more extensive than the fingerprint parameters used during waste acceptance. For example, waste solvents designated for fuels blending are expected to exhibit the characteristic of ignitability and are therefore managed in the appropriate manner for the expected hazard. Other fingerprint evaluations are used to confirm that the waste is as expected; i.e., that the waste is the waste approved for management on-site. Waste solvent is anticipated to have a certain range of specific gravity unless altered by impurities such as solids. PFF uses the suite of fingerprint parameters to identify non-conforming wastes. In addition, some analyses are not suitable for evaluation of certain wastestream types; i.e., pH measurements are not appropriate for non-aqueous wastes, fuel compatibility is not applicable to waste waters, specific gravity is not an appropriate measurement for solids, etc. PFF has developed the table presented in WAP-5 to provide the necessary information to properly manage the hazardous wastestreams accepted at the facility and requests that the agency approve the applicability of fingerprint analyses as submitted in this application.

22. *appendix F, WAP-5 - Since PFF is mixing different waste streams together and placing the mixture into the LSF tank, PFF must be able to show that each of the waste streams has a heating value of greater than 5000 BTU/lb as received.*

*Therefore, if the BTU value of a waste stream was not provided by the waste profile or otherwise known, a heating value analysis must be performed. The results should be included with the notification to the disposal facility burning the blended hazardous waste fuel when applicable.*

When PFF blends high BTU material with low BTU material, PFF will notify the appropriate TSDF in writing with each shipment.

23. A.8 *section A.8 - PFF needs to contact and obtain a determination from the appropriate agencies on the applicability of the Endangered Species Act (e.g., U.S. Fish and Wildlife Service, Florida Game and Freshwater Fish Commission) and the National Historic Preservation Act (e.g., Florida Department of State - Division of Historical Resources).*

Frank Darabi & Associates have been contracted to submit letters to the various agencies requesting review of the area. Upon their findings PFF will submit this information to the department.

#### Part II,B - Containers

24. *page II.B.2 - Since PFF is requesting to store additional waste codes which contain hazardous constituents that PFF has not managed in the past, the procedures for physical separation of incompatible wastes is not acceptable. In the case of PFF's storage building, compatible wastes (e.g., acid and cyanide, acid and base, base and chlorinated organics) cannot be stored in the same zone. If PFF wishes to add or modify physical structures such as dikes, berms, walls, or portable containment units, the addition or modification must be specified through permit renewal or modification.*

This permit application provides details regarding permanent containment structures for container management areas and PFF understands the requirement for permit modification prior to changes to hazardous waste management units. However, PFF wishes to implement use of portable containment units for segregation of small numbers of incompatible wastes within larger containment units. However, at no time will PFF store incompatible wastes within common zones (i.e., acids, cyanides and bases will not be stored in the same zone).

#### Part II, C - Tank Systems

25. *section C.4 - Temperature and pressure sensors should be added to the tank. This will provide warning to PFF personnel of a possible hazard and that incompatible wastes may have been accidentally placed into the tank.*

PFF is in the process of installing temperature and pressure sensors to the tank. Information on gauges has been included in Appendix O.

26. *appendix D, Facility Inspection Plan, page 3 - Revise the text of this page to state that tank inspections are performed daily. Also, note that loading/unloading areas must be inspected daily.*

Text has been revised as requested.

#### Part II, K.- Closure

27. *As stated in comment #74 of the 1st NOD, PFF must demonstrate that all hazardous waste and hazardous constituents (40 CFR 261 Appendix VIII) have been removed from the permitted units to achieve clean closure. Although TCLP can be used to help determine disposal options, it cannot be used to show clean closure. Therefore, in all instances (both containers and tank systems) where PFF proposed to analyze for TCLP constituents, it must instead analyze for all Appendix VIII constituents that have ever been stored at PFF. This applies to all necessary sampling, such as rinse water from decontamination of process equipment, wash water and all rinsate from decontamination of the container storage area, rinsewater from decontamination of the tank, its secondary containment, associated piping, etc.*

All reference to TCLP has been revised to reference Appendix VIII constituents.

28. *One representative sample of all decontamination fluids is not adequate. To demonstrate clean closure, at least one sample of the final rinsate from each zone of the permitted storage building must be taken. Similarly, one sample each of the final rinsate from the tank, the piping, and the secondary containment will be necessary. Revise the text accordingly.*

The closure cost estimate has been adjusted to reflect one representative sample of the final rinsate from 1) each zone of the container storage area, 2) the tank, 3) the tank's secondary containment, 4) each loading/unloading areas, 5) the 10-day storage area, and 6) the can crusher. Three (3) representative samples will be obtained from the piping. Ten (10) representative samples will be obtained from processing equipment.

29. *Background samples should be grab samples. If a composite sample from 3 on-site locations is taken, PFF will not be able to determine if one or more of the location samples has been impacted from facility operations. Revise the text accordingly.*

Text has been revised as requested and is shown below:

Three on-site locations considered unaffected by facility operations will be utilized to obtain background samples. One sample will be obtained from each location.

30. *Although PFF has included decontamination cost for its loading/unloading areas, transfer facility, and can crusher into the closure cost estimate, decontamination procedures, including confirmatory sampling, has not been proposed for these areas/equipment. Provide these procedures.*

Test has been incorporated into the Closure Plan and the closure cost estimate has been adjusted accordingly:

K1h. Ancillary structures such as the loading/unloading areas, transfer facility, can crusher, etc. will be closed using the same procedures utilized for the storage tank and drum storage area. The ancillary structures will be triple rinsed utilizing pressure cleaning. The rinseate will be collected for disposal. To demonstrate clean closure, the final rinse from each structure be analyzed for Appendix VIII constituents storage or processed in the respective areas. Each structure will be closed when the clean closure standards identified in Section B6e are achieved.

31. *If wipe or chip samples of concrete surfaces becomes necessary, the contingency amount (10%) provided for the closure cost estimate may not be adequate. The Department therefore suggests increasing the contingency amount to 25% of the cost estimate.*

The PFF facility is a relatively small hazardous waste management facility consisting of one hazardous waste storage tank and container management areas. These areas are equipped with secondary containment systems and facility operating practices have been designed to minimize the potential for contamination of environmental media from facility operations. The history of the site is well known and no releases to the environment are documented. Therefore, the potential for discovery of contamination during closure operations is minimal. In addition, the facility closure plan has been designed to effect a clean closure of the site in accordance with the requirements of 40 CFR 264.111. Because facility operations will be reviewed and the closure cost estimate updated annually in

accordance with the requirements of 40 CFR 264.142, PFF believes that the contingency of ten percent is appropriate. However, as an additional contingency, the closure cost estimate has been adjusted to include costs for analysis of 10 chip samples of concrete surfaces.

32. *Wipe samples of the tank and piping's representative surfaces after dismantling is not required if the final rinsate samples from the tank and piping demonstrates clean closure. However, if PFF wishes to take wipe samples, specify how many samples will be taken, and what parameters will be analyzed for.*

All reference to wipe samples on the tank and piping system have been omitted from the permit application.

33. *The revised text in response to comment #81 of the 1st NOD is not in section A2a or other sections of the revised application.*

Text has been revised as requested and as shown below:

35,000 PSI or greater pressure washer  
Industrial wet/dry shop vacuum  
Air driven diaphragm type pump  
Absorbent sock/booms  
Personnel protective equipment, i.e., tyvek coveralls, safety glasses and footwear, gloves, etc.  
DOT containers for shipment of waste  
Shovels and other miscellaneous hand tools.

Upon completion, the pressure cleaner will be used to decon all reusable equipment and/or all items will be handled as a RCRA waste.

34. *page II.K.1 - In the last sentence of section K1, the reference to 40 CFR 112(e) should be 40 CFR 264.112(e).*

Text has been revised as requested.

35. *page II.K.2 - From the response to comment #80 of the 1st NOD, the second sentence of the revised text to section K1b ("If excavation of contaminated soil...") is missing from the text of the revised application.*

Text has been revised as requested.



If excavation of contaminated soil (additional to that described in Section E4) and/or groundwater monitoring is necessary, PFF will revise this closure plan accordingly.

36. *page II.K.3 - If soil sampling becomes necessary, the excavated soil and the soil samples shall be analyzed for appropriate Appendix VIII constituents, similar to decontamination fluids. In addition, the samples may not be composited for analysis.*

IIK4a -Background Sample - Text in this section has been revised as requested and is shown below.

~~A composite~~ bBackground samples will be obtained from 3 locations on-site considered unaffected by facility operations. These samples will be taken at a depth of 0.5 to 1.0 feet using a US EPA sampling method or equivalent method. Analyses will be chosen to measure levels of constituents of concern; constituents of concern will include all 40 CFR 261 Appendix VIII constituents which have been stored at PFF.

- 1 January 1991. Compendium of ERT Soil Sampling and Surface Geophysics Procedures. EPA/540/P-91/006, United States Environmental Protection Agency, Office of Solid Waste and Emergency Response, Washington DC 20460 (Section 2.0, Soil Sampling: SOP #2012).

Part II, P - Potential Released from SWMUs  
Part II, Q - Information Requirements for SWMUs

37. *appendix J - Submit the certification required in Part II,P.*

Certification has been included as requested and is located in Appendix J.

38. *Appendix J - In addition to information on the "new" SWMUs included in this appendix, provide a listing of the "old" SWMUs also, preferable in the same format. This information should be readily available from PFF's RFA.*

Information on "old" SWMUs has been incorporated in Appendix J as requested.

39. *appendix J - Provide a drawing showing the location of all SWMUs.*

Figure 18 provides the location of all SWMUs, "new" and "old" in Appendix J.

Part II, S - Requirements of Equipment

40. *The implementation date for 40 CFR 264 Subpart BB was December 6, 1995. Therefore, submit all information requested in this section showing PFF's compliance with this rule.*

As a result of the promulgation of Subpart CC standards [59 FR 62896, December 6, 1994 (as amended)], the requirements of 40 CFR Subpart BB will apply to permitted TSD facilities on June 6, 1996<sup>1</sup>. PFF has implemented a "BB" monitoring program and will comply with applicable organic air emission standards for, tanks, and containers by the compliance deadline. Text in the permit document has been revised to reflect the current deadline for compliance and PFF has included Subpart BB in this submittal as Appendix M.

Text has been changed as follows:

**Part II.S      RCRA TSDF AIR RULES:**

... Perma-Fix of Florida, Inc. (PFF) operates some tank and container management units, as well as certain equipment, which will be subject to these requirements on December ~~June~~ 6, 1995~~6~~.

<sup>1</sup> 60 FR 56952, November 13, 1995

41. *At a minimum, PFF must have a detailed implementation schedule in place for 40 CFR 264 Subpart CC by December 6, 1995. Include this schedule in the application.*

PFF understands that US EPA is currently developing clarification for the 40 CFR Subpart CC regulations. After promulgation of this clarification, and prior to the effective date of the final rule, PFF will develop an implementation schedule for the Subpart CC requirements. PFF will submit the implementation schedule to the agency as soon as the schedule is finalized (See response to Item 40 above).

General

- \* The Department is still awaiting PFF's response to the following two comments for FDEP's September 29, 1995 letter.

42. *Provide an emergency preparedness plan explaining what actions Perm-Fix will take in the event of a severe storm or other event which may cause flooding beyond the level of the 100 year flood plain. These actions should protect the hazardous waste container from floating away or otherwise creating a dangerous situation. Provide specific criteria for implementation, such as when and where Perma-Fix will move the waste containers.*

The following actions will be taken in the event of a severe storm or other event which may cause flooding beyond the level of the 100 year flood plan to the extent that containers may float away or otherwise create a dangerous situation.

In the event that flood water begins to approach and has the potential to enter the permitted storage area to the extent that a dangerous situation may be created, PFF will discontinue the receipt of all waste. All on-site containerized waste will be relocated to the PFF west warehouse. All waste in the storage tank will be transferred to containers or a tanker trailer and relocated to the west warehouse. In the event that the west warehouse can not provide adequate protection from flood water, containerized waste and waste in tanker trailers will be relocated to Perma-Fix of Ft. Lauderdale, Inc., Perma-Fix of Memphis, Inc. or an alternate permitted TSDF, or (as approved by the State or local agencies) to an area of high flood protection as appropriate for the emergency situation.

In the event of a flood, the Facility Manager will be responsible for assessing the situation and the implementation of the action stated herein as deemed necessary. The Facility Manager has the authority to appropriate the necessary financial resources to implement the relocation of the waste. Facility personnel will be responsible for transferring waste from the tank to containers or a tanker trailers.

While in storage in the west warehouse or at one of PFF affiliated companies, proper container management procedures will be conducted, such as labeling, manifesting, adequate aisle space, inspection, etc.

Once the flood is no longer a threat, all waste will be relocated to PFF permitted storage area or shipped to a permitted TSDF for disposal in accordance with state and federal regulations.

PFF is in the process of developing an Emergency Flood Evacuation Plan and will submit this plan once completed.

3. *Provide a plan to inform and evacuate people living and working in nearby areas, if an emergency situation occurs at Perma-Fix that may require evacuation. Perma-Fix must consider a worst case scenario based on the maximum amount of waste in the permitted storage building at any time, type of waste, and the hazards of each waste.*

Although PFF does not have the authority to develop an area evacuation plan or the authority to inform people working in the surrounding area to evacuate, PFF is working with the Local Emergency Planning Committee (LEPC), the Gainesville Fire Rescue (GFR), and the Alachua County Department of Environmental Protection (ACDEP) in an effort to develop an Emergency Response Plan for a worst case accident at PFF. On January 23, 1996, PFF held a meeting with the LEPC, GFR and ADEP to initiate the development of the plan. As indicated by the enclosed correspondence, (Appendix N) "Shelter-in-place" appears to be an effective alternative to evacuation for protection from smoke resulting from a fire. Over the next several months, PFF will be working with the LEPC, GFR and ACDEP to develop: 1) an emergency notification system, 2) preplanned alternate emergency exit, and 3) a pre-education program for other businesses located in the industrial park.