Perma-Fix, Inc. (Gainesville)
FLD 980 771 071
Record Of Meeting
December 16, 2005 8:30 AM

Attendees:

FDEP:	Tim Bahr	Perma-Fix:	Bob Schreiber
	Doug Outlaw		Jerry Goodwin
	Harold Register		Jim Kreger
	Augusta Posner		Randy Self
	Ashwin Patel (by phone)		Scott Ellis (by phone)
	Chris Bodin (by phone)		Viraf Palsetia (by phone)
	Mike Fitzsimmons (by phone)		

The Department (FDEP) and Perma-Fix jointly scheduled a meeting for the purpose of addressing "substantial modification" considerations pursuant to Chapter 403.7211, F.S. These considerations are required for the "completeness determination" for the operating permit application received December 10, 2004 that included requests for construction of a new storage unit, 301 additional waste codes, and additional storage of 54,340 gallons (drum equivalents).

The meeting proceeded according to the Agenda and Chronology, both attached to this Record Of Meeting. The Department presented the chronology of milestones for the permit renewal application and then proceeded to discussing the results of the University of Florida review of the Off-Site Consequence Analysis (OSCA). The review recommended using an alternate hierarchy for assigning toxic endpoints for constituents – a different methodology than used in the 1999 OSCA or agreed upon by FDEP/Perma-Fix in previous meetings.

Perma-Fix presented that that the OSCA was developed and conducted according to a standardized methodology – Risk Management Program (RMP) under 112(r)(7) of the Clean Air Act. This methodology was previously implemented in 1999 to evaluate the addition of waste codes and the construction of a treatment unit and replacement of a 3,000 gallon tank. Moreover, Perma-Fix indicated that not all of the previous constituents were modeled; only an agreed upon class of constituents that represented the most likely constituents that would volatilize and present off-site impacts. The current OSCA report submitted in July 25, 2005 reflects the development and establishment of criteria and decision-making factors to date.

The Department noted that OSCA data alone may not be sufficient to determine whether a proposed modification is "substantial" under Chapter 403.7211, F.S., but noted that this is problematic because "substantial modification" determination criteria has not been established through rulemaking. Perma-Fix condensed the outstanding issues as follows: 1) What decisions/decision making remains for the pending applications, and 2) Is there a better way to define "substantial modification" for this permit application?

The Department indicated that, in the future the OSCA report should serve as a component of the demonstration; but that other qualitative details should be required to provide further support that the requested modifications do not constitute a "substantial modification." The Department contemplated that those qualitative details could include, but not be limited to;

1. Chemical storage of proposed constituent that is currently permitted for storage under an alternate waste code;

2. Facility waste management practices and/or training;

3. Construction or equipment that provides mitigation to off-site impacts due to potential releases;

4. Improvements or upgrades to equipment or construction since the 1999 OSCA that would mitigate off-site impacts due to potential releases; and

5. A comparison of engineering and operational standards proposed during rulemaking (provided as an attachment at the end).

With regard to its current operating permit application, Perma-Fix indicated that a report, separate from the OSCA, could be developed to address qualitative mitigation factors, which could be used to facilitate the evaluation of the proposed permit modification's potential for increasing the potential off-site impact, or risk of impact, from a release at the Perma-Fix facility. Some of those mitigation factors included:

1. The requested additional storage pertains mostly to treated hazardous waste. Those wastes are typically in storage, pending chemical analytical results. The treatment of those wastes typically removes most of the "volatile" components of the waste leaving a solid component with the listed code(s);

2. Perma-Fix operates under a QA plan equivalent to the NQA-1 (Quality Assurance for Nuclear Facilities) program as a US Department of Energy (DOE) contract facility. The NQA-1 is most equivalent to an Environmental Management System and requires enhanced operational standards; and

3. Perma-Fix has previously considered placing a firewall in the location where the new storage unit (LSV Processing Area) will be constructed. The Department stated that the construction of firewall to segregate the added volume from a fire hazard would provide a strong indicator that the addition of the "volume" does not constitute a "substantial modification."

The following action items were developed for the path forward:

1. Perma-Fix will develop a report, separate from the OSCA that will provide qualitative factors to facilitate the evaluation of the proposed permit modification's potential for increasing the potential off-site impact, or risk of impact, of a release from the facility. Perma-Fix agreed to use engineering and operational criteria suggested by the Department (attached) as a starting point for developing the qualitative factors to be addressed in the report.. This report will be provided in fourteen (14) business days for consideration by the Department. A draft may be shared with the Department in advance for preliminary comments.

2. FDEP has begun drafting a renewal operating permit to incorporate the requested modification items. FDEP indicated that a rough, rough draft without the benefit peer-review may be transmitted within fourteen (14) business days.

3. Technical personnel from FDEP and Perma-Fix, Inc. agreed to reconvene to discuss finalizing the OSCA utilizing the US DOE hierarchy as presented by the University of Florida. FDEP work product will be transmitted to Perma-Fix to facilitate the revised deliverable.

4. FDEP indicated that the review for the deliverable could take up to 60 days; hence the encumbrance would be approximately 75 days. FDEP and Perma-Fix agreed to work together to complete reviews and provide comments such that the Agency Action will be prepared for signature on Day 75.

5. FDEP will contact Dr. Roberts (University of Florida) to engage him in a pre-submittal dialogue concerning the Perma-Fix deliverable.

Location: DEP Twin Towers Office Building
Room 423
2600 Blairstone Road
Tallahassee, Florida 32399

Time: 0830 - 1030

Objective: Perma-Fix submitted an operating permit renewal application on December 10, 2004 that included a request to add storage volume and waste codes. Perma-Fix and the Florida Department of Environmental Protection (FDEP) are tasked with demonstrating that permit modifications do not constitute a substantial modification as identified under Florida Statute 403.7211, F.S.

Agenda:

- Milestones and current status for the renewal operating permit applications by Harold Register
- FDEP and Perma-Fix's obligation to address "substantial modification" pursuant to Florida Statute 403.7211, F.S.
- Perma-Fix's past and current position addressing statute.
    - Off-Site Consequence Analysis (OSCA) modeling methodology pursuant to Program 3 of the Accidental Release Prevention Program of s. 112(r)(7) of the Clean Air Act (CAA) comparable to the approved demonstration provided in 1999. This same methodology was mutually agreed upon as continued path for new submittal during DEP/PFF/SYA meeting on March 1, 2005 and re-affirmed on June 10, 2005.
    - Review from University of Florida (Dr. Steve Roberts) recommended alternate endpoint criteria that are not comparable to original parameters established by Perma-Fix in the June 6, 2000 construction/operation permit, or the constraints used in setting the limits for the storage quantity for waste codes in Attachment A of the permit.
    - Many of the recommended waste code additions, in most of the permitted storage areas, include chemical compounds (different waste code) that are already managed at the site.
- Path forward: Evaluation of quantitative and/or qualitative approaches to obtain approval for the additional waste codes and storage volume in the renewal permit.
- Develop consensus on recommendations to provide a demonstration that additional waste codes and storage volumes do not constitute a "substantial modification" as presented in Florida Statute 403.7211, F.S.
- Discuss time waiver requested by FDEP.
- Develop consensus for timetable(s) and deliverables, including sharing draft copies of permits, associated with achieving approval for the additional waste codes and storage volumes.
- End meeting – Identify action items and tentative schedule for completing permit renewal.

Attendees:

FDEP:	Tim Bahr	Perma-Fix:	Bob Schreiber
	Doug Outlaw		Jerry Goodwin
	Harold Register		Jim Kreger
	Augusta Posner		Randy Self
	Ashwin Patel*		Scott Ellis*
	Chris Bodin*		Viraf Palsetia*

*By teleconference; Call-in number: 850 410 0965

Perma-Fix, Inc. (Gainesville)
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Chronology of Permit Renewal

December 10, 2004 – FDEP receives renewal permit application, which includes request for construction for a new storage unit, 301 additional waste codes, and additional storage of 54,340 gallons (988 drum equivalents).

February 8, 2005 – FDEP issues 1st Notice of Deficiencies for the renewal permit application.

February 28, 2005 – FDEP receives draft of Off-Site Consequences Analysis and Air Modeling.

April 4, 2005 – FDEP receives Off-Site Consequences Analysis Report.

March 1, 2005 – FDEP/Perma-Fix/SYA meeting at the Northeast District Office.

March 10, 2005 – FDEP receives partial response to 1st Notice of Deficiencies. Letter requests additional time beyond 60 days to respond and revise the Off-Site Consequences Analysis Report and the Air Toxics Report.

June 3, 2005 – FDEP issues letter approving the request for extending the 60 day response period for the revised Off-Site Consequence Analysis Report and the Air Toxics Report.

June 10, 2005 – FDEP/Perma-Fix/SYA meeting/teleconference to discuss elements of the Off-Site Consequence Analysis Report and the Air Toxics Report.

July 25, 2005 – Final Off-Site Consequence Analysis Report received by FDEP.

August 12, 2005 – Final Air Toxics Modeling Report received by FDEP.

August 15, 2005 – Revised Part B application errata pages received by FDEP.

October 5, 2005 – FDEP issues letter indicating that the existing permit will remain in effect until final agency action has been rendered.

October 24, 2005 – FDEP receives reviews for the Air Toxics Modeling Report and Off-Site Consequences Analysis Report from University of Florida (Dr. Steve Roberts).

Design Standards. The owner or operator of a hazardous waste treatment, storage, or disposal facility or a transfer facility shall:

1. Provide interior emergency egress lighting for all hazardous waste treatment, storage, disposal and transfer facility structures except those that operate only during daylight hours and also meet interior lighting requirements by natural lighting. The interior emergency egress lighting shall meet the design standards of the Life Safety Code (NFPA 101) (1995) in the National Fire Codes issued by the National Fire Protection Association (NFPA), which are hereby adopted and incorporated by reference.

2. Provide exterior emergency lighting for the exterior of all hazardous waste treatment, storage, disposal and transfer facility hazardous waste management areas, including loading/unloading and transporter vehicle parking areas, except for hazardous waste management areas that operate only during the daylight hours. The exterior emergency lighting shall meet the design standards of the Life Safety Code (NFPA 101) (1995) in the National Fire Codes issued by the National Fire Protection Association (NFPA).

3. Provide secondary containment for all loading and unloading areas.

a. The secondary containment system shall have sufficient capacity to contain the total volume of the largest container or 10% of the total volume of the maximum number of containers managed in the loading and unloading area.

b. If the secondary containment system is not sheltered from precipitation, the secondary containment system shall have the additional capacity necessary to contain precipitation at the loading and unloading area from a 25-year, 24-hour storm event.

c. For attended transfer to a tank, the tank shall be installed with a spill containment system at each tank fill connection. This spill containment system shall be designed to prevent a discharge of regulated substances when the transfer hose or pipe is detached from the tank fill pipe and shall meet the requirements of Rule 62-761.500(1)(e), F.A.C.

4. Ensure that all transportation vehicles in which hazardous waste is stored incident to transportation at a hazardous waste management facility are parked on a concrete or asphalt surface.

5. Ensure that all hazardous waste management areas, including loading and unloading areas at treatment, storage, or disposal units and transfer facilities, comply with the security requirements of 40 CFR Part 264, Subpart C.

6. Ensure that all hazardous waste management areas, including loading and unloading areas at treatment, storage, or disposal units and transfer facilities, comply with the communications or alarm system requirements of 40 CFR Part 264, Subpart C, including fire and smoke alarm systems. The system must include a 24-hour attended alarm station or an alarm system which automatically transmits a signal to a municipal fire

department, a fire brigade, or an emergency response agency without delay.

7. Construct concrete floors for the hazardous waste management areas with an impervious, chemically resistant, surface or coating. For facilities that are constructed after the effective date of this rule and for major construction modifications to existing facilities, the floor shall be designed, at a minimum, in accordance with the standards of the American Concrete Institute or the American Association of State Highway and Transportation Officials, which are hereby adopted and incorporated by reference.

8. Hazardous waste treatment, storage, disposal and transfer facilities used for hazardous occupancy (as defined in section 308 of the Standard Building Code) must use, at a minimum, incombustible materials for the following structural elements: party and firewalls, interior bearing walls, interior nonbearing partitions, columns, beams, girders, trusses, arches, floors, floor/ceiling assemblies, roofs, roof/ceiling assemblies, exterior bearing walls, and exterior nonbearing walls.

9. Completely surround all bays that contain water reactive (Department of Transportation (DOT) Class 4.3), flammable or combustible hazardous waste (DOT Class 2.1, Class 3, Class 4.1 and Class 4.2), oxidizers (DOT Class 5.1), or organic peroxides (DOT Class 5.2), as defined in 49 CFR Part 173, with two-hour firewalls to the ceiling and provide automatic fire doors for the entrance and exit. Provide a two-hour rated ceiling for all water reactive storage or treatment bays. Contiguous bays which contain compatible hazardous waste may be considered as a single bay in meeting this standard. This standard shall not apply if the flammable or combustible hazardous waste is separated from other hazardous waste management areas in accordance with the distances specified in Rule 62-730.187(6)(d)2., F.A.C.

10. Provide the facility with an automatic fire sprinkler or suppression system which meets the design standards of the National Fire Codes (1997), issued by the National Fire Protection Association (NFPA), which are hereby adopted and incorporated by reference. Fire suppression agents must be compatible with the predominant type or types of hazardous waste managed.

11. Provide lightning protection for all interior storage or treatment structures for hazardous waste treatment, storage and transfer facilities which meets the standards set forth in the Standard for the Installation of Lightning Protection Systems (1997), issued by the National Fire Protection Association (NFPA), which are hereby adopted and incorporated by reference.

Operational Standards. The owner or operator of a hazardous waste treatment, storage, or disposal facility or a transfer facility shall:

1. Not store hazardous waste in containers outside of enclosed permitted storage areas or storage areas reported in the notification under Rule 62-730.171(2), F.A.C., for more than 24

hours unless the facility can demonstrate that the area in which life-threatening concentrations of hazardous substances will occur from a spill, fire, or other accidental release does not extend beyond the property boundary. The demonstration may be made, at the election of the facility, in the form of the methodology used to prepare submissions required under Program 3 of the Accidental Release Prevention Program of S.112(r)(7) of the Clean Air Act for the quantities to be stored, treated or disposed at the facility.

2. Equip the operator in potentially explosive environments with explosion-proof equipment, including drum crushers, oil filter crushers, and similar equipment, if used.

3. Augment the automatic fire suppression system with fire extinguishers that are compatible with each type of waste that is incompatible with the fire suppression agents used in the automatic fire suppression system.

4. Include the design standards set forth in this rule when complying with the general requirements of developing and following a written inspection schedule in 40 CFR 264.15.

(c) A design or operational standard in Rule 62-730.186(4), F.A.C., will not apply if the owner or operator provides reasonable assurances to the Department that the design or operational standard is unnecessary to reduce the risk to public health and safety in the event of a spill, fire, or other accidental release.

1. The owner or operator shall make such a demonstration by the submission of documents and supporting materials. The submission must be certified by a professional engineer licensed in the State of Florida.

2. If the applicant elects to include, in that submission, an emergency response plan submittal under the Emergency Planning and Community Right-to-Know Act, the Department shall consider the factual assertions and conclusions stated in the plan. In determining whether the applicant has provided reasonable assurances that the design or operational standards are unnecessary to implement the Department's goal of reducing the risk to public health and safety in the event of a spill, fire, or other accidental release, the Department shall consider the following site specific factors or quantities:

a. The physical characteristics of hazardous waste to be stored, treated or disposed; including ignitability, corrosivity, reactivity, toxicity, and volatility; together with any proposed restrictions on the types of hazardous waste to be stored, treated, or disposed;

b. The volume of each type of hazardous waste to be stored, together with any proposed restrictions on the types of hazardous waste to be stored, treated, or disposed;

c. Operating methods, techniques, and practices to be undertaken by the facility for hazardous waste for which life-threatening concentrations of hazardous substances would otherwise occur beyond the property boundary from a spill, fire, or other accidental release;

d. Population density and land use characteristics in adjoining areas;

e. Condition, siting, and carrying capacity of local evacuation routes; and

f. Design improvements or operational restrictions, other than those set forth in this rule, proposed by the owner or operator.