UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

APR 22 2015

OFFICE OF
SOLID WASTE AND
EMERGENCY RESPONSE

Mr. Ron Shaw
Facility Manager
Florida Transformer, Inc.
4509 State Highway 83 North
DeFuniak Springs, Florida 32433

Dear Mr. Shaw:

By this letter, the Office of Resource Conservation and Recovery (ORCR) of the U.S. Environmental Protection Agency (EPA) grants approval to Florida Transformer, Inc. (FTI) to operate its PCB-1000 chemical dechlorination (CD) unit, a non-thermal alternative Polychlorinated Biphenyls (PCBs) disposal method, to destroy PCBs in mineral oil dielectric fluid (MODEF) subject to the conditions of the enclosed approval. This approval is issued pursuant to Section 6(e)(1) of the Toxic Substances Control Act (TSCA) of 1976 (Public Law 94-469) and the Federal PCB Regulations, 40 CFR section 761.60(e) (48 FR 13185, March 30, 1983). This approval is applicable on a nationwide basis, since the PCB-1000 treatment unit is mobile and could potentially operate in any state. The approval is effective upon the EPA's signature, and unless specified otherwise in Condition 22, expires five years from the aforementioned signature date.

FTI conducted a treatment and disposal demonstration for MODEF containing PCBs at its facility in DeFuniak Springs, Florida during the week of September 11, 2012, using its totally enclosed PCB-1000 CD unit. EPA representatives observed the demonstration and collected split samples of the waste feed and the treated MODEF. Results of the analysis from the demonstration, which are summarized in Appendix IV of this approval, indicate that FTI's PCB-1000 CD unit destroyed PCBs to levels below 2 ppm. The EPA considers this level of performance to be equivalent to that achieved by incineration, which is required by the PCB regulations (see 40 CFR 761.60(e)).

This approval may be modified (including adding new conditions), revoked, or suspended any time the EPA has reason to believe the operation of FTI's PCB-1000 CD unit presents an unreasonable risk to human health or the environment. Modification, revocation, or suspension of this approval may also result from future EPA rulemaking(s) with respect to PCBs or from new information gathered by FTI and/or the EPA at a demonstration site or during subsequent jobs at other sites. Moreover, a violation of any condition of this approval or any applicable Federal regulations may subject FTI to enforcement action and may be grounds for modification, revocation, or suspension of this approval.

This approval is based upon the EPA's conclusion that FTI's PCB-1000 CD unit, when operated in accordance with the applicable regulations and in accordance with the conditions of this approval, does not pose an unreasonable risk to human health or the environment and achieves a level of performance equivalent to that achieved by incineration.

Please contact Amy Hensley at (703) 305-5084 if you have any questions pertaining to this approval.

Sincerely,

Barnes Johnson, Director
Office of Resource Conservation and Recovery

Enclosure

cc: Regional PCB Coordinators
EPA Region 1 – 10

Bheem Kothur
Florida DEP
Professional Engineer III

Enclosure

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

IN THE MATTER OF	)	APPROVAL TO DISPOSE
	)	
FLORIDA TRANSFORMER, INC.	)	OF POLYCHLORINATED
	)	
4509 STATE HWY 83 NORTH	)	BIPHENYLS (PCBs)
	)	
DEFUNIAK SPRINGS, FL 32433	)	

AUTHORITY

This approval is issued pursuant to Section 6(e)(1) of the Toxic Substances Control Act of 1976 (TSCA), Public Law No. 94-469, and the Federal Polychlorinated Biphenyls (PCB) Regulation, 40 CFR 761.60 (44 FR 31542, May 31, 1979). Background information, process descriptions, demonstration test result summaries, and the Environmental Protection Agency's (EPA's) findings related to this approval are included in Appendices I through IV.

Florida Transformer, Inc. (FTI) is the sole owner of the PCB-1000 chemical dechlorination (CD) unit which is designed to chemically destroy PCBs in mineral oil dielectric fluid (MODEF) so that the MODEF can be recycled and reused. The EPA has carefully assessed FTI's operations, and has audited and observed a demonstration of the PCB-1000 CD unit's treatment process capabilities and efficiency. The EPA finds that FTI's PCB-1000 CD unit, when treating MODEF containing PCBs in accordance with the conditions of this approval, provides PCB destruction equivalent to an approved TSCA incinerator, as required by 40 CFR 761.60(e).[1] Further, the EPA finds that FTI's process, when operated in accordance with this approval, will not present an unreasonable risk to human health or the environment.

[1] The regulations at §761.60(e) allow for the destruction of PCBs using methods other than incineration, provided the alternative method can achieve a level of performance equivalent to an incinerator approved under §761.70 or a high efficiency boiler operating in compliance with §761.71. The level of performance required for non-thermal destruction is measured differently than for thermal methods. It is the Agency's policy that non-thermal methods operating under 761.60(e) that destroy PCBs to < 2 ppm meet an equivalent level of performance to an incinerator approved under §761.70 or a high efficiency boiler operating in compliance with §761.71. See Draft Guidelines for Permit Applications and Demonstration Test Plans for PCB Disposal by Non-Thermal Alternative Methods, August 21, 1986.

Violation of any requirement of this approval is a violation of 40 CFR 761.60(e) and 761.50(a) and may also be a violation of other provisions of 40 CFR 761 Subpart D. A violation of the regulations is a prohibited act under Section 15 of TSCA.

EFFECTIVE DATE

This approval to operate nationwide is effective upon signature by the Director of the Office of Resource Conservation and Recovery (ORCR) and shall expire five years from the date of signature unless specified otherwise in Condition 22.

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DEFINITIONS AND ACRONYMS

Definitions found in 40 CFR 761.3 apply unless otherwise noted below.

"Analytical data" means: (a) a formal report from a chemical analysis laboratory; or (b) appropriate chemical instrument print outs from a chemical instrument that have appropriate controls, standards, and written instrumental operating parameters and conditions. Technical judgment or experience is not considered analytical data.

"Application" means all data and materials upon which the EPA based its decision to approve FTI's PCB-1000 CD unit, e.g., information submitted to the EPA by FTI to define, represent, or describe proposed testing protocols, proposed design and operations, and operational limits of the PCB-1000 CD unit. This includes the request for approval required by 761.60(e) and such data and materials submitted in relation to both the demonstration and operating approval applications. This includes FTI's "PCB Disposal by Non Thermal Alternative Method Permit Application," dated May 3, 2012.

"Day" means a calendar day, unless otherwise specified.

"Facility" means the all contiguous land and structures (such as a single manufacturing plant) at which FTI's PCB-1000 CD unit disposal operations are conducted.

"Facility location" means a street address or a directional description which would allow a facility to be found by an EPA inspector, as opposed to a P.O. Box that is not indicative of the location of the facility where the treatment unit will be located.

"HQ" means EPA Headquarters.

"Job" means all FTI PCB-1000 CD disposal operations for a single customer within fifty road miles of a central location. A job may consist of FTI's PCB-1000 CD disposal operations at several different facilities for a single customer.

"Lost-time injury" or "lost workday injury" means an injury related to the operation of FTI's PCB-1000 CD unit which results in an employee not performing his/her normal assignments during the workday and/or any successive workday following the day of injury.

"Major modification" means any change to capacity, design, operations, or any other changes significantly affecting overall PCB destruction efficiency, performance, or environmental impact of FTI's PCB-1000 CD unit or process.

"Mobile operations" means those operations where FTI's PCB-1000 CD unit operates at a facility for less than 180 total cumulative days in any calendar year. Cumulative days do not have to be consecutive to count towards the 180 days. The 180 cumulative day compilation starts on the first day any component of FTI's PCB-1000 CD unit begins operating at the facility.

"MODEF" means mineral oil dielectric fluid.

"Operations" means the process of treating PCBs ≥ 50 ppm, including start-up (e.g., powering up, running any oil through the equipment) of FTI's PCB-1000 CD unit, preparation of PCB waste feed, and decontamination of FTI's PCB-1000 CD unit and supporting components once treatment is terminated.

"ORCR" means the Office of Resource Conservation and Recovery.

"PCB" means polychlorinated biphenyls as defined in 40 CFR 761.3.

"Permanent operations" means those operations where FTI's PCB-1000 CD unit operates at a facility for 180 total cumulative days or longer in the same year. The 180 cumulative day compilation starts on the first day any component of FTI's PCB-1000 CD unit begins operating at the facility. Cumulative days do not have to be consecutive to count towards the 180 days.

"Process waste" means wastes generated by FTI's PCB-1000 process.

"RA" means EPA Regional Administrator.

"Regional PCB Coordinator" means the contact listed on the following website for the EPA Region in which the unit is or will be operating:
http://www.epa.gov/epawaste/hazard/tsd/pcbs/pubs/coordin.htm.

"Site" has the same definition as "Facility."

"Spill" has the same meaning as "Spill" as defined in the EPA's PCB Spill Cleanup Policy in 40 CFR 761.123.

"Total PCBs" is defined as the PCB concentration quantified using EPA Method 8082 and 680 for non-aqueous and aqueous samples, respectively.

"Year" means any 365 consecutive days except in the occurrence of a leap year, which contains 366 days. The year does not necessarily begin on January 1st.

BACKGROUND

Florida Transformer, Inc., located in DeFuniak Springs, Florida, services the power distribution equipment needs of entities, such as municipalities, industrial companies, and military installations. Pursuant to 40 CFR 761.60(e), FTI submitted an approval request, a TSCA PCB Demonstration Test Plan, and a "PCB Disposal by Non Thermal Alternative Method Permit Application" to the EPA, dated May 3, 2012, for approval to test, demonstrate and use an alternative PCB disposal technology to treat MODEF containing PCBs. FTI's PCB-1000 chemical dechlorination (CD) unit chemically destroys PCBs in the MODEF so it can be recycled or reused. FTI demonstrated that its PCB-1000 CD unit successfully disposed of PCBs contained in MODEF during the week of September 11, 2012 in DeFuniak Springs, Florida in accordance with the EPA's demonstration test plan approval issued to FTI on September 7, 2012. Specifically, FTI successfully achieved the destruction efficiencies required by the TSCA regulations during each of their three successive test runs. As a result, the Office of Resource Conservation and Recovery authorizes FTI to operate its PCB-1000 CD unit to destroy PCBs in MODEF under the conditions and restrictions contained in the following provisions.

CONDITIONS OF APPROVAL

Per 40 CFR §761.60(e), this approval waives otherwise applicable requirements of 40 CFR §§761.60(a) and 761.70. This approval may note additional requirements of 40 CFR part 761 but FTI should not rely solely on this approval for all requirements related to PCBs or the disposal of PCB waste.

(1) Feedstock Restrictions

a) The FTI PCB-1000 CD unit shall only treat MODEF.

b) Except as described in paragraph (1)(e) below, FTI shall not treat MODEF containing PCBs in concentrations greater than 2,000 ppm.

    1) FTI shall not dilute MODEF containing PCBs in concentrations greater than 2,000 ppm to reduce the concentration to below 2,000 ppm and to the extent practicable, shall not dilute PCBs that are below 2,000 ppm to reduce the concentration of the PCBs.

c) FTI shall treat no more than 280 gallons of MODEF per batch in its PCB-1000 CD unit. Other operational conditions are described in Condition 2.

d) Prior to treatment, FTI shall characterize the feedstock for PCBs (Aroclor type and concentration) using EPA Method 8082. The feedstock shall be sampled and analyzed by gas chromatography in accordance with the procedures described in FTI's application.

e) FTI may request approval from the EPA to conduct a demonstration test to show that the PCB-1000 CD unit is capable of treating MODEF with concentrations of PCBs greater than 2,000 ppm or is capable of treating other materials (e.g., other oils) containing PCBs. In such cases, FTI shall submit a demonstration test plan to the Director of ORCR in writing at least 120 days in advance of a proposed demonstration test. FTI shall not

conduct the demonstration test until the EPA approves their demonstration test plan. The demonstration test plan submitted to the Director of ORCR for approval must include the type (e.g., hydraulic oil, heat transfer oil) and quantity of material to be treated and the location of the test demonstration. If FTI is successful in demonstrating to the EPA that the PCB-1000 CD unit is capable of treating concentrations of PCBs in MODEF greater than 2,000 ppm or is capable of treating other material containing PCBs, the EPA may amend this approval accordingly. FTI shall treat any PCBs during the demonstration test to less than 2 ppm Total PCBs for the demonstration test to be considered successful. A minimum of three test trial runs for each demonstration test shall be performed. Authorized EPA representatives may witness the demonstration test and obtain appropriate split samples for verification of analytical results.

f) Whenever feedstock or treated MODEF is handled in tanks outside of the PCB-1000 CD treatment tanks, such as when treating bulk quantities of oil, the tanks must be clearly labeled. Feed tanks must be labeled so as to distinguish them from treated product tanks. Example labels include "Feed Tank," "Treated Product Tank," and "Intermediate, In-Process Holding Tank."

(2) Operating Condition Restrictions

Operation of the PCB-1000 CD unit shall be subject to the conditions of this approval and shall be consistent with the information and data included in FTI's application dated May 3, 2012.

a) Treatment Unit Shutdown

The PCB-1000 CD unit shall be immediately and automatically shut down if either of the following limits are exceeded:

(1) A maximum pressure of 15 psi in a mixing tank.

(2) A maximum mixing tank internal temperature of 95°C.

After an automatic shutdown due to exceedance of either of these limits, FTI shall take corrective measures to prevent further exceedances before resuming operations. If automatic shutdowns due to exceedances of either of these conditions occur more than 3 times within a year, FTI shall follow the requirements in Condition 4(b). Any one exceedance of either of the conditions counts towards the 3.

FTI shall also immediately shut down the PCB-1000 CD unit upon failure of the monitoring and/or recording equipment for the parameters specified in Condition 7(a). After such a shutdown is triggered, FTI shall not resume treatment operations until the equipment is repaired or replaced with functional equipment.

b) Reaction Time

FTI shall operate the PCB-1000 unit as a batch process (i.e., not a flow through process). Batch reaction time shall be no less than 50 minutes. Reaction time begins when FTI starts adding dechlorination reagent to the MODEF.

c) Sodium

FTI shall not add more than 33 L of sodium per batch of MODEF containing PCBs.

d) Nitrogen

FTI shall operate the PCB-1000 CD unit using an oxygen-free, nitrogen-filled internal environment.

e) Minimum Reaction Temperature

FTI shall maintain a minimum temperature of 80°C in the mixing tanks during the reaction time.

(3) Treatment Verification and Disposal of MODEF That Could Not be Adequately Treated

a) FTI shall sample each batch of treated MODEF at the facility where the PCB-1000 CD unit is conducting the treatment and analyze the samples by gas chromatography for the concentration of PCBs. The treated MODEF shall be sampled and analyzed by gas chromatography in accordance with the procedures described in FTI's application.

b) If the concentration of PCBs in the treated MODEF is ≥ 2 ppm PCBs, FTI shall either:

(1) Repeat treatment of the MODEF in the PCB-1000 CD unit until the MODEF is reduced to less than 2 ppm PCBs for up to 10 treatments (each time that sodium is added to a batch is considered one treatment); or

(2) Dispose of the MODEF in accordance with 40 CFR part 761, subpart D as if it contains the PCB concentration of the pre-treated feedstock.

c) If the concentration of PCBs in the treated MODEF is ≥ 2 ppm PCBs, the burden of ensuring proper disposal (including shipment to an appropriate disposal facility) shall be FTI's.

(4) Requirements Upon Failure to Achieve PCB Treatment Levels of < 2 ppm

a) If FTI fails to achieve treatment levels of < 2 ppm PCBs after 10 treatments (or fewer if no more treatments are planned in the PCB-1000 CD unit), FTI shall dispose of the MODEF as if it contains the PCB concentration of the pre-treated feedstock. FTI shall notify the Director of ORCR and the EPA Regional PCB Coordinator in writing of the failure to achieve the required treatment levels of this approval 1) prior to

operating the PCB-1000 CD unit at another facility; or 2) no later than thirty days after the feedstock was not successfully treated, whichever comes first. In such circumstances, FTI shall assess if the unsuccessful treatment was due to contaminants in the MODEF, due to a failure/malfunction of the PCB-1000 CD unit, or due to another factor. FTI shall include the results of this assessment in the notification discussed in this Condition (4(a)).

b) Immediately upon the third incidence of failure to achieve the required treatment levels (as described in Condition 4(a)) within any year, FTI shall cease operation of the PCB-1000 CD unit and shall notify the ORCR Headquarters contact identified in Condition 12 and the Regional PCB Coordinator by phone no later than the 3rd business day after the third incidence of failure. FTI shall also submit a written report to the ORCR Headquarters contact identified in Condition 12 and the Regional PCB Coordinator within 7 days of ceasing operation. In such instances, the malfunctioning PCB-1000 CD unit shall not resume operation until the problem has been corrected to the satisfaction of the ORCR Headquarters contact identified in Condition 12.

(5) Unit Damage

FTI shall report any damage to the PCB-1000 CD unit that may impact the unit's ability to operate in accordance with this approval within 2 business days by phone to the PCB Regional Coordinator and the ORCR Headquarters contact identified in Condition 12. Within 5 business days, FTI shall submit a written report that addresses such damage to the Director of ORCR and the PCB Regional Coordinator. The written report shall include information on the incident causing the damage, the cause(s) of the incident, steps being taken to repair the unit, and the estimated time before the unit is able to perform as specified in this approval. FTI shall notify the PCB Regional Coordinator and the ORCR Headquarters contact identified in Condition 12 by phone and receive approval from ORCR via written or emailed correspondence before resuming operations. The EPA may require a performance demonstration or submittal of appropriate data and/or information before FTI may resume operations to confirm that the unit has been fully repaired.

(6) Generated Waste Disposal and Handling Requirements

a) FTI shall sample and analyze any non-aqueous liquid wastes generated by FTI's PCB-1000 CD unit. FTI shall dispose of non-liquid and non-aqueous liquid wastes with PCB concentrations of ≥ 2 ppm (e.g., sludge, Fuller's earth filter media, and disposable personal protective equipment) as if it contained the PCB concentration of the pre-treated feedstock (see §761.60(a) for disposal options).

FTI may dispose of non-liquid and non-aqueous liquid wastes generated by the PCB-1000 CD unit with concentrations < 2 ppm as a non-PCB material, but final disposition of such waste must comply with all local, state, and federal regulations.

b) FTI shall sample and analyze any liquid aqueous process streams.

(1) For liquid aqueous process wastes containing < 0.5 ppb PCBs, FTI may manage them as non-PCB materials, but final disposition of such aqueous process streams must comply with all local, state and federal regulations.

(2) For aqueous process wastes containing ≥ 0.5 ppb and < 3 ppb, FTI shall dispose of them in compliance with 761.50(a)(3). For aqueous process wastes containing ≥ 3 ppb, FTI shall dispose of them as if they contained the PCB concentration of the pre-treated feedstock (i.e., MODEF) that was being treated at the time the aqueous process waste was generated.

c) FTI shall comply with the labeling and marking requirements for storage, holding, and process tanks at §761.40 and §761.45 for all aqueous process streams which contain PCB levels ≥ 3 ppb and for solid and non-aqueous wastes that contain PCB levels ≥ 2 ppm.

(7) Monitoring, Recordkeeping, and Reporting Requirements

a) FTI shall monitor, record, and maintain the following PCB-1000 CD unit operating parameters and information:

(1) Quantity of MODEF treated for each treatment batch,

(2) Concentration of PCBs in the MODEF feedstock for each treatment batch,

(3) Amount of dechlorination reagent used in each treatment batch and per job,

(4) Post-treatment concentrations of PCBs in the MODEF for each treatment batch,

(5) Temperature and pressure of reaction in FTI's PCB-1000 CD unit during each treatment batch at the following times: initially (before any heating is done), when sodium is begun to be added, the maximums, and final (when the treated MODEF is about to be removed),

(6) Quantity of PCB wastes generated at each job, including MODEF that could not be successfully treated to levels of below 2 ppm,

(7) Identification of facilities used to dispose of the PCB wastes listed in Condition 7(a)(6), and method of disposal,

(8) Date, time, and duration of treatment batches,

(9) Name and business address of the PCB-1000 CD unit operator and supervisor for each treated batch,

(10) The name and address of each client whose MODEF was treated by the PCB-1000 CD unit,

(11) A copy of the gas chromatograms from the tests required by Conditions 1, 3, and 6,

(12) A summary of the total number of gallons of MODEF treated by the PCB-1000 CD unit during the previous year, and

(13) Any reports required by Conditions 4, 5, or 9.

(14) Documentation that FTI and the facility at which FTI is operating have obtained any necessary approvals and permits from federal, state and local agencies.

b) FTI shall develop, compile, and maintain the records in a paper log or electronically in Condition 7(a), above, as follows:

(1) FTI shall maintain the records in the PCB-1000 CD unit trailer, and make them available for inspection for the PCB-1000 CD unit's treatment activities occurring at that particular facility and the records for all jobs conducted by the unit for the previous 5 years.

(2) FTI shall compile the records for each facility within 3 days of the end of treatment at that facility (i.e., the end of a job) and keep these documents at its main office in DeFuniak Springs, FL from the 3-day point until FTI is allowed to dispose of the records under Condition 7(b)(4) below;

(3) FTI shall make the records available for inspection by authorized representatives of the EPA upon request; and

(4) FTI shall maintain at a secure location the records for at least 10 years after the treatment date of the last job performed by the unit.

c) If either FTI initiates and completes closure of the PCB-1000 CD unit while this approval is in force or if the approval expires, FTI shall electronically submit these records to the Director of ORCR within 90 calendar days of certifying closure or the expiration, whichever comes first.

d) FTI shall maintain annual records on the disposition of all PCBs and submit them annually to the Director of ORCR in compliance with §761.180(b).

(8) Advance Notification of Operations

a) 30-Day Advance Notification of Operations

FTI shall, at least 30 days prior to locating its PCB-1000 CD unit at a facility, send non-confidential, written notifications of its intent to treat PCBs at such facility to the ORCR HQ contact identified in Condition 12, and to the appropriate EPA Regional PCB coordinator, state environmental agency, and local governmental environmental entities (if applicable) based on the location where operations will occur.

b) Information to Be Contained in 30-Day Advance Notification of Operations

(1) The following information shall be included in the 30-day advance written notification discussed in Condition 8(a). The information contained in the notification will be available to the public (see Condition 12) and may be used to schedule inspections and facilitate oversight of operations.

A. Company Identifications: 1) name, address, telephone number and brief description of the facility where FTI will be operating; 2) name, base (e.g., corporate office) address, name(s), email addresses, and telephone number(s) of the FTI corporate office contact(s) responsible for oversight of the mobile unit personnel, and a brief description of FTI;

B. Personnel Identification: 1) FTI contact name(s), email address(es), and telephone number(s) of personnel who are responsible for oversight of the FTI operations at the facility; 2) name(s) and telephone number(s) of facility representatives/personnel where FTI will be operating whom FTI reports to and who are responsible for oversight of FTI's operations at their facility;

C. The number to a phone that is dedicated to the PCB-1000 CD unit that the FTI unit operator(s) have access to and that goes with the PCB-1000 CD unit to each facility;

D. Description of the nature of the PCB disposal activity, including estimates of the amount of MODEF contaminated with PCBs and estimates of PCB concentration in the MODEF that will be treated. The estimates shall be based on analytical data provided by the customer and/or analytical data from FTI;

E. The date the PCB treatment/disposal activity is scheduled to begin, and the estimated duration (in days) of the operations;

F. The vehicle identification number (VIN) or state Department of Motor Vehicle license plate number for the PCB-1000 CD unit; and

G. Names, titles, addresses, email addresses, and telephone numbers of those required to be notified by Condition 8(b)(1)(A).

An acceptable example of a 30-day advance written notification of intent to operate is included in Appendix V.

(2) Changes to 30-Day Advance Notifications

If a change or changes to the information submitted in the original 30-day advance notification for a particular facility is, or are, necessary before operations have begun under that notification, FTI shall (with the exceptions of changing the schedule to an earlier treatment operations start date and changing the facility

location - see below) send an email that describes the change or changes to those required to be notified by Condition 8(a) in advance of the operating start date that is stated in the original 30-day notice. FTI may initiate the treatment/disposal activities as originally scheduled after they have submitted the change(s) provided the change(s) does not require modification of this operating approval.

If a change or changes to the information submitted in the original 30-day advance notification for a particular facility is, or are, necessary after operations have begun under that notification, FTI shall (with the exceptions of changing the facility location - see below) send an email that describes the change or changes to those required to be notified by Condition 8(a). FTI may continue the treatment/disposal activities after submitting the change(s) provided the change(s) do not require modification of this operating approval.

If FTI wishes to operate at a facility other than the facility identified in the submitted 30-day notification or change the scheduled treatment operations start date to an earlier date, FTI shall submit a new 30-day advance notification to those required to be notified by Condition 8(a) (which may differ from those notified by the original notice). FTI shall also notify those individuals to whom the original notice was submitted of the date or location change. In such circumstances, FTI shall not initiate treatment/disposal activities earlier than 30 days prior to submitting the new advance notification.

c) Additional Advance Notifications

In addition to the advance notifications prescribed in Condition 8(a) of this approval, FTI shall provide a non-confidential written notification of intent to operate 30 days in advance to the local fire departments and other applicable local emergency response entities where FTI intends to operate.

These additional advance written notifications shall specify the following information:

(1) Safety Data Sheets (SDS) for the principal chemicals in the treatment unit, and/or to be treated in the treatment unit (including PCBs, chemical reagents [e.g., sodium], and other chemicals [e.g., nitrogen gas]);

(2) The approximate quantities of principal chemicals in each treatment unit, and/or to be treated in the treatment unit; and

(3) General location of FTI's PCB-1000 CD unit scheduled to be at the facility.

(9) <u>PCB Spills</u>

In the event FTI believes, or has reason to believe, that a spill of PCBs has, or might have, occurred from any activities or devices related to FTI's PCB-1000 CD unit or from storage units and their connecting equipment (e.g., pipes/hoses) feeding into FTI's PCB-1000 CD unit, FTI shall notify the Regional PCB Coordinator and the ORCR HQ contact

identified in Condition 12 by phone immediately after initial response actions have been taken to ensure the protection of human health and the environment. FTI shall control and clean up any spills of PCBs or other fluids as provided in the Spill Prevention, Control and Countermeasure Plan provided in the application.

In addition, FTI shall submit a written report to the appropriate EPA RA and the Director of ORCR no later than 15 business days after the spill occurred that describes the: a) spill; b) operations that were being conducted prior to, and during, the spill; c) cleanup actions conducted; and d) changes in operations that FTI implemented to prevent such spills from occurring in the future.

FTI shall not feed any PCB material into FTI's PCB-1000 CD unit until the cause of the spill has been determined and corrected to the satisfaction of the EPA. FTI shall not resume PCB treatment operations until written or emailed approval is received from the ORCR HQ contact identified in Condition 12.

FTI shall also report PCB spills in accordance with applicable federal, state, and local requirements.

(10) Health and Safety

a) FTI shall take all necessary precautionary measures to ensure the operation of the PCB-1000 CD unit is in compliance with applicable health and safety standards, as required by this approval and other applicable Federal, state and local laws, regulations and ordinances. FTI shall report by phone to the Regional PCB Coordinator and the ORCR HQ contact identified in Condition 12 by the end of the business day immediately following the incident that resulted in any lost-time injury occurring as a result of FTI's PCB-1000 CD equipment or operations. FTI shall submit a written report describing the incident to the Director of ORCR within five business days.

b) Site-Specific Safety Plan

Before treating any PCB MODEF, FTI shall develop and maintain at the facility a site-specific safety plan for the activities covered by this approval. FTI shall also provide a copy of the site-specific safety plan to the emergency coordinator of the facility where it will operate prior to FTI's PCB-1000 CD unit arriving at the facility. FTI shall notify the facility where it will operate of the possible fire hazards associated with using sodium in FTI's PCB-1000 CD unit. At a minimum, FTI shall include the following site-specific information in each site-specific safety plan:

(1) Scope of work (description of the treatment process, maximum volume of MODEF that might be found at any given time within FTI's PCB-1000 CD unit or in directly associated storage containers, and any hazardous materials to be used);

(2) Project personnel, including roles, responsibilities and qualifications, name of on-site safety coordinator, and name(s) of any on-site cardiopulmonary resuscitation (CPR)/First-Aid certified person(s);

(3) Emergency contact information, including local authorities (e.g., local fire and police departments) and nearest medical facility that would accept patients contaminated with chemicals;

(4) Hazard identification (e.g., potential for sodium reactions/fires) and control/mitigation measures;

(5) Names of all chemicals used at the facility by FTI in its PCB-1000 CD unit along with approximate quantities and the corresponding safety data sheets (SDS);

(6) Emergency action plan(s) specifying the following:

A. Contact information – project and property management, and the persons responsible for handling emergencies (with 24-hour a day contact in the event of an emergency), including both phone numbers and email addresses
B. Evacuation plan(s)
C. First aid location(s)
D. Eye-wash station location(s)
E. Fire extinguisher location(s)
F. Location of SDS
G. Flammable storage area(s)
H. Smoking/non-smoking areas

FTI shall submit a copy of any site-specific safety plan to the ORCR HQ contact identified in Condition 12 or the applicable EPA Regional office upon request.

c) Fire Suppression System

If operating indoors, FTI shall locate and operate its PCB-1000 CD unit only at a facility that has an adequate fire suppression system (e.g., sprinkler, standpipe or other specialized system) that is compatible for a sodium fire. Separate and distinct fire suppression systems may be necessary based on the location of FTI's PCB-1000 CD unit relative to the location of the other chemicals in the building and based on the compatibility of the fire suppression system with the fire risk that is being mitigated in that particular area. It is the responsibility of FTI to evaluate whether the fire suppression system is appropriate to address the specific hazards of a sodium fire based on the design and location of FTI's PCB-1000 CD unit at the facility. FTI also shall only operate in a building that is in compliance with applicable federal, state and/or local fire suppression requirements.

d) Fire Detection System

If operating indoors, FTI is only permitted to locate and operate its PCB-1000 CD unit at a facility that has an active (24 hours/day) fire detection system (such as smoke alarms) that immediately notifies facility workers, occupants, facility emergency responders (whether they are on-site or off-site), and local emergency responders (e.g., fire department) of a fire emergency. FTI's PCB-1000 CD unit shall have its own active (24 hours/day) fire detection system that also meets the requirements discussed in this paragraph.

e) Fire Extinguishers

FTI shall maintain and clearly label fire extinguishers and other firefighting equipment that are capable of suppressing sodium fires and other types of fires that may be associated with materials treated by FTI's PCB-1000 CD unit. Labeling shall be based on the compatibility of the extinguisher with the fire hazard and shall be available at the PCB-1000 CD unit and within 25 feet of all hot work activities and operations. Multiple types of fire extinguishers and firefighting equipment may be necessary to address different fire hazards posed by FTI's PCB-1000 CD unit and the wastes that it treats. All fire extinguishers shall have the following:

(1) Annual inspection tag,

(2) A gauge indicating fully charged,

(3) Pin with security seal, and

(4) Instructions on how to use.

f) Treatment Unit Placement

The PCB-1000 CD unit shall be located at an adequate safety distance so that operations will not pose unreasonable risk to human health or the environment. For example, the PCB-1000 CD unit shall not be located less than 20 feet away from any storage area for flammable or combustible materials (e.g., flammable liquid storage tanks or drums) or next to a sensitive ecosystem if the treatment unit is operated outdoors.

g) Sodium Preparation System

FTI shall adequately maintain and locate the sodium preparation system a safe distance from, but no less than 10 feet from any flammable or combustible materials (e.g., mineral oils, oily rags) inside FTI's PCB-1000 CD unit, and no less than 20 feet away from any storage area for flammable or combustible materials (e.g., flammable liquid storage tanks or drums) that are either under the control of FTI or the facility where they are operating. While the sodium preparation unit(s) is in operation, FTI personnel must be on-site monitoring the unit from within 30 feet at all times.

(11) Security

FTI shall ensure its PCB-1000 CD unit is secure (e.g., with a fence, alarm system, signage) such that only those individuals participating in the operations and approved visitors are allowed in the area of FTI's PCB-1000 CD unit regardless of whether the unit is operating.

(12) Notifications and Reports

Notifications or reports required to be mailed to the Director of ORCR shall be mailed to: Director of ORCR, 1200 Pennsylvania Avenue N.W., Mailcode: 5301P, Washington, D.C. 20460. When a Condition requires electronic submission to the Director of ORCR, FTI shall email the information to ORCRPCBs@epa.gov.

Phone numbers for the EPA Regional PCB Coordinators can be found on the following website: http://www.epa.gov/epawaste/hazard/tsd/pcbs/pubs/coordin.htm. The ORCR HQ contact is Amy Hensley, 703-305-5084, but if she is not available, the following phone number may be used as the ORCR HQ contact: 703-308-8404.

Before treating PCB MODEF in the PCB-1000 CD unit, FTI shall post prominently on their website this approval document. FTI shall also post all 30 day advance notifications (described in Condition 8) on the same page as the approval. Both the approval and the 30 day advance notifications shall remain posted until 60 days after:

a) This approval is terminated;
b) This approval expires (provided FTI has not followed the procedures described in Condition 22 to allow the approval to continue in force); or
c) The unit is closed in accordance with Condition 16.

FTI shall post the approval and 30 day advance notifications on a page within their website where visitors would reasonably expect to see announcements on environmental projects, such as the disposal of PCB waste.

(13) Agency Approvals/Permits:

Operation of FTI's PCB-1000 CD unit may not commence until FTI has obtained all required approvals/permits from federal, state and local agencies. FTI is responsible for obtaining such approvals/permits. FTI shall ask the facility, prior to beginning operations, whether the facility is required to obtain any federal, state, or local approvals/permits necessary to allow FTI to conduct operations at their facility. FTI shall not operate the PCB-1000 CD unit at the facility unless the facility has been granted any necessary approvals/permits. Once FTI has verified from the facility that the facility has been issued the required approvals/permits, FTI shall document that verification in their operating records which are described in Condition 7(a).

(14) Personnel Training

FTI shall ensure that personnel directly involved with the operation of the PCB-1000 CD unit are familiar with the requirements of this approval. In this regard, FTI shall keep copies of the following documents with the PCB-1000 CD unit at all times:

a) This operating approval,
b) FTI's operating approval application,
c) FTI's demonstration test approval request and associated demonstration test approval issued by the EPA,
d) The Spill Prevention, Control and Countermeasure Plan, and
e) FTI's sampling and analytical procedures.

FTI shall also maintain a copy of the sampling and analytical procedures in the laboratory conducting the analyses.

At a minimum, FTI shall train personnel on the following:

a) The type of fluid which may be treated using FTI's PCB-1000 CD unit (i.e., MODEF), and the upper PCB concentration limits for the fluids which may be treated;

b) The recordkeeping, notification and reporting requirements identified in Condition 7 required by this approval, and the location of records and retention times;

c) The handling and/or PCB waste disposal requirements as described in Conditions 3, 4, and 6 for process waste and other materials generated during the operation of FTI's PCB-1000 CD unit;

d) The safety, operating, and maintenance procedures, with an emphasis on the safe handling and use of the sodium reagent to prevent harmful sodium reactions;

e) The procedures for using, inspecting, repairing, and replacing FTI's (and the facility's, if applicable) emergency and monitoring equipment, with an emphasis on the fire suppression equipment; and

f) The Spill Prevention, Control and Countermeasure Plan.

(15) Waste and Equipment Transport Between Jobs Sites

FTI shall not transport untreated PCB fluids off-site on FTI's PCB-1000 CD unit. FTI shall comply with any applicable U.S. Department of Transportation (US DOT) requirements in Title 49 Part 172 when transporting PCB-contaminated equipment (e.g., reactors, tanks) off-site on the unit. FTI shall comply with applicable marking requirements for PCB containers in 40 CFR 761.40 and decontaminate the unit by:

a) Rinsing all hoses and pipes with clean solvent three times prior to transporting the PCB-1000 CD unit from the site; or

b) Flushing all hoses and pipes with MODEF containing PCBs in concentrations less than 50 ppm into the reactor of FTI's PCB-1000 CD unit and treating the flushed MODEF in the reactor to below 2 ppm.

(16) Closure Cost Estimate and Plan, Financial Assurance, and Permanent Closure

a) Closure Cost Estimate and Plan

(1) Prior to issuance of this approval, FTI submitted to ORCR a written closure plan and closure cost estimate that identified the steps and quantified the estimated costs for the activities FTI shall conduct to permanently close the PCB-1000 CD unit. The provisions of 40 CFR 761.65(e)(4)-(8) and (f)(2)-(4) shall apply, except as otherwise provided in the Conditions of this approval.

(2) The EPA may require FTI to adjust the closure plan or closure cost estimate to ensure there would be no unreasonable risk to health or environment.

b) Financial Assurance

(1) FTI shall obtain financial assurance for closure. FTI shall apply the financial assurance requirements in 40 CFR 761.65(g) for commercial storage facilities to its PCB-1000 CD unit and comply with such requirements. FTI shall not operate its PCB-1000 CD unit without the necessary financial assurance. Such financial assurance shall be obtained and submitted to the Director of ORCR 60 days prior to commencing PCB treatment operations at any facility and maintained until closure activities have been completed. 40 CFR 761.65(g) references the financial assurance mechanisms specified in Subpart H of 40 CFR 264 of the Resource Conservation and Recovery Act. FTI may choose any of the financial assurance mechanisms or combination of mechanisms provided for in the regulations. The EPA may require variations in the wording of the instruments from that found at 40 CFR 264.151.

(2) FTI shall provide evidence of the increased value of the financial assurance mechanism whenever necessary (e.g. annual inflation adjustment, change in closure cost estimate triggered by modification of closure plan, etc.) as required in 264.143, which is incorporated by reference in 761.65(g).

(3) FTI shall also obtain financial assurance for the compensation of third parties for bodily injury and property damage caused by sudden and nonsudden accidental occurrences from, or related to, FTI's PCB-1000 CD unit operations by complying with the RCRA regulations that address third-party financial assurance liability requirements (i.e., 40 CFR 264.147).

c) If FTI wishes to change the closure plan, closure cost estimate, or financial assurance mechanisms due to factors other than inflation, FTI shall submit an adjusted plan, cost estimate, or financial assurance mechanism (as applicable) to the EPA. The EPA will review the change(s) and may require FTI to revise the adjusted closure plan, closure cost estimate, or financial assurance mechanism prior to approving it.

d) Permanent Closure

(1) Failure to submit a request for renewal as described in Condition 22 will be treated as evidence of intent to close FTI's PCB-1000 CD unit. If FTI does not submit a request for renewal before the time specified in Condition 22, FTI shall initiate closure procedures within 60 days of the last treatment of MODEF containing PCBs ≥ 50 ppm by FTI's PCB-1000 CD unit.

(2) In the event that FTI expects to cease operating its PCB-1000 CD unit permanently or for the remaining duration of the approval, FTI shall initiate closure procedures within 60 days of the last treatment of PCB MODEF by the PCB-1000 CD unit.

(3) FTI shall notify the Director of ORCR, in writing, at least 60 days prior tof the date on which final closure of its PCB-1000 CD unit is expected to begin (see 761.65(e)(6)(i)).

(4) Within 60 days of completion of closure of FTI's PCB-1000 CD unit, FTI shall submit by registered mail, a certification to the Director of ORCR that the PCB-1000 CD unit has been closed in accordance with the closure plan (see 761.65(e)(8)).

(5) During the closure activity period, FTI shall dispose of all contaminated system component equipment in accordance with the disposal requirements of 40 CFR 761 Subpart D or decontaminate the equipment in accordance with 40 CFR 761.79.

(6) FTI shall submit records to the Director of ORCR within 90 days of concluding closure as required in Condition 7(c).

(17) Ownership Transfer

a) If FTI intends to transfer ownership of FTI's PCB-1000 CD unit and the transferee wants to operate the PCB-1000 CD unit under the same or similar terms as this approval, FTI shall notify the Director of ORCR, in writing, at least 90 days before transferring ownership of FTI's PCB-1000 CD unit. FTI shall also submit to the Director of ORCR, at least 90 days before such transfer, a notarized affidavit signed by the transferee that states the transferee is seeking an approval to operate the PCB-1000 CD unit. Failure of FTI to provide the EPA with this required written documentation of the transfer within the specified time frame would be a violation of this approval and the approval would immediately terminate upon the transfer of ownership.

b) After receiving notification the EPA may:

(1) Issue an amended operating approval substituting the transferee's company name for FTI's name;

(2) Require the transferee to conduct a demonstration test and/or apply for a new PCB disposal approval by either submitting a complete operating approval request or a partial application request (e.g., that focuses on information that demonstrates the transferee has the ability to comply with the terms and conditions of this approval, such as a summary of company personnel qualifications and previous training that are relevant to complying with the terms and conditions of this approval, or a summary of previous compliance history, if applicable); or

(3) A combination thereof.

c) So that there will be no lapse in financial assurance for the transferred facility, the transferee shall establish financial assurance for closure compliant with Condition 16 and submit it to the EPA before the approval will be amended to transfer ownership. The transferee must select one of the financial assurance mechanisms listed in the PCB Regulations at 761.65(g). The EPA may require variations in the wording of the instruments from that found at 40 CFR 264.151. The financial assurance mechanism must be effective as of the date of final approval of the transfer (i.e., the date the amended approval is signed by the Director of ORCR).

d) The transferee shall not operate the mobile unit unless the EPA either has amended this approval to allow for such operation or has issued a new approval to the transferee.

(18) Additional Unit(s)

a) FTI shall not conduct PCB treatment operations in other PCB-1000 CD units not covered by this approval (except pursuant to an EPA approved test demonstration, if required) until FTI submits a request to the EPA to modify this approval (i.e., to add the new PCB-1000 CD unit(s) to this approval) and FTI receives approval from the Director of ORCR.

b) Such requests to modify this approval shall include a written pre-operation report containing, at a minimum, the following information:

1) Date of manufacture of the PCB-1000 CD unit;

2) Identification and/or serial number of the new PCB-1000 CD unit;

3) Certification by an independent, registered professional engineer that the new PCB-1000 CD unit is substantially identical to the original demonstrated in terms of engineering design, hardware, process capacity, quality and workmanship;

4) Certification by the Chief Executive Officer of FTI that the construction of the new PCB-1000 CD unit has been completed in compliance with Condition 18(b)(3); and

5) A list of all non-substantive changes made to the design and construction of the new PCB-1000 CD unit which are not identical to the original PCB-1000 CD unit (i.e., changes made to the unit even though the unit is considered substantially identical as described in Condition 18(c) above).

c) The EPA, at its discretion, may:

1) Request additional information about the new PCB-1000 CD unit(s);

2) Require FTI to conduct a demonstration test for the new PCB-1000 CD unit(s) prior to making a determination on the modification request to ensure the new PCB-1000 CD unit(s) is capable of complying with the terms and conditions of this approval;

3) Approve the modification request by relying on engineering information and other data/information provided in Condition 18(a) and (b) and determine demonstration testing is not required prior to, or after, the new PCB-1000 CD unit begins treatment operations; or,

4) Deny FTI's approval modification request to add a new PCB-1000 CD unit to this approval because the EPA, based on available data and information, concludes the new PCB-1000 CD unit is not capable of, or has not demonstrated the capability of, achieving the required performance standards and operating in a manner that does not present unreasonable risk to health and the environment.

(19) Process/Equipment Modifications

FTI shall not make major modifications (e.g., changes of engineering design, ancillary hardware, or process capacity) to its PCB-1000 CD unit prior to receiving written approval from the Director of ORCR, to implement such major modifications. If FTI desires such major modifications, FTI shall submit an approval modification request to the Director of ORCR. The Director may, depending on the nature of the major modification request, require FTI to conduct a demonstration test to ensure the PCB-1000 CD unit continues to be in compliance with the applicable performance standards included in this approval and to ensure the PCB-1000 CD unit continues to operate in a manner that does not present unreasonable risk to health and the environment.

(20) Unit Operators

Operation of FTI's PCB-1000 CD unit shall be managed and overseen by a qualified FTI employee during all times the PCB-1000 CD unit is operated.

(21) Approval Expiration Date

This approval shall become effective upon signature of the Director of ORCR and expire five years from the date the approval becomes effective except as specified otherwise below.

22) Approval Renewal

If FTI intends to continue to operate beyond the expiration date of this approval, FTI shall submit a complete approval renewal application request and, if required (see below), a complete demonstration test plan to the EPA at least 180 days prior to the expiration date of this approval. If FTI submits this information to the EPA at least 180 days prior to the expiration date of this approval, this approval continues in force (i.e., does not expire) until the EPA either issues an approval renewal, a conditional approval renewal, or an approval request denial. FTI will not be allowed to operate under revised operating conditions until the EPA issues FTI a fully renewed, and revised, operating approval. If FTI does not submit a complete approval renewal application request and, if required, a complete demonstration test plan to the EPA at least 180 days prior to the expiration date of this approval, this approval will expire as specified in Condition 21.

A complete approval renewal application and complete demonstration test plan are considered to be, at a minimum, information that was submitted in previously approved operating approval requests and demonstration test plans, with appropriate modifications or updates based on proposed revisions to the original approval, which may include, treatment unit design and operation changes, and revised operating and testing procedures. For example, if FTI is seeking approval to treat another type of PCB material or MODEF containing concentrations of PCBs $\geq$ 2,000 ppm, the approval application and demonstration test plan shall reflect those changes.

The EPA may require FTI to conduct another demonstration test to assure the EPA that FTI will continue to operate its PCB-1000 CD unit in accordance with the applicable performance standards and in a manner that does not present an unreasonable risk of injury to health or the environment. As a result, FTI is encouraged to contact the ORCR HQ contact identified in Condition 12 in advance of 180 days prior to the expiration date of this approval if FTI intends to renew this approval in order to ascertain whether the EPA would require FTI to conduct a new demonstration test. This is especially important if FTI wants to make changes to its operating parameters (e.g., treating a different type of PCB material or treating MODEF with concentrations of PCBs $\geq$ 2,000 ppm). Under those circumstances, FTI will not be allowed to operate under revised operating conditions until the EPA issues FTI a fully renewed, and revised operating approval.

23) Mobile versus Permanent Operation

This approval is for mobile operation of FTI's PCB-1000 CD unit. If FTI intends to operate the PCB-1000 CD unit at a facility for 180 cumulative days or longer within any year, then FTI shall comply with the conditions of Appendix VI of this approval. Such operations are considered permanent operations, potentially requiring a separate approval.

DECISION TO APPROVE FTI's REQUEST TO CONDUCT PCB TREATMENT OPERATIONS

1. Approval to dispose of PCBs is hereby granted to Florida Transformer, Inc. (FTI), of DeFuniak Springs, Florida, subject to the conditions expressed in this approval and consistent with the materials and data included in the application and demonstration test plan and report submitted to the EPA by FTI. Due to the performance test results, the design aspects of the treatment system, and the operating parameters and safety requirements included in this approval, the EPA finds that FTI's PCB-1000 CD unit achieves a level of performance equivalent to a TSCA PCB incinerator[2] and finds that the treatment unit operations will not present an unreasonable risk of injury to health or the environment.

2. The EPA reserves the right to impose additional conditions or revoke this approval when it has reason to believe that FTI's PCB-1000 CD unit is not achieving the relevant performance standards or continued operation of FTI's PCB-1000 CD unit would present an unreasonable risk to health or the environment.

   The EPA will make best efforts, taking into account the nature of the risk, to provide reasonable advance notice to FTI and provide opportunity for FTI to comment on any modifications or termination of the approval. The EPA may require FTI to immediately cease operations while the EPA is deciding whether to impose approval modifications or to terminate this approval.

3. Any departure from the conditions of this approval or the terms expressed in the application must receive prior written authorization from the Director of ORCR. Violations of any applicable regulations may be subject to enforcement action and may result in termination of this approval.

4. FTI shall be responsible for the actions of its employees and contractors that operate or assist in the operation of its PCB-1000 CD unit when those actions are related to performance of the PCB-1000 CD unit, including operating or moving the equipment. FTI shall assume full responsibility for compliance with this approval and all Federal, state and local regulations that apply to FTI, including, but not limited to, any malfunction, spill, pollutant release, incident, or other reporting requirements.

5. The EPA reserves the right for its employees or agents to inspect FTI's PCB treatment/disposal activities at any location at any reasonable time.

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[2] The regulations at §761.60(e) allow for the destruction of PCBs using methods other than incineration, provided the alternative method can achieve a level of performance equivalent to an incinerator approved under §761.70 or a high efficiency boiler operating in compliance with § 761.71. The level of performance required for non-thermal destruction is measured differently than for thermal methods. It is the Agency's policy that non-thermal methods operating under 761.60(e) that destroy PCBs to < 2 ppm meet an equivalent level of performance to an incinerator approved under §761.70 or a high efficiency boiler operating in compliance with § 761.71. See Draft Guidelines for Permit Applications and Demonstration Test Plans for PCB Disposal by Non-Thermal Alternative Methods, August 21, 1986.

6. Violation of any requirement of this approval is a violation of 40 CFR sections 761.60(e) and 761.50(a) and may also be a violation of other provisions of 40 CFR 761 Subpart D. A violation of the regulations is a prohibited act under Section 15 of TSCA.

April 22, 2015
Date

Barnes Johnson
Director
Office of Resource Conservation and Recovery

APPENDIX I

COMPANY BACKGROUND

Florida Transformer, Inc. (FTI) provides services to entities such as electric cooperatives, municipalities, electric membership cooperatives, industrial companies, and military installations that are primarily located in the southeastern U.S. (Florida, Georgia, Mississippi, and Alabama), but FTI's mobile PCB treatment services may extend to entities nationwide. FTI's core business comes from the service, repair, and decommissioning of power distribution equipment. On March 17, 2004, EPA Region 4 issued a 40 CFR 761.65(d) PCB commercial storage approval to FTI to store PCB contaminated oil.

APPENDIX II

PROCESS DESCRIPTION AND FINDINGS

Process Description:

The PCB-1000 chemical dechlorination unit uses a process that chemically treats PCBs with the use of a sodium reagent. In this process, the sodium reagent reacts with the chlorine atoms on the PCB molecule to form sodium chloride and chlorine-free biphenyl molecules. The dechlorination of PCBs by an alkali sodium reagent must be conducted in nitrogen or other inert atmosphere, such as argon. This is to prevent a fire hazard resulting from hydrogen produced due to the reaction of the sodium reagent with any moisture that may be in the oil.

The PCB-1000 CD unit can be divided into five separate components: degasifier, reagent system, mixing tanks, centrifuge, and nitrogen purge system. Generally, PCB contaminated mineral oil dielectric fluid feedstock is transferred from a bulk tank to the PCB-1000 CD unit, and is first passed through a degasifier and heater to remove moisture and other vapor. The degassed oil enters one of two mixing tanks which are heated to maintain the proper reaction temperature. The oil passes from one mixing tank to another while continuously being agitated to achieve proper mixing, reagent dispersion, and reaction. After adequate reaction time, the treated oil is passed through an air cooler component to lower the temperature of the oil post reaction, further quenched with water, and transferred to the centrifuge. The centrifuge then removes sludge byproduct consisting of chlorine-free biphenyl molecules and NaCl (salt).

Additional processing may include the use of a Fuller's earth system to further purify and decolorize the oil to enhance the treated oil's market favorability. Also, a 2,6-di-tertiary-butyl-para-cresol (DBPC) additive system may be used to reduce the oxidation rate of the transformer oil in order to extend the treated oil's useful life.

Findings:

Pursuant to a testing approval issued by the EPA, FTI conducted a demonstration test during the week of September 11, 2012 to determine whether their PCB-1000 CD unit (which is mounted on a 40'9" container trailer) can adequately treat PCBs in MODEF having concentrations as high as 1,940 ppm Total PCBs. The test had to demonstrate the PCB-1000 CD unit could treat PCB-containing MODEF at these PCB levels to levels below 2 ppm, i.e., the level of performance equivalent to an incinerator approved under 761.70. In September 2012, representatives of ORCR witnessed a performance test demonstration conducted by FTI in DeFuniak Springs, FL, that utilized a chemical dechlorination system to treat PCBs in MODEF. The FTI treatment unit successfully treated PCB contaminated MODEF in three successive performance test runs.

APPENDIX III

FLOW DIAGRAM

The flow diagram has been redacted from this public information version of this approval.

APPENDIX IV

SUMMARY OF DEMONSTRATION TEST RESULTS
FOR THE PCB-1000 CHEMICAL DECHLORINATION PROCESS

Batch Reaction Times:

Run No.	Sodium Used (L)	Date	Reaction Time		
			Start	Finish	Minutes
1	30	9/11/12	1315	1422	67
2	20	9/12/12	1110	1200	50
3	16	9/12/12	1605	1650	45

Reaction time is the time spent mixing with reagent and begins when FTI started adding dechlorination reagent to the MODEF.

Parameters for all 3 Runs:

Temperature (max. reaction temp.):	90 – 95 °C
Pressure (psi):	2 – 3 psi

Sampling Information:

				Total PCB Concentration (ppm)	
Sample	Date	Time	Moisture Content (ppm)	FTI's Lab	EPA's Lab
Feed 1	9/11/12	1020	63	1756	2609
Feed 2	9/12/12	0850	67	1843	2538
Feed 3	9/12/12	1255	2594	1690	2477
Treated 1	9/11/12	1422	NA	<1	<1
Treated 2	9/12/12	1200	NA	<1	<1
Treated 2 duplicate	9/12/12	1200	NA	<1	<1
Treated 3	9/12/12	1650	NA	<1	<1
Sludge Oil	9/13/12	1710	NA	<1	Not tested

APPENDIX V

SAMPLE THIRTY DAY NOTIFICATION FORM FOR CONDITION NO. 8

Company

Name: Florida Transformer, Inc
Address: 4509 State Highway 83 North, DeFuniak Springs, FL 32433
Contact Person Name and Phone:_____
VIN or License Plate Number of Unit: _____
Phone dedicated to the unit that the unit operator(s) have access to that goes with the unit to each site: _____

Company that Owns the Facility where the Unit Will be Operating

Name: _____
Mailing Address: _____
Contact Person Name and Phone: _____

Person, Organizational Affiliation/Title, and Phone Number for:

EPA ORCR Contact: Amy Hensley, EPA ORCR, PCB Approval Writer, 703-305-5084
EPA Regional Contact: _____
State Contact: _____
Local (Town/City/County) Contact: _____

Location Where Treatment Will Occur:

Street Address or Other Identifier for Site: _____
Facility Manager: _____
Phone Number for Facility Manager: _____
Brief Description of the Facility/Site: _____

Nature of the Disposal Activity:

Type of PCB Disposal Process: _____
Type(s) of Material Being Treated: _____
Volume of PCB-Containing Liquid Being Treated: _____
Concentration of PCBs in the Material Before Treatment: _____
Date Treatment Operations are Expected to Begin: _____
Estimated Duration of the Treatment Operations (in Days): _____

APPENDIX VI

PROCESS FOR TRANSITION FROM APPROVED MOBILE OPERATIONS TO APPROVED PERMANENT OPERATIONS

If FTI operates the PCB-1000 chemical dechlorination unit at a facility for 180 cumulative days or longer within any year, then such operations are considered permanent operations requiring a separate approval, with the following exception. FTI may, pursuant to the provisions in Condition 2 of this Appendix, request the EPA to waive the requirement to obtain a separate approval for permanent operations and, if approved, instead operate pursuant to the terms and conditions of this approval and other applicable requirements discussed in Condition 2 of this Appendix.

(1) Advance Notification and Approval Process for Transitioning From Approved Mobile Operations to Approved Permanent Operations

The following requirements are applicable only if FTI intends to operate the PCB-1000 CD unit at a site for greater than 180 cumulative days in a year, and apply irrespective of whether FTI, pursuant to the provisions in Condition 2 of this Appendix, requests the EPA to waive the requirement to obtain a separate approval for permanent operations:

a) Notification Requirements Prior to Transitioning from Approved Mobile Treatment Operations to Approved Permanent Treatment Operations

(1) If FTI operates the PCB-1000 CD unit at a facility for 180 cumulative days or longer within any year, then such operations are considered permanent operations. FTI shall provide advance written notification of their proposed intent to change to permanent operating status at least 90 days prior to the 180th cumulative day to the Director of ORCR and the EPA Regional PCB coordinator (see definition of Regional PCB coordinator).

(2) This notification shall indicate whether FTI anticipates conducting operations in more than one EPA Region after leaving the permanent operations facility. If FTI still anticipates conducting operations in more than one EPA Region after leaving the permanent operations facility, FTI shall include in the notification whether such anticipated treatment activities will use:

A. The PCB-1000 CD unit covered by this approval;
B. New PCB-1000 CD units that are identical to the unit covered by this approval; or
C. New PCB-1000 CD units that are designed differently than the unit covered by this approval.

This can impact whether the permitting authority will be EPA Headquarters (HQ) or the EPA Regional Administrator (RA) pursuant to 761.60(e), noting also that 761.60(i) gives the EPA the discretion to assign the authority to review and

approve any aspect of a disposal system to the Office of Solid Waste and Emergency Response (OSWER) in EPA HQ or to the RA.

b) Approval Requirements and Process for Transitioning from Approved Mobile Operations to Approved Permanent Operations

(1) FTI shall not operate for more than 180 cumulative days in a year at a facility without first obtaining a separate approval from the applicable EPA approval issuance authority to operate a permanently-based unit.

(2) In such situations, FTI shall submit a demonstration test plan and a demonstration test report (if required by the applicable EPA approval issuance authority), and an approval application for permanent operations to the Director of ORCR and the appropriate Regional PCB Coordinator for approval.

(3) Requirements described in Conditions (1)(b)(1) and (1)(b)(2) of this Appendix (above) do not apply if FTI operates pursuant to a waiver described in Condition 2 of this Appendix.

(2) Requirements and Process to Waive the Requirements in Condition 1(b) of this Appendix

a) Waiver Request

(1) FTI may request EPA to waive the requirements in Conditions 1(b)(1) and 1(b)(2) of this Appendix. If FTI is submitting such a request, FTI shall submit the request with the notification provided pursuant to Condition 1(a) of this Appendix or in a separate transmittal to the Director of ORCR at least 90 days prior to the 180th cumulative day operating at a particular facility.

(2) If, pursuant to Condition 2(a)(1) of this Appendix (above), FTI submits a request to the EPA to waive the requirements in Conditions 1(b)(1) and 1(b)(2) of this Appendix and also submits notice pursuant to Condition 2(a)(1) above and if the EPA has not yet made a determination on FTI's request to waive the requirements in Conditions 1(b)(1) and 1(b)(2) of this Appendix, then FTI may continue operating after the 180th cumulative day at a facility pursuant to the conditions of this approval while the EPA processes FTI's request, provided that:

A. FTI maintains and adjusts its required financial assurance coverage based on a revised cost estimate (if necessary) or based on the need to obtain a new or revised financial assurance instrument due to prolonged operations at the facility, consistent with the requirements in Condition 16; and
B. FTI submits, upon request by the EPA, elements of information described in Condition 2(e) of this Appendix.

(3) If the EPA has not yet made a determination on the waiver request as described later in Condition 2(c)(1) of this Appendix, and if FTI's operating time at the facility encompasses this approval's expiration date and FTI wants to renew this operating approval, then FTI shall, consistent with the requirements in Condition

22, submit renewal applications to both the Director of ORCR and the RA no later than 180 days prior to this approval expiration date, unless EPA directs FTI to submit the renewal applications to one and not the other.

(4) If the EPA decides, pursuant to Condition 2(b) of this Appendix below, that public notification and participation is required due to the change in operating status at the facility, the EPA may allow FTI to continue to operate while the public participation process is occurring assuming FTI is following all other applicable requirements related to operating pursuant to the waiver request.

(5) If granted, such a waiver does not release a facility from any regulatory requirements to obtain other TSCA PCB approvals (e.g., a commercial storage approval).

b) Public Participation

The EPA may require FTI to conduct public participation activities prior to making a determination on the waiver request. If the EPA notifies FTI that public participation is required, the EPA may require FTI to make relevant documents, such as updated facility evaluations and updated approval applications, available to the public. The public participation activities may include providing a public notice to the community via an established treatment facility public mailing list or an ad in a local newspaper and conducting a public meeting using procedures similar or identical to those described in 40 CFR 270.42(b)(2-5). The EPA may also, based on the level of interest or anticipated level of interest, or require FTI to, in addition to the activities discussed above, hold a public hearing using procedures similar to those described in 40 CFR sections 124.12(a)(1), (2) and (4) and 124.12(b), (c) and (d).

c) EPA Decision on a Waiver Request

(1) The EPA may:

a) Approve the waiver request and allow FTI to continue to operate pursuant to the conditions of this approval;
b) Approve the waiver request and allow FTI to continue to operate pursuant to modified conditions of this approval; or
c) Deny FTI's waiver request.

(2) If the EPA approves the waiver request and allows FTI to continue to operate pursuant to modified conditions of this approval, the EPA may allow for a transition period where FTI may operate pursuant to the conditions of this approval for a predetermined time before it becomes subject to the revised approval conditions.

d) Renewing an Approval That Allows FTI to Operate Pursuant to the Waiver Provisions

If the EPA issues FTI a waiver as described in Condition 2(c) of this Appendix and FTI anticipates continuing to operate pursuant to this waiver (and approval) after the

expiration date of this approval, FTI shall comply with the requirements of Condition 22 and may continue operating beyond the expiration date if the requirements of Condition 22 are met.

(3) Transitioning Back to Mobile Operation Status after Approved Permanent Operations Have Concluded

a) FTI shall submit a notification 45 days in advance of mobilization to both the Regional EPA Administrator and the Director of ORCR if FTI would like to resume mobile operations.

b) Prior to mobilization, FTI shall comply with any applicable closure and decontamination requirements that are specified in the waiver and the applicable operating approval.

c) The EPA may modify this approval based on information that becomes available prior to allowing FTI to transition from permanent operation status to mobile operation status. FTI may also request the EPA to modify certain approval conditions that may not be appropriate or necessary for mobile operations.

d) If FTI anticipates transitioning back to mobile operation status after the expiration date of this approval, FTI shall submit a renewal application to the EPA no later than 180 days prior to the expiration date of this approval if they wish to ensure they can operate pursuant to this approval in the event the EPA does not make a final decision on the renewal application prior to this approval's expiration date.