

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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

AUTHORITY

This approval is issued pursuant to Section 6(e)(1) of the Toxic Substances Control Act (TSCA), 15 USC § 2605(e)(1), and the federal Polychlorinated Biphenyls (PCB) regulations, 40 CFR 761.60(e).

Failure to comply with the approval conditions specified herein shall constitute a violation of §§ 761.60(e) and 761.50(a) and may also be a violation of other provisions of the PCB regulations in 40 CFR part 761. A violation of the PCB regulations is a prohibited act under Section 15 of TSCA.

SUMMARY AND FINDINGS

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 LLC (FT) 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 FT's operations and has audited and observed a demonstration of the PCB-1000 CD unit's treatment process capabilities and efficiency during the week of February 10, 2020. The EPA finds that FT's PCB-1000 CD unit, when treating MODEF containing PCBs in accordance with the conditions of this approval, provides PCB destruction equivalent to disposal in an incinerator approved under § 761.70, as required by § 761.60(e).¹ Further, the EPA finds that FT's process, when operated in

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 99.9999% of PCBs as calculated by the Destruction Removal Efficiency (DRE), or result in less than two (2) ppm PCBs, 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 "Guidance for Applicants Requesting to Treat/Dispose of PCBs Using Incineration or an Alternative Method," October 4, 2019.

accordance with this approval, will not present an unreasonable risk of injury to health or the environment.

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 (5) years after the date of signature, except as otherwise specified in Condition 23.

DRAFT

CONTENTS

Definitions and Acronyms

Conditions

Approval

Appendices

- I. Company Background
- II. Process Description
- III. Flow Diagram
- IV. Demonstration Test Results
- V. Sample 30-Day Advance Notification of Operations Form

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 printouts from a chemical instrument that has 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 FT’s PCB-1000 CD unit (e.g., information submitted to the EPA by FT 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, as well as FT’s “PCB Disposal by Non-Thermal Alternative Method Permit Application,” dated November 18, 2019.

“Approval” means the content of this document, the conditions within, and the approval application.

“Batch” means the volume of MODEF treated at one time, which must be 280 gallons or less of MODEF treated in one mixing tank.

“CD” means the process of chemical dechlorination.

“CFR” means the Code of Federal Regulations.

“Day(s)” means a calendar day(s), unless otherwise specified.

“Director of ORCR” means the Director of the Office of Resource Conservation and Recovery (ORCR), Office of Land and Emergency Management (OLEM), U.S. EPA, Washington, DC. Phone Number: 703-308-8895. Mailing address: USEPA Headquarters, 1200 Pennsylvania Avenue, N. W., OLEM/ORCR, Mail Code: 5303P, Washington, DC 20460.

“Facility” means all contiguous land and structures (such as a single manufacturing plant) at which FT’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 FT PCB-1000 CD unit disposal operations for a single customer within fifty road miles of a single facility. A job may consist of FT’s PCB-1000 CD unit disposal operations at several different facilities within fifty road miles of a single facility for a single customer.

“Lost-time injury” means an injury related to the operation of FT’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, or having the potential to significantly affect, overall PCB destruction efficiency, performance, or health or environmental impact of FT’s PCB-1000 CD unit or process.

“Mobile operations” means those operations where FT’s PCB-1000 CD unit operates at a facility for less than 60 total cumulative days in any year. Cumulative days do not have to be consecutive to count towards the 60-day limit. The 60-cumulative day compilation starts on the first day any component of FT’s PCB-1000 CD unit begins operating under this approval at the facility.

“MODEF” means mineral oil dielectric fluid.

“Operations” means the process of treating MODEF containing > 50 ppm PCBs, or < 50 ppm PCBs where the PCB concentration is less than 50 ppm as a result of dilution, including start-up (e.g., powering up, running any oil through the equipment) of FT’s PCB-1000 CD unit, preparation of PCB waste feed, and decontamination of FT’s PCB-1000 CD unit and supporting components once treatment is terminated.

“ORCR” means the Office of Resource Conservation and Recovery, within EPA Headquarters.

“PCB” means polychlorinated biphenyls as defined in § 761.3.

“PCB regulations” are the regulations at 40 CFR part 761.

“Permanent operations” means those operations where FT’s PCB-1000 CD unit operates at the FT facility in DeFuniak Springs, Florida. FT’s operations at the DeFuniak Springs facility are exempt from the 60-day mobile operations limit.

“Process waste” means wastes generated by FT’s PCB-1000 CD unit process.

“Regional EPA Administrator” means the Regional Administrator in the Region in which FT’s PCB-1000 CD unit is or will be operating.

“Regional PCB Coordinator” means the contact listed on the following website for the EPA Region in which FT’s PCB-1000 CD unit is or will be operating:
<https://www.epa.gov/pcbs/program-contacts>.

“Site” has the same definition as “Facility.”

“SDS” means material safety data sheets.

“Spill” has the same meaning as “Spill” as defined in EPA's PCB Spill Cleanup Policy in § 761.123.

“Treatment” means the phase of operation of the PCB-1000 unit when PCBs are destroyed, beginning when sodium dispersion first enters the mixing tank and ending when the oil wash is conducted in the sodium lines.

“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.

CONDITIONS OF APPROVAL

Per 40 CFR 761.60(e), this approval waives otherwise applicable requirements of §§ 761.60(a) and 761.70. This alternative disposal approval may reference additional requirements of 40 CFR part 761, but FT should not rely solely on this approval for all requirements related to PCBs or the disposal of PCB waste. In the event that the information contained in the application or other supporting documents differs from the conditions specified in this document, the conditions of this document shall govern.

(1) Feedstock Restrictions

- a) The FT PCB-1000 CD unit shall only treat MODEF.
- b) FT shall not treat MODEF containing PCBs in concentrations greater than 2,000 ppm.
 - 1) FT shall not blend or dilute MODEF which is not subject to disposal requirements in the PCB regulations with MODEF which is subject to disposal requirements in the PCB regulations. FT may dilute MODEF containing PCBs in concentrations greater than 2,000 ppm with MODEF which is subject to disposal requirements in the PCB regulations to reduce the PCB concentration of the feedstock material to meet permissible treatment levels (i.e., to levels below the appropriate maximum permissible concentration for treatment).
- c) FT 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, FT shall characterize the feedstock for PCBs (Aroclor type and concentration) using EPA Method 8082A (SW-846). The feedstock shall be sampled and

analyzed by gas chromatography in accordance with the procedures described in FT's November 18, 2019, application.

- e) Whenever feedstock (i.e., MODEF) is handled in tanks outside of the PCB-1000 CD unit 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 Conditions

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 FT's application dated November 18, 2019. See Condition 8 for the recordkeeping requirements related to the operation of the PCB-1000 CD unit.

Compliance with the parameter limits in paragraphs 2(b) and 2(e) of this condition is required at all times, irrespective of whether any parameter deviation coincides with the 3-minute recording interval in Condition 8(a)(5).

a) Treatment Unit Covered by this Approval

FT shall only conduct PCB treatment operations, under the conditions of this approval, with the following PCB-1000 CD unit. See Condition 19 on how to incorporate additional units.

Name of the Unit	Vehicle Identification Number (VIN)	License Plate
PCB-1000 Unit Trailer	1DW1A5328CS323825	8681CK (Florida)

b) Treatment Unit Shutdown

The PCB-1000 CD unit shall be shut down (i.e., stop any oil or sodium feed to the mixing tank and run clean oil through the sodium lines) if any of the following limits are exceeded for more than five (5) minutes:

- 1) A maximum temperature in the mixing tank of 208°F (98°C).
- 2) A maximum reactor pressure of 5 psi in a mixing tank.
- 3) A maximum pressure of 15 psi in tank 13, the sodium measuring cylinder.

FT shall monitor each of these parameters (e.g., by use of an alarm system) and immediately take corrective actions if any of the aforementioned limits are exceeded for any period of time. After a shutdown due to exceedance of greater than five (5) minutes of any of these limits, FT shall take additional corrective measures to prevent further exceedances before resuming operations. If shutdowns due to exceedances of any of

these conditions occur more than three (3) times within a year, FT shall follow the requirements in Condition 5. Any one (1) exceedance of any of the conditions counts towards the three (3).

FT shall also shut down the PCB-1000 CD unit upon failure of the monitoring and/or recording equipment for the parameters specified in Condition 8(a) for more than five (5) minutes. After such a shutdown is triggered, FT shall not resume treatment operations until the equipment is repaired or replaced with functional equipment.

c) Sodium

FT shall not add more than 33 L of sodium per batch of MODEF.

d) Nitrogen

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

e) Minimum Reaction Temperature

FT shall maintain a minimum temperature of 158°F (70°C) in the reactor during the reaction time.

(3) Sampling Plan and Feedstock Concentration

FT shall follow the sampling plan in its application for sampling contaminated feedstock for each job to ensure compliance with Condition 8(a) of this permit.

(4) Treatment Verification and Disposal of MODEF that Could not be Adequately Treated

a) FT 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 FT's application.

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

1) Repeat treatment of that batch of MODEF in the PCB-1000 CD unit until the PCB concentration in the MODEF is reduced to less than two (2) ppm for up to five (5) total treatment cycles of that batch (each time the oil wash is conducted in the sodium lines is considered the completion of one treatment); or

2) Dispose of that batch of MODEF in accordance with 40 CFR part 761, subpart D as if it contains the PCB concentration of the pre-treated feedstock prior to any dilution that may have occurred. FT is responsible for ensuring proper disposal (including shipment to an appropriate disposal facility) in accordance with the PCB regulations.

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

When the third batch of MODEF is disposed of because it failed to achieve the required treatment level [where failure to meet the required treatment level for an individual batch may include repeated treatment cycles described in Condition 4(b)(1)] within any year, FT shall cease operation of the PCB-1000 CD unit and shall notify the ORCR HQ contact identified in Condition 13 and the Regional PCB Coordinator by phone within three (3) business days after the third incidence of failure. FT shall also submit a written report to the ORCR HQ contact identified in Condition 13 and the Regional PCB Coordinator within seven (7) days of ceasing operation. The written report shall include information on the conditions under which the treatment failed, the likely cause(s) of the treatment failure, the final disposal location of the waste, steps being taken to improve the performance of the unit, and the estimated time before the unit is able to perform as specified in this approval. 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 HQ contact identified in Condition 13 and until FT receives approval from ORCR to resume operation of the unit via written or email correspondence.

(6) Unit Damage

Within two (2) business days of FT becoming aware of any damage to the PCB-1000 CD unit that may impact the unit's ability to operate in accordance with this approval, FT shall report the damage by phone to the ORCR HQ contact identified in Condition 13 and the PCB Regional Coordinator. Within five (5) business days of FT becoming aware of the damage, FT shall submit a written report that addresses such damage to the Director of ORCR and the PCB Regional Coordinator. The written report shall include a description of 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. The damaged PCB-1000 CD unit shall not resume operation until the unit has been repaired to the satisfaction of the ORCR HQ contact identified in Condition 13 and until FT receives approval from ORCR to resume operation of the unit via written or email correspondence. The EPA may require a performance demonstration or submittal of data and/or information before FT may resume operations to confirm that the unit has been fully repaired.

(7) Generated Process Waste Disposal and Handling Requirements

- a) FT shall dispose of non-liquid and non-aqueous liquid wastes (e.g., sludge, Fuller's earth filter media, and disposable personal protective equipment) based on the PCB concentration at the time of disposal or, if the PCB concentration is not analytically determined, as if such wastes contained the PCB concentration of the feedstock prior to any dilution that may have occurred (see 40 CFR §§ 761.50 and 761.60 for disposal options). Final disposition of such wastes must comply with all local, state, and federal requirements.
- b) FT shall dispose of aqueous liquid wastes (e.g., water from the centrifuge) based on the PCB concentration at the time of disposal or, if the PCB concentration is not analytically determined, as if such wastes contained the PCB concentration of the inputs to the equipment generating the aqueous liquid wastes (see §§ 761.50, 761.60, and 761.79 for

disposal options). Final disposition of such wastes must comply with all local, state, and federal requirements.

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

(8) Monitoring, Recordkeeping, and Reporting Requirements

- a) FT shall monitor, record, and maintain the following PCB-1000 CD unit operating parameters and information:
 - 1) Estimated quantity of MODEF treated in each treatment batch;
 - 2) Concentration of PCBs in the MODEF feedstock, including both the highest known pre-diluted PCB concentration (if applicable) as well as the actual PCB concentration, for each treatment batch;
 - 3) Amount of sodium reagent used in each treatment cycle (each time the oil wash is conducted in the sodium lines is considered the completion of one treatment) and total per batch;
 - 4) Post-treatment concentrations of PCBs in the MODEF for each treatment batch;
 - 5) Any parameters measured during operations, including, but not limited to, temperature and pressure of the reaction in the PCB-1000 CD unit, which shall be recorded every three (3) minutes during each treatment batch beginning when the first sodium dispersion enters the mixing tank from Tank 12 and ending ten (10) minutes after the peak temperature is reached;
 - 6) Any exceedance of any of the operating parameter limits in Conditions 2(b) and 2(e) irrespective of whether any parameter deviation coincides with the 3-minute recording interval in Condition 8(a)(5);
 - 7) A copy of the analytical report (including the associated gas chromatogram) to determine the final concentration of PCBs in decontamination solvent or wastewater not sent for disposal;
 - 8) Quantity of PCB wastes generated at each job, including MODEF, that could not be successfully treated to less than two (2) ppm PCBs;
 - 9) Identification of facilities used to dispose of the PCB wastes listed in Condition 4(b) and Condition 7, and the method of disposal, if applicable;
 - 10) Date, time, and duration of treatment batches;
 - 11) Name of the PCB-1000 CD unit operator and supervisor for each treated batch;

- 12) The name and address of each client whose MODEF was treated by the PCB-1000 CD unit;
 - 13) A copy of the gas chromatograms from the tests required by Conditions 1, 4, and 7;
 - 14) A summary of the total number of gallons of MODEF treated by the PCB-1000 CD unit during a given calendar year (i.e., January 1st through December 31st);
 - 15) Any and all reports required by Conditions 5, 6, and 10; and
 - 16) Documentation that FT and the facility at which FT is operating have obtained any necessary approvals, permits, and other authorizations from federal, state and local agencies.
- b) FT shall develop, compile, and maintain the records in Condition 8(a), above, in a paper log or electronically, as follows:
- 1) FT shall compile the records for treatment conducted at each facility within ten (10) days of the end of treatment at that facility (i.e., the end of a job) and keep these records in the PCB-1000 CD unit trailer or its main office in DeFuniak Springs, Florida, from the 10-day point until at least ten (10) years after the disposal/treatment date of the job;
 - 2) If records are electronic, FT shall create a paper or electronic backup of all records in a manner that would prevent them from being destroyed if the original records were destroyed; and
 - 3) FT shall make the records, paper or electronic, available for inspection by authorized representatives of the EPA, upon request.
- c) If FT initiates and completes closure of the PCB-1000 CD unit while this approval is in force, or if the approval expires, FT shall electronically submit all records from the previous ten (10) years to the Director of ORCR within 90 days of FT certifying closure of or expiration of the approval, whichever comes first.
- d) FT shall maintain annual records on the disposition of all PCB waste treated or generated by the unit and submit them annually to the Director of ORCR in compliance with 40 CFR § 761.180(a).

(9) Advance Notification of Operations

a) 30-Day Advance Notification of Operations

FT shall, at least 30 days prior to operating its PCB-1000 CD unit at a facility other than FT's DeFuniak Springs, Florida, facility, send a 30-day advance notification of operations, including the information specified in Condition 9(b), to the ORCR HQ contact identified in Condition 13, and to the appropriate EPA Regional PCB Coordinator, state environmental agency, and local government environmental entities (if

applicable) based on the location where operations will occur. An example template for a 30-day advance notification of operations is included in Appendix V.

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

The following information shall be included in the 30-day advance notification of operations discussed in Condition 9(a), which applies only to jobs taking place outside FT's DeFuniak Springs, Florida, facility. The information specified in Conditions 9(b)(1) and 9(b)(2) will be available to the public and may be used to schedule EPA inspections and facilitate oversight of operations.

- 1) *FT Contact*: facility name, mailing address, contact person name, email address, and phone number, and the number to a phone that is dedicated to the FT operations at the customer facility.
- 2) *Treatment Plan*: Date and location where the disposal/treatment will occur, including street address, a brief description of the facility/site, the date the operations are scheduled to begin, and the estimated duration (in days) of the operations.
- 3) *Customer Facility Contact*: Company name, mailing address, and name/phone number of a contact person of the company that owns the facility.
- 4) *Regulatory Contacts*: Names, titles, and phone numbers for the EPA ORCR contact, EPA Regional contact, state agency contact, and local agency contact.
- 5) *Description of operations*: Description of the nature of the operations to be conducted at the facility, including the type of disposal/treatment process, estimates of the amount of MODEF to be treated, and estimates of PCB concentration in the MODEF before treatment. These estimates shall be based on analytical data provided by the customer and/or analytical data from FT.

c) Changes to 30-Day Advance Notifications of Operations

- 1) If FT wishes to operate its PCB-1000 CD unit at a facility other than the facility identified in the submitted 30-day advance notification of operations or change the scheduled start date to an earlier date, FT shall submit a new 30-day advance notification of operations to the regulatory contacts listed in Condition 9(b)(4) (which may differ from those notified by the original 30-day advance notification of operations). FT shall also notify the regulatory contacts to whom the original 30-day advance notification of operations was submitted of the date or location change. In such circumstances, FT shall not initiate activities earlier than 30 days after submitting the new 30-day advance notification of operations.
- 2) If the information submitted in the original 30-day advance notification of operations changes in a manner not described by Condition 9(c)(1), FT shall immediately send an email to the regulatory contacts listed in Condition 9(b)(4) that describes the change(s) to the original 30-day advance notification of

operations. FT may proceed with treatment as planned after they have submitted the change(s).

d) Additional Notifications

In addition to the 30-day advance notification of operations prescribed in Condition 9(a) of this approval, FT shall provide three types of additional notifications prior to operating its PCB-1000 CD unit at a facility other than FT's DeFuniak Springs, Florida, facility:

- 1) FT shall provide the following information to local fire departments, state emergency response committee (SERC),² and local emergency planning committee (LEPC)³ and other applicable local emergency response authorities prior to operating its PCB-1000 CD unit in the jurisdiction where FT intends to operate.
 - A. The 30-day advance notification of operations described in Condition 9(a).
 - B. 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 any other chemicals (e.g., nitrogen gas), as applicable;
 - C. The approximate quantities of principal chemicals in the treatment unit, and/or to be treated in the treatment unit; and
 - D. General location of where the FT PCB-1000 CD unit will be at the facility.
- 2) FT shall provide a public notice of intent to operate. This 30-day advance written notification of intent to operate shall be posted in a location where the community located nearest the facility will likely see it (for example, the local newspaper, news website). However, when the PCB-1000 CD unit will operate at the same location multiple times during the same year, FT may provide the 30-day advance notification of intent to operate required under this condition on an annual basis, provided the information included in the original notice has not significantly changed. This notification shall include the following information:
 - A. Contact information for an FT representative;
 - B. Contact information for a customer facility representative;
 - C. General location of where the FT PCB-1000 CD unit will be situated at the facility;
 - D. Brief description of the type of waste being treated;
 - E. Brief description of the treatment process;

² <https://www.epa.gov/epcra/state-emergency-response-commissions-contacts>

³ <https://www.epa.gov/epcra/local-emergency-planning-committees>

- F. Anticipated dates of operation at the facility; and
 - G. Link to EPA or FT website where this approval document and the 30-day advance notifications of operations are posted.
- 3) Before treating MODEF in the PCB-1000 CD unit, FT shall either post this approval document prominently (or provide a link) on its website where visitors would reasonably expect to see announcements on environmental projects, or link to the EPA website where this approval document is posted. Also, FT shall either post (or provide a link to) the 30-day advance notifications of operations specified in Condition 9(a) on the same web page as the approval, or link to the EPA website where these notifications are posted. Both the approval and the 30-day advance notifications of operations shall remain posted until 60 days after:
- A. This approval is terminated and permanent closure has been completed in accordance with Condition 17(d);
 - B. This approval expires, provided FT has not followed the procedures described in Condition 23 to allow the approval to continue in force; or
 - C. The unit is closed in accordance with Condition 17(d).

(10) PCB Spills

In the event FT believes, or has reason to believe, that a spill (as defined in EPA's PCB Spill Cleanup Policy in § 761.123) of PCBs has, or may have, occurred from any activities or devices related to FT's operations:

- a) FT shall notify the Regional PCB Coordinator and the ORCR HQ contact identified in Condition 13 by phone immediately after initial response actions have been taken to ensure the protection of human health and the environment. FT shall control and clean up any spills of PCBs or other fluids as provided in the Spill Prevention, Control and Countermeasure Plan provided in FT's application.
- b) FT shall submit a written report to the appropriate Regional PCB Coordinator and the Director of ORCR no later than 15 business days after the spill occurred that describes the: 1) spill; 2) known or suspected cause(s) of the spill; 3) operations that were being conducted prior to, and during, the spill; 4) cleanup actions conducted; and 5) changes in operations that FT implemented to prevent such spills from occurring in the future.
- c) FT shall also report PCB spills in accordance with applicable federal, state, and local requirements.

(11) Health and Safety

- a) FT shall maintain and operate its PCB-1000 CD unit in a way that minimizes the possibility of a fire, explosion, or any unauthorized release of PCBs and minimize the consequences of any release that may occur.

- b) FT shall take all necessary precautionary measures to ensure the operation of the PCB-1000 CD unit follows applicable health and safety standards, as required by this approval and other applicable federal, state, and local requirements.
- c) By the end of the business day during which it occurred, FT shall report by phone to the Regional PCB Coordinator and the ORCR HQ contact identified in Condition 13 an incident that resulted in any lost-time injury occurring as a result of FT's PCB-1000 CD unit equipment or operations. FT shall submit a written report describing the incident to the Director of ORCR within five (5) business days of the incident.
- d) At all times, FT personnel operating the PCB-1000 CD unit shall have a device such as a telephone (immediately available at the scene of operations) or a hand-held two-way radio capable of summoning emergency assistance from local fire departments, police departments, or state or local emergency response teams.
- e) At least once a year, FT shall test and maintain (to the extent necessary to assure its proper operation in a time of emergency) all unit and/or facility communications or alarm systems, fire protection equipment, and spill control equipment.
- f) Site-Specific Safety Plan
 - 1) Before treating any MODEF, FT shall develop and maintain at the facility a site-specific safety plan for the activities covered by this approval. FT shall also provide a copy of the site-specific safety plan to the emergency coordinator of the customer facility where it intends to operate prior to FT's PCB-1000 CD unit arriving at the facility. FT shall notify the facility where it will operate of the possible fire hazards associated with using FT's PCB-1000 CD unit. At a minimum, FT shall include the following site-specific information in each site-specific safety plan:
 - A. Scope of work, including a description of the treatment process, and maximum volume of MODEF that might be found at any given time within FT's PCB-1000 CD unit or in directly associated storage containers;
 - B. 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);
 - C. Emergency contact information, including local authorities (e.g., local fire and police departments) and nearest medical building that would accept patients contaminated with chemicals;
 - D. Hazard identification (e.g., potential for sodium reactions/fires) and control/mitigation measures;
 - E. Names of all chemicals used at the facility by FT in its PCB-1000 CD unit along with approximate quantities, location within the unit, and the corresponding SDSs;

F. Emergency action plan(s) specifying the following:

- i. Name(s) and contact information for FT personnel responsible for unit operation and customer facility personnel responsible for oversight of FT's operations at the facility, and the persons responsible for handling emergencies (with 24-hour per day contact in the event of an emergency), including both office and home phone numbers and email addresses. This list must be kept up to date. Where more than one person is listed, one must be named as primary emergency coordinator and others must be listed in the order in which they will assume responsibility as alternates;
 - ii. Evacuation plan(s);
 - iii. Response procedures for reasonable emergency scenarios;
 - iv. First aid location(s);
 - v. Eye-wash station location(s);
 - vi. Fire extinguisher and any other fire-fighting equipment location(s);
 - vii. Location of SDSs;
 - viii. Flammable storage area(s); and
 - ix. Smoking/non-smoking areas.
- 2) FT shall submit a copy of any site-specific safety plan to the ORCR HQ contact identified in Condition 13 or the applicable EPA Regional office, upon request.
 - 3) FT shall immediately revise the site-specific safety plan if any of the relevant information in this approval or the safety plan changes.

g) Emergency Coordinator

FT shall, at all times, have at least one designated employee either at the operating site premises or on call (i.e., available to respond to an emergency by reaching the operating site within 30 minutes) with the responsibility for coordinating all emergency response measures. This emergency coordinator shall be thoroughly familiar with all aspects of the site-specific safety plan, operations and activities at the site, the location and characteristics of waste handled, and the facility layout, including the hazards associated with the facility location where the PCB-1000 CD unit is operated.

h) Emergency Procedures

- 1) Whenever there is an imminent or actual release of PCBs, or an incident that results or may result in injury to health or the environment, for example from fire,

spill, or explosion, the FT emergency coordinator (or his/her designee when the emergency coordinator is on call) shall immediately:

- A. Activate internal facility alarms or communication systems, where applicable, to notify all facility personnel;
 - B. Notify appropriate federal, state and/or local emergency response entities (e.g., fire departments) if their help is needed; and
 - C. Use the Emergency Action Plan described in Condition 11(f)(1)(F) as a resource to expedite the emergency coordinator's response.
- 2) Whenever there is an imminent or actual release of PCBs, or an incident that results or may result in injury to health or the environment, for example, from fire, spill, or explosion, the emergency coordinator shall as soon as practical identify the character, exact source, amount, and real extent of any released materials. The emergency coordinator shall also assess possible hazards to health or the environment that may result from the release or emergency incident. This assessment shall consider both direct and indirect effects of the release or emergency incident (e.g., the effects of any toxic, irritating, or asphyxiating gases that are generated, or the effects of any PCB surface water run-off from water or chemical agents used to control fire and heat-induced explosions).
- 3) If the emergency coordinator determines that the PCB-1000 CD unit has had a release of PCBs or emergency incident which presents or may pose an unreasonable risk of injury to health or the environment outside the site or facility, he/she shall report the findings as follows:
- A. If the assessment indicates that evacuation of local areas may be advisable, the emergency coordinator shall immediately notify appropriate local authorities; and
 - B. The emergency coordinator shall immediately notify either the government official designated as the on-scene coordinator for that geographical area, or the National Response Center (using their 24-hour toll free number 1-800-424-8802). The notification must include:
 - i. Name and telephone number of the reporter;
 - ii. Name and address of facility;
 - iii. Time and type of incident (e.g., release, fire);
 - iv. Name and quantity of material(s) involved, to the extent known;
 - v. The extent of injuries, if any; and
 - vi. The possible hazards to human health, or the environment, outside the facility.

- 4) During an emergency, FT's emergency coordinator shall coordinate with the customer facility's emergency coordinator and take all reasonable measures necessary to ensure that releases or emergency incidents do not recur or spread to other areas at the operating site. These measures must include, where applicable and when possible, safely shutting down the CD treatment unit, collecting and containing released waste, removing or isolating containers and equipment, and other measures that can be implemented to protect health and the environment.
 - 5) FT's emergency coordinator shall coordinate with the customer facility's emergency coordinator to assess if any facility operations/processes need to be suspended or if any immediate measures should be taken to minimize the risk of injury (e.g., from the release of toxics or the spread of fire) that could occur due to the nature of facility operations and chemicals/products stored at the facility.
 - 6) Immediately after a release or emergency incident has been contained, FT shall provide for treating, storing, or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a release or emergency incident at the facility.
 - 7) FT shall notify the Regional PCB Coordinator and the ORCR HQ contact identified in Condition 13 of the release or emergency incident by phone immediately after initial response actions have been taken to ensure the protection of health and the environment.
 - 8) FT shall submit a written report to the appropriate EPA Regional PCB Coordinator, ORCR HQ contact identified in Condition 13, and the Director of ORCR no later than 15 business days after the PCB release or emergency incident occurred that describes the: a) release or incident; b) cause(s) of the release or incident, c) operations that were being conducted prior to, and during, the release or emergency; d) cleanup actions conducted; and e) changes in operations that FT implemented or will implement to prevent such releases or incidents from occurring in the future.
 - 9) FT shall not feed any MODEF into the PCB-1000 CD unit until the cause of the PCB release or emergency incident has been determined and corrected to the satisfaction of the EPA. FT shall not resume PCB treatment operations until written or emailed approval to resume operations is received from the ORCR HQ contact identified in Condition 13.
 - 10) FT shall also report any releases of PCBs or emergency incidents in accordance with applicable federal, state, and local requirements.
- i) Fire Suppression System

If operating indoors, FT shall locate and operate its PCB-1000 CD unit only at a facility that has adequate fire suppression capabilities (e.g., sprinkler, standpipe or other specialized system). Separate and distinct fire suppression systems may be necessary based on the location of FT'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 FT to evaluate whether the fire suppression system is appropriate to address the specific hazards based on chemical compatibility, the design and location of FT's PCB-1000 CD unit at the facility, and the materials that may be stored at the facility. FT also shall only operate in a building that complies with applicable federal, state, and/or local fire suppression requirements.

j) Fire Detection System

If operating indoors, FT 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. FT'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 for all indoor and outdoor operations.

k) Fire Fighting Equipment

FT shall maintain and clearly label fire extinguishers and other firefighting equipment that are capable of suppressing 1) fires that may be associated with materials treated by the PCB-1000 CD unit and 2) fires that may be associated with materials used by the PCB-1000 CD unit (e.g., sodium reagent). Labeling shall be based on the compatibility of the extinguisher or equipment with the fire hazard and shall be available at the PCB-1000 CD unit and within 25 feet of all high temperature activities and operations. Multiple types of fire extinguishers and firefighting equipment may be necessary to address different fire hazards posed by FT'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 the fire extinguisher is fully charged,
- 3) Pin with security seal, and
- 4) Instructions on how to use.

l) Mobile Unit Placement

The PCB-1000 CD unit shall be placed at a location where operations will not pose unreasonable risk of injury to health or the environment. When not operating at FT's facility in DeFuniak Springs, Florida, the PCB-1000 CD unit shall be located at least 20 feet away from any storage area for flammable or combustible materials or the minimum distance necessary to prevent releases and emergency incidents, whichever is greater. The PCB-1000 CD unit shall not be located next to a sensitive ecosystem if the treatment unit is operated outdoors.

m) Required Aisle Space

FT shall not locate or operate the PCB-1000 CD unit and associated equipment and storage containers, in an area that does not allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and disposal/treatment equipment operation in an emergency.

n) Sodium Preparation System

When not operating at FT's facility in DeFuniak Springs, Florida, FT shall adequately maintain and locate the sodium storage containers at a safe distance from, but no less than 10 feet from, any flammable or combustible materials (e.g., mineral oils, oily rags) and no less than 20 feet away from any storage area for flammable or combustible materials (e.g., flammable liquid storage tanks or drums). Flammable or combustible materials shall not be stored in the sodium storage room at the DeFuniak Springs, Florida, facility or inside the sodium dispersion area in the back of FT's PCB-1000 CD unit. While the sodium preparation unit is in operation, FT personnel shall be on site monitoring the unit from within 30 feet at all times.

o) Start-up Phase Inspection

During the start-up phase of a treatment batch, FT shall visually inspect the PCB-1000 CD unit for leaking or dripping connections. If any are identified, FT shall perform the appropriate maintenance procedures (e.g., tighten connections, replace gaskets, packings, or any other type of mechanical seal) before the unit is put online in the treatment phase for processing. PCB waste shall not be fed for treatment until the system exhibits no leaks and is operating pursuant to the operating requirements included in this approval.

(12) Security

FT 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 FT's PCB-1000 CD unit regardless of whether the unit is operating.

(13) 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., Mail Code: 5301P, Washington, D.C. 20460. For electronic submission to the Director of ORCR or ORCR HQ contact, FT shall email the information to ORCRPCBs@epa.gov. Wherever practical, email is preferable to phone and mail communication, except where otherwise specified.

Phone numbers for the EPA Regional PCB Coordinators can be found on the following website: <https://www.epa.gov/pcbs/program-contacts>. The ORCR HQ contact is Karen Swetland-Johnson, 703-308-8421 or ORCRPCBs@epa.gov.

(14) Agency Approvals, Permits, and Other Authorizations

Operation of FT's PCB-1000 CD unit may not commence until FT has obtained all required approvals, permits, and other authorizations from federal, state, and local agencies. FT is responsible for obtaining such approvals, permits, and other authorizations. FT shall not

operate the PCB-1000 CD unit at a customer facility unless the facility has been granted any necessary approvals, permits, and other authorizations. Once FT has verified that both it and the customer facility (as applicable) have been issued all required approvals, permits, and other authorizations, FT shall document that verification in its operating records, as described in Condition 8.

(15) Personnel Training

- a) FT shall ensure that the personnel directly involved with the operation of the PCB-1000 CD unit are familiar with the requirements of this approval. In this regard, FT shall keep copies of the following documents with the PCB-1000 CD unit, or in FT's main office when operating in its DeFuniak Springs, Florida, facility, at all times:
 - 1) This approval;
 - 2) FT's application;
 - 3) FT's Spill Prevention, Control and Countermeasure Plan; and
 - 4) FT's sampling and analytical procedures.
- b) FT shall also maintain a copy of the sampling and analytical procedures in the laboratory conducting the analyses.
- c) At a minimum, FT shall train personnel on the following:
 - 1) The type of fluid which may be treated using FT's PCB-1000 CD unit (i.e., MODEF), and the upper PCB concentration limits for the fluids which may be treated;
 - 2) The recordkeeping, notification, and reporting requirements identified in Condition 8 and required by this approval, and the location of records and retention times;
 - 3) The handling and/or disposal requirements for process waste and other materials generated during the operation of FT's PCB-1000 CD unit;
 - 4) The safety, operating, and maintenance procedures for the PCB-1000 CD unit, with an emphasis on the safe handling and use of the sodium reagent to prevent harmful sodium reactions;
 - 5) The procedures for using, inspecting, repairing, and replacing FT's (and the customer facility's, if applicable) equipment, including emergency and monitoring equipment, with an emphasis on the fire suppression equipment; and
 - 6) FT's Spill Prevention, Control and Countermeasure Plan.

(16) Waste and Equipment Transport Between Job Sites

FT shall not transport untreated PCB fluids or contaminated material offsite in FT's PCB-1000 CD unit. FT shall comply with any applicable U.S. Department of Transportation (US DOT) requirements in 49 CFR part 172 when transporting PCB-contaminated equipment (e.g., reactors, tanks) off site in the unit. FT shall comply with applicable marking requirements for PCB containers in § 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, and treating the spent solvent in accordance with Condition 7; or
- b) Flushing all hoses and pipes at least two times with MODEF containing PCBs in concentrations less than 50 ppm into the reactor of FT's PCB-1000 CD unit and treating the flushed MODEF in the reactor in accordance with Condition 7.

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

a) Closure Cost Estimate and Plan

- 1) Prior to issuance of this approval, FT submitted to ORCR a written closure plan and closure cost estimate that identified the steps and quantified the estimated costs for the activities FT shall conduct to permanently close the PCB-1000 CD unit. The provisions of § 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 FT to adjust the closure plan or closure cost estimate to ensure there will be no unreasonable risk of injury to health or the environment.

b) Financial Assurance

- 1) FT shall establish or maintain financial assurance sufficient to meet or exceed the closure cost estimate submitted in FT's November 2019 application and submit documentation of such financial assurance to the Director of ORCR 60 days prior to commencing operations under this approval. Within 60 days of receiving that documentation, the Director of ORCR will respond, in writing, approving or disapproving of the financial assurance. If the Director of ORCR does not respond within 60 days, FT may assume that the financial assurance is complete and acceptable and proceed with their operations. FT shall apply the financial assurance requirements in § 761.65(g) for commercial storage facilities to its PCB-1000 CD unit and comply with such requirements. FT shall not operate its PCB-1000 CD unit without the necessary financial assurance. Section 761.65(g) references the financial assurance mechanisms specified in 40 CFR part 264 subpart H under the Resource Conservation and Recovery Act (RCRA). FT may choose any of these financial assurance mechanisms or a combination of mechanisms provided for in the regulations. The EPA may require variations in the wording of the instruments from that found at § 264.151. FT shall maintain financial assurance until closure activities have been completed.

- 2) FT 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) as required in § 264.143, which is incorporated by reference in § 761.65(g).
- 3) FT shall also establish 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, FT's PCB-1000 CD unit operations and submit documentation of such financial assurance to the Director of ORCR at least 60 days prior to commencing operations. Within 60 days of receiving that documentation, the Director of ORCR will respond, in writing, approving or disapproving of the financial assurance. If the Director of ORCR does not respond within 60 days, FT may assume that the financial assurance is complete and acceptable and proceed with their operations. FT shall comply with the RCRA regulations that address third-party financial assurance liability requirements (i.e., § 264.147).

c) Changes to the Closure Plan, Closure Cost Estimate, or Financial Assurance Mechanisms

If FT wishes to change the closure plan, closure cost estimate, or financial assurance mechanisms due to factors other than inflation, FT may submit an adjusted plan, cost estimate, or financial assurance mechanism (as applicable) to the ORCR HQ contact identified in Condition 13. The EPA will review the proposed change(s) and may require FT 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 23 will be treated as evidence of intent to close FT's PCB-1000 CD unit. If FT does not submit a request for renewal before the time specified in Condition 23, FT shall initiate closure procedures within 60 days of the expiration date of this approval.
- 2) In the event that FT expects to cease operation permanently or for the remaining duration of the approval, FT shall notify the Director of ORCR, in writing, at least 60 days prior to the date on which final closure of its PCB-1000 CD unit is expected to begin (see § 761.65(e)(6)(i)).
- 3) During the closure activity period, FT shall dispose of all contaminated system component equipment in accordance with the disposal requirements of 40 CFR part 761 subpart D or decontaminate the equipment in accordance with § 761.79.
- 4) Within 60 days of completion of closure of FT's PCB-1000 CD unit, FT 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) FT shall submit records to the Director of ORCR within 90 days of concluding closure as required in Condition 8(c).

(18) Ownership Transfer

- a) If FT intends to transfer ownership of FT's PCB-1000 CD unit, and the transferee intends to operate the PCB-1000 CD unit under the same or similar terms as this approval, FT shall notify the Director of ORCR, in writing, of the intended transfer at least 90 days prior to the intended transfer date. FT shall include in the notification a notarized affidavit signed by the transferee that states the transferee is seeking an approval to operate the PCB-1000 CD unit. Failure of FT to provide the EPA with this required written documentation of the transfer within the specified time frame shall be a violation of this approval resulting in its immediate termination upon the transfer of ownership.
- b) After receiving notification, the EPA may:
 - 1) Issue an amended approval substituting the transferee's name for FT's name;
 - 2) Require the transferee to conduct a demonstration test and/or apply for a new PCB disposal approval by submitting either a complete application 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 PCB-1000 CD unit, the transferee shall establish financial assurance for closure compliant with Condition 17 and submit it to the ORCR HQ contact before the approval will be amended to transfer ownership. The transferee shall 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 § 264.151. The financial assurance mechanism shall 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 PCB-1000 CD unit unless the EPA either has amended this approval to allow for such operation or has issued a new approval to the transferee.

(19) Additional Unit(s)

- a) FT shall only conduct operations, under the conditions of this approval, with the PCB-1000 CD unit covered by this approval. FT shall not conduct PCB treatment operations in other PCB-1000 CD unit(s) not covered by this approval unless and until FT submits a request to the Director of ORCR to modify this approval (i.e., to add the new PCB-1000 CD unit(s) to this approval) and FT receives approval from the Director of ORCR. The EPA may require FT to conduct a demonstration test prior to receiving approval to conduct treatment operations in the new PCB-1000 CD unit(s).

- b) Requests under Condition 19(a) to modify this approval shall include a written pre-operation report containing, at a minimum, the following information:
- 1) Date(s) of manufacture of the new PCB-1000 CD unit(s);
 - 2) Identification and/or serial number(s) of the new PCB-1000 CD unit(s);
 - 3) Certification by both an independent, registered professional engineer and the Chief Executive Officer of FT that the new PCB-1000 CD unit(s) is substantially identical to the original demonstrated in terms of engineering design, hardware, process capacity, quality, and workmanship; and
 - 4) A list of all non-substantive changes made to the design and construction of the new PCB-1000 CD unit(s) 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 19(b)(3) above).
- c) The EPA, at its discretion, may:
- 1) Request additional information about the new PCB-1000 CD unit(s);
 - 2) Require FT 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 19(a) and (b) and determine demonstration testing is not required to add the new PCB-1000 CD unit(s) to the approval; and/or
 - 4) Deny FT's approval modification request to add the new PCB-1000 CD unit(s) to this approval because the EPA, based on available data and information, concludes the new PCB-1000 CD unit(s) is not capable of, or has not demonstrated the capability of, achieving the required performance standards and operating in a manner that does not pose unreasonable risk of injury to health and the environment.

(20) Process/Equipment Modifications

FT shall not make major modifications (e.g., changes of engineering design, ancillary hardware, or process capacity) to its PCB-1000 CD unit or operate outside of the feedstock and operating parameters in Conditions 1 and 2 of this approval prior to receiving written approval from the Director of ORCR to implement such major modifications. If FT intends to make such major modifications, FT shall submit an approval modification request to the Director of ORCR. The Director of ORCR may, depending on the nature of the major modification request, require FT 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 pose unreasonable risk of injury to health and the environment.

In such cases, FT shall submit a demonstration test plan to the Director of ORCR in writing at least 90 days in advance of a proposed demonstration test. FT 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 FT is successful in demonstrating to the EPA that the PCB-1000 CD unit is capable of providing PCB destruction equivalent to disposal in an incinerator approved under § 761.70 and will not present an unreasonable risk of injury to health or the environment when operating under modified operating parameters, safety requirements, or other changes to the conditions of this approval, the EPA may amend this approval accordingly. FT shall treat any PCBs during the demonstration test to less than two (2) ppm total PCBs for the demonstration test to be considered successful. A minimum of three (3) 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.

(21) Unit Operators

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

(22) Approval Expiration Date

This approval shall become effective upon signature of the Director of ORCR and expire five (5) years from the date the approval becomes effective, except as otherwise specified in Condition 23.

(23) Approval Continuation and Renewal

If FT intends to continue to operate beyond the expiration date of this approval, FT shall submit a complete operating approval renewal application to the Director of ORCR at least 365 days prior to the expiration date of this approval. Upon submission of a complete approval renewal application, the EPA will inform FT if a demonstration test plan will be required. The demonstration test plan shall be submitted at least 274 days (9 months) prior to the expiration date of this approval. If FT submits the approval renewal application to the EPA at least 365 days prior to the expiration date of this approval, this approval continues in force (i.e., does not expire) until the EPA issues an approval renewal, a conditional approval renewal, or a denial. FT shall not be allowed to operate under revised operating conditions in an approval renewal application until the EPA issues FT a fully renewed, and revised, approval. If FT does not submit a complete approval renewal application and, if required, a complete demonstration test plan to the EPA at least 365 days and 274 days prior to the expiration date of this approval, respectively, this approval will expire as specified in Condition 22.

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, updated safety protocols, and revised operating and testing procedures. For example, if FT is seeking approval to treat another type of PCB material or MODEF containing concentrations of PCBs greater than 2,000 ppm, the approval application and demonstration test plan shall reflect those changes.

The EPA may require FT to conduct another demonstration test to assure the EPA that FT will continue to operate its PCB-1000 CD unit in accordance with the applicable performance standards and in a manner that does not pose an unreasonable risk of injury to health or the environment. As a result, FT is encouraged to contact the ORCR HQ contact identified in Condition 13 in advance of 365 days prior to the expiration date of this approval to ascertain whether the EPA would require FT to conduct a new demonstration test. This is especially important if FT intends to make changes to its operating parameters.

(24) Mobile and Permanent Operation

This approval allows FT to operate the PCB-1000 CD unit nationwide as a mobile unit and at the FT facility in DeFuniak Springs, Florida, as a permanent unit. FT shall not operate the PCB-1000 CD unit at a customer facility for more than 60 cumulative days within any year (any 365-day period). FT may request that the EPA extend the 60-day limit once per year. FT shall submit such a request to the Director of ORCR at least seven (7) calendar days prior to the 60th cumulative operating day. FT may not operate past the 60th cumulative operating day at a given site without receiving EPA's prior approval. Except as provided in Conditions 22 and 23, EPA imposes no limitation on the number of operating days at the FT facility in DeFuniak Springs, Florida.

DECISION TO APPROVE FT'S REQUEST TO CONDUCT PCB TREATMENT
OPERATIONS

1. Approval to dispose of PCBs in the PCB-1000 CD unit identified in Condition 2(a) is hereby granted to Florida Transformer LLC (FT), of DeFuniak Springs, Florida, subject to the conditions of this approval and consistent with the materials and data included in the application and demonstration test plan and report submitted to the EPA by FT.
2. EPA finds that the FT PCB-1000 CD unit covered by this approval provides PCB destruction equivalent to disposal in an incinerator approved under 40 CFR 761.70. EPA further finds that, as reflected in the performance test results and as a result of the design aspects of the treatment system and the operating parameters and safety requirements included in this approval, operations of the PCB-1000 CD unit covered by this approval will not present an unreasonable risk of injury to health or the environment when operated in accordance with applicable regulations and the conditions of this approval.
3. The EPA reserves the right to impose additional conditions or revoke this approval when it has reason to believe that FT's PCB-1000 CD unit is not achieving the relevant performance standards and/or presents or may present an unreasonable risk of injury to health or the environment; new information requires changes; and/or the EPA issues new regulations or standards that impact conditions of this approval.
4. The EPA will make reasonable efforts, taking into account the nature of the risk, to provide reasonable advance notice to FT and to provide the opportunity for FT to comment on any modifications or termination of the approval. The EPA may require FT to immediately suspend operations while the EPA is deciding whether to impose approval modifications or to terminate this approval.
5. 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.
6. FT 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 operations, including operating or moving the equipment.
7. FT shall assume full responsibility for compliance with this approval and all federal, state and local requirements that apply to FT's operation of the PCB-1000 CD unit, including, but not limited to, any malfunction, spill, pollutant release, incident, or other reporting requirements.
8. The EPA reserves the right for its employees or agents to inspect FT's PCB treatment/disposal activities at any location at any reasonable time.
9. Violations of any applicable regulations or conditions of this approval may be subject to enforcement action and may result in termination of this approval. 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 part 761. A violation of the PCB regulations is a prohibited act under Section 15 of TSCA.

[DRAFT FOR PUBLIC COMMENT]

Date

Gregory Sullivan, Acting Deputy Director
Office of Resource Conservation and Recovery

DRAFT

APPENDIX I

COMPANY BACKGROUND

Florida Transformer LLC (FT) primarily services, repairs, and decommissions power distribution equipment for 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), in addition to entities nationwide via FT's mobile PCB treatment services. On April 22, 2015, EPA Headquarters issued a § 761.60(e) approval to FT to destroy PCBs in MODEF using their PCB-1000 CD unit. The dechlorination process was approved at that time to destroy PCBs in MODEF that had PCB concentrations as high as 2,000 ppm. On September 26, 2017, EPA Region 4 issued a § 761.65(d) PCB commercial storage approval to FT for its DeFuniak Springs, Florida, facility, that allows FT to store PCB waste.

On November 18, 2019, FT submitted a renewal application to EPA, requesting that EPA renew their § 761.60(e) disposal approval and to increase the number of allowable operating days at their DeFuniak Springs, Florida, facility. In the 2015 approval, FT was limited to operating the unit for 180 days or less per 365-day period. EPA chose instead to include conditions in the renewed approval for permanent operations at the DeFuniak Springs, Florida, facility in addition to the conditions for mobile operations. EPA observed a demonstration of the PCB-1000 CD unit at the DeFuniak Springs facility and collected split samples of the waste feed and the treated MODEF during the week of February 10, 2020. Results of the analysis from the demonstration, which are summarized in Appendix IV of this approval, indicated that the PCB-1000 CD unit destroyed PCBs to levels below two (2) ppm.

APPENDIX II

PROCESS DESCRIPTION AND FINDINGS

Process Description:

The PCB-1000 CD unit converts used MODEF with PCB concentrations of 2 – 2000 ppm into MODEF with nondetectable (< 2 ppm) levels of PCB concentration. Used MODEF which is subject to disposal requirements in the PCB regulations, is transferred from the power distribution equipment into five aboveground storage tanks as it is received. When the PCB storage tanks reach capacity and tanker load volume has been met, the Mobile Unit Supervisor and PCB Area Supervisor coordinate the transfer of used MODEF to the PCB-1000 CD unit. There are no other preparation steps for the MODEF before it is treated in the unit.

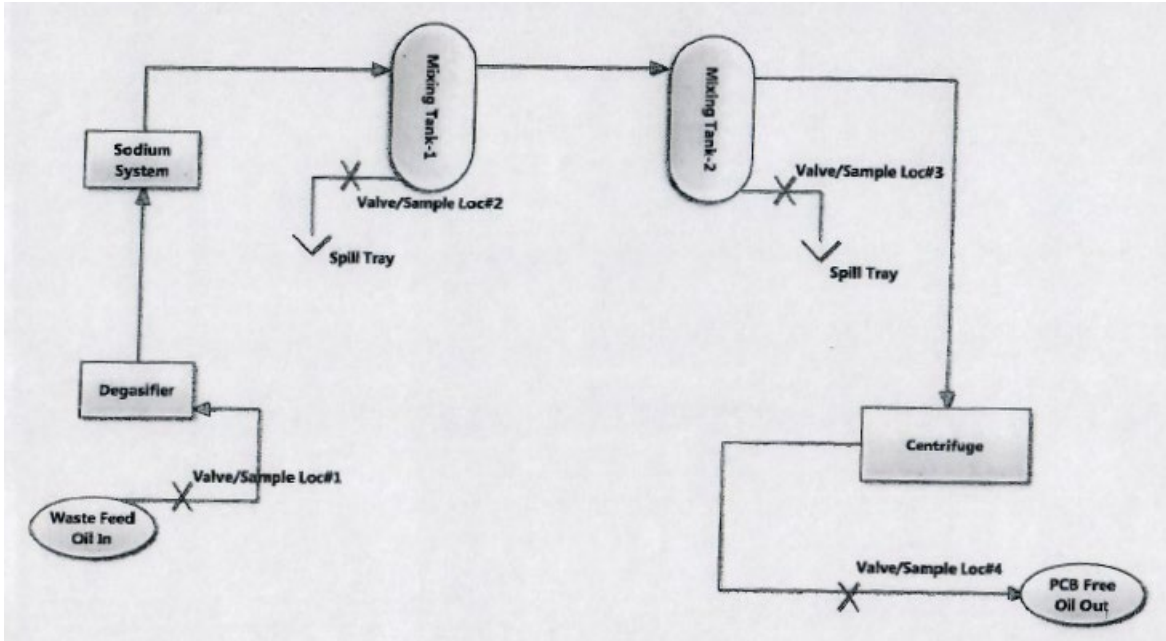
The PCB-1000 CD unit can be divided into five separate components: degasifier, sodium preparation system, mixing tanks, centrifuge, and nitrogen purge system. Generally, used MODEF feedstock is transferred from a bulk tank to the PCB-1000 CD unit, where it is first passed through a degasifier and heater 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 reagent dispersion is added to the oil while continuously being agitated to achieve proper mixing 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. The treated MODEF is then transferred to approved processing facilities for further recycling.

Demonstration Findings:

In February 2019, representatives of ORCR and EPA Region 4 witnessed a performance test demonstration conducted by FT in DeFuniak Springs, Florida, that utilized a chemical dechlorination system to treat PCBs in MODEF. Pursuant to FT's April 22, 2015, approval and the demonstration test plan submitted to EPA on November 18, 2019, FT demonstrated that FT can operate the PCB-1000 CD unit to adequately treat PCBs in MODEF having concentrations as high as 2,510 ppm total PCBs to less than 2 ppm PCBs, i.e., the level of performance equivalent to an incinerator approved under § 761.70. The first run of the demonstration test did not successfully treat the PCBs, as a blockage prevented the sodium dispersion from reaching the mixing tank. After the blockage was removed, the PCB-1000 CD unit successfully treated PCB-contaminated MODEF in three consecutive performance test runs.

APPENDIX III
FLOW DIAGRAM



DRAFT

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	Reaction Time
1	27.5	2/11/20	11:18am	3:46pm	4.46 hours
2	20	2/12/20	10:36am	11:26am	0.83 hours
3	31	2/12/20	2:58pm	2/13 8:46am	17.83 hours
4	20	2/13/20	11:25am	12:15pm	0.83 hours

Reaction time is the time spent mixing with reagent and begins when FT started adding dechlorination reagent to the MODEF. The variability in reaction times is typical, given FT's operating procedures. Since the PCB-1000 CD unit is a batch process, FT adds sodium reagent, waits for the reaction to occur, and samples the PCB concentration in the oil onsite, and then repeats this process until the PCB concentration is less than 2 ppm. This can lead to long reaction times while remaining protective.

Parameters for all 4 Runs:

Temperature (max. reaction temp.):	83 – 98°C
Pressure (psi):	<5 psi
Batch Volume (gal)	270

Sampling Information:

Sample	Date	Time	Moisture Content (ppm)	Total PCB Concentration (ppm)	
				FT's Lab	EPA's Lab
Run 1 Feed	2/12/20	11:18am	897	2970	Not tested
Run 2 Feed	2/12/20	10:36am	792	2180	2130
Run 3 Feed	2/13/20	2:58pm	520	1837	1227
Run 4 Feed	2/13/20	11:25am	1181	2511	Not tested
Run 1 Final	2/12/20	3:47pm	Not tested	444	Not tested
Run 2 Final	2/13/20	11:27am	Not tested	<0.34	<0.5
Run 3 Final	2/13/20	8:47am	Not tested	<0.34	<0.5
Run 4 Final	2/13/20	12:10pm	Not tested	1.38	<0.5 ⁴

⁴ The difference between EPA's and FT's sample results is likely caused by residual sodium in the oil that continued to destroy PCBs while the sample was shipped to the EPA lab. The FT sample was immediately analyzed on-site.

DRAFT

APPENDIX V

30-DAY ADVANCE NOTIFICATION OF OPERATIONS FOR
MOBILE PCB TREATMENT/DISPOSAL UNIT

DRAFT

30-Day Advance Notification of Operations for Mobile PCB Treatment Unit

Section A

TREATMENT COMPANY

Company Name: _____

Mailing Address: _____

Contact Person Name: _____

Email Address: _____ Phone: _____

VIN or License Plate Number of Mobile Unit: _____

Phone number of operator's emergency phone: _____

WHEN AND WHERE DISPOSAL/TREATMENT WILL OCCUR

Company Name: _____

Mailing Address: _____

Contact Person Name and Phone: _____

Street Address or Latitude/Longitude for Site: _____

Brief Description of the Facility/Site: _____

Expected Treatment Start Date and Duration in Days: _____

Section B

REGULATORY CONTACT INFORMATION

Include Name, Organizational Affiliation, Title, Phone Number, and Email Address (if known)

EPA ORCR Contact: _____

EPA Regional Contact: _____

State Contact: _____

Local (Town/City/County) Contact: _____

NATURE OF THE TREATMENT OPERATIONS

Type of PCB Disposal/Treatment Process: _____

Volume of MODEF to be Treated: _____

Concentration of PCBs in the MODEF Before Treatment: _____