

**United States Environmental Protection Agency
Region 10
1200 6th Avenue, Suite 900
Seattle, WA 98101**

Approval to Commercially Store Polychlorinated Biphenyls (PCBs)

Issued to

**Transformer Technologies, LLC
4705 Turner Road, SE
Salem, OR 97301
EPA ID No. ORQ 00002 6715**

AUTHORITY

This Approval is issued pursuant to Section 6(e) of the Toxic Substances Control Act, 15 United States Code (U.S.C.) §2601 et seq. (1976), and implementing regulations promulgated there under at 40 Code of Federal Register (C.F.R.) Part 761.

BACKGROUND

Transformer Technologies LLC (Trans Tech) provides customers, principally utilities and major industries, with equipment decommissioning, dismantling, and recycling services. Trans Tech functions as a commercial storer of PCB waste (as defined in 40 CFR § 761.3) engaged in storage for disposal activities requiring EPA approval.

On May 27, 2010, the United States Environmental Protection Agency, Region 10 (EPA) issued an approval for commercial storage of PCBs with an expiration date of May 27, 2020. On April 9, 2020, Trans Tech submitted an application for re-issuance of a PCB Commercial Storer Permit (Application) to the United States Environmental Protection Agency, Region 10 (EPA), and provided supplemental information on May 20, 2020 and June 30, 2020. The EPA confirmed in a letter dated May 27, 2020, that the existing approval and its conditions will remain in effect until such time that the EPA acts on the Application. This Approval serves as that action.

The Trans Tech facility consists of a 24,000 ft² building, as documented in Appendix B of the Closure Plan. Within the building, there are three distinct storage for disposal units subject to this approval. The first is a 1,062 ft² area dedicated to PCB storage for disposal, referred to as SA1. In addition, Trans Tech will conduct commercial storage for disposal in two (2) metals pans (22' L x 7' W x 16" H each), referred to as SAP1 and SAP2, which will be placed inside Plant #2 to better accommodate PCB Articles of any size or dimensions that fits within either pan.

The re-issue Application requested authorization to store the following quantities of PCB Items and PCBs:

Up to 156,000 lbs. of PCB electrical equipment containing approximately 8,000 gallons of fluid assumed to contain PCBs > 499 ppm unless and until test results show otherwise;

Up to 40,000 lbs. of un-drained PCB-contaminated electrical equipment (50-499 ppm PCBs as tested) containing approximately 2,000 gallons of PCB-contaminated fluid;

Up to 60 55-gallon DOT-approved drums and/or containers containing approximately 3,000 gallons of fluid contaminated with PCBs 50 ppm or greater as tested;

Up to 4,000 lbs. of PCB Solids (PCBs 50 ppm or greater as tested) in DOT-approved drums and/or containers.

These volumes reflect the aggregate volume of all wastes in the three storage units identified as SA1, SAP1 and SAP2 as described below. Subject to the limits for SAP1 and SAP2 Section III of this approval and Section 3.3 in Attachment 1, wastes may be managed in any of the three units.

No processing of PCBs or PCB Items that require EPA authorization pursuant to 40 C.F.R. § 761.20(c)(2)(ii) will occur at the facility. Trans Tech does drain or pump fluids from PCB Items. These activities are primarily associated with and facilitate storage or transportation for disposal, and do not require a TSCA storage or disposal approval pursuant to 40 C.F.R. § 761.20(c)(2)(i).

APPLICABLE REGULATIONS

The conditions of this Approval were developed in accordance with the applicable requirements of 40 C.F.R. Part 761. The rules for PCB storage for disposal facilities appear at 40 C.F.R. 761.65, "Storage for disposal." These rules require, among other things, that facilities which store PCB waste generated by others, in quantities greater than 500 gallons, obtain a written Approval issued by EPA.

DEFINITIONS

Definitions appearing at 40 C.F.R. §761.3 are incorporated by reference into this approval. Other terms have such meaning as identified in this approval.

APPROVAL

For the reasons set forth in the Statement of Basis, the EPA has determined that the applicant has satisfied the requirements of 40 C.F.R. § 761.65(d)(2). Approval is hereby granted to Transformer Technologies LLC, 4705 Turner Road, SE, Salem, OR 97301, EPA Id. No. ORQ 00002 6715 to commercially store PCBs and PCB Items for disposal, subject to the Approval conditions stated herein.

This Approval is effective as of the date of EPA's original signature and shall expire on the tenth anniversary date of the EPA signature, unless revoked, suspended, terminated, or administratively continued in accordance with the Approval conditions stated herein. Modifications to the original Approval are effective as of the date of the respective modification signature and shall remain in effect for the duration of the modified Approval.

This Approval does not relieve Trans Tech from compliance with all applicable federal, state and local regulatory requirements, including the federal PCB regulations at 40 C.F.R. Part 761, and any amendments or revisions thereto.

Original Signature

Timothy B. Hamlin, Director
Land, Chemicals and Redevelopment Division

Date

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Standard Conditions

- I.A Effect of Approval
- I.A.1 Trans Tech may store PCBs and PCB Items in accordance with these Approval conditions and the federal PCB regulations at 40 C.F.R. Part 761. Any management of PCBs and/or PCB Items not in accordance with this Approval or the cited PCB regulations is prohibited.
- I.A.2 Issuance of this Approval does not convey property rights of any part or any exclusive privilege, nor does it authorize any injury to persons or property, any invasion of other private rights or any infringement of federal, state, or local laws or regulations.
- I.A.3 Compliance with conditions of this Approval does not establish a defense to violation of any other applicable law or regulation, including the federal PCB regulations at 40 C.F.R. Part 761.
- I.A.4 This Approval does not relieve Trans Tech from compliance with all applicable federal, state and local regulatory requirements, including the federal PCB regulations at 40 C.F.R. Part 761.
- I.B Severability
- I.B.1 The provisions of this Approval are severable, and if any provision of this Approval, or if the application of any provision of this Approval is held invalid, the remainder of this Approval shall not be affected thereby.
- I.C Approval Compliance
- I.C.1 Trans Tech must comply with and operate in accordance with the conditions of this Approval and with provisions of the federal PCB regulations at 40 C.F.R. Part 761.
- I.C.2 If at any time Trans Tech becomes aware that it is operating the Facility in a manner that is not in compliance with this Approval or other applicable provisions of the PCB Regulations, Trans Tech shall provide notification of such non-compliance to EPA according to Condition II.L within 24 hours verbally or via e-mail, and shall submit a confirmatory written within five (5) calendar days.
- I.C.3 This Approval is based on the facts, representations, and certifications made by Trans Tech in its storage for disposal application dated April 9, 2020, supplemental material provided May 20, 2020 and June 20, 2020, and the Administrative Record supporting this Approval. If at any time Trans Tech possesses or is otherwise made aware of any material data or information (including but not limited to site conditions that differ from those presented in the application) that are/is relevant to whether or not activities approved herein may pose an unreasonable risk of injury to health or the environment, Trans Tech must report such data or information to the EPA. Such notification must be via e-mail to EPA according to Condition II.L within five working days, and in writing within 30 calendar days, of first possessing or being made aware of those data or information. Trans Tech shall also report in the same manner new or different material information related to a condition or any element of the approved storage activities. EPA may direct Trans Tech to take such actions it finds necessary to ensure the approved storage activities do not pose an unreasonable risk of injury to health or the environment.

Trans Tech shall follow such direction until written Approval is obtained from EPA that finds the condition(s) requiring such direction no longer poses an unreasonable risk of injury to health or the environment. EPA reserves the right to modify or revoke this Approval based on information provided pursuant to this condition, or any other information available to EPA that provides a basis to conclude that activities covered by this Approval pose an unreasonable risk of injury to health or the environment.

I.D Approval Suspension/Revocation

I.D.1 Failure to fully comply with the conditions of this Approval, including any modifications of this Approval subsequent to its effective date, without the prior written Approval of EPA may result in the immediate suspension or revocation of this Approval, initiation of enforcement action pursuant to Sections 16 and 17 of TSCA, 15 U.S.C. §§ 2615 and 2616, or both.

I.D.2 This Approval may be suspended or revoked at any time when:

I.D.2.a EPA has reason to believe that the continued operation of the facility presents an unreasonable risk of injury to health or the environment;

I.D.2.b EPA discovers or is informed of any misrepresentation or omission of material fact in the Trans Tech application upon which this Approval is based;

I.D.2.c EPA determines that Trans Tech, its principals, or key employees, have committed any civil environmental violation or have had any criminal conviction.

I.E Approval Expiration and Continuance

I.E.1 This Approval shall expire on the tenth anniversary date of its effective date.

I.E.2 This Approval and its conditions shall remain in effect beyond the expiration date in Approval Condition I.E.1 if Trans Tech has submitted a complete and adequate application, as defined in Condition I.E.3 for re-issue of this Approval at least 180 days, but not more than 270 days prior to the expiration date of this Approval and EPA has determined in writing that the application is complete and adequate. Provided these conditions are met, this Approval continues in force past its expiration date until EPA issues a new Approval or denies the request for re-issuance.

I.E.3 A complete re-issue application must contain information listed in 40 CFR § 761.65(d)(3), and must include all information necessary for EPA to determine that the proposed activities can be carried out in compliance with the requirements of 40 C.F.R. Part 761 and will not pose an unreasonable risk of injury to health or the environment. The re-issue application may include proposed revisions to the original approval, which may include design and operation changes, updated safety protocols, and revised operating and testing procedures.

The EPA may require Trans Tech to submit additional information to ensure that the re-issue application is complete and adequate.

- I.E.4 All conditions of this Approval except for Approval Conditions I.A.1 and III.B.1, shall remain in effect and enforceable beyond the expiration date in Approval Condition I.E.1 if:
 - I.E.4.a Trans Tech fails to submit a timely, complete and adequate application for re-issuance of this Approval to continue the activities authorized by this Approval pursuant to Approval Condition I.F.1; or
 - I.E.4.b Trans Tech fails to provide certification to EPA of completion of closure activities according to the approved closure requirements in Approval Condition II.G 180 days prior to the expiration date of this Approval pursuant to Approval Condition I.E.1
- I.E.5 If either of the circumstances identified in Approval Condition I.E.3 should occur, this will be considered notice to EPA that the expiration date of this Approval according to Approval Condition I.E.1 is the date at which Trans Tech expects to begin closure, and Trans Tech must immediately implement the approved Closure Plan in Attachment 1.
- I.F Approval Modification
 - I.F.1 Trans Tech shall provide EPA with advance written notification of any proposed modification of this Approval. Trans Tech may not implement the proposed modifications until EPA issues a modified Approval in writing.
- I.G Entry and Inspection
 - Trans Tech shall allow EPA authorized representatives to, at reasonable times:
 - I.G.1 Inspect Trans Tech's property and activities, including conducting interviews as necessary or appropriate, to determine compliance with this Approval or the requirements of 40 C.F.R. Part 761;
 - I.G.2 Inspect any records that must be kept pursuant to requirements of this Approval or the requirements of 40 C.F.R. Part 761;
 - I.G.3 Take samples for the purpose of assessing compliance with requirements of this Approval or the requirements of 40 C.F.R. Part 761.
- I.H Change in Ownership or Operational Control
 - I.H.1 Trans Tech shall notify the EPA in writing at least 180 days before it intends to transfer ownership or operational control of the Facility. This notification shall include the name, address, e-mail and telephone number of the intended transferee. This notification shall be sent to the EPA according to Condition I.L. Along with such notification, Trans Tech shall submit an application to modify the Trans Tech Application providing the information required in all applicable provisions of 40 CFR § 761.65(d)(3)(i)-(v) and (x), along with a notarized affidavit signed by the intended transferee stating that it concurs with all provisions of the Application, including the proposed modifications submitted in connection with the intended transfer of ownership or operation, and agrees to comply with all conditions of the Approval that EPA may issue based on the application.

- I.H.2 After receiving TRANS TECH's notification and application to modify the Application, the intended transferee's affidavit, evidence that the intended transferee has financial assurance for closure pursuant to 40 CFR § 761.65(g) (if applicable), and other documents EPA may require under 40 CFR § 761.65(j)(2), EPA may either:
- I.H.2.a Modify the approval to substitute the transferee's name for TRANS TECH and make other conforming minor modifications; or
- I.H.2.b Require the intended transferee to submit a new application and/or apply for a new approval.
- I.H.3 The intended transferee shall not operate the Facility until the EPA issues an approval in the transferee's name.
- I.H.4 Trans Tech must maintain its financial assurance for closure for the Facility until the intended transferee has established financial assurance for closure of the Facility pursuant to 40 CFR § 761.65(g) and EPA issues an approval in the transferee's name.
- I.H.5 EPA may revoke, suspend, and/or modify this Approval or the transferee's new approval if, following a change in ownership or operational control at the Facility, there is a change in the Facility's operations and EPA finds that this Approval or the transferee's new approval will not prevent unreasonable risk of injury to health or the environment.
- I.I Inapplicability of the Paperwork Reduction Act
- No information required to be maintained or submitted pursuant to this Approval is subject to the Paperwork Reduction Act of 1980, 44 U.S.C. 3501 et seq., because such information is collected by EPA from a specific individual or entity for the purpose of assuring compliance with this Approval.
- I.J Bankruptcy
- Trans Tech must notify EPA within ten (10) days of filing for bankruptcy so that EPA may ensure compliance with the requirements of this Approval, including the maintenance of adequate financial assurance, and ensure that ongoing Facility operations will not pose unreasonable risk of injury to health or the environment.
- I.K Flood Plain Designation
- Trans Tech must submit a written notification to the EPA within five (5) working days of Trans Tech becoming aware of, or EPA notification to Trans Tech of, any change to Federal Emergency Management Agency flood maps that result in any portion of the facility becoming within the 100-year flood plain. EPA may modify, suspend, revoke, or terminate this Approval if EPA determines that the change in flood plain designation, or any change in Facility operations resulting from or associated with such change in flood plain designation, may pose unreasonable risk of injury to health or the environment.

I.L

Submissions

Submissions required by this Approval shall be provided to EPA as follows:

EPA: Timothy B. Hamlin, Director
Land, Chemicals and Redevelopment Division
EPA Region 10
1200 6th Ave., Suite 155, M/S 15-H04
Seattle, WA 98101
E-mail: Hamlin.Tim@epa.gov
Facsimile: (206) 553-8509

w/copies to: Dave Bartus
Land, Chemicals and Redevelopment Division
EPA Region 10
1200 6th Avenue, Suite 155, M/S 15-H04
Seattle, WA 98101
E-mail: Bartus.Dave@epa.gov
Facsimile: (206) 553-8509

- II **General Facility Conditions**
- II.A Operation of Facility
- II.A.1 Trans Tech shall maintain and operate the facility to prevent fire, explosion, or release of PCBs to air, soil, groundwater or surface water, and in accordance with Attachment 3.
- II.B Security
- II.B.1 The facility must be secured to restrict public access as documented in Section IIB.2 of the re-issue approval application, incorporated by reference.
- II.C Personnel Training
- II.C.1 Trans Tech shall ensure that personnel who are directly involved with handling PCBs and PCB items and their immediate supervisors are familiar with the requirements of this Approval, and the regulatory requirements under 40 C.F.R. Part 761.
- II.C.2 Trans Tech shall provide training as documented in Attachment 2 to personnel who are directly involved with handling PCBs and PCB items and their immediate supervisors
- II.D Safety and Health
- II.D.1 Trans Tech employees managing PCBs ≥ 50 ppm, including decontamination activities, shall wear or use protective clothing or equipment as documented in Section 5.2.4 of Attachment 1, "Safety Procedures for Decontamination Personnel" to protect against dermal contact with or inhalation of PCBs.
- II.D.2 Trans Tech shall report injuries or illnesses related to PCB exposure associated with activities authorized or required pursuant to this approval to EPA Region 10 according to the requirement of Approval Condition I.J.
- II.E Spills
- II.E.1 Trans Tech must clean-up all spills and releases of PCBs within and associated with operation of the PCB Storage Areas as authorized by Condition III.A as soon as practicable, but no later than within 24 hours of discovery. Cleanup must be to the closure performance standard documented in Section 1.1 of the Closure Plan in Attachment 1, and according to the verification sampling and analysis requirements in the Closure Plan.
- II.E.2 Trans Tech shall dispose of any wastes or debris generated as a result of cleanup or decontamination of any PCB spill or release in accordance with the applicable requirements of 40 C.F.R. 761.61.
- II.E.3 Trans Tech shall document all spills and releases of PCBs subject to the requirements of Condition II.E.1, as well as all cleanup and decontamination activities, in the facility operating record required by Condition II.F. Trans Tech

shall provide e-mail notification to EPA of any spill or release that triggers notification to the National Response Center.

II.F Recordkeeping and Reporting

II.F.1 Trans Tech must maintain a written operating record at the Facility. The following information must be recorded, as it becomes available, and maintained in the operating record for at least three years following completion of closure of the PCB Storage Areas:

II.F.1.a Records of each PCB Container and each PCB Item placed into storage in the PCB Storage Areas. Information which must be included for each PCB Container and PCB Item must include:

II.F.1.a.i Identity or unique identification number of each PCB Container or PCB Item;

II.F.1.a.ii PCB Container or PCB Item weight;

II.F.1.a.iii Known or assumed PCB concentration;

II.F.1.a.iv Records of any sampling and laboratory analysis used to determine PCB concentration;

II.F.1.a.v The date each PCB Item or the contents of each PCB Container were taken out of service;

II.F.1.a.vi The date each PCB Container and PCB Item was placed into storage in the PCB Storage Areas, and the date it is removed for disposal.

II.F.1.b All records and documents, including annual records, annual document logs, and annual reports required by 40 C.F.R. 761.180(b);

II.F.1.c Records of all inspections, including inspection logs, required by Condition III.G.1, as well as documentation of all cleanups of spills or repair/replacement of storage equipment or coatings.

II.F.1.d Records of all cleanups of spills or leaks conducted pursuant to Condition III.E.

II.F.1.e Records of training provided according to Condition III.C.

II.F.1.f Records of all repairs to the PCB Storage Area floor, curb or coating pursuant to Condition IV.G.1.b.

II.F.1.g Copies of the current closure cost estimate and financial assurance document(s).

II.F.2 All reports and other information placed in the operating record or provided to EPA must be signed by the facility manager or a designated representative.

II.F.3 Trans Tech must make the contents of the facility operating record available to EPA upon request.

II.F.4 Trans Tech must retain all records required by this Approval or the federal PCB regulations at 40 C.F.R. Part 761 for at least three years, or indefinitely during the course of any unresolved enforcement action regarding the facility, or upon request

by EPA, notwithstanding any other provision of this Approval of the federal PCB regulations at 40 C.F.R. Part 761.

II.G Closure and Financial Assurance

II.G.1 Trans Tech shall close the facility in accordance with the Closure Plan in Attachment 1.

II.G.2 Trans Tech shall submit a written request to modify the approved Closure Plan whenever any of the conditions listed in 40 C.F.R. 761.65(e)(4) arise.

II.G.3 Trans Tech shall annually adjust the closure cost estimate, initially documented in Section 9 of the Closure Plan (Attachment 1), as required by 40 C.F.R. 761.65(f)(2) and submit a copy of the adjusted closure cost estimate to EPA Region 10 no later than 30 days following each annual adjustment.

II.G.4 Trans Tech shall establish and maintain financial assurance for closure of the PCB Storage Areas identified in Approval Condition III.A, according to the requirements of 40 C.F.R. 761.65(g). Financial assurance must be in the amount of the current closure cost estimate.

II.G.5 Trans Tech shall provide written demonstration of the financial assurance mechanism to EPA Region 10, according to the requirements of Approval Condition I.K, no later than 30 days following establishment of or any modification to the financial assurance mechanism.

II.G.6 Trans Tech shall revise the closure cost estimate and the financial assurance mechanism no later than thirty (30) days after any EPA-approved modification of the facility Closure Plan in Attachment 1 that may increase the cost of closure.

II.H Sampling and Analysis

II.H.1 Trans Tech shall ensure that all samples taken for purposes of documenting the PCB concentration of PCB Containers and PCB Items managed pursuant to this approval are obtained according to the procedure documented in Attachment 4 and

are representative of the contents of the subject Container or Item as defined in 40 CFR 761.3, incorporated by reference into this approval.

- II.H.2 Results of analytical testing conducted for purposes documenting the PCB concentration of PCB Containers and PCB Items managed pursuant to this Approval shall be reported as total PCBs by Aroclor mixture.
- II.H.3 All records relating to sampling, analysis, and quality assurance required by the PCB Regulation or this Approval shall include the following:
 - II.H.3.a exact date, place, and time of each sample collected;
 - II.H.3.b volume of each sample collected;
 - II.H.3.c name of person collecting each sample;
 - II.H.3.d name of analyst;
 - II.H.3.e date and time of analysis;
 - II.H.3.f the analytical techniques or methods used for each sample;
 - II.H.3.g the analytical results including chromatographs, calculations, and other raw data;
 - II.H.3.h calibration records and maintenance records of sampling equipment and analytical instrumentation; and,
 - II.H.3.i records of quality assurance/quality control activities.

III PCB Storage Management

III.A Approved PCB Storage Areas

The approved PCB Storage Areas are the 1062 square foot curbed and lined area (referred to as SA1), and the two movable metals pans (22' L x 7' W x 16" H each) referred to as SAP1 and SAP2 placed within the facility Plant #2 to better accommodate PCB Articles of any size or dimensions, as documented in Appendix B of the Closure Plan. The capacity of the metal pans is 205 cubic feet with a storage capacity of ~1532 G. In accordance with 40 CFR §761.65(b)(1)(ii), at no time, will any item containing fluid be stored within either pan that has an internal volume exceeding 750 G nor will any single container or PCB item managed in the 1,190 square foot PCB Storage Area containing fluid have an internal volume more than 4,450 gallons.

III.B Types of PCB Storage Allowed

III.B.1 Trans Tech is authorized to store for disposal the following PCBs and PCB Items:

Up to 156,000 lbs. of PCB electrical equipment containing approximately 8,000 gallons of fluid assumed to contain PCBs > 499 ppm unless and until test results show otherwise;

Up to 40,000 lbs. of un-drained PCB-contaminated electrical equipment (50-499 ppm PCBs as tested) containing approximately 2,000 gallons of PCB-contaminated fluid;

Up to 60 55-gallon DOT-approved drums and/or containers containing approximately 3,000 gallons of fluid contaminated with PCBs 50 ppm or greater as tested;

Up to 4,000 lbs. of PCB Solids (PCBs 50 ppm or greater as tested) in DOT-approved drums and/or containers.

These volumes reflect the aggregate volume of all wastes in SA1, SAP1 and SAP2. The wastes that can be managed in SAP1 and SPA2 are subject to the limitations in Section III of this Approval and Section 3.3 in Attachment 1. Subject to these limits, wastes may be stored in any of the three units.

III.B.2 Storage of any PCBs at concentrations greater than or equal to 50 ppm in the authorized PCB storage area other than enumerated in Condition III.B.1 is prohibited, as are any other activities requiring a written approval pursuant to 40 C.F.R Part 761.

III.C Design Requirements of Storage Area

III.C.1 Trans Tech must maintain the PCB Storage Area identified in Condition III.A above in accordance with the requirements of 40 C.F.R. 761.65(b)(1) and as

documented in Section 3 of the approved Closure Plan in Attachment 1 and Section 2 of Attachment 3.

III.D PCB Waste Storage Containers

III.D.1 Containers used to store PCB waste destined for disposal shall comply with the requirements of 40 C.F.R. 761.65(c)(6).

III.E Management of Stored PCB containers and Items

III.E.1 Oversized PCB Items may be stored on pallets or appropriate cribbing in any of the PCB Storage Areas provided that a static floor loading of 2,500 lbs/ft² pounds per square foot is not exceeded. This condition applies to SA1, SAP1 and SAP2.

III.E.2 If any PCB container or PCB item is leaking, Trans Tech must immediately:

III.E.2.a Transfer the waste in the container or the PCB Item to a properly marked, non-leaking container; or

III.E.2.b Overpack the leaking container (PCB Containers only); or

III.E.2.c Use the drain table located inside SA1 to drain fluid from the leaking item.

III.E.3 All PCB Containers and PCB Items managed in the PCB Storage Area must be placed such that labels and markings are visible without moving other PCB Containers or PCB Items, and in a manner that does not impede inspections.

III.E.4 All equipment used for placement or retrieval of palletized PCB containers or PCB Items, or of oversized PCB Items to/from storage area must be operated according to manufactures instructions and operating limits, and in a manner that prevents damage to PCB Containers, PCB Items, the PCB Storage Area SA1 curb, either of the SAP1 or SAP2 pans, or the floor/curb protective coating.

III.E.5 No movable equipment is used inside any of the three (3) PCB Storage Areas except as necessary to place or remove PCB containers or PCB Items to/from the storage units.

III.E.6 Personnel operating such equipment must be properly trained as required by Condition II.C and supervised.

III.E.7 All equipment used for placement or retrieval of PCB Containers or PCB Items to/from the PCB Storage Areas that may come into direct contact with PCBs must

remain within the building structure unless it has been decontaminated as specified in Section 5.2.1 of the Closure Plan in Attachment 1.

III.F Marking Requirements

III.F.1 Trans Tech shall ensure that all PCB Containers and PCB Items managed in the PCB Storage Areas are marked in compliance with the requirements of 40 C.F.R. 761.40.

III.F.2 Trans Tech shall mark the PCB Storage Areas as required by 40 C.F.R. 761.40(a)(10).

III.G Inspection Requirements

III.G.1 Trans Tech shall perform inspections of SA1, SAP1 and SAP3 at least every thirty (30) days. Inspections shall address the following elements:

III.G.1.a PCB Containers and PCB Items in the PCB Storage Area shall be inspected for spills or leaks. Any leaking PCB Container or PCB Item shall be managed according to Condition III.E.3, and any spill or leak cleaned up according to requirements of Condition II.E.

III.G.1.b The floors, joints and curbing inside SA1 shall be inspected for any cracks or damage to the epoxy coating. Any cracks or floor coating shall be repaired or re-coated as soon as practicable.

Attachment 1
Closure Plan

CLOSURE PLAN

TRANSFORMER TECHNOLOGIES, LLC

Prepared For:

**Transformer Technologies, LLC
4709 Turner Road SE
Salem, OR 97317
EPA ID: ORQ000026715**

DATE REVISED: **June 30, 2020**

Prepared By:
**Evergreen Services & Consulting, Inc.
9931 Haley Road
Jacksonville, FL 32257**

Transformer Technologies, LLC

CLOSURE PLAN

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CLOSURE PLAN

SECTION 1 GENERAL

1.0 Introduction

This Closure Plan has been developed for the Transformer Technologies, LLC (Trans Tech) facility located at 4705 Turner Road SE, Salem, Oregon 97301, EPA ID No.: ORQ 000026715. Trans Tech leases approximately 5 acres of land as shown in Figure 1.1 Site Plan. The property owner is Coleman WJR LLC, Portland, Oregon. The subject property is located in Section 7, Township 8 South, Range 2 West within Marion County.

This Closure Plan and the Financial Requirements have been prepared in accordance with the requirements of 40 C.F.R. §761.65(d) & (e). This Plan identifies all the steps necessary to close the PCB Commercial Storage areas (as defined in Section 3.1) at any point during its operational life. The Plan can be implemented in its entirety or partially, even though partial closure is not anticipated.

Trans Tech will maintain an on-site copy of the approved Closure Plan at the facility office until the certification of closure has been submitted to and accepted by the U.S. Environmental Protection Agency (EPA). The EPA Regional Administrator will be notified at least 60 days prior to the date Trans Tech expects to begin final closure according to 40 C.F.R. §761(e)(6)(i). The date Trans Tech expects to begin closure/initiation of closure activities will be within 30 days of the receipt of the last regulated items at the facility. The closure date for the entire facility is estimated to be 2050 AD. This date will be dependent of the demand for disposal services. Upon completion of closure, Trans Tech will submit a certification by Trans Tech's owner and by an independent registered environmental professional, in accordance with the requirements of 40 C.F.R. §761.65(e)(8), that the facility has been closed in accordance with the specifications in the approved Closure Plan.

1.1 Final Closure Activities

All material wastes will be removed from the site (or from the section of the facility closed for a partial closure) and all necessary equipment will be decontaminated or disposed of according to their regulatory level during closure activities. All regulated material in the facility at time of closure will be transported to third-party facilities (as indicated in Section 4.2) and disposed of in accordance with all state and federal regulations.

The PCB levels to be achieved for final closure are $10 \mu\text{g}/100 \text{ cm}^2$ for non-porous surface as measured by a standard wipe test in accordance with 40 C.F.R. § 761.123.

1.2 Land Use

Land use within the area including the Trans Tech plant site, is zoned industrial and commercial. The immediate vicinity of the industrial park is mixed commercial uses.

1.3 Traffic Patterns

Figure 1.1 shows traffic patterns around the facility.

1.4 Security Systems

Trans Tech is an indoor facility with only keyed access after-hours. Unauthorized ingress and egress will be prohibited. A security system is installed at the facility.

1.5 Closed PCB or Hazardous Waste Management Units

There are no closed PCB or Hazardous waste management units in the vicinity of Trans Tech.

SECTION 2 ENVIRONMENTAL CONDITIONS

In general, there are no environmental conditions which would make the facility an unreasonable risk to the environment or human health. Any spills or leaks at the facility, other than within the PCB Commercial Storage Areas, will be cleaned up in accordance with the PCB Spill Clean-Up Policy at 40 C.F.R. §761, Subpart G. Spills or releases within the PCB Commercial Storage Area will be cleaned up in accordance with Storage Approval Condition II.E.1.

SECTION 3 COMMERCIAL STORAGE AREAS

3.1 General Facility Description

The entire facility consists of a rectangular shaped building and covers a total area of 24,000 ft². The entire facility is roofed. The office area is 1,960 ft², the foreman's office is 160 ft², and the mechanical room is 128 ft² leaving a total production and storage area of 21,752 ft² referred to as Plant #2.

Within Plant #2, an area measuring 1062 ft² is dedicated to PCB Commercial Storage, hereafter referred to as SA1, subject to conditions of the commercial storage approval. Additionally, Trans Tech will conduct commercial storage in two (2) movable metals pans (2 - 22' L x 7' W x 16" H), hereafter

referred to as SAP1 and SAP2, which will be placed inside Plant #2 to better accommodate PCB Articles of any size or dimensions that fits within either pan and does not exceed the storage limit requirements at 40 CFR §761.65(b)(1)(ii).

No processing for disposal of regulated items, that require EPA authorization, will occur at the facility. Draining or pumping of fluid from PCB Items to consolidate fluid for shipment is not considered processing for disposal, and as documented in 40 C.F.R. §761.20(c)(2)(i), does not require a TSCA storage or disposal approval. Sampling of PCB items will be accomplished according to the Sampling Plan in Attachment 4.

3.2 Roofing and Walls

The building walls are constructed of 16 foot tall concrete tilt-up panels. Each panel is 5 ½ inches thick and contains #4 Horizontal Reinforcement (rebar). On top of the panel is a 10 ft high Standard Metal Siding, covered on the inside by R15 Vinyl Faced Wall Insulation. The roof is constructed of Standard Seam Metal Roofing, covered on the inside with R19 Vinyl Faced Roof Insulation. The roof rises 5 ft 2 ½ inches from eave to ridge.

3.3 Floor

The floor area of SA1, where the regulated items may be stored, is overlaid with Cascade Floors heavy duty epoxy system - a no odor 3 component resin rich flooring system that is installed at 3/16th inch thickness in accordance with the material specifications (see Appendix C). SA1 is surrounded by a one-foot containment wall. The two (2) metal pans will be placed on the floor inside Plant #2.

The floor of SA1 consists of a 6-inch thick, reinforced concrete slab. The slab is underlain by a 24 mil HDPE liner. The HDPE liner was placed over crushed rock/stone and covered with 6"- 8" of crushed stone. The 6-inch floor was then poured over this configuration, with the exception of the 4' Closure Pour section that connects to the walls. A footing was poured 4' beyond the floor pour and the tilt up panels poured. The tilt-up panels were lifted onto the footings and the liner was wrapped up inside of the panels. The final Closure Pour was then completed, which includes rebar ties from the panels. The floor has no floor drains, penetrations or expansion joints which would allow liquid to contact the ground. The floor loading capacity is 2,500 lbs/ft² for all of Plant #2, including SA1

SA1 is noted on the Facility Floor Plan (Appendix B). This area is enclosed with a one-foot high containment wall. The floor has an epoxy coating as documented above. The epoxy will be continuously applied on the floor and wrapped up onto the walls for one foot. A fillet corner will be employed at the seam between the wall and the floor. The pans contain a 16" high containment wall. Thus, all 3 PCB

Commercial Storage areas within Plant #2 meet the storage facility requirements of 40 CFR §761.65(b)(1).

The volume capacity of SA1 is 8,976 gallons (g) and the volume capacity of SAP1 and SAP2 are 1512 G respectively exclusive of the volume displacement caused by the items stored within each area. In accordance with the requirements of 40 C.F.R. §761.65(b)(1)(ii), Trans Tech will not store any individual PCB Articles or PCB Containers with an internal volume equal to two times the internal volume of any of the Commercial Storage Area or multiple items where the fluid amounts exceed 25% of the internal volume of any of the Commercial Storage Areas, whichever is greater.

3.4 100 Year Flood Plain

According to the U.S. Department of Housing and Urban Development for Marion County, Oregon, the building, Plant #2, was designed at an elevation 1ft. above the 100-year flood plain.

SECTION 4 INVENTORY, REMOVAL AND DISPOSAL OF REGULATED MATERIAL

4.1 Maximum Inventory

The maximum estimated inventory of regulated PCB material that will be managed in the PCB Storage Areas consists of the following:

- Up to 156,000 lbs. of known and/or untested, un-drained electrical equipment containing approximately 8,000 gallons of fluid known or assumed to contain PCBs > 499 ppm;
- Up to 40,000 lbs. of un-drained PCB-contaminated electrical equipment (50-499 ppm PCBs) containing approximately 2,000 gallons of PCB-contaminated fluid;
- Up to 60 55-gallon DOT-approved drums, containing approximately 3,000 gallons of PCB-Contaminated (50-499 ppm PCBs) fluid;
- Up to 4,000 lbs. of PCB Items, and/or PCB Remediation Waste in DOT-approved drums.

4.2 Removal and Disposal of Regulated Material

The approach taken for removal of materials will be determined by the extent of closure activities. The initial efforts will be directed towards removal of regulated PCB Items. The inventory of regulated PCB electrical equipment at the facility will be disposed of in accordance with 40 C.F.R. §761.60(b). The PCB electrical equipment will be drained and transported to Chemical Waste of the Northwest (EPA ID: ORD 08945 2353) for landfill. The fluid will be bulked and transported to Veolia ES Technical Services, Port Arthur, Texas, (EPA ID: TXD000838896) for incineration.

For purposes of Closure Cost Estimates, the assumed PCB electrical equipment is being disposed of as

PCB. When activities in this Closure Plan are implemented, the equipment will be tested and disposed of according to regulatory requirements applicable to the actual PCB concentration.

PCB-Contaminated electrical equipment will be drained. The fluid will be bulked and transported to Veolia ES Technical Services (EPA ID: TXD 00083 8896) for incineration. The drained equipment will be transported to Chemical Waste of the Northwest, Arlington, Oregon (EPA ID: ORD 08945 2353) for landfill.

The 55-gallon drums of PCB-Contaminated fluid will be bulked and transported to Veolia ES Technical Services, Port Arthur, Texas. The empty drums will be transported to Chemical Waste of the Northwest, Arlington, Oregon, and landfilled. Disposal pricing for these drums is included in the closure cost estimate.

Liquid PCBs including the PCB-contaminated fluid will be transported via tanker trailers with 6,000-gallon capacity per load. Any solid PCBs will be transported in van trailers, in lined roll-off containers or lined, dump trailers approved to haul PCB regulated solids and debris.

Transportation of the PCB waste material off-site will be done using properly trained and permitted drivers along with properly permitted vehicles as required. All personnel utilized in the removal and transportation of the above-referenced materials will be OSHA 40-hour HAZWOPER trained. All regulated PCB waste material will be manifested in accordance with 40 C.F.R. §761.207.

4.3 Post-Closure Plan

Post-closure care will not be needed for this facility since closure and decontamination according to the performance standards established in this Closure Plan will eliminate the potential for post-closure releases of PCBs into the environment. All contamination will be removed from the site as a result of closure activities.

4.4 Notice in Deed

A deed restriction is not anticipated to be needed, since closure and decontamination according to the performance standards established in this Closure Plan will eliminate the potential for post-closure releases of PCBs into the environment without any additional physical (cap) or institutional (deed restriction) controls.

4.5 Expected Year of Closure

The expected year of closure is the year 2050 A.D. This date will be dependent on the demand for Trans

Tech's services.

SECTION 5 DECONTAMINATION AND COMPLIANCE WITH PCB SPILL CLEAN-UP POLICY

5.1 Equipment and Area Classification

Items and areas subject to sampling, decontamination and compliance with the spill cleanup policy include the following restricted access items and areas where a spill has occurred:

- Non-porous surfaces of other equipment.
- Storage area (other than the PCB Storage Area subject to approval Condition II.E) floors and containment walls.
- Metal Pans used for PCB Storage
- Drain Table
- Loading and unloading areas.

5.2 Decontamination Procedures

During facility operations, strict adherence to 40 C.F.R. §761 Subpart G, PCB Spill Cleanup Policy will be practiced for spills/releases in areas of the facility other than the PCB Storage Area. Spills/releases in the PCB Storage Area are subject to the requirements of storage approval Condition II.E. Continual adherence to this Policy will ensure minimal decontamination activities at the time of closure. In any event, closure activities will include the following as outlined below in 5.2.1 - 5.2.3.

5.2.1 Decontamination/Disposal of Other Equipment

All non-porous surfaces of equipment (other than the metal pans and drain table) will be decontaminated in accordance with 40 C.F.R. §761.79 (c)(2). It is estimated that this decontamination process will use a maximum of 100 G of the Pentone Power Cleaner 155 cleaning agent and produce one thousand (1,000) pounds of contaminated debris (cloth, towels, sludge, etc.) for off-site disposal. The fluid will be transported to Veolia ES Technical Services, Port Arthur, Texas, for incineration and the bulked solids will be transported to Chemical Waste of the Northwest, Arlington, Oregon, for landfill.

The metal pans and drain table will be double-washed rinsed utilizing the following method:

- Wash 1: Scrub with organic solvent and wipe up the solvent.
- Rinse 1: Wipe surface with moistened pad, wipe up with dry pad.
- Wash 2: Repeat Wash 1.
- Rinse 2: Repeat Rinse 1.

This process will generate 50 G of contaminated solvent and ~100 lbs of contaminated pads. These items

will be able to be re-used or sold for scrap metal recycling, thus are not included in the disposal numbers.

All porous components/surfaces of equipment that have been in direct contact with PCB and PCB-Contaminated fluids will be removed and drummed or bulked for landfill at Chemical Waste of the Northwest, Arlington, Oregon. It is estimated that this process, along with the sampling, will result in an additional 11,000 pounds of solids for disposal.

The following is a breakdown of equipment to be disposed of and equipment to be decontaminated:

- Equipment to be disposed of includes:
 - Pumps and hoses
- Equipment to be decontaminated includes:
 - Miscellaneous oil fittings and valves
 - Miscellaneous hand tools as required including screwdrivers, pipe wrenches, etc.
 - 3 sets of forks and masts on forklifts.
 - Miscellaneous steel drip pans
 - Drain table
 - 2 Metal Pans

5.2.2 Plant Floors, Working Areas and Walls

All interior plant floors and areas extending up the 1-foot containment wall will be cleaned as follows:

- A solution of one-part Pentone Power Cleaner 155 and 20 parts water will be used as a detergent. The containment walls will be scrubbed with stiff bristle brushes. The areas will then be vacuumed dry to remove any detergent residue. This procedure is expected to generate 300 gallons of contaminated cleaner for disposal.

The equipment in SA1, which has been in contact with contaminated material, will be wiped down with dampened cloths to remove any potential contaminated dust. The cloths will be rinsed and rung out for reuse until soiled. It is estimated that this operation will produce the following material for disposal:

- 300 gallons of wash/rinse liquid
- 600 pounds of contaminated solids (cloths, mops, suits, etc.)

The fluids generated during this process will be bulked with the PCB fluids and transported to Veolia ES Technical Services, Port Arthur, Texas, for incineration. The solids generated will be transported to Chemical Waste of the Northwest, Arlington, Oregon, for landfill.

5.2.3 Loading and Unloading Areas

During facility operations, if a spill should occur outdoors, it will be reported, if necessary, and cleaned immediately as per 40 C.F.R. Subpart G, Spill Cleanup Policy. If an outdoor spill(s) is found, it will be addressed and remediated according to 40 C.F.R. §761.61 or 40 C.F.R. 761 Subpart G whichever is the most applicable to the situation.

The engineered design, construction and operating criteria of the facility should eliminate any potential for undetected groundwater contamination. Therefore, groundwater sampling at the time of closure has not been incorporated into this Closure Plan.

5.2.4 Safety Procedures for Decontamination Personnel

All persons participating in decontamination and removal of material for closure will be adequately trained for the preceding activities. Safety equipment will include but not be limited to the following:

- Disposable protective coveralls
- Rubber boots and gloves
- Respirators, if necessary, with the appropriate cartridge filters.

SECTION 6 CLEANUP AND DECONTAMINATION VERIFICATION

Areas subjected to cleanup and decontamination verification are detailed below.

6.2 Work Area Floors, Loading and Unloading Areas

At the time of closure, the work area floors will be inspected for signs of past spillage. Such areas, if found, will be cleaned according to the requirements of Section 5.2.4. Following cleaning, the floors will be sampled in accordance with Appendix A, Closure Sampling Plan. Verification of decontamination is indicated by all tests resulting in the following: $\leq 10 \mu\text{g}/100 \text{ cm}^2$ for non-porous surfaces in high occupancy areas.

If any wipe test results in greater than the allowed levels, that portion of the floor will be re-cleaned 55 feet in all directions from the sample locations, or to the nearest wall. A second group of samples in the area will be collected and analyzed. The number and distance of samples are as specified in Appendix A - Closure Sampling Plan. Cleaning and re-analysis will continue until all results confirm the cleanup levels.

Loading and unloading areas within the sampling area will be sampled according to Appendix A.

If the sample results are greater than the cleanup levels noted, the area will be decontaminated and retested.

6.3 Certification

This closure activity shall be attested to, reported and certified by an independent registered Environmental Professional.

SECTION 7 REGULATED INVENTORY AND MATERIALS GENERATED DURING CLOSURE ACTIVITIES

7.1 Inventory

- Up to 156,000 lbs. of untested, un-drained electrical equipment containing approximately 8,000 gallons of fluid assumed to contain PCBs > 499 ppm unless and until test results show otherwise;
- Up to 40,000 lbs. of un-drained PCB-contaminated electrical equipment (50-499 ppm PCBs) containing approximately 2,000 gallons of PCB-contaminated fluid;
- Up to 60 55-gallon DOT-approved drums, containing approximately 3,000 gallons of PCB-Contaminated (50-499 ppm PCBs) fluid;
- Up to 4,000 lbs. of PCB Items, and/or PCB Remediation Waste in DOT-approved drums.

7.2 Waste Material Generated During Closure Activities

- 150 gallons of contaminated cleaner and solvent used to clean non-porous surfaces (5.2.1)
- 1,100 lbs. of cloth, suits, rags, brushes etc. used to clean non-porous surfaces (5.2.1)
- 11,000 lbs. of porous components and/or surfaces (5.2.1)
- 600 gallons of contaminated cleaner used to clean floors, curbs and walls (5.2.2)
- 600 lbs. of contaminated solids used to clean walls, ceilings, and equipment (5.2.2)
- 2,000 lbs. empty drums, unregulated for disposal under TSCA (5.2.2)

SECTION 8
CLOSURE COSTS ESTIMATE

The Closure Costs Estimate has been developed to ensure that adequate funds along with a viable financial instrument will be available to pay for costs in the event that TCI is unable to complete closure. A summary of the estimated costs of employing a third party to implement all closure activities is provided.

Item	Description	Quantity	Unit	Unit Rate	Amount
1	Removal of Inventory: Fluid & Transformers	30	MH	\$40	\$1200
2	Equipment for decontamination & dismantling	32	MH	\$40	\$1280
3	Cleaning of Floors	15	MH	\$40	\$600
4	Equipment & supplies for dismantling, decontamination, & cleaning	--	--	--	\$1000
5	Cleaning Fluid	--	--	--	\$500
6	Disposal of Contaminated fluids generated during cleaning activities	750	G	\$2.96	\$2220
7	Disposal of solids generated during closure process by landfill	12700	LB	\$0.1071	\$1360
8	Transportation of solids to landfill	1	PL	\$1200	\$1200
9	Loading of trucks for landfill	2	MH	\$40	\$80
10	Sample Collection (Labor & Supplies)	--	--	--	\$6161
11	Analysis of Samples	344	S	\$45	\$15480
12	Disposal of PCB Inventory	56000	LB	\$0.1071	\$5998
13	Transportation of PCB Equipment	4	L	\$1200	\$4800
14	Disposal of PCB Fluids	8000	G	\$2.96	\$23680
15	Transportation of PCB Fluids	2	L	\$11,425	\$22850
16	Disposal of PCB-Contaminated Equipment	25000	LB	\$0.1071	\$2678
17	Transportation of PCB-Contaminated Equipment	1	L	\$1200	\$1200
18	Disposal of PCB-Contaminated Fluid	5000	G	\$2.96	\$14800
19	Transportation of PCB-Contaminated Fluid	1	L	\$11,425	\$11425
20	Disposal of PCB Items and/or Remediation Waste including empty drums	4000	LB	\$0.1071	\$428
21	Transportation of PCB Items and/or Remediation Waste (Partial load; prices included with L/I #8)	--	--	--	--
22	Engineering Oversight & Supervision	--	--	--	\$3500
23	Certification of Closure	--	--	--	\$2500
24	Contingency	--	--	--	\$12490
LEGEND: MH = Manhours; H = hours; G – gallons; L = truckloads; LB = pounds; PL = partial load; T = tons; D = drums; S = samples				TOTAL	\$137,430

SECTION 9
CLOSURE SCHEDULE

EVENT	DAYS
Notification given to EPA of closure.	0
Last Regulated Material received at the facility	30
Closure Activities Begin	
• Removal of Regulated Inventory	60
• Cleaning and Decontamination Activities	90
• Sampling and Analysis	120
• Re-cleaning if indicated by Analysis of Samples Followed by Re-sampling	140
• Final Analysis Received	170
Closure Complete	170
Closure Certification	230

**APPENDIX A
CLOSURE SAMPLING PLAN**

Transformer Technologies LLC (Trans Tech) will implement the following procedures for sampling areas noted as Storage and Processing and other High Occupancy Areas to include concrete, metal pans and loading and unloading areas at the facility. These areas include both porous and non-porous surfaces. Trans Tech is electing to sample the non-PCB Commercial Storage Areas (shown below) to ensure that there has been no migration of regulated levels of PCB's into the remainder of Plant #2 as well as the loading and unloading docks. All sampling will take place after Trans Tech has accomplished its initial cleaning of the Storage Areas in accordance with the procedures set forth in 5.2.1 - 5.2.3 in Closure Plan. All sampling, compositing, and analysis will be conducted in accordance with EPA's Guidance Manuals EPA-560/5-85-026 and EPA - 560/5-86-017. Extraction and analysis of samples will be according to the requirements of 40 C.F.R. 761.272.

For the areas noted above, the following steps will be taken:

- 1) A square-based grid system will be overlaid on the entire area to be sampled. The grid axes will be oriented on a north-south line centered in the area and an east-west axis perpendicular to the magnetic north-south axis also centered in the area.
- 2) A series of sampling points will be marked using a grid interval of 3 meters with the sampling points being marked at the intersection of grid lines. The sampling points will extend in every direction to the extent sufficient to result in a two-dimensional grid completely overlaying the sampling area.
- 3) A wipe sample will be taken at each grid point that falls within the sampling area for the areas located within the facility. Wipe sampling will be conducted in accordance with 40 C.F.R. 761.123. Based on the 3-meter interval, the estimated number of wipe samples to be taken are noted below:

Non-Regulated Storage and Processing Area (Plant #2)	236
PCB Storage Area (SA1)	40
Administration Area	124
Metal Pans (2 per pan – 1 internal, 1 external)	
TOTAL	292

- 4) A solid matrix (soil) sample will be taken of the areas outside the facility. These areas are designated in Figure A-1 as the two Loading/Unloading Areas and the estimated number of samples (prior to compositing for each area) are noted below:

Northwestern Loading/Unloading Area	21
Southeastern Loading/Unloading Area	31
TOTAL	52

- 5) The solid matrix soil samples will be taken according to the following procedures:
 - a) The area to be sampled will be marked by a 10 cm X 10 cm (100 cm² template)The soil will be scraped to a depth of approximately 1 cm with a stainless-steel trowel or scoop to yield about 100 g of soil. The template used to mark the sample and the gloves worn by the sampler will be discarded after each sample is taken. This material will be disposed of as PCB solid waste. The trowel or scoop will be decontaminated between each sample by swabbing the surface with a solvent and a

disposable cloth and discarding the cloth each time an item is decontaminated.

- b) For each area noted in #5 above the following number of samples will be composited:

Location	# of Samples	# of Composites
Northwestern Loading/Unloading Area	21	2
Southeastern Loading/Unloading Area	31	3

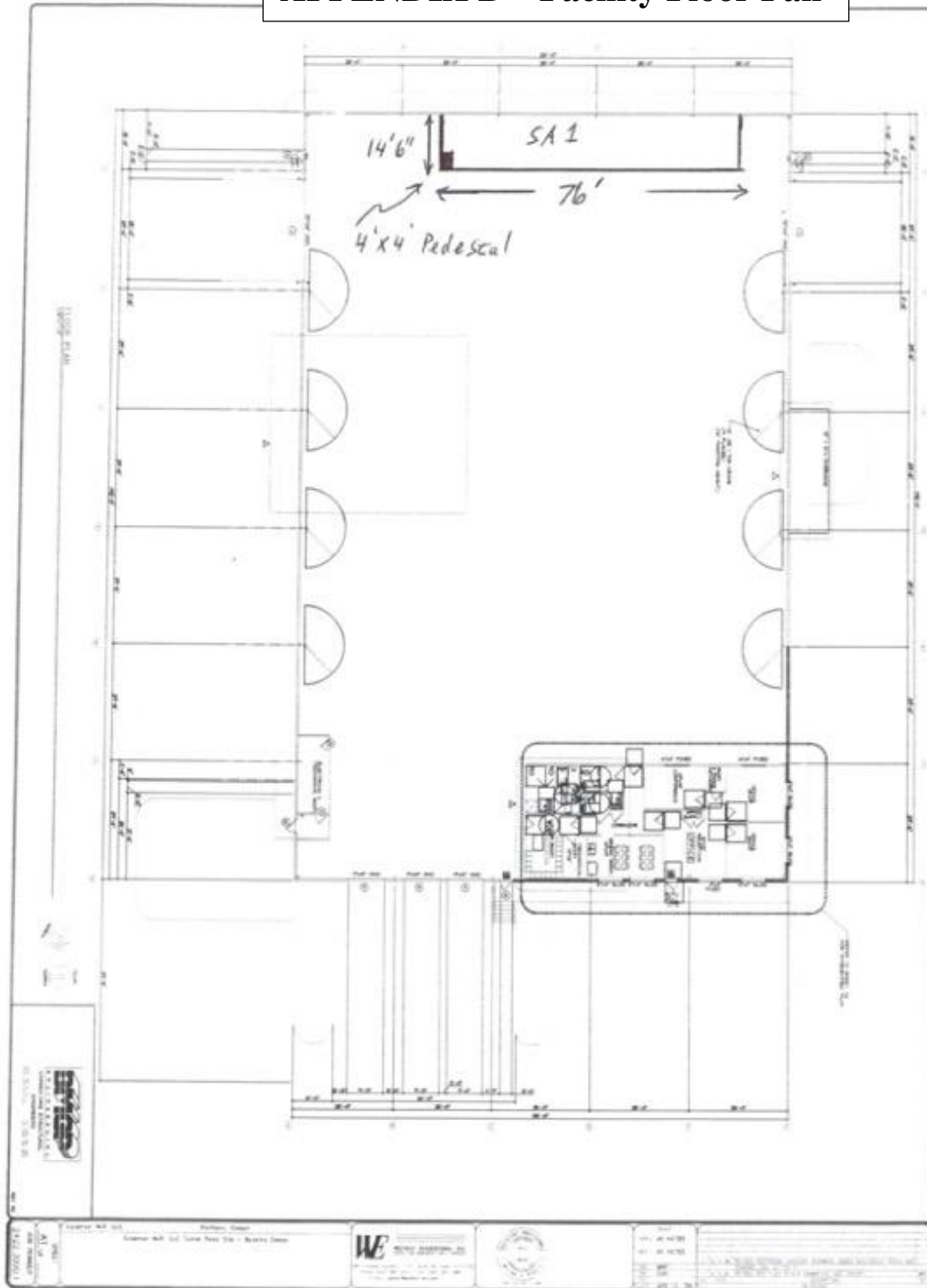
- c) The samples will be made of equal size as much as possible. Each of the samples to be composited will be placed into a stainless-steel bowl and thoroughly mixed using a clean trowel or scoop for each composite to be made. The bowl will be decontaminated after each use with a solvent and disposable cloth. The gloves used during the mixing process and the cloth used for wiping the bowl will be placed into a plastic bag and disposed of as PCB waste.
- d) A 100 g sample from the composited mix will be placed into a sample bottle, sealed, labeled and noted in the logbook and on the Chain-of-Custody form.
- 6) A Quality Control Program will be implemented to ensure sampling accuracy and data validity. It will include the following: (1) preparing field blanks for the laboratory; (2) sampling without contamination of sample; (3) maintaining a rigid Chain-of-Custody procedure for the samples; and (4) fully documenting the entire sampling program and maintaining records of the documentation.

a) **Field Blanks**

- i) **Wipe Samples:** Field blanks will be obtained by wetting a clean gauze with the hexane and storing the gauze in a sample jar, sealing, labeling and noting the item in the Logbook and on the Chain-of-Custody form. Only the Logbook will bear the notation that it is a field blank.
- ii) **Soil samples:** A field blank will be obtained by collecting clean soil. This should be done prior to collecting any soil samples and after taking all soil samples, and the trowel and scoop have been decontaminated. The samples will be placed into separate sample bottles, sealed, labeled and documented in the Logbook and on the Chain-of-Custody form. Only the Logbook will bear the notation that the samples are field blanks.
- iii) A sample of the hexane that is to be used for wipe sampling and decontaminating will also be analyzed as a field blank. The sample will be placed into the sample bottle, sealed, labeled and documented into the Logbook and on the Chain-of-Custody form. Only the Logbook will bear the notation that the sample is a field blank.
- b) **Sampling without Contamination:** Samples collected may become contaminated in two (2) ways: (1) dirty sample containers; and (2) cross-contamination of samples from the use of contaminated sampling equipment. The first type of contamination will be eliminated by using only new sample bottles that are sealed by the manufacturer. The sampling equipment will be pre-cleaned with a solvent prior to its use in the field. The sampling equipment will be rinsed with a solvent after each use and wiped with a disposable cloth. A new cloth will be used each time a sample is taken.
- c) **Sample Custody and Recordkeeping:** The samples will be tracked from their origin to the laboratory using strict Chain-of-Custody protocols as follows:
- i) All samples will be assigned a unique sample identification number. Those samples that are composited will be shown in the Logbook as the composited

- sample number and it will indicate all of the sample numbers that were composited into it.
- ii) Record in the Logbook all sample container preparation and integrity procedures taken prior to sampling.
 - iii) Records of the sample collection will be noted in the Logbook and on the Chain-of-Custody form by the same individual and will detail the following:
 - Specific location of sampling
 - Date of collection
 - Exact time of collection
 - Type of sample matrix (i.e., soil, wipe, etc.)
 - Complete name of sampler
 - Initialing or signing after each entry
 - iv) Maintaining records as to whose custody the samples were in at all times by notations on the Chain-of-Custody form.
 - Shipment or delivery of the samples directly to the analytical laboratory.
 - Chain-of-Custody records accompanying the samples during shipment and delivery.
 - Unbroken custody during shipment or delivery as evidenced by complete shipping records and samples sent in sealed containers.
 - v) Documentation of the above will also be kept in the Logbook.

APPENDIX B – Facility Floor Pan



APPENDIX C
Epoxy Specifications

PRODUCT DATA SHEET FOR:
CASCADE FLOORS HEAVY DUTY EPOXY SYSTEM
EPOXY/CHEMICAL RESISTANT TOP COAT SYSTEM 1/8 - 1/4" THICKNESS

Description: Cascade Floors heavy duty epoxy system is a no odor 3 component resin rich flooring system that is installed at 1/8 to 1/4 " thickness or greater. Intended use of area as well as traffic and type of cleaning service determine the thickness of application. This system is most generally designed for heavy chemical use areas and food processing applications. Cascade Floors heavy duty epoxy systems have very tough and durable physical properties and are based on a tried and true formulation used in the food processing/chemical/circuit board manufacturing industry by Cascade Floors Inc. for over 35 years.

Packaging: Resin components come in 1, 3, and 5 gallon kits.

Colors: Tile Red, light gray, charcoal, and tan

Because we blend our resin base in liquid form we can have a very consistent color throughout the entire flooring system (unlike other flooring systems on the market) will yield consistent color throughout.

Features:

- Fast curing between layers and turnaround times
- Damp proof primer allows application on 5-10 day old cement (it is always recommended to have as much cure time on cement as possible, standard being 28 days)
- Very uniform finished product with desired texture due to application in layers rather than trying to apply entire system in 1 application as other systems try
- Excellent impact and abrasion resistant
- Highly chemical resistant to caustics and acids (see chemical resistance charts)
- Ease of clean up
- Very slip resistant for safety of employees

Benefits:

- No VOC 100% solids system
- Can be applied during operation of facility with no contamination of odors
- Resistant to most food processing environments for industrial flooring
- USDA and FDA compliant
- Very cost effective and low maintenance compared to other type systems
- Holds up very well to heavy traffic
- Installed by only our trained crews with over 60 years experience
- Backed by a company that has been in business over 30 years with a 5 year warranty

Applications:

- Wineries
- Meat Processing
- Dairy
- Bottling facilities
- Pharmaceutical
- Restaurants and commercial kitchens and commissaries
- Chemical processing
- Cold storage facilities
- Pulp and paper mills
- Frozen food manufacturing
- Coolers

Attachment 2
Technical Qualifications & Training Schedule

Name	Employees Requiring Training	Frequency
Plant Orientation	All employees	Initially
Plant Rules and Safety Policies	All employees	Initially/Throughout the year*
Hazard Communication (Right to Know)	All employees with potential chemical exposure	Initially/Throughout the year
PCB Hazard Awareness PCB Commercial Storer Permit PCB Spill Cleanup Policy	All employees with potential PCB exposure	Initially/Throughout the year/Annual Refreshers
Personal Protective Equipment	All exposed employees	Initially/Throughout the year
Ladders	All affected employees	Initially/Annually thereafter
Fire Extinguisher	All employees	Initially/ Annually thereafter
Spill Prevention Control and Countermeasure	All employees who may respond to a chemical spill	Initially/Throughout the year
Asbestos Awareness	All exposed employees	Initially/Throughout the year
Hearing Conservation	All affected employees	Initially/Throughout the year
Lock Out/Tag Out Affected Employee	All affected employees	Initially/Throughout the year
Lock Out/Tag Out Authorized Employee	Maintenance/Equipment operators who may inspect, clean, or adjust machinery	Initially/ Whenever there is a change in locations or personnel
Asbestos Awareness	All exposed employees	Initially/ Annually thereafter
Cranes, Chains and Slings	All affected employees	Initially/ Annually thereafter
Respirators	All affected employees	Initially/ Annually thereafter
Fall Protection	All employees who work at elevations above four feet	Initially/Throughout the year
Compressed Gas Cylinders	All affected employees	Initially/ Annually thereafter
Electrical Awareness	All employees	Initially/ Annually thereafter
Forklift Safety	All affected employees	Initially/ Annually thereafter
General Safety Meeting	All employees	Monthly

* Throughout the year - Topics are reviewed often during monthly safety meetings.

Attachment 3

**Transformer Technologies, LLC
Operations Plan
Salem, OR Facility**

Transformer Technologies, LLC
Operations Plan

Section I - General Overview of the Facility

Transformer Technologies, LLC (Trans Tech) will receive PCB, PCB Contaminated, and non-PCB items. The regulated material will be stored for shipment off-site. The non-PCB items are processed in Plant #1 for recycling and recovery of the metals.

The entire facility known as Plant #2 consists of a rectangular-shaped building and covers a total area of 24,000 ft². The entire facility is roofed. The office area is 1,960 ft², the foreman's office is 160 ft² and the mechanical room is 128 ft² leaving a total production and storage area of 21,752 ft². Of this area, 1,190 ft² is dedicated to the PCB Storage Area, referred to as SA1, along with 2 movable metals pans (22' L x 7' W x 16" H), referred to as SAP1 and SAP2. The pans are placed inside Plant #2 to better accommodate PCB Articles of any size or dimensions. No processing of PCB or PCB-Contaminated items will occur at the facility.

Upon receipt at the facility, items contaminated by 50 parts per million (ppm) PCBs or greater are:

- inspected for conformance with the accompanying manifest and/or shipping papers;
- assigned a unique tracking number; and
- staged for storage, analysis, and off-site shipping.

Section II - Storage of Items

Trans Tech will store items in a manner that allows maximum use of space and presents no danger to the employees or release to the environment. Aisles of the Storage Area will be kept clear for easy movement of mobile equipment and personnel. No mobile equipment operates within the PCB Storage Areas. All PCB Containers and PCB Items managed in the PCB Storage Areas will be placed such that labels and markings are visible without moving other PCB Containers or PCB Items, and in a manner that does not impede inspections.

No mobile equipment operates within the PCB Storage Areas. All PCB Containers and PCB Items managed in the PCB Storage Areas will be placed such that labels and markings are visible without moving other PCB Containers or PCB Items, and in a manner that does not impede inspections.

SA1 will be overlaid with Cascade Floors heavy duty epoxy system - a no odor 3 component resin rich flooring system that is installed at 3/16th inch thickness. SAP1 and SAP2 will be used to store overflow and/or oversized items. As they are metal, they do not require an epoxy coating.

Drummed PCB waste shipped to the facility will be stored on pallets. Drummed PCB waste generated at the facility will be placed directly on the floor of the PCB Storage Areas. If stored on the floor, the drums will not be stacked more than two drums high. Empty drums, however, can be stacked over two drums high. Manufacturer's specifications will be used in determining how high other containers may be stacked.

Section III - Marking of Items

Within Trans Tech's facility, storage of PCB items will occur within the PCB Storage Areas. Trans Tech will observe the following practices when marking PCB items:

- PCB labels will be placed at each entrance into the facility where PCBs are in storage.
- PCB labels and accumulation dates will be required on any items drained for shipment off-site or drained due to leaking.
- Items in storage for disposal will be marked as required by 40 C.F.R. §761.40.

Section IV - Housekeeping and Spill Cleanup

Trans Tech shall maintain and operate the facility to prevent release of PCBs to the environment and reduce PCB exposure to its employees. Routine unloading, loading and storage of items can lead to potential leaks and spills; therefore, Trans Tech understands the importance of good housekeeping practices.

Visual inspections are done on a daily basis by the day shift. They are documented if problems are found. Trans Tech will conduct documented 30-day inspections as required by 40 CFR §761.65 and this permit. Regulated items, received as leaking, will be overpacked, wrapped, drained, or otherwise placed in a spill pan within the PCB Storage Areas. The same will occur for any items found leaking after receipt. Any spill cleanups shall be documented as required by 40 C.F.R. §761.180(b)(1)(iii). If necessary, the leaking item will be drained prior to shipment off-site. Leaks and small spills that occur inside Trans Tech's facility will be cleaned up using the following procedure and in accordance with the closure performance standards documented in the Closure Plan in Section VIII, and according to the verification sampling and analysis requirements in the Closure Plan:

- Initially, absorbent will be used to absorb freestanding liquids and minimize the contaminated area.
- Care should be taken in determining the spill boundaries in order to ensure the cleaning process removes all the contamination.
- The initial covering of absorbent will be removed before cleaning the floor surface.
- This will be followed up with a double wash and double rinse of the contaminated area with a suitable solvent.
- The contaminated area will be scrubbed to facilitate the cleaning process. Absorbent will be used between washings to absorb any liquids, PCB or remaining solvent from the contaminated area.
- All debris, solid waste or liquid generated from a spill cleanup will be disposed of in accordance with PCB disposal regulations at 40 C.F.R. 761 Subpart D.

As required by 40 C.F.R. §761.65, Trans Tech will conduct documented 30-day inspections of the PCB Storage Areas and any corrective actions taken will be noted. For releases of PCBs to the environment that occur outside of Plant #2, Trans Tech will operate in compliance with all requirements of the PCB Spill Cleanup Policy at 40 C.F.R. 761 Subpart G.

Attachment 4

**Transformer Technologies, LLC
PCB Sampling Plan
Salem, OR Facility**

Sampling Plan

Instructions for Taking Oil Sample

IV Distribution Units

1. Label transformer with TT sticker and assign a unique sample ID number.
2. Mark glass vial with unique sample ID number.
3. Record unique sample ID number, date of arrival, source, and physical location in PCB Storage Log residing on TT server.
4. Punch a hole on top of can utilizing Hilti Tool
5. Take new syringe and tubing and place in hole. Insert tubing as far down as possible.
6. Extract approximately 2ml of oil and place in vial, close vial tight. (If there is no oil in unit, a wipe sample must be taken. *See PCB Wipe Sampling Instructions* below.)
7. Place used empty syringe and tubing in plastic bag. **NEVER** place items on the ground or any surface. (Except for on an absorbent pad.)
8. Cover hole with silicon putty.
9. Wipe clean any tools used with absorbent pad
10. Dispose related items used in collection in the designated special waste container.
11. Fill out chain of custody document.

V Transportables

1. Place absorbent pad on the ground underneath the valve.
2. Place a small cup on top of absorbent pad.
3. Slowly open valve until oil begins to trickle.
4. Collect 2ml of oil and shut off valve.
5. Place oil collected into a glass vial.
6. Wipe clean any tools used with absorbent pad.
7. Dispose related items used in collection in the designated special waste container.
8. Fill out chain of custody document.
9. Provide glass vial along with chain of custody to mail clerk to send to testing lab.

VI PCB Wipe Sampling Instructions

1. Mark off a 10cm x 10cm (4" x 4") area to be tested. Look for grid guide provided.
2. Wet the 3" x 3" cotton gauze with hexane.
3. Wipe the area horizontally with hexane saturated gauze pad.
4. Turn the gauze pad over and wipe the area vertically with the gauze pad.
5. If the area is smaller than 4" x 4", consult with testing lab for testing instructions.
6. Place the gauze pad in a clean glass container with lid.
7. Label the glass container with sample identification number.
8. Wipe clean any tools used with absorbent pad.
9. Dispose related items used in collection in the designated special waste container.
10. Fill out chain of custody document.
11. Provide glass container along with chain of custody to mail clerk to send to testing lab.