

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 REGION VII
 11201 Renner Boulevard
 Lenexa, Kansas 66219**

In the Matter Of:)
)
 A-Line E.D.S., Inc.) Approval to Commercially
 808 Dearborn Avenue) Store and Dispose of Polychlorinated
 Waterloo, Iowa 50702) Biphenyl Waste
 EPA ID No. IAR000503078)

AUTHORITY

This Approval to commercially store and dispose of Polychlorinated Biphenyls (PCB) waste is issued pursuant to Section 6(e)(1) of the Toxic Substances Control Act (TSCA), 15 U.S.C. § 2605(e)(1), and 40 Code of Federal Regulations (CFR) § 761 “Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions” (PCB Regulations).

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BACKGROUND

A-Line E.D.S., Inc. (“A-Line, A-Line E.D.S.”) owns and operates a facility located at 808 Dearborn Avenue in Waterloo, Iowa, at which it functions as a commercial storer and disposer of PCB waste (as defined in 40 CFR § 761.3) engaged in storage and disposal activities requiring U.S. Environmental Protection Agency approval. A-Line E.D.S. operates two scrap metal recovery ovens which are subject to this Approval.

On April 7, 2008, A-Line E.D.S. notified the EPA of PCB activity and submitted an initial application to commercially store and dispose of PCB waste, which the EPA approved on May 30, 2008. The EPA approved the A-Line E.D.S. renewal application on July 11, 2013. On March 5, 2018, A-Line E.D.S. applied for renewal of its existing PCB waste commercial storage and disposal approval, which the EPA approved on September 23, 2019. The permit modification request submitted on January 14, 2021, is the subject document reviewed for the issuance of this Approval modification.

APPLICABLE REGULATIONS

This Approval and modification incorporates, and is issued in accordance with, applicable requirements of the PCB Regulations at 40 CFR § 761. The rules applicable to the storage and disposal of PCBs at concentrations of 50 parts per million (ppm) or greater are codified at 40 CFR § 761 Subpart D, “Storage and Disposal.” The PCB Regulations require, among other things, that commercial storers and disposers of PCB waste obtain a written approval issued by the Regional Administrator for

the region where the storage facility is located. On April 29, 2019, the authority of the Regional Administrator was delegated to the Director of the Land, Chemical & Redevelopment Division, Region 7.

FINDINGS

Upon review of the A-Line E.D.S. Application and modification request, the EPA has determined that the criteria for approval to engage in the commercial storage and disposal of PCB waste as set forth in 40 CFR § 761 have been met. Specifically, the Application and demonstration tests show that A-Line E.D.S.'s storage and disposal facility, storage capacity, employee qualifications, closure plan and financial assurance for closure satisfy applicable requirements and that operation of the facility, when conducted in accordance with the conditions of this Approval and all applicable provisions of the PCB regulations, will not pose an unreasonable risk of injury to health or the environment.

EFFECTIVE DATE

This Approval and modification request shall become effective upon signature and shall expire on September 23, 2029, unless suspended, revoked or terminated, or administratively continued, in accordance with the conditions of this Approval, or unless otherwise authorized under applicable law.

DEFINITIONS

All the terms and abbreviations used in this Approval shall have the meanings as defined in 40 CFR § 761.3 unless the context clearly indicates otherwise or unless the term is defined below for the purposes of this Approval.

“A-Line E.D.S.” means A-Line E.D.S. Corporation, the company which owns and operates a PCB waste commercial storage and disposal facility located at 808 Dearborn Avenue in Waterloo, Iowa, and which is approved to commercially store and dispose of PCB waste under this Approval.

"A-Line E.D.S. Facility" and "Facility" mean all contiguous land and improvements on the land and all structures and other appurtenances of the PCB waste commercial storage and disposal facility located at 808 Dearborn Avenue in Waterloo, Iowa.

“Approval” means the content of this document, the conditions within, and any subsequent EPA-approved written modifications thereto.

“Application” and "A-Line E.D.S. Application" mean all data and materials upon which the EPA based its decision to approve A-Line E.D.S.'s request for approval to commercially store and dispose of PCBs and PCB Items, e.g. information submitted to the EPA by A-Line E.D.S. to define, represent, or describe A-Line E.D.S.'s commercial storage and disposal operations. This includes A-Line E.D.S.'s March 5, 2018, renewal application and any subsequent A-Line E.D.S. application that the EPA approves in writing as a modification to this Approval.

“CFR” means the Code of Federal Regulations.

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

“Delegate” means the Director, Land, Chemical & Redevelopment Division, EPA Region 7.

“Director” means the Director of the Land, Chemical & Redevelopment Division within Region 7, U.S. EPA in Lenexa, Kansas. Phone Number: (913) 551-7003 or 1-800-223-0425. Mailing Address: US EPA Region 7, 11201 Renner Boulevard, Lenexa, Kansas 66219.

“Electrical equipment” means assembled or disassembled transformers, circuit breakers, switches, bushings, voltage regulators and reclosers.

“EPA” means the U.S Environmental Protection Agency, Region 7.

“Footprint” means the area of the storage area floor space taken up by electrical equipment or PCB capacitors.

“LCARD” means the Land, Chemical & Redevelopment Division, EPA Region 7.

“Major modification” means any change which will affect overall Facility performance or environmental impact, including but not limited to changes to the storage areas, the maximum PCB storage inventory, the closure plan, closure cost estimates (except as required for inflation adjustment), and the financial plan for closure.

“Minor modification” means any change which will not affect overall Facility performance or environmental impact including but not limited to an administrative or informational change, and correction to typographical errors.

“MSC” means maximum storage capacity.

“PCB” means polychlorinated biphenyl(s) as defined in 40 CFR § 761.3.

“PCB Regulations” are the regulations at 40 CFR § 761.

“Regional Administrator” means the Regional Administrator, EPA Region 7.

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

“Storage area” or “PCB storage area” means any storage area listed in condition B.2(a).

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CONDITIONS OF APPROVAL

A. General Conditions

1. Approval Compliance

- (a) A-Line E.D.S. must operate its Facility in compliance with the conditions of this Approval and consistent with the information included in the A-Line E.D.S. Application. Noncompliance with any provision of the A-Line E.D.S. Application and/or any condition of this Approval shall be deemed a violation of this Approval and may subject A-Line E.D.S. to civil or criminal enforcement action and associated penalties.
- (b) This Approval and modification supersedes all previous Approvals for the commercial storage and disposal of PCB waste at the Facility issued by the EPA to A-Line E.D.S.
- (c) A-Line E.D.S. must comply and operate the Facility in accordance with Section 6(e) of TSCA, 15 U.S.C § 2605(e), and the PCB Regulations, including the requirements of the “PCB Spill Cleanup Policy” codified at 40 CFR § 761, Subpart G.
- (d) This Approval is based on the facts, representations, and certifications made by A-Line E.D.S. in its Application. In the event that the conditions of this Approval are inconsistent with the provisions of, or the information contained in, the A-Line E.D.S. Application and supporting documentation, A-Line E.D.S. must comply with the conditions of this Approval.
- (e) A-Line E.D.S. is liable for the actions of its employees, agents, Contractors, subcontractors and others who are involved in the operation of the Facility.
- (f) Failure to comply with any of the Approval conditions shall constitute a violation of the requirement in 40 CFR § 761.50(a) to store or dispose of PCB waste in accordance with 40 CFR § 761 Subpart D. A violation of the PCB Regulations is a prohibited act under Section 15 of TSCA.
- (g) Compliance with this Approval does not relieve A-Line E.D.S. of the responsibility to comply with all other applicable federal, state, and local laws and regulations, including the PCB Regulations. A-Line E.D.S. should not rely solely on this Approval for all requirements related to PCBs or the storage and disposal of PCB waste.

2. Duty to Report Noncompliance

If at any time A-Line E.D.S. 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, A-Line E.D.S. shall notify the EPA Region 7 PCB Coordinator within 24 hours and shall submit a written report to the EPA describing the inconsistencies within five calendar days.

3. EPA Modification, Suspension, Revocation and Termination of Approval

- (a) The EPA reserves the right to modify, suspend, revoke and terminate this Approval:
 - (i) If A-Line E.D.S. fails to operate the Facility in compliance with this Approval;
 - (ii) If there is reason to believe that continued operation of the Facility presents an unreasonable risk of injury to health or the environment, or if new regulations or standards become applicable rendering such modification, suspension, revocation or termination appropriate. Upon request, A-Line E.D.S. shall provide information the EPA deems necessary to determine whether cause exists for modification, suspension, revocation or termination of this Approval. A-Line E.D.S. shall provide such information within the time frame specified in the EPA's request, or if no time frame is specified, within five calendar days of the EPA's request unless impracticable;
 - (iii) Upon discovering misrepresentation(s) or omission(s) of material fact(s) in the A-Line E.D.S. Application; or
 - (iv) For environmental civil violations committed by, or criminal convictions of, A-Line E.D.S., its principles or key employees.
- (b) The EPA's right to modify, suspend, revoke or terminate this Approval does not in any way preclude its right to commence appropriate enforcement action under any or all applicable statutes and regulations. The EPA reserves any rights and remedies available to it under TSCA, the PCB Regulations and any other Federal laws or regulations for which the EPA has jurisdiction, to enforce the provisions of this Approval.

4. Application and Approval Modifications

- (a) A-Line E.D.S. must submit an application and receive written EPA approval for any modification to the A-Line E.D.S. Application or to this Approval. A-Line E.D.S. must not implement any such modifications until it receives written EPA consent.
- (b) Minor modifications to the A-Line E.D.S. Application or to this Approval shall be submitted to the EPA Region 7 PCB Coordinator and shall be implemented only after receipt of written consent.
- (c) Major modifications to the A-Line E.D.S. Application or to this Approval shall be submitted to the EPA Regional Administrator or his or her delegate and shall be implemented only after receipt of written consent.

5. Approval Expiration/Renewal

- (a) This Approval and the subject modification shall expire on September 23, 2029. This Approval and the conditions herein will remain in effect beyond the Approval expiration date if a complete renewal application is received within the time period specified in condition A.5(b) and the EPA has determined in writing that the application is complete.
- (b) To continue the commercial storage and disposal of PCBs and PCB Items granted by this Approval after the expiration date of this Approval, A-Line E.D.S. shall submit a complete renewal application at least 90 days, but not more than 180 days prior to the expiration date, September 23, 2029. A complete renewal application must contain, at a minimum, information listed in 40 CFR § 761.65(d)(3). A complete renewal application is considered to be information submitted in the most recently approved application, with appropriate modifications or updates based on 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 A-Line E.D.S. to submit additional information to support the renewal of this Approval. If A-Line E.D.S. submits this information to the EPA at least 90 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 an approval request denial.
- (c) If A-Line E.D.S. does not submit a complete renewal application at least 90 days prior to the expiration date of this Approval, this Approval will expire as specified in condition A.5(a). Failure to submit a renewal application as described in condition A.5(b) will be treated as evidence of A-Line E.D.S.'s intent to close.

6. Entry and Inspection

A-Line E.D.S. shall allow, at reasonable times, the EPA authorized representative(s) to conduct inspections for the purpose of determining compliance with this Approval. Such inspection activities may include, but are not limited to, permitting the EPA authorized representative(s) to:

- (a) conduct interviews;
- (b) inspect and/or collect copies of records and monitoring data;
- (c) take sample(s); and
- (d) inspect, observe and document A-Line E.D.S.'s activities, equipment, work practices, operations and processes.

7. Change in Ownership or Operational Control

- (a) A-Line E.D.S. shall notify the Regional Administrator in writing at least 90 days before it intends to transfer ownership or operational control of the Facility. This notification shall include the name, address and telephone number of the intended transferee. A copy of this notification shall be sent to the EPA's Region 7 PCB Coordinator. Along with such notification, A-Line E.D.S. shall submit an application to modify the A-Line E.D.S. Application providing the information required in all applicable provisions of 40 CFR § 761.65(d)(3), along with a notarized affidavit signed by the intended transferee stating that it will abide by all conditions of the Application, including the proposed modifications submitted in connection with the intended transfer of ownership or operation.
- (b) After receiving A-Line E.D.S.'s notification and application to modify the Application, the intended transferee's affidavit, evidence that the intended transferee has established financial assurance for closure pursuant to 40 CFR § 761.65(g), and other documents the EPA may require under 40 CFR § 761.65(j)(2), EPA may either:
 - (i) Modify the approval to substitute the transferee's name for A-Line E.D.S., and make other conforming minor modifications; or
 - (ii) Require the intended transferee to submit a new application and/or apply for a new approval.
- (c) The intended transferee shall not operate the Facility until the Regional Administrator or his or her delegate issues an approval in the transferee's name.
- (d) A-Line E.D.S. must maintain its financial assurance for closure of the Facility until the intended transferee has established financial assurance for closure of the Facility pursuant to 40 CFR 761.65(g) and the EPA issues an approval in the transferee's name.
- (e) The 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 the EPA finds that this Approval or the transferee's new approval will not prevent unreasonable risk of injury to health or the environment.

8. Change in Flood Plain

A-Line E.D.S. must submit a written notification to the EPA Regional PCB Coordinator immediately upon re-designation of the Facility within a 100-year flood plain. The EPA may modify, suspend, revoke or terminate this Approval if the 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.

9. Transformers and Other Electrical Equipment

If the PCB concentration of any transformer, or dielectric fluid within any transformer, received by A-Line E.D.S. is not known at the time of receipt, A-Line E.D.S. must treat the transformer to be a PCB Transformer, i.e., 500 ppm or greater PCBs, until testing proves otherwise.

10. Bankruptcy

A-Line E.D.S. must notify the EPA within 30 days of filing for bankruptcy so that the 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.

11. Severability

If any part or condition of this Approval is found to be invalid by any court of competent jurisdiction, all of the other provisions of this Approval shall remain in full force and effect.

B. PCB Storage

1. Facility Description

A-Line E.D.S. decommissions transformers, electrical equipment and operates two on-site scrap metal recovery ovens, described further in Condition C of this Approval. The A-Line E.D.S. Facility in Waterloo, Iowa, is situated on approximately 12 acres of securely fenced land consisting of several structures including: office building, maintenance building, two open sided equipment storage facilities, boring building, warehouse, transformer decommissioning building and a granulation building for metals recovery. Several outdoor aboveground storage tanks not subject to this Approval are present on the property and discussed in the approved Spill Prevention Control and Countermeasures and Contingency Plan dated November 30, 2017. The Facility is located at latitude 42° 29' 27" N and longitude 92° 18' 11" W with surface drainage from the Facility flowing into Dry Run Creek 0.13 miles west of the Facility. Total Facility area under roof is about 74,000 square feet, with 12,264 square feet for the transformer decommissioning building. See Attachment A of this Approval for Facility layout.

2. PCB Storage Areas

(a) A-Line E.D.S.'s approved PCB storage areas are described below and depicted in Attachment A. PCB storage areas shall be maintained in compliance with 40 CFR §761.65 and the A-Line E.D.S. Application.

(i) Decommissioning Building: 150 feet long by 85 feet wide, twice sealed with contrasting color epoxy, concrete floor with continuous 6-inch-high curbing. Additionally, a 600 square foot metal pan within the decommission building with 6-inch steel pans are used to capture and contain any leaks.

- (ii) Indoor Tank Area: 6 steel tanks total completely contained within the decommissioning building with two being subject to this Approval; one 7,500-gallon tank for 2-49 part per million (ppm) PCBs, and one 5,000-gallon tank for 50-499 ppm PCBs.
- (iii) Outdoor Tank Area: Ten tanks total are contained in a 14-gauge corrugated steel wall set 6-inches deep in the soil. The wall is supported by 35-inch posts anchored in the ground and concrete. A polyethylene liner is draped over the corrugated wall to provide a containment floor. The liner is covered with 8-inches of gravel. Of these tanks, five are subject to this Approval and all are 21,000-gallon tanks for 2-49 ppm PCBs.
- (b) Storage of PCBs or PCB items in an area other than the approved storage areas described above shall be deemed a violation of this Approval.
- (c) Maintenance of an approved storage area in a manner that is not in compliance with 40 CFR § 761.65(b)(1) and the A-Line E.D.S. Application shall be deemed a violation of this Approval.

3. Maximum Storage Capacities for PCBs and PCB Items

- (a) The maximum storage capacity and the categories of PCBs and PCB Items permitted to be stored at any time are specified below. A-Line E.D.S.'s ability to store PCBs and PCB Items at the Facility is limited to the categories and quantities specified below.
 - (i) Decommissioning Building:
 - 45,000 pounds of drained or filled PCB Transformers (≥ 500 ppm PCB), not to exceed 20 Transformers or a total Footprint of 180 square feet.
 - 135,000 pounds of drained or filled PCB Transformers (≥ 50 but < 500 ppm PCB), not to exceed 310 Transformers or a total Footprint of 2,800 square feet.
 - 30,000 pounds of drained or filled PCB Capacitors (≥ 500 ppm PCB), stored on standard skids not to exceed 300 Capacitors or a total Footprint of 225 square feet.
 - 40,000 pounds of drained or filled PCB-Contaminated electrical equipment (≥ 50 but < 500 ppm PCB), not to exceed a total Footprint of 450 square feet.
 - Drained or filled drums holding up to 3,025 gallons of liquid (≥ 500 ppm PCB), not to exceed 55 (55) gallon drums, or a total Footprint of 500 square feet.

- Drained or filled drums holding up to 4,070 gallons of liquid (≥ 50 but < 500 ppm PCB), not to exceed 74 (55) gallon drums, or a total Footprint of 1,500 square feet.
 - Indoor tank area as described below.
- (ii) Indoor Tank Area:
- 5,000 gallons of liquid (≥ 50 but < 500 ppm PCB) in one bulk tank.
 - 7,500 gallons of liquid (≥ 2 but < 50 ppm PCB) in one bulk tank.
- (iii) Outdoor Tank Area:
- 100,000 gallons of liquid (≥ 2 but < 50 ppm PCB) in five bulk tanks.
- (b) A-Line E.D.S. shall not substitute capacity of one of the PCB or PCB Item categories described above to prevent exceedance of the maximum storage capacity in another PCB or PCB Item category.
- (c) Storage of categories of PCBs or PCB Items in excess of the quantities described above in a given storage area shall be deemed a violation of this Approval.

4. Storage Requirements for PCBs and PCB Items

- (a) Intact and non-leaking PCB equipment and other PCB articles, whether drained or filled, shall be stored free-standing or in PCB article Containers.
- (b) Partially or fully disassembled drained PCB equipment and other PCB articles shall be stored free-standing, or in PCB containers.
- (c) Leaking PCB articles and PCB equipment shall be stored in PCB containers.
- (d) Liquid PCBs shall be stored in PCB containers, dedicated stationary bulk storage containers (tanks), or intact and non-leaking PCB articles.
- (e) Non-liquid PCBs shall be stored in PCB containers.

5. PCB Marking and Labeling

- (a) A-Line E.D.S. shall label all PCB Containers, PCB storage areas, and any PCB Item subject to marking requirements under 40 CFR § 761.40 with the label defined in 40 CFR § 761.45.
- (b) A-Line E.D.S. shall place a label on all PCB Items with the date of removal from service for disposal. Storage shall be managed so that PCB Items can be located by this date. Stationary storage containers for liquid PCBs shall have a record that includes, for each batch of PCBs, the quantity of the batch and date the batch was

added to the container. The record shall also include the date, quantity, and disposition of any batch of PCBs removed from the container.

- (c) A-Line E.D.S. shall dispose of all PCBs and PCB Items within one year after they are taken out of service. If additional time is required for disposal, A-Line E.D.S. shall comply with the requirements of 40 CFR § 761.65(a)(2) and (3).

6. PCB Storage Container Requirements

- (a) Any container used for the storage of liquid or non-liquid PCB waste shall be in accordance with the requirements set forth in the DOT Hazardous Materials Regulations at 49 CFR § 171 through 180.
- (b) Stationary storage containers (tanks) used to store organic solvents containing ≥ 2 ppm PCBs and PCB liquids containing ≥ 50 ppm PCBs shall be in compliance with the requirements of 40 CFR § 761.65(c)(7).
- (c) Containers used to store liquid or non-liquid PCB waste shall comply with the requirements of 40 CFR § 761.65(c)(6).
- (d) A-Line E.D.S.'s use of a PCB waste storage container that does not comply with any of the requirements described above shall be deemed a violation of this Approval.

7. Storage Area Requirements

- (a) Drums containing PCBs and PCB items shall not be stacked in a manner that could result in a spill. Drums shall not be stacked more than two drums high.
- (b) An aisle width of two feet, minimally, must be maintained to allow for unobstructed access to all PCBs and PCB Items stored on-site by personnel, fire protection equipment and decontamination equipment.
- (c) A-Line E.D.S. may store PCBs and PCB items in a manner that allows maximum use of space. However, PCBs and PCB items must be stored in a manner that presents no danger to workers and that does not impede routine inspections carried out by A-Line E.D.S. as required by this Approval. During inspections conducted by EPA authorized representative(s), A-Line E.D.S. will move items as requested by the inspector(s) to allow the inspector(s) full access to the Facility and stored PCBs and PCB Items.
- (d) Access to the PCB storage areas shall be restricted to workers that have completed training in accordance with Condition D.3. Those workers that are working for or on behalf of A-Line E.D.S. as of the effective date of this Approval that have been trained under previous versions of the A-Line E.D.S. training manual shall be allowed access to the PCB storage areas for up to 60 days of the effective date of this Approval in order to complete the training described in paragraph D.3 of this Approval.

- (e) A-Line E.D.S. must document the PCB content of all incoming inventory to establish compliance with the conditions of this Approval at all times. Sampling and analytical methods must comply with applicable provisions of the PCB Regulations.
- (f) If any PCB container, PCB article, PCB article container or PCB equipment is leaking, A-Line E.D.S. shall immediately transfer the PCB waste in the container, article or PCB equipment to a properly marked, non-leaking container. Any spilled or leaked materials shall immediately be cleaned up and the materials and residues containing PCBs shall be disposed of in accordance with applicable provisions of the PCB Regulations and Condition D.4 of this Approval.
- (g) No item of movable equipment that is used for handling PCBs and PCB Items in the approved storage areas and that comes in direct contact with PCBs shall be removed from the storage area unless it has been decontaminated as specified in 40 CFR § 761.79.
- (h) PCB Containers must always be closed during storage, except when adding and removing their contents, and must not be opened, handled or stored in a manner which may cause damage or leaks.

8. Storage Area Inspection Requirements

- (a) PCBs and PCB Items in storage shall be checked for leaks and spills daily. A-Line E.D.S. need not document the daily (routine) inspections. However, any spills discovered during these routine inspections shall be cleaned up expeditiously, as specified in paragraph B.8(c) below.
- (b) At least once every 30 days, as required by 40 CFR § 761.65(c)(5), A-Line E.D.S. shall conduct a thorough inspection of each PCB storage area at the Facility. The following elements shall be included in the 30-day inspections:
 - (i) PCBs and PCB Items in storage shall be checked for leaks and spills;
 - (ii) The PCB Containers, PCB Article Containers, PCB Equipment and stationary storage containers (tanks), and ancillary equipment (valves, pipelines, etc.,) shall be checked for leaks;
 - (iii) The condition of PCB liquid and spent solvent storage tank shells, tank supports, and tank area curbing shall be checked for cracks, leaks or deterioration;
 - (iv) Tank vents, high liquid level alarm systems and liquid level indicators shall be checked to make sure they are operating properly;
 - (v) The condition of the floor, joints and curbing in the PCB storage area shall be checked; and

- (vi) Spill response and emergency equipment as described in the Spill Prevention Control and Countermeasure Plan (SPCC Plan) submitted and approved as part of the A-Line E.D.S. Application shall be checked and replaced or replenished as necessary.
- (c) PCBs or PCB items found leaking shall be transferred to a properly marked non-leaking container. Any spilled or leaked materials shall immediately be cleaned up and the materials containing PCBs shall be disposed of in accordance with applicable provisions of the PCB Regulations and condition D.4.
- (d) Any needed repairs, including those for leaks, cracks, deterioration, or malfunctioning vents, alarms or indicator levels detected during such inspections, shall be made as expeditiously as possible.

C. Scrap Metal Recovery Ovens

1. Process Findings

A-Line E.D.S. operates two copper reclamation furnaces subject to this approval, a Model G-466-HT (EP3, furnace EP3), and a Model W-3000-HT (EU4, furnace EU4).

EP3 is a single load chamber furnace rated at a maximum capacity of 1,600 pounds (lb) per load and is powered by natural gas. With an average process weight of approximately 1,050 lb per load, EP3 emissions are vented through a secondary retention chamber to an exhaust stack that is monitored with a continuous emissions monitoring system (CEMS). The engineering schematic and process description for EP3 is included as Appendix II.

EU4 is a dual load chamber furnace rated at a capacity 5,000 lb per load on each side for a total maximum capacity of 10,000 lb per run. Both primary load chambers from EU4 vent emissions through dedicated retention chambers to a shared thermal oxidizer chamber and exhaust stack. The EU4 exhaust stack is also monitored with a CEMS with complete engineering schematics and process description provided in Appendix III.

2. Emissions Compliance Testing

EP3 had an emissions compliance stack test conducted on November 29, 2018. A 90% maximum load was processed with EP3 exhaust emissions sampled for; nitrogen oxides, carbon monoxide, sulfur dioxide, particulate matter, Hydrogen Chloride, carbon dioxide and oxygen at the A-Line E.D.S. Facility. The average results of all measured pollutant emissions were below the required state and federal limits. These emissions results are documented in the Emissions Compliance Test report dated December 29, 2018 and are summarized in Appendix IV.

EU4 had an emissions compliance stack test conducted on December 15, 2020. A 90% maximum load was processed with EU4 exhaust emissions sampled for; nitrogen oxides, carbon monoxide, sulfur dioxide, particulate matter, Hydrogen Chloride, carbon dioxide and oxygen at the A-Line E.D.S. Facility. The results of all measured pollutant emissions were below the required state and federal limits and are documented in the

Emissions Compliance Test report dated January 12, 2021 and are summarized in Appendix V.

3. Operational Conditions

- (a) A-Line E.D.S. shall operate both scrap metal recovery ovens in compliance with 40 CFR § 761.72, “Scrap metal recovery ovens and smelters,” the Iowa Department of Natural Resources Air Permits numbered 05-A-910 and 20-A-085 as well as all other applicable Federal, State, and local laws and regulations at all times.
- (b) A-Line E.D.S. shall only dispose of residual PCBs associated with PCB-Contaminated articles regulated under 40 CFR § 761.60(b), metal surfaces in PCB remediation waste regulated under 40 CFR § 761.61, or metal surfaces in PCB bulk product waste regulated under 40 CFR § 761.62(a)(6) and 761.79(c)(6), from which all free-flowing liquids have been removed in the scrap metal recovery ovens.
- (c) PCB liquids, other liquid waste qualifying as waste oils which may be used as provided for at 40 CFR § 761.20(e), or PCB remediation waste, other than PCB-Contaminated articles, may not be disposed of in the metal recovery oven.

4. Operational Requirements

A-Line E.D.S. shall operate EP3 and EU4 copper reclamation furnaces in accordance with requirements found in 40 CFR § 761.72(a).

- (a) A-Line E.D.S. shall maintain full and functional operation of both enclosed (i.e., negative draft, no fugitive emissions) and interconnected chambers of the scrap metal recovery ovens.
- (b) All scrap metal shall be placed in the primary chambers at ambient temperature.
- (c) The quantity of scrap fed into the recovery oven and retention times shall be measured and recorded for each process run.
- (d) The primary chambers must operate at a temperature between 537 °C and 650 °C for a minimum of 2-1/2 hours and reaches a minimum temperature of 650 °C (1,202 °F) once during each heating cycle or process run.
- (e) Heated gases from all primary chambers feed directly into the secondary chamber (i.e., afterburners) which operate at a minimum temperature of 1,200 °C (2,192 °F), with at least a 3 percent excess oxygen, and a retention time of 2.0 seconds with a minimum combustion efficiency of 99.9 percent according to the definition in 40 CFR § 761.70(a)(2).
- (f) Heating of the primary chambers shall not commence until the secondary chambers have reached a temperature of 1,200 ° ±100 °C (2,192 ° ±180 °F).

- (g) Continuous monitoring for concentrations of carbon dioxide, carbon monoxide, temperature, and excess oxygen in the primary and secondary chambers shall be operated and recorded while either chamber is in operation.
- (h) Emissions from the secondary chambers shall be vented through the exhaust gas stack and gas stack emissions shall be for: particulates <0.015 grains/dry standard cubic foot, sulfur dioxide <35 parts per million by volume (ppmv), nitrogen oxide <150 ppmv, carbon monoxide <35 ppmv, and hydrogen chloride <35 ppmv.
- (i) A measurement of the temperature in all secondary chambers at the time the primary chamber starts heating is taken, recorded and retained at A-Line E.D.S. for three years from the date each charge is introduced into a primary chamber.

5. Contingency Plan Requirements

A-Line E.D.S. shall maintain a contingency plan for the scrap metal recovery oven that indicates a list of all required parameters specified in paragraph 4 and values at which shut down should occur. It shall also list any corrective measures and the time frame required for completion of these measures if any of the operational requirements specified in paragraph 4 of this section are not met.

6. Maintenance of Data and Records

All operating data and records for the scrap metal recovery ovens shall be maintained in accordance with 40 CFR § 761.180, "Records and monitoring".

D. Facility Operation, Limitation of Exposure and Control of Releases

1. Facility Conditions

A-Line E.D.S. shall maintain and operate the Facility to prevent fire, explosion, releases of PCBs to the environment and exposure of workers to PCBs. All processing (disassembly and decontamination) of PCBs and PCB Items shall be conducted within the Facility.

2. Facility Security

The A-Line E.D.S. Facility security fencing must be secured to restrict access at all times.

3. Worker Protections

- (a) A-Line E.D.S. workers with access to PCB decommissioning processes shall wear or use protective clothing or equipment at the Facility to protect against dermal contact with or inhalation of PCBs or material containing PCBs.
- (b) A-Line E.D.S. shall comply with all applicable health and safety standards, as required by federal, state and local regulations and ordinances.
- (c) A-Line E.D.S. shall comply with the safety provisions of the Applications.

- (d) All employees hired subsequent to the date of this Approval and modification must be trained, as specified in A-Line E.D.S.'s personnel training program and training schedule included in the Application. In addition, A-Line E.D.S. must ensure that personnel who are directly involved with handling PCBs or operating the scrap metal recovery oven are familiar with the requirements of this Approval, and the regulatory requirements under 40 CFR § 761.
- (e) Within 30 days of the effective date of this Approval, A-Line E.D.S. shall update as necessary the manual it uses to train workers with access to PCB storage areas so that it includes, but is not necessarily limited to, the regulatory requirements of the PCB Regulation, with emphasis in the requirements of the "Spill Cleanup Policy," 40 CFR § 761 Subpart G; the conditions of this Approval; and the SPCC Plan submitted and approved as part of the A-Line E.D.S. Application.
- (f) Within 30 days of the effective date of this Approval, A-Line E.D.S. shall update as necessary the manual it uses to train workers with access to the scrap metal recovery oven so that it includes, but is not necessarily limited to; the regulatory requirements for the scrap metal recovery oven; the conditions of this Approval; the contingency plan and requirements; and the SPCC Plan submitted and approved as part of the A-Line E.D.S. Application.
- (g) A-Line E.D.S. shall make its updated training manual available to the EPA upon request. The EPA shall have the right to review the updated A-Line E.D.S. training manual and require A-Line E.D.S. to correct any deficiencies in a prompt manner.
- (h) Within 60 days of the effective date of this Approval, A-Line E.D.S. shall ensure proper training of all existing workers that have, or will have, access to PCB storage areas and the metal recovery oven in accordance with the updated A-Line E.D.S. training manuals.
- (i) All new workers must complete training in accordance with the updated A-Line E.D.S. training manuals prior to entering PCB storage areas or operating the scrap metal recovery oven. In addition to initial training, all workers with access to PCB storage areas or the scrap metal recovery oven must complete annual refresher training in accordance with the updated A-Line E.D.S. training manual.
- (j) Except as provided in condition D.3(k), the PCB concentration of non-porous surface areas located outside of PCB storage areas shall not exceed 10 µg/100 cm² and all porous surface located outside of PCB storage areas shall not exceed 1 ppm.
- (k) The PCB concentration of food handling areas, including any locations where food or drink is prepared, stored or consumed shall not exceed a concentration of 1 µg/100 cm² for non-porous surfaces and 1 ppm for porous surfaces.
- (l) Any person entering and leaving the PCB storage area must do so through a clean-in/clean-out station.

- (m) The PCB concentration of non-porous surface areas located in the clean-in/clean-out station shall not exceed 10 µg /100 cm² and all porous surfaces located in the clean-in/clean-out station shall not exceed 1 ppm.
- (n) In the event the concentration of PCBs exceeds the levels set forth in conditions D.3(j) through D.3(m), A-Line E.D.S. shall immediately begin decontamination of the affected area in accordance with applicable requirements of the PCB Regulations and this Approval.
- (o) A-Line E.D.S. shall not encapsulate any PCB-containing areas regardless of PCB concentration levels without specific prior written approval from the EPA.
- (p) A-Line E.D.S. must report incidences of injury or exposure to PCBs to the Region 7 PCB Coordinator within 24 hours of becoming aware of such injury or illness.

4. PCB Spills and Releases

- (a) A-Line E.D.S. has prepared and submitted an SPCC Plan that the EPA approved as part of the A-Line E.D.S. Application. A-Line E.D.S. shall follow the spill prevention measures outlined in the SPCC Plan and implement applicable control measures specified in the SPCC Plan for qualifying spill events.
- (b) Spills of PCBs shall be cleaned up in accordance with the requirements of the PCB Spill Cleanup Policy at 40 CFR § 761, Subpart G of the PCB Regulation, as applicable.
- (c) A-Line E.D.S. shall comply with the applicable PCB spill reporting requirements under 40 CFR § 761.125; the Clean Water Act; and the Comprehensive Environmental Response Compensation and Liability Act. Notification of the EPA Regional Office of any PCB spill as required under 40 CFR § 761.125 shall be made to the Region 7 PCB Coordinator. A written report of the reportable spill incident under 40 CFR § 761.125 must be submitted within five business days following the incident.
- (d) Any wastes generated as a result of cleanup of a PCB spill or decontamination of any material contaminated by a PCB spill shall be disposed of in accordance with 40 CFR § 761.61.
- (e) A-Line E.D.S. shall immediately report to Region 7 PCB Coordinator if, as a result of any unauthorized entry or operation at the Facility, PCBs were released. To the extent known, such report shall include a description of the unauthorized entry or operation, the resulting release of PCBs, and any corrective action taken by A-Line E.D.S. Examples of unauthorized entry or operation at the Facility to be reported to the EPA include, but are not be limited to, tampering, destruction, or loss at the Facility which caused the release of PCBs.

5. Emergency Provisions

- (a) A-Line E.D.S. shall follow the SPCC Plan that was submitted and approved as part of the A-Line E.D.S. Application whenever there is a fire, explosion, or release of PCBs or hazardous constituents. A-Line E.D.S. shall document the date, reason, and all corrective actions taken for any occurrence or implementation of the SPCC Plan.
- (b) Copies of the updated A-Line E.D.S. training manual, SPCC Plan, and this Approval shall be maintained and be made available to all workers at the A-Line E.D.S. Facility.
- (c) Lists of emergency contacts, telephone numbers, and emergency exit routes shall be posted in prominent locations throughout the Facility minimally including employee break rooms, main exits, and next to telephones available to employees.
- (d) The Facility shall, at a minimum, be equipped with the following:
 - (i) an internal communications or alarm system capable of providing immediate emergency notification (voice or signal) to facility personnel;
 - (ii) devices, such as a telephone or a hand-held two-way radio, which is immediately available at the scene of operations, capable of summoning emergency assistance from local police departments, fire departments, and State or local emergency response teams;
 - (iii) portable fire extinguishers, fire control equipment, spill control equipment, and decontamination equipment; and
 - (iv) water at adequate volume and pressure to supply fire hose streams or foam equipment.
- (e) A-Line E.D.S. shall test and maintain the equipment at the Facility in accordance with the manufacturer's recommendations to ensure proper operation in time of emergency. In the event any of the equipment specified above was manufactured by A-Line E.D.S., A-Line E.D.S. shall establish and follow a testing and maintenance plan for those manufactured items.
- (f) Whenever PCBs are being poured, mixed or otherwise handled, A-Line E.D.S. shall ensure that all workers involved in the operation will have immediate access to an internal alarm or emergency communication device, either directly or through visual or voice contact with another worker.
- (g) At all times, there shall be at least one worker present at the A-Line E.D.S. Facility or on call with the responsibility for coordinating all emergency response measures. This worker shall have immediate access to the entire Facility and to a device, such as a telephone or a hand-held two-way radio,

immediately available at the scene of operation capable of summoning external emergency assistance. This worker must have the authority to commit the resources needed to carry out the contingency measures of this Approval, the A-Line E.D.S. Application, the PCB Regulation or that are otherwise appropriate.

- (h) Within 30 calendar days from the initial issuance of this Approval, A-Line E.D.S. shall provide a written description of storage activities, stored materials and emergency procedures, as described in the A-Line E.D.S. Application, to local police departments, hospitals and state and local emergency response teams that may be called upon to provide emergency services, and shall provide updates of the written description as necessary.
- (i) A-Line E.D.S. shall review and promptly modify the SPCC Plan whenever:
 - (i) such plan fails in an emergency;
 - (ii) A-Line E.D.S. changes the Facility's design, construction, operation, maintenance or emergency response policies;
 - (iii) a circumstance arises that materially increases the potential for fires, explosions, or releases of PCBs or hazardous constituents;
 - (iv) the list of emergency coordinators changes;
 - (v) the list of emergency equipment changes;
 - (vi) a revision is warranted to prevent a risk of injury to health and the environment; or
 - (vii) the EPA determines that a revision to such plan is necessary.
 - (viii) A-Line E.D.S. shall submit proposed modifications to its SPCC Plan to the EPA in the form a modified application, and shall not implement such modifications until it receives written EPA approval.

6. Recordkeeping and Reporting

- (a) A-Line E.D.S. shall comply with all applicable recordkeeping and reporting requirements of the PCB Regulation, including but not limited to, annual records, annual document logs and annual reports as required by 40 CFR §761.180.
- (b) A-Line E.D.S. shall maintain weekly records of storage inventories which are sufficient to determine compliance with the maximum storage capacity and related requirements for PCBs and PCB Items specified in condition B.2.
- (c) A-Line E.D.S. must maintain records demonstrating compliance with the requirements of 40 CFR § 761.180(a) and (b) and this Approval:
 - (i) the documentation of PCB content, sampling and analytical testing requirements of paragraph B.7(e);

- (ii) the inspection requirements of paragraph B.8(b), which shall be in the form of inspection records;
 - (iii) the cleanup and disposal requirements of paragraph B.8(c);
 - (iv) the repair requirements of paragraph B.8(d);
 - (v) the sampling and monitoring requirements of paragraph C.4;
 - (vi) the contingency plan requirements of paragraph C.5, which shall include the date and reason of any occurrence or implementation of the contingency plan and document all corrective actions taken;
 - (vii) the worker training requirements of paragraph D.3(i), which shall include the name and title of the individual, the date(s) of the training and a signature sheet certifying that the signatory completed training in accordance with the updated A-Line E.D.S. training manuals on the date specified;
 - (viii) the detection of exceedance(s) and decontamination requirements under conditions D.3(j) through D.3(n);
 - (ix) the spill, release, disposal, reporting and notification requirements of paragraph D.4;
 - (x) the equipment maintenance and testing requirements of paragraph D.5(d); and,
 - (xi) the emergency responder notification requirements of paragraph D.5(g).
- (d) A-Line E.D.S. shall maintain copies of the manifests, either paper copies or electronically available in an online e-Manifest account, and certificates of disposal for all PCBs and PCB Items that have been stored at the A-Line E.D.S. Facility. Copies of certificates of disposal shall be provided to the generator within 30 calendar days of receipt by A-Line E.D.S. of documentation of final disposal of all materials resulting from the commercial storage of the generator's PCBs and PCB Items.
- (e) All records relating to sampling, analysis and quality assurance required by the PCB Regulation or this Approval shall include the following:
- (i) exact date, place, and time of each sample collected;
 - (ii) volume of each sample collected;
 - (iii) name of person collecting each sample;
 - (iv) name of analyst;

- (v) date and time of analysis;
 - (vi) the analytical techniques or methods used for each sample;
 - (vii) the analytical results including chromatographs, calculations, and other raw data;
 - (viii) calibration records and maintenance records of sampling equipment and analytical instrumentation; and,
 - (ix) records of quality assurance/quality control activities.
- (f) All records required to be maintained either by the PCB Regulation or this Approval shall be legible, prepared in black ink, or typed. Any modification or correction of the records must be initialed and dated by a A-Line E.D.S. worker authorized to make such change. If the recordkeeping is maintained electronically, A-Line E.D.S. shall produce and maintain hard copy printouts on a monthly basis and shall back-up the data on a daily basis. During any period of time in which the electronic recordkeeping system is rendered non-operational, A-Line E.D.S. must implement a comparably reliable alternate recordkeeping system in its place.
- (g) All records required to be maintained either by the PCB Regulation or this Approval shall be maintained at one centralized location at the A-Line E.D.S. Facility, and shall be made available for inspection by the EPA authorized representatives. When A-Line E.D.S. ceases operations, all such records shall be made available to the EPA at the A-Line E.D.S. Facility for a period of at least five years following cessation of operations. If A-Line E.D.S. is unable to comply with this condition because it is no longer in control of the site, it shall comply by making such records available at an alternative location proposed by A-Line E.D.S. and approved by the EPA in writing.
- (h) All reports, notifications and other information requested to be provided to the EPA shall be signed by a A-Line E.D.S. officer or by the A-Line E.D.S. Environmental and Safety Manager.
- (i) Unless otherwise specified herein, reports, notification, mail or other submittals required to be submitted to the EPA under this Approval shall be sent to
- PCB Coordinator (Attn: Annah Murray)
 U.S. Environmental Protection Agency, Region 7
 11201 Renner Boulevard, Lenexa, KS 66219
- (j) No recordkeeping, report or communication required under this Approval shall qualify as a self-audit or voluntary disclosure under the EPA audit, self-disclosure or penalty policies.

7. Closure and Financial Assurance

- (a) A-Line E.D.S. shall maintain adequate financial assurance as specified in 40 CFR § 761.65(g) and 40 CFR § 264, Subpart H, to provide for:
 - (i) funding in accordance with the approved closure plan; and
 - (ii) compensating others for bodily injury and property damage caused by accidents arising from operations of the facility.
- (b) The Closure Plan and Closure Cost Estimate submitted as part of the A-Line E.D.S. Application is deemed acceptable under 40 CFR § 761.65(e) and is incorporated by reference into this Approval. A-Line E.D.S. shall comply with the approved Closure Plan and Closure Cost Estimate.
- (c) A-Line E.D.S. has demonstrated financial assurance for closure of the A-Line E.D.S. Facility as required by 40 CFR § 761.65(g). A-Line E.D.S. may not modify its mechanism for financial assurance without prior written approval from the EPA. A-Line E.D.S. shall submit proposed changes to its financial assurance mechanism to the EPA Region 7 PCB Coordinator in the form a modified application and shall not implement such modification until it receives written EPA approval.
- (d) A-Line E.D.S. shall adjust the Closure Cost Estimate annually to reflect inflation as required by 40 CFR § 761.65(f)(2) within 30 days after the close of A-Line E.D.S.'s fiscal year. A-Line E.D.S. shall submit a copy of the annually adjusted Closure Cost Estimate to the EPA no later than the annual anniversary of the effective date of this Approval. If the annual adjustment to the Closure Cost Estimate changes the required amount such that it exceeds the face value of the existing financial assurance mechanism, A-Line E.D.S. shall make a corresponding increase to its financial assurance mechanism. In the event modification to the financial assurance mechanism amount is required, A-Line E.D.S. shall submit documentation of adequate financial assurance to the Regional Administrator or his or her delegate.
- (e) A-Line E.D.S. shall modify the Closure Plan and Closure Cost Estimate whenever any changes in ownership, operating plans, maximum storage capacity or facility design affect the Closure Plan; whenever there is a change in the expected year of closure; or whenever unexpected events during closure require modification. If A-Line E.D.S. becomes aware of information indicating that the estimated costs associated with performing closure of the A-Line E.D.S. Facility may exceed the current Closure Cost Estimate approved by the EPA, A-Line E.D.S. shall modify the Closure Plan and/or Closure Cost Estimates, as appropriate. A-Line E.D.S. shall submit proposed modifications to its Closure Plan and/or Closure Cost Estimate to the EPA in the form of a modified application and shall not implement such modifications until it receives written EPA approval. A-Line E.D.S. shall base modifications to Closure Cost Estimates on maximum cost conditions, as specified in 40 CFR § 761.65(f)(i) - (iv), and

shall submit them to the EPA with a “certification,” as defined in 40 CFR § 761.3.

- (f) When an EPA approved modification to the Facility's Closure Plan increases the Closure Cost Estimate, or when the EPA approves a modification which increases the Facility's Closure Cost Estimate, A-Line E.D.S. shall make corresponding increases to its financial assurance and provide documentation to the EPA of such change no later than 30 days after such modification is approved by the EPA.
- (g) When an EPA-approved modification to the Facility increases the maximum storage capacity in Condition 3.a, A-Line E.D.S. shall notify the EPA Region 7 PCB Coordinator in writing no later than 30 days from the completion of the modification and either establish a new financial assurance or amend the existing financial assurance mechanism. The new or amended financial assurance mechanism must be established and activated no later than 30 days after notification of the completion of the modification but prior to the use of the modified portion of the Facility.
- (h) A-Line E.D.S. shall keep a copy of the most recently approved Closure Plan, Closure Cost Estimate and financial assurance document(s) at the Facility and make such documents available to EPA authorized representatives, upon request.
- (i) A-Line E.D.S. shall notify the Regional Administrator or his or her delegate at least 60 days prior to the date it expects to begin closure. The date A-Line E.D.S. “expects to begin closure” shall be no later than 30 days after the date on which A-Line E.D.S. receives its final quantities of PCB waste for storage.
- (j) Upon termination of the operation, A-Line E.D.S. shall proceed according to the provisions of the Closure Plan submitted to and approved by the EPA. As used in this paragraph, "termination of the operation" includes cessation of operations required by expiration, termination, or revocation of this Approval.
- (k) In accordance with A-Line E.D.S.'s approved closure plan, A-Line E.D.S. shall remove all PCB waste in storage at the A-Line E.D.S. Facility within 90 days after receiving the final quantity of PCB waste for storage and shall complete closure activities within 180 days after receiving the final quantity of PCB waste for storage.
- (l) Upon termination of the operation, A-Line E.D.S. shall proceed according to the provisions of the Closure Plan submitted to and approved by the EPA. As used in this paragraph, “termination of the operation” includes voluntary cessation of operations and cessation of operations required by expiration, termination, or revocation of this Approval.
- (m) During the closure period, all contaminated systems, components, equipment, structures, and soils shall be disposed of in accordance with the disposal requirements of 40 CFR § 761, Subpart D, or, if applicable, decontaminated in accordance with the levels specified in the PCB Spill Cleanup Policy, 40 CFR § 761, Subpart G.

- (n) If PCB waste is removed from the storage facility during closure, A-Line E.D.S. will become a generator of PCB waste subject to the generator requirements of 40 CFR § 761, Subpart J.
- (o) Within 60 days of completion of closure of the A-Line E.D.S. Facility, A-Line E.D.S. shall submit to the EPA Regional Administrator or his or her delegate a certification that the Facility has been closed in accordance with the approved closure plan. The certification shall be signed by A-Line E.D.S. and by an independent registered professional engineer.

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DECISION TO APPROVE

The EPA Region 7 has determined that the criteria for approval to engage in the commercial storage and disposal of PCB waste as set forth in 40 CFR § 761 have been met. Specifically, the Application and demonstration test show that A-Line E.D.S.'s storage and disposal facility, storage capacity, employee qualifications, closure plan, and financial assurance for closure satisfy applicable requirements and that operation of the facility, when conducted in accordance with the conditions of this Approval and all applicable provisions of the PCB regulations, will not pose an unreasonable risk of injury to health or the environment. The EPA approves A-Line E.D.S.'s Application to commercially store and dispose of PCBs and PCB Items at the A-Line E.D.S. Facility.

This Approval shall become effective the date the Director of the Land, Chemical & Redevelopment Division Region 7, acting on A-Line E.D.S.'s Application, signs it and shall expire 10 years from such date, unless suspended, revoked or terminated, or administratively continued, in accordance with the conditions of this Approval, or unless otherwise authorized under applicable law.

This approval does not relieve A-Line E.D.S. from compliance with all applicable federal, state and local regulatory requirements, including the federal PCB regulations at 40 CFR § 761.

DeAndre
Singletary

Digitally signed by
DeAndre Singletary
Date: 2021.09.02
09:54:36 -05'00'

Date

DeAndré Singletary, Director
Land, Chemical & Redevelopment Division

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Appendix I

A-Line E.D.S. Certification Form

I, _____, _____ certify that I
Print Name of Authorized A-Line E.D.S. Representative, Title

have received and reviewed the Approval to Commercially Store and Dispose of Polychlorinated Biphenyl Waste, 2021 modification, at the A-Line E.D.S. Facility in Waterloo, Iowa, on this _____ day of _____, and year of 2021, and hereby agree to abide by all Conditions of the Approval and all applicable requirements of the PCB Regulations, 40 CFR § 761.

Signature

Date

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Appendix II

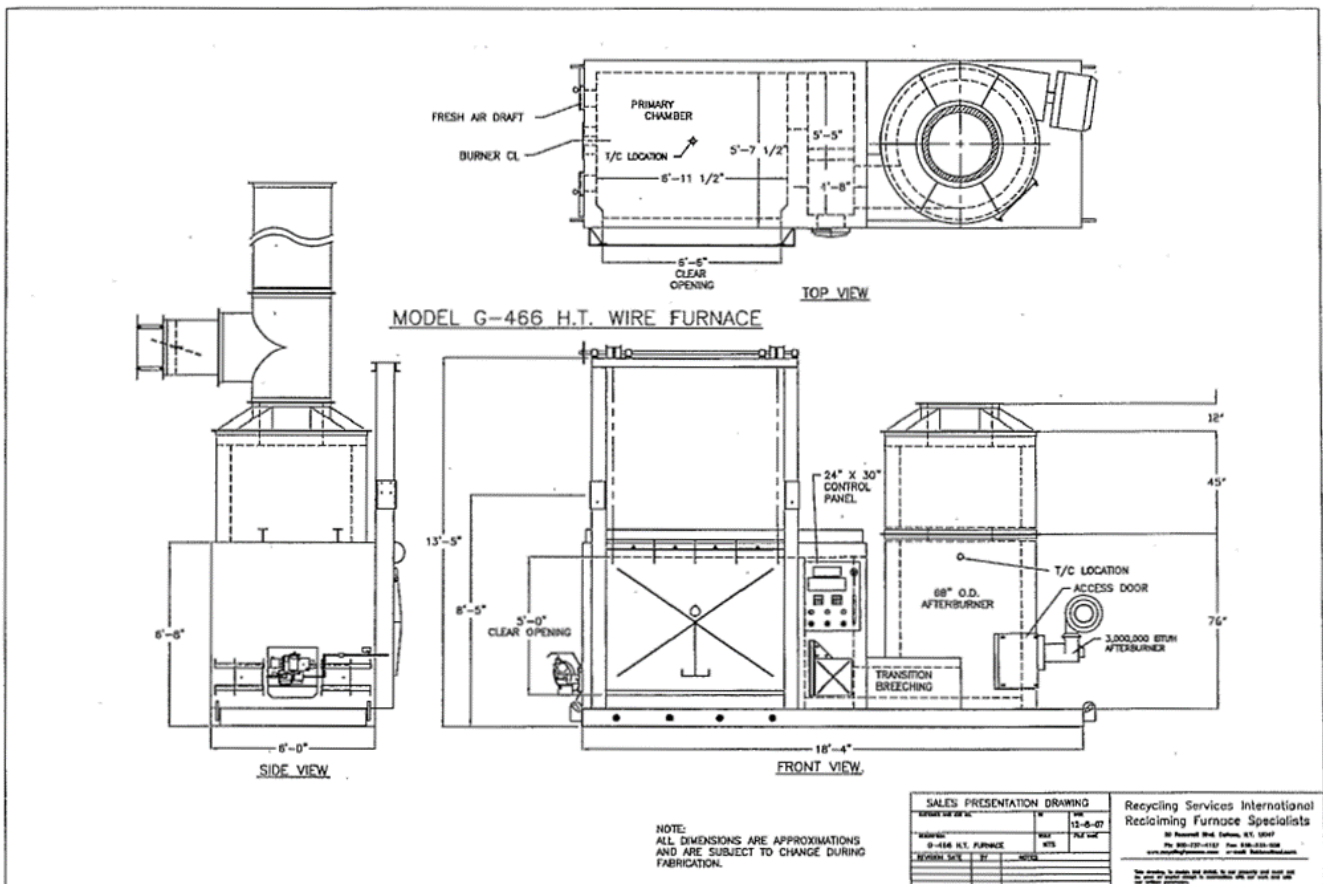
EP3 Process Description

Below are the process steps followed during the demonstration test conducted on November 29, 2018.

1. Before starting the oven, the following items are checked:
 - a. Ensure that the continuous emissions monitor performed a successful automatic calibration.
 - b. Ensure there is no material inside the primary chamber.
 - c. The damper is in the open position or perpendicular to the stack.
 - d. Photohelic gauge reads "0".
 - e. All draft doors are closed (including the backdraft door).
 - f. The primary chamber slide gate is open.
 - g. Observe pressure reading on gas gauge located on gas line at rear of oven to ensure gas flow to the oven.
2. Start combustion blowers.
3. Start afterburner by turning the selector switch to the "on" position.
4. After the two minute purge, observe that the burner did ignite by checking the flame signal inside the control panel, as well as, looking through the sight glass located on the afterburner chamber.
5. Allow the afterburner temperature to rise to at least 1,250 °F.
6. Open primary door approximately 6-inches. Once afterburner temperature reaches 1,250 °F, turn primary burner switch to the "on" position.
7. Physically observe the ignition by sight before closing the primary door.
8. Close the primary door and ensure that the flame signal inside the control panel indicates flame.
9. Select material to be processed and prepare burn pallets.
10. Record gross weight of material to be processed.
11. Determine burn cycle time by estimating percentage of combustible material.
 - a. Minimum burn cycle time is 2.5 hours.
 - b. 250 lbs of combustible per 2.5 hour burn cycle (100 lbs/hour).
12. When the afterburner is at a minimum temperature of 2,100 °F and the primary chamber is at a minimum temperature of 1,000 °F the oven has meet preheating temperature requirements.
13. Turn primary burner selector switch to the "off" position and close primary slide gate.
14. Before loading the material and re-igniting the primary burner, the back draft door shall be open to ensure oxygen levels are above 3%.
15. Raise the primary door and load material into the chamber.
16. Open primary slide gate and open left and right draft doors approximately 1-inch.
17. Turn primary burner selector switch to the "on" position.
18. Physically observe the ignition by sight before closing the primary door.
19. Close the primary door and ensure that the flame signal inside the control panel indicates flame.
20. Record load cycle start time.
21. Observe control panel temperatures for primary chamber and afterburner to ensure minimum temperatures are maintained.
 - a. Primary Chamber - minimum of 999 °F and reach 1,202 °F at least once during heating cycle or batch treatment.
 - b. Afterburn - minimum temperature of 2, 192 °F.
22. Observe the continuous emissions monitor for the following:
 - a. CO < 35 ppm

- b. $O_2 > 3\%$
 - c. $C_{eff} > 99.9\%$.
23. If load contains a sufficient amount of combustible material and minimum temperature of 1,000 °F can be maintained in primary chamber, burner can be turned off to conserve fuel
 24. When afterburner temperature reaches approximately 2,200 °F, the photohelic gauge is adjusted to 0.08" - 0.10"
 25. Once burn cycle time requirements has been met and primary chamber temperature is below 700 °F;
 - a. Record load cycle end time.
 - b. Open primary chamber door to remove load.
 - c. Weigh load to calculate actual combustible material (pre-burn gross weight minus post-burn gross weight).
 26. For subsequent loads repeat operating steps 9 – 25.
 27. Following last burn cycle, afterburner is turned off when primary chamber temperature is below 700 °F.
 28. Combustion blowers may be turned off only when afterburner and primary temperatures are 500 °F or less.

Engineering Schematic of A-Line's EP 3 Metal Recovery Oven



Appendix III

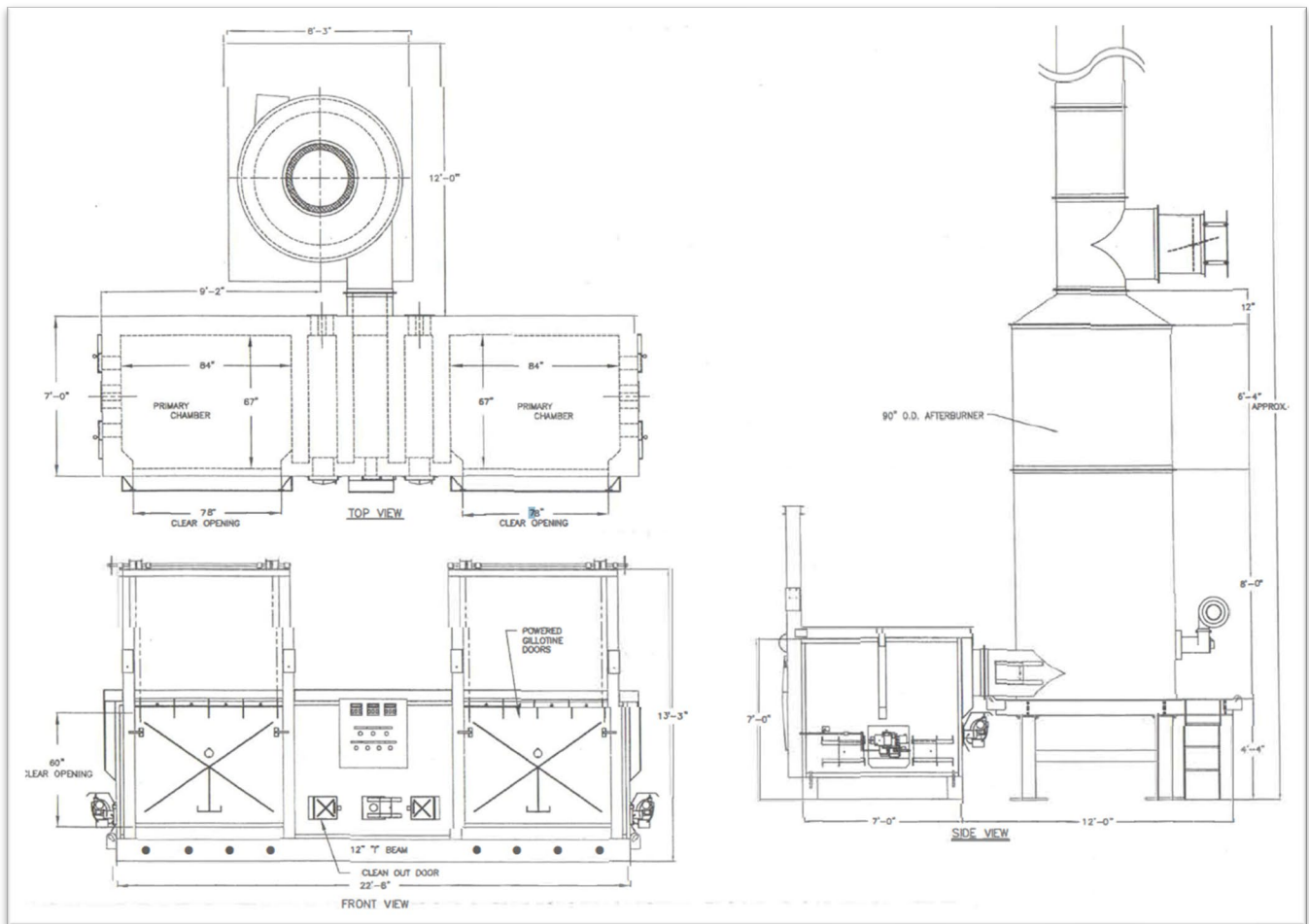
EU4 Process Description

Below are the process steps followed during the demonstration test conducted on December 15, 2021.

1. Before starting the oven, the following items are checked:
 - a. Ensure that the continuous emissions monitor performed a successful automatic calibration.
 - b. Ensure there is no material inside the primary chamber.
 - c. The damper is in the open position or perpendicular to the stack.
 - d. Photohelic gauge reads "0".
 - e. All draft doors are closed (including the backdraft door).
 - f. The primary chamber slide gate is open.
 - g. Observe pressure reading on gas gauge located on gas line at rear of oven to ensure gas flow to the oven.
2. Start combustion blowers.
3. Start afterburner by turning the selector switch to the "on" position.
4. After the two minute purge, observe that the burner did ignite by checking the flame signal inside the control panel, as well as, looking through the sight glass located on the afterburner chamber.
5. Allow the afterburner temperature to rise to at least 1,250 °F.
6. Open primary door approximately 6-inches. Once afterburner temperature reaches 1,250 °C, turn primary burner switch to the "on" position.
7. Physically observe the ignition by sight before closing the primary door.
8. Close the primary door and ensure that the flame signal inside the control panel indicates flame.
9. Select material to be processed and prepare burn pallets.
10. Record gross weight of material to be processed. The minimum weight required is 4,500 pounds per side per burn with the maximum weight allowed being 5,000 pounds per side per burn.
11. Determine burn cycle time by estimating percentage of combustible material.
 - a. Minimum burn cycle time is 2.5 hours.
 - b. 250 lbs of combustible per 2.5 hour burn cycle (100 lbs/hour).
12. When the afterburner is at a minimum temperature of 2,100 °F and the primary chamber is at a minimum temperature of 1,000 °F the oven has meet preheating temperature requirements.
13. Turn primary burner selector switch to the "off" position and close primary slide gate.
14. Before loading the material and re-igniting the primary burner, the back draft door shall be open to ensure oxygen levels are above 3%.
15. Raise the primary door and load material into the chamber.
16. Open primary slide gate and open left and right draft doors approximately 1-inch.
17. Turn primary burner selector switch to the "on" position.
18. Physically observe the ignition by sight before closing the primary door.
19. Close the primary door and ensure that the flame signal inside the control panel indicates flame.
20. Record load cycle start time.
21. Observe control panel temperatures for primary chamber and afterburner to ensure minimum temperatures are maintained.
 - a. Primary Chamber - minimum of 999 °F and reach 1,202 °F at least once during heating cycle or batch treatment.
 - b. Afterburn - minimum temperature of 2, 192 °F.
22. Observe the continuous emissions monitor for the following:

- a. $CO < 35$ ppm
 - b. $O_2 > 3\%$
 - c. $C_{eff} > 99.9\%$.
23. If load contains a sufficient amount of combustible material and minimum temperature of 1,000 °F can be maintained in primary chamber, burner can be turned off to conserve fuel.
 24. When afterburner temperature reaches approximately 2,200 °F, the photohelic gauge is adjusted to 0.08" - 0.10".
 25. Once burn cycle time requirements has been met and primary chamber temperature is below 700 °F;
 - a. Record load cycle end time.
 - b. Open primary chamber door to remove load.
 - c. Weigh load to calculate actual combustible material (pre-burn gross weight minus post-burn gross weight).
 26. For subsequent loads repeat operating steps 9 – 25.
 27. Following last burn cycle, afterburner is turned off when primary chamber temperature is below 700 °F.
 28. Combustion blowers may be turned off only when afterburner and primary temperatures are 500 °F or less.

Engineering Schematic of A-Line's EU4 Metal Recovery Oven



Appendix IV

EP3 Demonstration Results

Demonstration test was conducted on November 28-29, 2018 at A-line facility in Waterloo, Iowa. Below are the results of this demonstration test.

Emissions and Operations Summary

	Run 1	Run 2	Run 3	Average	Regulatory Requirements
PM Conc., Gr/dscf	0.006	0.004	0.002	0.004	<0.015
SO2 conc., ppm	0.4	0.2	0.3	0.3	<35
CO Conc., ppm	1.5	0.6	0.4	0.8	<35
NOx Conc., ppm	55.5	53.3	55.3	54.7	<150
HCl Concentration, ppm	2.6	5.1	10.4	6	<35
Combustion Efficiency	99.99766	99.99893	99.99925		>99.9%
Test Date: 11-28-2018*					
Primary Chamber (°F)	767.35**	1,008.85	1,100.83		>1,000
Afterburner (°F)	2,273.57	2,255.23	2,255.80		>2,200
Test Date: 11-29-2018*					
Primary Chamber (°F)	1,145.75	1,160.18	1,161.01		>1,000
Afterburner (°F)	2,355.94	2,356.43	2,356.77		>2,200

*During the heating cycles in both days it was demonstrated that the primary chamber was heated to > 1,200 °F.

**While this run did not meet the 1,000 °F threshold, all five the subsequent runs demonstrated that the treatment unit successfully heated the primary chamber to 1,000 °F. The EPA only requires three successful runs, but six runs were conducted due to emission sampling constraints.

Summary of Isokinetic Results

Parameter	Units	Run 1	Run 2	Run 3
Stack Area	sq. ft.	5.58	5.58	5.58
Nozzle Area	sq. ft.	0.0014	0.0014	0.0014
Calibration Factors				
Pitot Tube Coefficient		0.84	0.84	0.84
Meter Calibration Factor		0.96	0.96	0.96
Orifice Calibration Coefficient	in. H2O	2.32	2.32	2.32
Pressure				
Barometric Pressure (at the Test Site)	in. Hg	29.06	29.06	29.06
Stack Static Pressure	in. H2O	0.04	0.04	0.04
Average Pressure Differential of Orifice	in. H2O	1.34	1.34	1.44

Average Sqrt Pressure Differential of Orifice	in. H2O	1.16	1.16	1.20
Meter Pressure	in. Hg	29.16	29.16	29.17
Absolute Stack Pressure	in. Hg	29.06	29.06	29.06
Temperature				
Average Stack Temperature	deg F	1,492.60	1,477.80	1,474.80
Average Stack Temperature	deg R	1,913.60	1,899.80	1,869.10
Average Meter Temperature	deg F	55.60	60.30	59.80
Average Meter Temperature	deg R	495.90	498.30	497.70
Stack Content				
Stack Gas Oxygen Content	%	11.90	11.50	11.20
Stack Gas Carbon Dioxide Content	%	5.10	5.30	5.50
Water Collected				
Volume of H2O collected	mL	96.50	89.10	87.20
Sampling Time				
Total Sampling Time	minutes	60.00	60.00	60.00
Volume				
Total Meter Volume (measured)	cu. ft.	34.63	35.02	36.37
	dry std			
Total Standard Dry Meter Volume	cu. ft.	34.53	34.75	36.14
Total Wet Volume	cu. ft.	4.55	4.20	4.11
Moisture Fraction (measured)*		0.12	0.11	0.10
Molecular Weight				
Dry Stack Gas Molecular Weight	g/g-mole	29.29	29.31	29.33
Wet Stack Gas Molecular Weight	g/g-mole	27.98	28.09	28.17
Velocity				
Average Velocity	ft/sec	29.42	29.35	29.71
Stack Gas Flow				
Average Stack Gas Flow (at stack conditions)	acfm	9,851.4		
		1	9,830.71	9,951.26
Average Stack Gas Flow (at standard wet conditions)	scfm	2,640.3		
		4	2,653.93	2,730.60
Average Stack Gas Flow (at standard dry conditions)	dscfm	2,332.9		
		4	2,367.67	2,451.68
Isokinetic rate	%	100.98	100.12	100.57

Appendix V

EU4 Demonstration Results

Demonstration test was conducted on December 15-16, 2020 at A-line facility in Waterloo, Iowa. Below are the results of this demonstration test.

Emissions and Operations Summary

	Run 1	Run 2	Run 3	Average	Regulatory Requirements
PM Conc., Gr/dscf	0.005	0.003	0.004	0.004	<0.015
SO2 conc., ppm	9.4	5.0	5.4	6.6	<35
CO Conc., ppm	15.2	2.8	2.0	6.7	<35
NOx Conc., ppm	45.2	55.6	54.0	51.6	<150
HCl Concentration, ppm	10.1	5.3	5.5	7	<35
Combustion Efficiency	99.981	99.996	99.997		>99.9%
Test Date: 12-16-2020					
Primary Chamber (°F)	1,168.2	1,186.0	1,212.2		>1,000
Afterburner (°F)	2,306.5	2,306.5	2,252.4		>2,200

During the heating cycles it was demonstrated that the primary chamber was heated to minimally 1,206°F, and the secondary chamber was heated to minimally 2,192°F for each run.

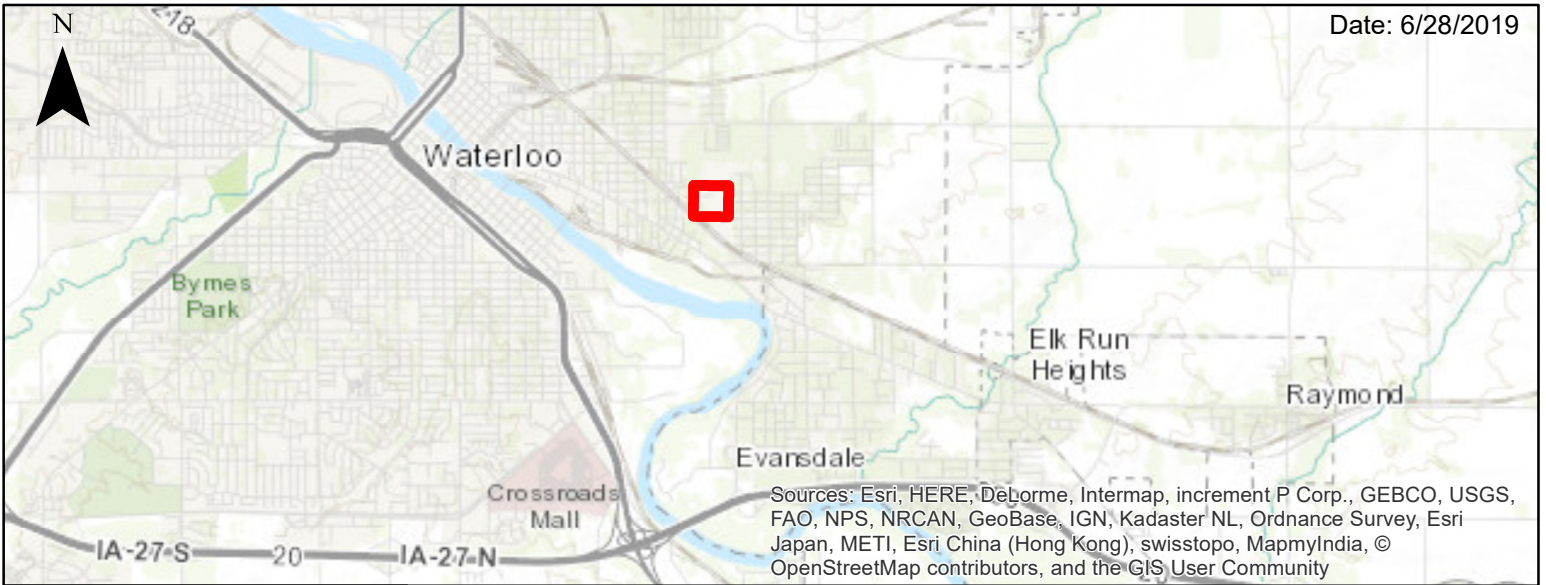
Summary of Isokinetic Results

Parameter	Units	Run 1	Run 2	Run 3
Stack Area	sq. ft.	4.909	4.909	4.909
Nozzle Area	sq. ft.	0.110	0.110	0.110
Calibration Factors				
Pitot Tube Coefficient		0.84	0.84	0.84
Meter Calibration Factor		1.011	1.011	1.011
Orifice Calibration Coefficient	in. H2O	2.082	2.082	2.082
Pressure				
Barometric Pressure (at the Test Site)	in. Hg	29.4	29.4	29.4
Stack Static Pressure	in. H2O	-0.16	-0.16	-0.16
Average Pressure Differential of Orifice	in. H2O	0.92	0.86	0.82
Average Sqrt Pressure Differential of Orifice	in. H2O	0.959	0.927	0.906
Meter Pressure	in. Hg	29.47	29.46	29.46
Absolute Stack Pressure	in. Hg	29.39	29.39	29.39
Temperature				
Average Stack Temperature	deg F	1,739.7	1,726	1,725.2

Average Stack Temperature	deg R	2,199.7	2,186	2,185.2
Average Meter Temperature	deg F	37.2	41.2	42.3
Average Meter Temperature	deg R	497.2	501.2	502.3
Stack Content				
Stack Gas Oxygen Content	%	7.6	9.7	9.6
Stack Gas Carbon Dioxide Content	%	8	6.7	6.7
Water Collected				
Volume of H2O collected	mL	109.2	88.9	100.9
Sampling Time				
Total Sampling Time	minutes	72	72	72
Volume				
Total Meter Volume (measured)	cu. ft.	35.225	34.905	33.77
	dry std			
Total Standard Dry Meter Volume	cu. ft.	42.38	40.78	40.08
Total Wet Volume	cu. ft.	5.104	4.190	4.750
Moisture Fraction (measured)*		0.1214	0.1027	0.1186
Molecular Weight				
Dry Stack Gas Molecular Weight	g/g-mole	29.58	29.46	29.46
Wet Stack Gas Molecular Weight	g/g-mole	28.18	28.28	28.10
Velocity				
Average Velocity	ft/sec	51.7	50.6	49.4
Stack Gas Flow				
Average Stack Gas Flow (at stack conditions)	acfm	15,225	14,902	14,550
Average Stack Gas Flow (at standard wet conditions)	scfm	3,590	3,536	3,453
Average Stack Gas Flow (at standard dry conditions)	dscfm	3,154	3,172	3,044
Isokinetic rate	%	104.90	102.5	103.1

Appendix VI. A-Line EDS Facility Map

Date: 6/28/2019



Legend

- A-Line EDS Facility Boundary
- PCB Storage Tanks
- Scrap Metal Furnaces

