REGION 6
DALLAS, TX 75270

September 27, 2024

Micole Gonzales-St. John, M.S.
Environmental Manager
Republic Services – US Ecology
3277 County Road 69
Robstown, Texas 78380

RE: The United States Environmental Protection Agency (EPA) Region 6 Reauthorization Approval for Commercial Storage of Polychlorinated Biphenyls (PCBs) at Republic Services, LLC, in Robstown, Texas; EPA ID No. TXD069452340

Dear Ms. Gonzales-St. John:

This letter and the enclosed Conditions of Approval grants approval to Republic Services, LLC for commercial storage of PCB waste. A Public Notice was published in the Corpus Christi Caller-Times newspaper announcing the proposed approval which opened a 45-day comment period, during which requests could be made for a Public Hearing. A Public Hearing was requested and held virtually on June 20, 2024. The comments made at the hearing and EPA's response to comments can be viewed on USEPA R6 PCB website at https://www.epa.gov/pcbs/republic-services-llc-robstown-texas.

Violation of 40 CFR Part 761, or any of the enclosed Conditions of Approval, may subject Republic Services, Inc. to an enforcement action under the Toxic Substances Control Act (TSCA) and/or other applicable laws and regulations. Such action could result in a termination, revocation, or modification of the approval. This approval becomes effective on the date of this letter and expires at midnight, the same day and month, five years later.

If you have questions, please contact Harry Shah at (214) 665-6457 or shah.harry@epa.gov.

Sincerely,

Helena Healy

Helena Healy
Director
Land, Chemicals and
Redevelopment Division

Enclosure

cc: Charly Fritz (TCEQ)

US Ecology Texas, Inc. Storage Approval and Supporting Documents Contents:

PCB COMMERCIAL STORAGE
CONDITIONS OF APPROVAL
US ECOLOGY TEXAS, INC., ROBSTOWN, TEXAS

Consistent with 40 CFR §761.65((d)(4)(i), the U.S. Environmental Protection Agency, Region 6 has determined that US Ecology's application for approval to store PCBs meets the requirements of 40 CFR §761.65((d)(2).

The terms and abbreviations in these conditions are in accordance with those defined in 40 CFR §761.3, unless otherwise noted. The term "Facility" hereinafter refers to US Ecology Texas, Inc., Robstown, Texas.

I. LOCATION

The Facility is located at 3277 County Road 69, Robstown, Texas.

II. PCB STORAGE AREAS AND PCB WASTES AUTHORIZED

A. PCB WASTES AUTHORIZED

1. Solid and liquid polychlorinated biphenyls (PCBs).

B. PCB STORAGE AREAS & MAXIMUM CAPACITY AUTHORIZED

The Facility shall comply with 40 CFR §761.65 (Storage for disposal) in the following authorized storage area and maximum allowed inventories:

1. Controlled Parking/Storage Building II Bay C (West Side) (TCEQ Permitted Unit No. 4) with a maximum PCB inventory of 928 55-gallon drums (51,040 gallons).

2. Drum Processing Building (RCRA TCEQ Permitted Unit No. 2) with a maximum PCB inventory of 972 55-gallon drums (53,460 gallons), which equates to 265 cubic yards.

C. AUTHORIZATION TO OPERATE ADDITIONAL PCB STORAGE AREAS

1. For any new PCB storage area not identified in II.B. above, the Facility shall not commence storage in the new storage area until it has notified the Environmental Protection Agency (EPA) Region 6 RCRA Permits Section and received a written approval authorizing the new area for PCB storage.

2. For any expansion in capacity or major modification of an existing PCB storage area, the Facility shall not store PCBs in the modified area until it has notified the EPA Region 6, RCRA Permits Section, and received a written approval for the expansion or modification of the area. A major modification shall be defined as a change in the configuration or location of those authorized PCB storage areas listed in II.B. above.

D. WASTE CHARACTERIZATION AND ACCEPTANCE

1. US Ecology shall implement and follow the waste acceptance procedures specified in the facility's PCB TSCA Approval, Acceptance, Verification, and Storage Procedures

(Dated: February 6, 2024). This facility's PCB Approval, Acceptance, Verification, and Storage Procedures are included in Appendix 1 of this approval [40 CFR §761.65(d)(4)(iv)].

III. PCB STORAGE AREA OPERATION

A. GENERAL OPERATING REQUIREMENTS

1. The Facility shall operate and maintain all storage areas and systems of treatment and control in accordance with the Facility application and subsequent amendments to the application, the conditions of this approval, and the PCB regulations (40 CFR Part 761).

2. The Facility is responsible for the actions of all employees, agents, contractors, or others involved in commercially storing PCBs at the Facility.

3. Nothing in these Conditions for Approval relieves the Facility of its duty to comply with all applicable federal, state, and local statutes and regulations.

B. PCB STORAGE AREA OPERATING REQUIREMENTS

1. The Facility shall store PCBs and PCB Items only in the areas designated in condition II.B.

2. Adequate aisle space shall be maintained to allow for unobstructed access to all PCB Items stored on-site by personnel, fire protection equipment, and decontamination equipment.

3. The Facility shall not exceed the maximum storage inventory of PCBs indicated in condition II.B. Requests for increasing the maximum inventory shall be submitted and approved by the EPA in writing prior to storage of additional PCB inventory.

4. In accordance with the attached Approval, Acceptance, Verification, and Storage Procedures, the Facility shall verify the PCB content of PCBs or PCB Items before accepting the material for storage. If sampling is determined to be required, sampling and analytical methods shall conform to EPA regulations and guidance. Results of all analyses shall be recorded and kept on file.

C. STORAGE CLOSURE AND FINANCIAL REQUIREMENTS

1. The Facility shall comply with the closure regulations pursuant to 40 CFR §761.65 (d)-(g) except for any requirements that are specifically waived in this approval.

2. The Closure Cost Estimate shall be updated to adjust for inflation annually, or within 30 days after EPA approval of any modification to the Closure Plan that increases the expected costs of closure.

3. The Facility shall amend the Closure Plan and current Closure Cost Estimate whenever changes in operating plans or Facility design affect the Closure Plan, or whenever there is a change in the expected year of closure. In the event the Facility becomes aware of information that tends to show that the estimated costs associated with performing closure of the Facility may exceed the current Closure Cost Estimate approved by EPA,

the Facility shall modify the Closure Plan and submit any modifications to the Closure Plan to EPA for approval.

4. Financial assurance, at least equivalent to that specified in 40 CFR §761.65(g) and 40 CFR Part 264, Subpart H, shall be maintained by the Facility to provide funding for proper closure. The Closure Plan shall also provide for the decontamination and/or disposal of PCB-contaminated equipment and materials at an EPA approved PCB disposal facility.

5. Any payment required to establish or continue the financial assurance mechanism used to satisfy the financial requirements shall be made when due. Written verification of the payments shall be furnished to the EPA Region 6 RCRA Permits Section within 30 days of the payment due dates. The Facility shall also submit such documentation, as EPA may require, to determine whether the financial assurance requirements for this approval have been met.

6. The Facility shall submit documentation of continued financial assurance annually to the EPA Region 6 RCRA Permits Section.

7. The Facility shall notify the EPA Region 6 RCRA Permits Section at least 60 days prior to the date closure is expected to begin.

8. Upon termination of PCB storage activities, the Facility shall proceed according to the provisions of the approved Closure Plan. The word "termination" means cessation of PCB storage operations required by expiration, termination, or revocation of this approval.

IV. STANDARD APPROVAL CONDITIONS

A. SEVERABILITY

The conditions of this authorization are severable, and if any provision of this authorization, or any application of any provision is held invalid, the remainder of this authorization shall not be affected thereby.

B. DEPARTURE FROM APPROVAL CONDITIONS

If at any time the Facility becomes aware of any violation of the conditions of this Approval, the Facility shall notify the EPA Region 6 RCRA Permits Section by telephone within 24 hours and shall submit a written report within five (5) days.

C. FAILURE TO SUBMIT INFORMATION

When Facility officials become aware that it has failed to submit any relevant facts in the PCB storage application, or submitted incorrect information in any report to EPA, the Facility shall submit such facts or information to the EPA Region 6 RCRA Permits Section within 30 days.

D. PERMITS

During PCB storage, the Facility shall comply with all Federal, State, and local regulations and agreements, including:

1. permits for the storage of PCBs, and

2. the applicable RCRA hazardous waste regulations.

E. DUTY TO PROTECT THE ENVIRONMENT

1. The Facility shall correct any adverse impact on the environment resulting from noncompliance with this approval.

2. *Condition to modify, revoke and reissue, or terminate the Approval***.** EPA reserves the right to modify (including by imposing additional conditions), revoke and reissue, or terminate this Approval when any of the following circumstances exist:

   a. EPA has reason to believe the approved activities are not achieving the relevant standards or goals or otherwise are not in compliance with the Approval.

   b. EPA has reason to believe the approved activities present or may present an unreasonable risk of injury to health or the environment;

   c. EPA becomes aware of new or previously undisclosed information that may substantively impact its previous finding of no unreasonable risk and require modifications to this Approval; or

   d. EPA issues new regulations or standards that impact conditions of this Approval.

3. *Condition to require additional information.* When any of the circumstances described above exist, EPA reserves the right to require the facility to provide additional information relevant to the Agency's determination whether to modify, revoke and reissue, or terminate the Approval. This may include information to inform EPA's finding that the approved activity does not present an unreasonable risk of injury to health or the environment, such as information related to the risks or impacts of the activity on surrounding communities and communities with environmental justice concerns, including those related to climate change and cumulative impacts of environmental and other burdens.

4. *Condition to provide additional information.* If the facility becomes aware of new or previously undisclosed information that may substantively impact EPA's previous finding that approved activities do not present an unreasonable risk of injury to health or the environment, the facility must provide that information to the Agency as soon as possible but no later than 30-days. This may include information related to the risks or impacts of the approved activity on surrounding communities and communities with environmental justice concerns, including those related to climate change and cumulative impacts of environmental and other burdens.

F. WORKER PROTECTION

1. The Facility shall comply with the health and safety practices described in the application. Personnel safety requirements and procedures for PCB handling, storage, and transport shall comply with Occupational Safety and Health Administration regulations applicable to this Facility.

2. The Facility shall comply with its PCB training plan. All employees who handle PCBs and PCB Items at the Facility shall receive the training, as specified in the Facility's training plan. The training shall include a discussion of PCB regulatory requirements, including the requirements of the PCB Spill Cleanup Policy pursuant to 40 CFR §§761.120-135. Additional training shall include the specifics of the Safety Plan, Contingency Plan, and the Emergency Procedures, as well as the Spill Prevention Control and Countermeasure (SPCC) Plan. A signature sheet shall be included as part of the training to verify personnel participation. Employees shall be re-trained every year. All new employees shall be trained before handling PCBs and PCB Items.

G. MAINTENANCE

1. The Facility shall have in place a routine inspection and maintenance program for all equipment and/or systems of treatment and control (and related appurtenances) which are installed or used to achieve compliance with the conditions of this approval.

2. All vehicles owned by the Facility used for the transport of PCBs and PCB Items shall meet DOT regulations during transport of PCBs and be properly marked in accordance with 40 CFR §761.40.

H. EMERGENCIES AND CONTINGENCY PLANS

1. The Facility shall follow the SPCC and Contingency Plan whenever there is a release of PCBs. A copy of these plans, along with a copy of this approval, shall be kept onsite in an area easily accessible to employees who handle PCBs. The Facility shall notify EPA Region 6 immediately after any of the following events:

    a. the plan is found inadequate during an emergency,

    a. the Facility changes its design or operating methods, or

    b. the list of emergency coordinators changes,

2. The PCB spills occurring at the Facility shall be cleaned up immediately to levels required by the PCB Spill Cleanup Policy. The Facility shall submit reports monthly of any spill(s) that occurred within the previous 30-day period, and what action was taken to remediate the spill(s).

3. The release of PCBs into the environment is cause for the Facility to immediately initiate clean-up. The Facility shall also initiate an investigation into the cause and potential impact of the release and provide a detailed written report to the EPA Region 6 RCRA Permits Section within 30 days of the discovery of the release.

4. Any PCB spills or releases occurring at the Facility, or from any Facility-owned PCB transport vehicle, shall be cleaned up according to the PCB Spill Cleanup Policy, 40

CFR Part 761, Subpart G. If a PCB spill or release to the environment cannot be cleaned up to EPA standards within twenty-four (24) hours, a Facility official shall notify the EPA Region 6 RCRA Permits Section of the circumstances of the spill, the estimated time of cleanup, and a justification for the length of time of cleanup. The EPA may order cessation of further PCB storage and/or treatment at the Facility, if spills or releases are not cleaned up to acceptable levels as defined by EPA.

5. Emergency contacts, telephone numbers, and emergency exit routes shall be posted in prominent locations throughout the Facility.

6. The Facility shall maintain an adequately trained emergency coordinator(s) who shall be available or on-call at all times to direct emergency procedures, as outlined in the Contingency Plan.

7. The Facility shall maintain in good working order any equipment required to deal with these emergencies. The Facility shall keep in good working order the following emergency equipment:

   a. an internal communication or alarm system capable of providing immediate emergency notification to Facility personnel,

   b. communication devices capable of summoning emergency assistance from local police, fire, or emergency response departments,

   c. portable fire extinguisher, fire control equipment, spill control equipment, and decontamination equipment, and

   d. water at adequate volume and pressure to supply fire hose streams.

8. At a minimum, the Facility shall test and/or check monthly the equipment specified above to assure its proper operation. A record of the monthly inspections shall be kept by the Facility for three years.

I. RECORDKEEPING AND REPORTING

1. The Facility shall comply with all applicable monitoring and recordkeeping requirements, as specified in 40 CFR §761.180 for commercial storers. All PCB records, documents, and reports shall be maintained at the Facility, and shall be made available for inspection by authorized EPA representatives. Any modification or correction of the records shall be initialed and dated by the supervisor in charge.

2. The Facility shall maintain an inventory of PCBs and PCB Items in storage. The inventory shall include a description of each PCB Item, the date it was taken out of service, and the date shipped off-site for disposal.

3. Records relating to PCB sampling and analysis shall be retained by the Facility for five years. These records shall include the following information:

   a. date of each sample collected,

   b. volume of each sample collected,

   c. the name of the person who collected the sample, and

d. the name of the company that analyzed the sample, along with the name of analyst, the date the sample was analyzed, the method used, and the reported result.

For facilities that analyze PCB samples at an onsite laboratory, sample volume records are not required if the remainder of the sample is returned to the onsite stored PCB Item from which the sample was taken.

4. Following each spill cleanup action, the Facility shall develop and maintain records of the cleanup in accordance with 40 CFR §§761.120-135, of the PCB Spill Cleanup Policy. These records shall include:

   a. identification of the source of the spill,

   b. estimated or actual date and time of the spill occurrence,

   c. date and time cleanup was completed,

   d. description of the spill location,

   e. pre-cleanup sampling data used to establish spill boundaries, if required, because of insufficient visible traces, and a description of the sampling methodology used,

   f. amount and type of waste cleanup material generated,

   g. description of the solid surfaces cleaned and of the double wash/rinse method used, and if soil is the contaminated media, the depth of soil excavated, and amount of soil removed for disposal,

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   h. post-cleanup verification sampling information, such as a description of the sampling methodology used, the number of samples analyzed, and the analytical data, and

   i. a certification by the appropriate Facility officials stating that the cleanup levels required by EPA were achieved, and that the record is true to the best of his/her knowledge.

5. The Facility shall maintain copies of certificates of disposal provided by the commercial disposal Facility for all PCBs and PCB Items which have been stored at the commercial storage Facility. The Facility is the generator when manifesting PCB wastes off-site for proper disposal.

6. The Facility may utilize electronic formats to maintain any required records and reports.

J. INSPECTIONS AND ENTRY

The Facility shall allow an authorized representative, upon presentation of credentials and other documents as may be required by law to:

1. enter the Facility where PCBs and PCB Items are being handled, or stored,

2. have access to and copy, at reasonable times, any records that shall be kept pursuant to the Toxic Substances Control Act (TSCA) PCB regulations,

3. inspect any facilities, equipment practices, or operations required under this approval or the TSCA PCB regulations; and

4. sample or monitor for the purposes of assuring that the Facility is operating in compliance with the conditions of this approval and the TSCA PCB regulations.

K. INFORMATION REQUESTS

The Facility shall provide to the Regional Administrator (to the attention of the Director, Land, Chemical, & Redevelopment Division), within a reasonable time, any relevant information which may be requested to determine whether cause exists for modifying, revoking, reissuing, or terminating this approval, or to determine compliance with this approval. The Facility shall also provide to EPA, upon request, copies of records required to be kept pursuant to the TSCA PCB regulations.

L. TRANSFER OF OWNERSHIP

The Facility shall notify the Regional Administrator (to the attention of the Director, Land, Chemical, & Redevelopment Division) at least ninety (90) days before transferring ownership of the Facility. The Facility shall also submit to the Regional Administrator, at least ninety (90) days before such transfer, a notarized affidavit signed by the transferee stating that the transferee shall abide by all provisions of this PCB storage approval. After receiving such notification and affidavit, and other such documents as EPA may require, EPA may issue an amended Approval substituting the transferee's name for the Facility name, or EPA may require the transferee to apply for a new PCB commercial storage approval. The transferee shall not operate under the Approval until the Regional Administrator issues an Approval in the transferee's name. The transferor shall maintain financial assurance for the Facility until the transferee's application has been approved and the transferee has demonstrated that it has established financial assurance for closure pursuant to 40 CFR §761.65(g).

M. EFFECTIVE DATE OF APPROVAL

This approval becomes effective on the date of this letter and expires at midnight on the same day and month five years later. Please re-apply for re-authorization approval at least twelve months before the expiration date of this approval.

L. STATEMENT IN COMPLIANCE WITH 40 CFR 761.65(d)(4)(i)

1. The United States Environmental Protection Agency, Region 6 (EPA) is renewing and modifying a Toxic Substances Control Act (TSCA) Approval issued to US Ecology Texas, Inc. (USET), to continue to operate a commercial storage and disposal facility for non-liquid polychlorinated biphenyls (PCB). Pursuant to 40 C.F.R. 761.65(d)(4)(i), EPA finds that USET's application satisfied the criteria at 40 C.F.R. § 761.65(d)(2):

   (i) USET, its principals, and its key employees responsible for the establishment or operation of the commercial storage facility are

qualified to engage in the business of commercial storage of PCB waste. This finding is based on EPA's evaluation of key personnel responsible for facility operations and technical qualifications and experience as submitted within the Renewal Application.

(ii) USET possesses the capacity to handle the quantity of PCB waste which the facility has estimated will be the maximum quantity of PCB waste that will be handled at any one time at the facility. This finding is based on the information and calculations reviewed in the Renewal Application and also represented in Appendices 1 and 5.

(iii) USET has certified compliance with the storage facility standards in 40 C.F.R. § 761.65(b) as found in the Certification Statements provided in the Renewal Application, Appendix 2.

(iv) USET has developed a written closure plan for the facility that is deemed acceptable by the Land, Chemicals, and Redevelopment Director under the closure plan standards. This finding is based on EPA's evaluation of Appendix 3 of the Renewal Application, the requirements of which are incorporated into this Approval.

(v) USET has included in the application for final approval a demonstration of financial responsibility for closure that meets the financial responsibility standards in the form of insurance coverage that is based on closure cost estimates and inflation.

(vi) USET's operation of the storage areas will not pose an unreasonable risk of injury to health or the environment. This finding is based on EPA's evaluation of the Renewal Application and all applicable regulations at 40 C.F.R. § 761, as set forth in this Approval.

(vii) The environmental compliance history of the applicant, its principals, and its key employees does not constitute a sufficient basis for denial of the application. This finding is based on EPA's evaluation of the information contained in the complete Renewal Application and a review of available compliance data. All available information demonstrates that the Facility is in compliance with its current Approval and the TSCA PCB regulations at 40 C.F.R. Section 761, and that the Facility's compliance history evinces no unwillingness or inability to achieve and maintain compliance with the regulations.

END OF APPROVAL CONDITIONS

APPENDIX 1 – Approval, Acceptance, Verification, and Storage Procedures

REPUBLIC SERVICES

Sustainability in Action

US Ecology Texas, Inc. – Robstown Facility
PCB TSCA Personnel Training Plan

US Ecology Texas, Inc. (Robstown Facility), a Republic Services Company, owns and operates an industrial and hazardous waste treatment, storage, and disposal facility located at 3277 County Road 69 in Robstown, Nueces County, Texas. The Robstown Facility supports a wide range of industries producing refined products, petrochemicals, agriculture chemicals, and pharmaceuticals. This Training Plan is specific to polychlorinated biphenyls (PCBs) and is written to provide information on training requirements of the Robstown Facility. Note: Only PCB bearing materials/waste with concentrations less than 50 ppm are currently exempt and authorized for disposal at the Robstown Facility.

Robstown Facility Personnel Training Program

The Robstown Facility Personnel Training Program (Training Program) is in compliance with 29 CFR §1910.120 which covers hazardous waste operations and emergency response. The training program implementation is the responsibility of the General Manager/Designee. The General Manager/Designee functions as Training Coordinator, responsible for selecting qualified instructors, planning, and organizing the training sessions, and ensuring proper adherence to documentation and record keeping procedures. The identification of training needs of each job position and development of the training program's content will ensure adequate instruction relevant to each position is provided.

Training on new environmental regulations pertaining to Facility operations and compliance with environmental standards will also be provided. Training lesson plans will be developed to address specific areas of the regulations for which personnel training is required. Training may first be provided to key Facility management personnel who may be responsible, once trained, for training other personnel.

Documentation and Recordkeeping

The responsibility for maintenance of training records at the Facility relies on the General Manager/Designee. Training records for current employees will be retained at the Facility; for former employees, records will be retained at least three (3) years after termination of company employment.

The documents that will be retained as constituents of the training record include:

- Job titles and description for each position related to hazardous material/waste management and name of employee filling the position.
- Written job description for each position related to waste management describing the required qualifications, duties of the position, and the type and amount of introductory and continuing training required for every position.
- Training documentation records for each employee, which may include:
  - Training Signature Sheet
  - Training Certificate

Robstown Facility PCB TSCA Training

As part of the Training Program, the PCB TSCA Training will provide the required training for the handling and storage of PCBs at the Robstown Facility. Note: Other compliance trainings provided as part of the Training Program include pertinent PCB information in those trainings.

The PCB TSCA Training is provided/conducted at initial employment/change in work duties, annually, and as needed (permitting changes, operational changes, etc.). Only workers who have completed the PCB TSCA Training may have unsupervised access to the areas in which hazard material/waste operations are being performed.

The PCB TSCA Training will cover the following information:

Storage Capacity Limitations / Security

In compliance with 40 CFR §761.65(d)(3)(vi) a maximum PCB capacity of:

928 equivalent 55-gallon containers (51,040 gallons) to be stored in the Controlled Parking/Storage Building II Bay C.

972 equivalent 55-gallon containers (53,460 gallons) to be stored in the Drum Processing Building.

Containment and berm requirements/dimensions for storage of items that can include transformers, circuit breakers, voltage regulators, switches or bushings, small PCB capacitors / light ballasts, PCB Articles, PCB Article Containers, debris, non-bulk PCB Containers, etc.

Labeling requirements that include PCB markings, RCRA labeling, OSHA and/or DOT labeling/placarding.

The Robstown Facility's site security meets the requirements mandated in 40 CFR §112.7(e)(9). These measures include:

Facility access restrictions to the public with 6-foot-high security fence around the entire facility. All gates are manned/monitored by security and kept shut and locked when unattended and after hours.

PCB storage areas have limited access to only trained employees.

These storage areas for PCBs include a 24 Safety and Surveillance System that is monitored remotely with notification of facility personnel.

Indoor and outdoor lighting for security and safety reasons.

The Robstown Facility has developed a sophisticated profile review process that is used to ensure compliance with all record-keeping requirements. The Generator (customer) completes the Generator Waste Product Questionnaire form, which is reviewed and approved by site personnel during the waste prequalification profile approval process, following the Waste Analysis Plan, facility permits, and regulatory requirements. All analytical data and/or SDS information is provided for the corresponding waste stream for approval to accept.

Manifests are utilized for transportation to the Robstown Facility and an inventory number is assigned for tracking and storage at the Robstown Facility and any associated records.

Site Safety Plan and Training

The safety plan details precautions required to minimize the risk to personnel performing the on-site inspection and sampling in addition to the facility or contractor's standard safety plan. Personal Protective Equipment (PPE): Personnel shall wear, at a minimum, a hard hat, safety glasses, and steel-toed boots while working in or inspecting the Drum Building. Appropriate additional PPE (such as Tyvek suits, face shields, leather gloves, chemical resistant gloves, chemical resistant boots, etc.,) will be worn while sampling, working with liquids, transferring wastes, etc.

During the profile approval process the safety precautions are also evaluated for the specific waste stream; therefore, any PCB profiles will have the required PPE for that specific PCB waste.

All PCB waste and materials are containerized upon arrival in appropriate DOT compliant transport packaging.

Confined Space Entry: No confined space entries will be performed except by those trained in accordance with OSHA standards. There are not containers accepted that would require a confined space entry for PCBs.

PCB Spill Prevention and Cleanup Procedures

Spill Prevention Measures

These procedures are designed to include all areas at the Robstown Facility that handle and/or store PCB materials or waste. The following list encompasses areas where applicable PCB storage and handling occurs, including both PCB storage buildings and the loading/unloading areas/docks. The list provides a description of the

containment, diversionary structures, and/or equipment that is utilized to prevent discharged oil from the identified potential spill sources from reaching the navigable waters of the United States.

Loading/Unloading of PCBs

These activities have the highest potential for spills of PCBs during unloading/loading and movement of containers in and out of designated storage. To mitigate, abate, and contain any PCB spills:

Operators inspect the incoming loads for any container issues or spills in transport; and should one occur the DOT labeling on the containers will alert them to the hazard in addition to the manifest and profile information for appropriate PPE and methods to clean up.

For movement of containers additional operators act as spotters for operators on equipment (such as forklifts moving pallets/containers) offloading/loading onto trucks.

PPE, spill kits, bags of absorbent material, overpacks, and extra poly or metal drums are within the building and throughout the immediate working areas.

PCB Storage Buildings

These areas are used to store PCB contaminated soil, PCB debris, PCB transformers, PCB capacitors, and PCB contaminated materials. The storage areas are divided into bays with the use of concrete berms, and specific designated bays/area for only PCBs each of which can contain 100% of the volume of the permitted storage volume of the storage building and are labeled as designated PCB storage areas. The floors and joints of these concrete storage areas are sealed with chemically resistance epoxy to ensure the surface is impervious in the event of a spill.

The storage buildings are inspected daily for any container integrity issues, labeling, leaks/spills, appropriate storage areas, PCB and incompatible waste segregation.

Should the containers be struck by moving equipment or damaged for any other reason during storage, any spills would be contained to the immediate area for clean-up. PPE, spill kits, bags of absorbent material, overpacks, and extra poly or metal drums are within the building and throughout the immediate working areas.

Spill Cleanup Procedures

The Robstown Facility Spill Cleanup Procedure / Standards

PCB and PCB/RCRA Spills

Solid Surfaces (i.e., steel, glass, coated concrete, concrete, etc.)

50 mg/kg or greater PCB in spilled material: Cleaned to less than 10 µg / 100cm^2 by standard wipe analysis. If not achievable, contact the General Manager/Designee. A minimum of three wipe samples is required. The

sample grid, i.e., number of wipes and where they are to be taken, is to be put together by a person trained to do so or check with the General Manager to obtain a sample grid. All actions, except for taking the wipe samples, must be completed within 48 hours of the discovery of the spill. No delay should occur between getting wipe samples and cleaning areas still contaminated with PCB's.

Less than 50 mg/kg PCB in spilled material: Double wash rinse according to 40 CFR §761.125(b)(1) and Subpart S and to visible cleanliness. All actions must be completed within 48 hours of the discovery of the spill.

Soil, i.e., dirt, gravel, crushed rock, asphalt, etc.

If the concentration of the PCBs in the material spilled is 50 mg/kg or more, or more than 1 pound of PCBs was spilled, the contaminated soil must be decontaminated to 1 mg/kg or less PCB by weight or to at least 10 mg/kg PCB in the soil in spill area is excavated to a minimum depth of 10 inches. Excavated soil will be replaced with clean soil (i.e., containing less than 1 mg/kg PCBs).

If the concentration of the PCBs in the material spilled is <50 mg/kg and less than 1 pound of PCBs was spilled, all soil within the visible traces of spill and a buffer of 1 lateral foot or an area 20% larger than the original area of contamination, whichever is greater, must be excavated to a depth of at least 10 inches and back-filled with clean soil (i.e., containing less than 1 mg/kg PCBs).
Note: Cleaned up materials are to be treated as site generated hazardous and /or PCB waste unless they can be commingled with the waste that spilled.

Standards for Cleanup

High contact indoor or outdoor solid surfaces should be cleaned to 10 µg/100 cm^2 (as measured by standard wipe test).

Low contact, outdoor, impervious solid surfaces should be cleaned to 10 µg/100 cm^2 (as measured by standard wipe test).

Low contact, outdoor, non-impervious solid surfaces should be cleaned to 10 µg/100 cm^2.

For spill cleanups, PCB contaminated soil should be excavated to a minimum depth of 10 inches and then further removed until it reaches a concentration of <10 mg/kg. The excavated soil should be replaced with clean soil (less than 1 mg/kg PCBs).

As bulk PCB remediation waste, PCB contaminated soil and other non-impervious surfaces should be removed to 1 mg/kg PCBs.

Additional PCB requirements under 40 CFR Subpart S – Double Wash/Rinse Method for Decontaminating Non-Porous Surfaces (Procedure):

Per 40 CFR §761.360 - Background

The double wash/rinse procedure is used to remove PCBs from surfaces quickly and effectively. It is important to select and use the proper cleanup equipment, to conduct the procedure correctly so as not to redistribute PCBs, and to comply with disposal requirements for all cleanup materials.

Per 40 CFR §761.363 - Applicability

The double wash/rinse procedure includes two washing steps and two rinsing steps. The two washing and rinsing steps are slightly different depending on whether a contaminated surface was relatively clean before the spill (see section Per 40 CFR §761.372), or whether the surface was coated or covered with dust, dirt, grime, grease, or another absorbent material (see section Per 40 CFR §761.375).

Per 40 CFR §761.366 - Cleanup equipment

Use scrubbers and absorbent pads that are not dissolved by the solvents or cleaners used, and that do not shred, crumble, or leave visible fragments on the surface. Scrubbers and absorbent pads used to wash contaminated surfaces must not be reused. Scrubbers and absorbent pads for rinsing must not contain ≥2 ppm PCBs. Scrubbers and absorbent pads used in the second rinse of contaminated surfaces may be reused to wash contaminated surfaces.

Capture and contain all solvents and cleaners for reuse, decontamination, or disposal. Clean organic solvents contain <2 ppm PCBs. Clean water contains <3 ppb PCBs.

Per 40 CFR §761.369 - Pre-cleaning the surface

If visible PCB-containing liquid is present on the surface to be cleaned, thoroughly wipe or mop the entire surface with absorbent paper or cloth until no liquid is visible on the surface.

Per 40 CFR §761.372 - Specific requirements for relatively clean surfaces

For surfaces that do not appear dusty or grimy before a spill, such as glass, automobile surfaces, newly poured concrete, and desktops, use the double wash/rinse procedures in this section.

First wash. Cover the entire surface with organic solvent in which PCBs are soluble to at least 5 percent by weight. Contain and collect any runoff solvent for disposal. Scrub rough surfaces with a scrub brush or disposable scrubbing pad and solvent such that each 900 cm^2 (1 square foot) of the surface is always very wet for 1 minute. Wipe smooth surfaces with a solvent-soaked, disposable absorbent pad such that each 900 cm^2 (1 square foot) is wiped for 1 minute. Any surface <1 square foot shall also be wiped for 1 minute. Wipe, mop, and/or sorb the solvent onto absorbent material until no visible traces of the solvent remain.

First rinse. Wet the surface with clean rinse solvent such that the entire surface is very wet for 1 minute. Drain and contain the solvent from the surface. Wipe the residual solvent off the drained surface using a clean, disposable absorbent pad until no liquid is visible on the surface.

Second wash. Cover the entire surface with organic solvent in which PCBs are soluble to at least 5 percent by weight. Contain and collect any runoff solvent for disposal. Scrub rough surfaces with a scrub brush or disposable scrubbing pad and solvent such that each 900 cm^2 (1 square foot) of the surface is always very wet for 1 minute. Wipe smooth surfaces with a solvent-soaked, disposable absorbent pad such that each 900 cm^2 (1 square foot) is wiped for 1 minute. Any surface <1 square foot shall also be wiped for 1 minute. Wipe, mop, and/or sorb the solvent onto absorbent material until no visible traces of the solvent remain. The rinse solvent from the first rinse (paragraph (b) of this section) may be used.

Second rinse. Wet the surface with clean rinse solvent such that the entire surface is very wet for 1 minute. Drain and contain the solvent from the surface. Wipe the residual solvent off the drained surface using a clean, disposable absorbent pad until no liquid is visible on the surface.

Per 40 CFR §761.375 - Specific requirements for surfaces coated or covered with dust, dirt, grime, grease, or another absorbent material.

First wash. Cover the entire surface with concentrated or industrial strength detergent or non-ionic surfactant solution. Contain and collect all cleaning solutions for proper disposal. Scrub rough surfaces with a scrub brush or scrubbing pad, adding cleaning solution such that the surface is always very wet, such that each 900 cm^2 (1 square foot) is washed for 1 minute. Wipe smooth surfaces with a cleaning solution-soaked disposable absorbent pad such that each 900 cm^2 (1 square foot) is wiped for 1 minute. Wash any surface <1 square foot for 1 minute. Mop up or absorb the residual cleaner solution and suds with a clean, disposable, absorbent pad until the surface appears dry. This cleaning should remove any residual dirt, dust, grime, or other absorbent materials left on the surface during the first wash.

First rinse. Rinse off the wash solution with 1 gallon of clean water per square foot and capture the rinse water. Mop up the wet surface with a clean, disposable, absorbent pad until the surface appears dry.

Second wash. Cover the entire surface with organic solvent in which PCBs are soluble to at least 5 percent by weight. Contain and collect any runoff solvent for disposal. Scrub rough surfaces with a scrub brush or disposable scrubbing pad and solvent such that each 900 cm^2 (1 square foot) of the surface is always very wet for 1 minute. Wipe smooth surfaces with a solvent-soaked, disposable absorbent pad such that each 900 cm^2 (1 square foot) is wiped for 1 minute. Any surface <1 square foot shall also be wiped for 1 minute. Wipe, mop, and/or sorb the solvent onto absorbent material until no visible traces of the solvent remain.

Second rinse. Wet the surface with clean rinse solvent such that the entire surface is very wet for 1 minute. Drain and contain the solvent from the surface. Wipe the residual solvent off the drained surface using a clean, disposable absorbent pad until no liquid is visible on the surface.

Per 40 CFR §761.378 - Decontamination, reuse, and disposal of solvents, cleaners, and equipment

Decontamination. Decontaminate solvents and non-porous surfaces on equipment in accordance with the standards and procedures in 40 CFR §761.79(b) and (c).

Reuse. A solvent may be reused so long as its PCB concentration is <50 ppm. Decontaminated equipment may be reused in accordance with 40 CFR §761.30(u). Store solvents and equipment for reuse in accordance with 40 CFR §761.35.

Disposal. Dispose of all solvents, cleaners, and absorbent materials in accordance with 40 CFR §761.79(g). Dispose of equipment in accordance with 40 CFR §761.61(a)(5)(v)(A) or decontaminate in accordance with 40 CFR §761.79(b) or (c). Store for disposal equipment, solvents, cleaners, and absorbent materials in accordance with 40 CFR §761.65.

Spill of PCB Contingency Plan

The Robstown Facility has comprehensive incident response criteria outlined in its RCRA Part B Contingency Plan, Emergency Response Plan, SPCC Plan, and Stormwater Plan to prevent any spill that also includes PCB related materials and wastes. In the unlikely event any oil should reach navigable waters, a report will be

submitted to the U.S. Coast Guard, the EPA, and the Texas Commission on Environmental Quality as per 40 CFR §112.4(a).

Note: The Robstown RCRA Part B Permit Contingency Plan and any other necessary facility permit/plans are always kept on-site and available for use by facility personnel.

Inspections, Testing, and Maintaining Equipment

The Robstown facility is equipped and conducts inspections, testing, and/or performs maintenance on the following:

Internal communications (radio and siren/alarm system) utilized for daily operations and provide immediate emergency notification (voice or signal) to facility personnel. Devices, such as landlines, cell phones, and/or two-way radio, whichever are immediately available at the scene of operations, capable of summoning emergency assistance from other site personnel and to direct others to contact local police departments, fire departments, and State or local emergency response teams.

Portable fire extinguishers, fire control equipment, spill control equipment, and decontamination equipment at the PCB storage areas and throughout the facility.

Fire Rover System that is monitored remotely 24/7 with thermal imaging detection to aim and deploy fire foam in both PCB storage buildings.

Water source to supply an adequate volume and pressure to supply fire hose streams or equipment to PCB storage buildings.

The Robstown Facility inspects, tests, and maintains the equipment specified above as recommended by the manufacturer or in accordance with other regulatory agency requirements for safety equipment at the facility to assure its proper operation in case of an emergency.

APPENDIX 3 - Closure Plan

LNV
engineers | architects | contractors

PART B APPLICATION, SECTION VII.A and VII.C
CLOSURE AND POST-CLOSURE PLANS
ATTACHMENT VII.2

CLOSURE PLAN

This Closure Plan has been prepared by US Ecology Texas (USET), to comply with the Federal requirements of 40 CFR Part 264 Subpart G and 40 CFR 270.14 (b)(13), as adopted by the Texas Commission on Environmental Quality (TCEQ), as well as State requirements. State requirements include the Texas Risk Reduction Program (TRRP; 30 Texas Administrative Code (TAC) 350.2(h)) or the Risk Reduction Standards (30 TAC 335 Subchapter S) for closures grandfathered as described in 30 TAC 350.2(m). This plan describes the procedures USET will follow to perform partial and/or final closure of the permitted units located at the facility.

The procedures described in this Closure Plan will be followed in conducting closure activities of the following units:

- Hazardous Waste Land Disposal Units (Permit Unit Nos. 1e and 1g)
- RCRA/PCB Container Storage Building (Permit Unit No. 2)
- Controlled Parking/Storage Buildings (Permit Unit No. 3 and No. 4)
- Wastewater Pretreatment and Ground Water Recovery Tank Farm/Deepwell Pretreatment System (Permit Unit No. 5, No. 6, No. 7, No. 8, and No. 10)
- Bulk Stabilization Tank (Permitted Unit No. 16)
- Uncovered Waste Storage Areas (Permit Unit No. 9)
- Bulk Stabilization Tanks (Permit Unit No. 10)
- Mixing Tanks (Permit Unit No. 11, No. 12, No. 13 and No. 14)
- Thermal Desorption Unit and Tanks (Permit Unit No. 46 and Nos. 24-41)
- Wastewater Tanks (Permit Unit Nos. 20-23)
- Distillation Unit Tanks (Permit Unit Nos. 42-45)

1.0 CLOSURE PERFORMANCE STANDARD

Through implementation of the closure procedures described in this document, USET will ensure that each hazardous waste management unit is closed in a manner that minimizes the need for further maintenance, and eliminates the potential for post-closure escape of hazardous waste or constituents to the surrounding environment.

Note that the term "clean closure" is used later in this plan. This term means that a unit has been taken out of service (closed), the general closure performance standards (40 CFR 264.111) have been met, and no post-closure care is required. This type of closure is analogous to TRRP Remedy Standard A, as described in TCEQ guidance (TRRP-3 TRRP Compatibility with RCRA).

Attainment of closure standards (e.g., TRRP Remedy Standard A or B) will be documented in closure certifications discussed further below.

2.0 PARTIAL FACILITY CLOSURE

Each of the hazardous waste disposal units has been and shall be closed when it reaches the end of its active life. In this manner, the facility is partially closed and may continue to undergo unit or area closures as the need arises. Circumstances which may prompt partial facility closure are:

- modifications to facility operations;

- units reaching end of useful service life; or
- unlikely failure of units/structures.

Closure of any treatment or storage unit will be conducted according to procedures described in Sections 5.0 and 6.0, with regard to removal of waste and residues, unit decontamination, or dismantling and disposal.

3.0 MAXIMUM WASTE INVENTORY

The maximum potential inventory of hazardous waste on-site at the time of closure is 10,467.76 cubic yards and is estimated to be the sum of the permitted capacity for each treatment and storage unit included in this permit application.

The facility's inventory of hazardous waste in treatment and storage units will be removed to the on-site landfill cells, or transported to an off-site treatment, storage or disposal facility permitted under RCRA or other appropriate regulatory authority. The methods to be employed for waste removal, transportation and final disposition of each unit's waste inventory are described in Section 5.0.

4.0 SCHEDULE FOR CLOSURE

USET will notify the TCEQ Executive Director in writing at least sixty (60) days prior to the date on which closure activities are expected to begin for any permitted unit.

4.1 Time Allowed for Closure

Final facility closure is expected to begin no later than thirty (30) days after receipt of the final volume of waste at the facility. For individual units projected for closure, closure activities are also expected to begin no later than thirty (30) days after receipt of the final waste volume, unless there is a reasonable probability that the unit will receive additional hazardous waste. In the latter case, closure will begin no later than a year after the date on which the most recent volume of waste is received.

Should additional time be necessary for unit or facility closure, USET will submit notification, and a permit modification if necessary, requesting a longer period.

Within ninety (90) days after receiving the final volume of waste, waste inventory in storage or treatment units will be treated on-site and disposed of in the landfill, or removed for off-site treatment and/or disposal.

Closure activities will be completed within 180 days from receipt of the final volume of waste at the unit or facility. The closure process generally involves the following steps. The permitted units will be decontaminated, or dismantled and disposed of, in accordance with the procedures described in Section 5.0 and 6.0, respectively. Any remaining airspace in the landfill cell will be backfilled and a final cover placed as described in Section 5.1.

4.2 Closure Time Extension

Although not anticipated, treatment, removal or disposal of the final volume of hazardous waste and completion of closure activities may require longer than the ninety (90) day period allowed by 40 CFR Subpart G for waste inventory removal, or the 180 days allowed

for completion of closure activities. If a longer period is required, USET may request modification of the approved Closure Plan, or otherwise petition the TCEQ for approval of a closure time extension. The extension request will include a demonstration that:

- closure activities require longer than the 90 or 180 days allowed as referenced above, or
- the unit has capacity to receive additional waste, or
- there is a reasonable likelihood that another person other than USET will commence operation of the facility with one year, or
- closure will be incompatible with continued operation, or
- steps have been taken and will continually be taken to prevent threats to human health and the environment including compliance with applicable permit requirements.

5.0 CLOSURE PROCEDURES

5.1 Closure of Landfill Cells

The final cover system for Landfill Cells 40 – 42, 48 and 50 will include the following components (from top to bottom):

- Grassed side slope runoff control terraces
- 18-inch-thick topsoil layer for Cells 40-42 and Cell 48;
  24-inch-thick topsoil Layer for Cell 50
- Geotextile filter fabric
- HDPE Geonet
- 40-mil LLDPE geomembrane
- Geosynthectic clay liner (GCL)
- One-foot thick compacted clay layer

Cell 48 includes the aerial fill portions of Cells 40, 41, & 42. Cell 50 includes the aerial fill portions of Cells 43/44/45/46.

The final cover systems for all landfill cells have been designed following the design criteria defined by the Hazardous and Solid Waste Amendments of 1984 (HSWA) and all applicable regulations. Upon completion of construction, final cover systems will be certified by an independent engineer registered in the State of Texas.

5.2 Closure of Treatment and Storage Units

At the time of each individual unit closure, USET will evaluate the economic feasibility of conducting clean closure of treatment/storage units and structures. In addition to the economic feasibility of decontamination, USET will evaluate the condition of each unit or structure to determine whether unit removal and disposal is more appropriate.

5.2.1 RCRA/PCB Container Storage Building Permit Unit No. 2

PCB items/articles that have not been drained and disassembled at the time of closure will be drained, flushed, and rinsed with diesel fuel and will be disposed of at an appropriately permitted facility. Rinsate generated during the decontamination procedures at the time of closure will be transported offsite for disposal.

Any remaining drums of PCB waste or PCB contaminated waste generated onsite will be transported offsite for disposal. An appropriately certified commercial waste company will perform all transportation and disposal activities. Transportation and disposal will be preformed according to all federal and state regulations.
US Ecology Texas will comply with all PCB waste generator requirements in 40 CFR 761 when PCB wastes are generated during disposal activities.

Sampling Activities

The matrices to be sampled during the closure of RCRA/PCB Storage Building Permit Unit No. 2 include wipe samples of solid surfaces, concrete core samples, surface soil, soil cores (if surface soil samples indicate contamination), waste oil, and rinsate.

Sampling records will be maintained in a dedicated field book to provide complete documentation of the sampling event. The records will include the following information: sample location, sample identification, sample location map, date and time of sampling, sampling method, field observations of sample appearance and odor, weather conditions, sampler's identification, and any comments. Other maintained records include shipping labels and chain of custody forms.

Samples will be placed in precleaned sample bottles, capped, labeled and marked with a yellow TSCA PCB mark. The bottle will then be sealed in a plastic bag and placed in an ice chest at 4 degrees C.

All field equipment used in sample collections will be either discarded after use or decontaminated. Proper PPE will be used during sample collection.

Sample Labeling and Chain of Custody - All samples will be placed in a container supplied by the laboratory and labeled. The following information will be written on the label:

Facility Name
Sample Identification
Sampling Date
Sampling Time
Sample Collector's name
Preservatives used
Type of sample

After samples are obtained, samples will be sent off site to a commercial laboratory. A Chain of Custody Form will accompany the samples.

Decontamination Procedures

Cleanup and decontamination procedures will be performed under the supervision of the General Manager or designee. The list of items to be decontaminated is as follows:

ITEM	USE	CONSTRUCTION MATERIAL	CLASSIFICATION	CLEANUP LEVEL
Roof and Walls above 6 feet	Structure	Sheet metal	Impervious solid surface	10 ug /100 cm^2
Walls below 6 feet	Structure	Sheet metal	Impervious solid surface	10 ug /100 cm^2

Floors	Structure	Epoxy coated concrete	Impervious solid surface	10 ug /100 cm^2
Equipment	Movement of waste containers	Steel	Impervious solid surface	10 ug /100 cm^2

Appropriate PPE will be worn at all times during cleanup and decontamination procedures. All protective clothing used will be decontaminated or disposed of as a regulated material.

Contaminated items will be flushed with diesel fuel using the double wash/rinse method described in 40 CFR 761.123. Used solvent and rinsate will be collected and sent off site for disposal. The used solvent and rinsate will be managed as PCB contaminated material. If decontamination is not effective, sandblasting, sealing or equivalent methods will be used to remove or permanently contain surface contamination.

The soils below and surrounding the RCRA/PCB storage building will be inspected, sampled, analyzed and disposed of if necessary. Soil contamination is not expected; therefore, excavation of soil is not anticipated. If soil is found to be contaminated, proper excavation and backfilling procedures will be implemented.

Post-Cleanup Verification Procedures

Post cleanup sampling (40 CFR 761.125(c)(5)(viii)) will be conducted to verify decontamination. If sample results are greater than the cleanup level, sample locations will be re-sampled. If after re-sampling, the sample results are greater than the cleanup level, the contaminated area will be washed and rinsed again.

If decontamination procedures do not remove PCBs to the cleanup level or if removal of the building is the preferred method of closure, the building structure will be dismantled and the concrete floor will be broken into pieces. The building debris will be characterized and disposed of as required under RCRA and TSCA regulations.

5.2.2 Controlled Parking / Storage Buildings Permit Unit Nos. 3 and 4

At the time of closure, the waste inventory in the Controlled Parking / Storage Buildings will be stabilized and disposed of in the active cell or will be removed and transported to a RCRA authorized off-site facility for treatment and/or disposal.

Removal of the buildings, concrete pad and contaminated soil, if any, will be conducted following the procedures described in Section 5.2.6.

5.2.3 Wastewater Pretreatment & Groundwater Recovery Tank Farm Permit Unit Nos. 5-8 and No. 10

The liquid waste inventory in the storage tanks will be removed for transport to a RCRA authorized facility. The storage tank piping and ancillary equipment will be drained into the tank(s) to the maximum extent possible and disconnected (isolated from service during closure). Residual wastes from the tank system piping and ancillary equipment will be removed from the tanks for transport to an authorized disposal facility.

The storage tanks and fittings will be dismantled and properly disposed of in the landfill cell.

The concrete slab and dikes will be washed and broken up into manageable pieces and disposed of in the landfill cell. The underlying soil will be inspected for visual signs of possible contamination. If signs of possible contamination are present, the soil will be sampled and analyzed for the constituents detailed in Section 6.0.

Contaminated soil as determined by statistical comparison with background data will be removed and properly treated and disposed of in the landfill cell.

If the clean closure option is selected, decontamination will follow the procedures described in Section 6.0, as applicable.

If at the time of closure it is determined that removal of contaminated soils is not possible, the tank system will be closed as a landfill and post-closure care will be implemented accordingly.

5.2.4 Bulk Stabilization Tank Permit Unit No. 16

The Containment Building structure for the Bulk Stabilization Tank Permit Unit No. 16, previously underwent partial closure in December 2006. The roof and walls of the building were dismantled and disposed of in mid-2009. Permit Unit No. 16, Bulk Stabilization Tank, is located on the remaining concrete foundation of this building. The concrete foundation of the Containment Building will be closed during closure activities for Permit Unit No. 16.

As discussed above, the two bulk stabilization tanks are located on the concrete foundation of the previously partially closed Containment Building. The concrete foundation has been coated and acts as secondary containment for the tanks. The liners underlying the concrete foundation are not used for containment of the tanks. The tanks have a capacity of approximately 36 cubic yards each. It should be noted that one of the tanks has been removed from service as part of the permit modification for Permit Unit No. 13. However, both tanks still require final closure as discussed below.

In general, closure of the mixing tanks will proceed in the following manner to meet the closure performance standard. Any waste inventory that complies with the land disposal restrictions will be disposed in the active on-site landfill or transported to an appropriate off-site facility for treatment and/or disposal. Land disposal restricted waste will be treated and disposed in the active on-site landfill or transported to an appropriate off-site facility for treatment and/or disposal.

Closure of the tanks and the concrete foundation the Partially Closed Containment Building will be accomplished by decontamination as detailed in Section 6.0. If decontamination is physically impossible or economically unfeasible, the floor will be washed, broken up into manageable pieces, and disposed of in the landfill or transported to an appropriate off-site facility for disposal. The containment system drainage material and underlying liner system will also be removed for disposal in the landfill or transported to an appropriate off-site facility for treatment and/or disposal.

5.2.5 Uncovered Waste Storage Areas Permit Unit No. 9

At time of closure, the waste inventory will be stabilized, if and as necessary, and disposed in the active landfill cell or will be removed to an authorized off-site facility for treatment and disposal. The waste inventory, for closure purposes has been estimated at 6,897 cubic yards which is the unit's total permitted storage capacity.

There are nine (9) separate areas, 9-1 through 9-9, that make up the uncovered storage areas. Three (3) of the areas, 9-1, 9-7 and 9-8 have a concrete base and closure of these areas is covered in section 5.2.2. The remaining six (6) areas have a clay soil, asphalt or caliche base.

Unit No. 9 is used for the storage of covered containers containing wastes without freeliquids. As such it is unlikely that wastes will leak from the containers(s) onto the ground.Standard operating practices involve visual inspections. If any wastes are found on theground, the affected "spill" area will be over excavated, placing the waste material back intothe container it came from or in a compatible container for appropriate management. Theaffected area will be backfilled with clean soil. Operating and inspection practices shouldpreclude Permit Unit No. 9 from being contaminated.

Closure of Unit No. 9 will be accomplished by removing any stored inventory and visually inspecting the storage areas. Two (2) verification samples will be taken from each area for the constituents identified in Section 6.0 of this plan. If contaminants are found above the applicable regulatory action thresholds in force at the time of closure or background levels, whichever is greater, the affected areas will be excavated, sampled and analyzed for the constituents of concern to verify attainment of the closure standard. The excavated material will be placed in containers, stabilized as necessary and disposed of in the active cell, or will be removed to an authorized offsite facility for treatment and disposal.

5.2.6 Stabilization Building Mixing Tanks Permit Unit Nos. 11, 12, 13 & 14

Mixing tanks MT-1 and MT-2 (Permit Unit No. 11 and No. 12) are located within Stabilization Building No. 2 and mixing tanks MT-3 and MT-4 (Permit Unit No. 13 and No. 14) are located within Stabilization Building No. 3. These tanks are used to treat wastes that are restricted from land disposal to meet some or all of the applicable treatment standards. The mixing tanks are constructed of steel and are located below ground within concrete pits. Mixing tanks MT-1 and MT-2 each has an operating capacity of 132 cubic yards. Mixing tanks MT-3 and MT-4 each has an operating capacity of 122 cubic yards. The concrete pits and associated concrete foundation and perimeter curbing of the buildings provide secondary containment for the waste treatment operations in these tanks. Ancillary components include backhoes for mixing and loading.

In general, closure of the mixing tanks will proceed in the following manner to meet the closure performance standard. Any waste inventory that complies with the land disposal restrictions will be disposed in the active on-site landfill or transported to an appropriate off-site facility for treatment and/or disposal. Land disposal restricted waste will be treated and disposed in the active on-site landfill or transported to an appropriate off-site facility for treatment and/or disposal. Any waste inventory not amenable to on-site treatment and disposal will be transported to an appropriate off-site facility for treatment and/or disposal.

Closure of the tanks will be accomplished through decontamination as detailed in Section

3/1/2018

There are nine (9) separate areas, 9-1 through 9-9, that make up the uncovered storage areas. Three (3) of the areas, 9-1, 9-7 and 9-8 have a concrete base and closure of these areas is covered in section 5.2.2. The remaining six (6) areas have a clay soil, asphalt or caliche base.

Unit No. 9 is used for the storage of covered containers containing wastes, liquid wastes are! prohibited in 9-1 through 9-6 and 9-9 areas. As such it is unlikely that wastes will leak from the containers(s) onto the ground. Standard operating practices involve visual inspections. If any wastes are found on the ground, the affected "spill" area will be over excavated, placing the waste material back into the container it came from or in a compatible container for appropriate management. The affected area will be backfilled with clean soil. Containers stored at the Thermal Pad and Future Distillation Pad contain liquid or solid wastes, which have appropriate secondary containment, Operating and inspection practices should preclude Permit Unit No. 9 from being contaminated.

Closure of Unit No. 9 will be accomplished by removing any stored inventory and visually inspecting the storage areas. **Closure of 9-7 and 9-8 will be accomplished by decontamination as detailed in Section 6.0. For 9-2 through 9-6 and 9-9,** two (2) verification samples will be taken from each area for the constituents identified in Section 6.0 of this plan. If contaminants are found above the applicable regulatory action thresholds in force at the time of closure or background levels, whichever is greater, the affected areas will be excavated, sampled and analyzed for the constituents of concern to verify attainment of the closure standard. The excavated material!will be placed in containers, stabilized as necessary!and disposed of in the active cell, or will be removed to an authorized offsite facility for treatment and disposal.

5.2.6 Stabilization Building Mixing Tanks Permit Unit Nos. 11, 12, 13 & 14

Mixing tanks MT-1 and MT-2 (Permit Unit No. 11 and No. 12) are located within Stabilization Building No. 2 and mixing tanks MT-3 and MT-4 (Permit Unit No. 13 and No. 14) are located within Stabilization Building No. 3. These tanks are used to treat wastes that are restricted from land disposal to meet some or all of the applicable treatment standards. The mixing tanks are constructed of steel and are located below ground within concrete pits. Mixing tanks MT-1 and MT-2 each has an operating capacity of 132 cubic yards. Mixing tanks MT-3 and MT-4 each has an operating capacity of 122 cubic yards. The concrete pits and associated concrete foundation and perimeter curbing of the buildings provide secondary containment for the waste treatment operations in these tanks. Ancillary components include backhoes for mixing and loading.

In general, closureof the mixing tanks will proceed in the following manner to meet the closure performance standard. Any waste inventory that complies with the land disposal restrictions will be disposed in the active on-site landfill or transported to an appropriate off-site facility for treatment and/or disposal. Land disposal restricted waste will be treated and disposed in the active on-site landfill or transported to an appropriate off-site facility for treatment and/or disposal. Any waste inventory not amenable to on-site treatment and disposal will be transported to an appropriate off-site facility for treatment and/or disposal.

Closure of the tanks will be accomplished through decontamination as detailed in Section 6.0. If decontamination is physically impossible or economically unfeasible, the floor will be washed, broken up into manageable pieces, and disposed of in the landfill or transported to an appropriate off-site facility for disposal. The containment system drainage material and underlying liner system will also be removed for disposal.

5.2.7 Wastewater Storage Tanks Permit Unit Nos. 20-23

The liquid waste inventory in the storage tanks will be removed for transport to a RCRA authorized facility. The storage tank piping and ancillary equipment will be drained into the tank(s) to the maximum extent possible and disconnected (isolated from service during closure). Residual wastes from the tank system piping and ancillary equipment will be removed from the tanks for transport to an authorized disposal facility.

The storage tanks and fittings will be dismantled and properly disposed of in the landfill cell. The concrete slab and dikes will be washed and broken up into manageable pieces and disposed of in the landfill cell. The underlying soil will be inspected for visual signs of possible contamination. If signs of possible contamination are present, the soil will be sampled and analyzed for the constituents detailed in Section 6.0.

Contaminated soil as determined by statistical comparison with background data will be removed and properly treated and disposed of in the landfill cell.

If the clean closure option is selected, decontamination will follow the procedures described in Section 6.0, as applicable.

If at the time of closure it is determined that removal of contaminated soils is not possible, the tank system will be closed as a landfill and post-closure care will be implemented accordingly.

5.2.8 Thermal Desorption Unit (TDU) and Tanks Permit Unit Nos. 46 and 24-41

The liquid waste inventory in the tanks associated with TDU will be closed in accordance with procedures set for in Section 5.2.10, below.

The TDU will be closed utilizing clean closure decontamination procedures outlined in Section 6.0, as applicable.

5.2.9 Distillation Unit Tanks Permit Unit Nos. 42-45

The liquid waste inventory in the storage tanks will be removed for transport to a RCRA authorized facility. The storage tank piping and ancillary equipment will be drained into the tank(s) to the maximum extent possible and disconnected (isolated from service during closure). Residual wastes from the tank system piping and ancillary equipment will be removed from the tanks for transport to an authorized disposal facility.

The storage tanks and fittings will be dismantled and properly disposed of in the landfill cell. The concrete slab and dikes will be washed and broken up into manageable pieces and disposed of in the landfill cell. The underlying soil will be inspected for visual signs of possible contamination. If signs of possible contamination are present, the soil will be sampled and analyzed for the constituents detailed in Section 6.0.

Contaminated soil as determined by statistical comparison with background data will be removed and properly treated and disposed of in the landfill cell.

If the clean closure option is selected, decontamination will follow the procedures described in Section 6.0, as applicable.

If at the time of closure it is determined that removal of contaminated soils is not possible, the tank system will be closed as a landfill and post-closure care will be implemented accordingly.

6.0 DECONTAMINATION OF EQUIPMENT AND STRUCTURES

If the clean closure option is selected for any unit, decontamination of structures and equipment will follow the procedures described below, as applicable.

1. The interior surfaces of piping, valves, pumps and other ancillary equipment associated with tank systems or processing units will be cleaned by flushing with a detergent wash and rinsing with tap water. If the facility determines that a detergent wash is not adequate, other appropriate decontamination methods may be employed (e.g., solvent wash, steam cleaning).

2. Tank interior or processing unit surfaces will be pressure washed using water and cleaning agents followed by triple rinsing with tap water.

3. Concrete floors and structures will be cleaned with an industrial floor scrubber. The floors will be pressure washed and triple rinsed. The entire surface will be visually inspected to ensure removal of visually detectable residues. Wash waters generated during decontamination will be removed with vacuum equipment or by pumping to a container or tanker truck for disposal in the site's injection disposal well or sent to an off-site authorized disposal facility.

4. Following decontamination and visual inspection of all tanks and structures, a final rinse with clean tap water will be performed. Decontamination will be verified by collecting and submitting one rinsate sample from each unit/structure for analysis. Sampling and analysis will be conducted following procedures recommended by the current version of USEPA SW-846 at the time of closure. Decontamination verification samples will be analyzed for the following parameters:

    - pH
    - Phenolics
    - Benzene
    - Carbon Tetrachloride
    - Chloroform
    - 1,1-Dichloroethene
    - Methyl ethyl ketone
    - Methylene Chloride
    - Tetrachloroethene

- Toluene
- 1,1,1-trichloroethane
- Trichloroethene
- Arsenic
- Chromium
- Lead
- Nickel
- Selenium

Decontamination rinsewater will be statistically compared to a background sample of tap water. If a statistically significant increase in parameters is detected in the rinsewater when compared to background levels, the decontamination steps described above will be repeated until the statistical comparison is met.

Heavy equipment and unloading docks used for handling waste will be cleaned with high pressure washer until all visible contamination has been removed. If decontamination is physically impossible or economically unfeasible, the equipment or applicable parts thereof will be disposed of properly in the landfill cell.

Wastewater generated from decontamination activities will be disposed of in the site's injection disposal well or sent to an off-site authorized disposal facility.

7.0 AMENDMENTS TO CLOSURE PLAN

USET will submit a written request to the TCEQ for a modification, as necessary, whenever the following occurs:

a. changes in operating plans or facility design that materially affect the Closure Plan; or
b. there is a change in the expected year of closure, or
c. in conducting partial or final closure activities, unexpected events require a modification to the approved Closure Plan.

8.0 CERTIFICATION OF CLOSURE

USET will submit a certification of closure to the TCEQ within sixty (60) days of completing closure activities for any of the hazardous waste management units. The facility will certify that the hazardous waste management unit or facility, as applicable, was closed in accordance with the specifications of the approved Closure Plan. The certification will be signed by a facility representative and by an independent professional engineer registered in the State of Texas.

9.0 CLOSURE COST ESTIMATE

The closure cost estimate for financial assurance is included in Attachment VII.1 of the RCRA Permit Renewal Application. The closure cost estimate is based on facility closure prompted by an unforeseen event at the time when closure would be the most expensive. For this worst case closure scenario, the assumptions are that USET is no longer in control of the facility and closure will be performed by a third party contractor under the direction of the TCEQ. Further assumptions are detailed in the cost estimate and calculations included in Attachment VII.1.

In accordance with the requirements of 40 CFR 264.142(c), the closure cost estimate will be

modified within thirty (30) days after a Closure Plan revision that increases the cost of closure. The total closure cost estimate will be updated for inflation annually, according to the guidelines in 40 CFR 264.142(b).

10.0 GROUNDWATER MONITORING

Sampling and monitoring of the groundwater will be conducted following the same procedures observed during operations just prior to final closure.

11.0 LEACHATE COLLECTION

Monitoring and pumping of leachate from the landfill sumps will be conducted following the same procedures observed during the active operating life of the facility as outlined in the permit application.

12.0 RUN-ON AND RUN-OFF CONTROLS

During the active life of the facility, run-on control for the landfill units is provided by perimeter dikes designed to prevent inundation during a 100 year, 24-hour storm event. These dikes will continue to provide run-on control during the closure period. Run-off control will be provided by a combination of landfill cap placement and facility storm water conveyance ditches.

POST-CLOSURE PLAN

The post closure care period for USET will begin upon completion of the land disposal unit or of the facility, and will continue for thirty (30) years thereafter. Should USET determine at any time during the post closure care period that any of the monitoring or maintenance activities are no longer necessary, or the revisions to the approved plans are required, the facility operator will petition the Texas Commission on Environmental Quality (TCEQ) Executive Director for a modification to the plan.

A detailed description of the post closure care activities to be performed at the facility is provided in the following sections.

1.0 GROUNDWATER MONITORING

Post closure monitoring of the groundwater will proceed in the same manner as is followed during facility's active life at the time of closure in accordance with Section XI of the of the RCRA Permit Renewal Application. This will apply to the system configuration, parameters to be monitored for, and groundwater sampling and analysis procedures.

2.0 POST CLOSURE CONTACT

The contact for the facility at any time during the post closure care period wil will be

American Ecology Corporation
Lakepointe Centre 1
300 E Mallard Dr., Suite 300
Boise, ID 83706
Telephone Number: (800) 590-5220

3.0 POST-CLOSURE NOTICES

Within 60 days of the submittal of closure certification for a disposal facility in which hazardous waste or waste residues will remain at closure, a record of type, location and quantities of hazardous waste disposed in the landfill will be submitted by the Executive Director and the local land use authority in accordance with 40 CFR 264.119(a).

40 CFR 264.119(b)(1) requires that the owner or operator record a notation on the deed to the facility property within 60 days of certification of closure of the first hazardous waste disposal unit and within 60 days of certification of closure of the last waste disposal unit. This notation must notify any potential purchasers of the property that:

(1) the land has been used to manage hazardous wastes;

(2) its use is restricted under 40 CFR 264.Subpart G regulations; and

(3) the survey plat required under 40 CFR 264.116 and the waste information required under 40 CFR 264.119(a) have been filed with the local land use authority and the Executive Director.

40 CFR 264.119(b)(2) requires that a certification be submitted to the Executive Director specifying that the notation required by 40 CFR 264.119(b)(1) has been recorded. This certification must be signed by the owner or operator, and a copy of the recorded document must also be provided to the Executive Director. These documents are to be submitted within 60 days of certification of closure of the first hazardous waste disposal unit and within 60 days of certification of closure of the last hazardous waste disposal unit.

In addition to these requirements, 30 TAC 335.5 requires that prior to disposal of industrial solid waste, the following information must be recorded in the deed records of the county in which the disposal activity will occur:

(1) a metes and bounds description of the portion or portions of the tract of land on which waste disposal will take place;

(2) the class or classes of waste to be disposed of and waste description; and

(3) the name or permanent address of the person or persons (individual, corporation, organization, etc.) operating the facility where more specific information on the waste can be obtained.

This rule further requires that proof of deed recordation must be provided to the Executive Director in writing. All information as required by 30 TAC 335.5 has already been filed in the Deed Records of Nueces County, Texas, and proof of deed recordation has been submitted to the TCEQ.

4.0 INSPECTION AND MAINTENANCE ACTIVITIES

The post closure plan requires inspections and maintenance of the final cover system and other facility features. These activities will be conducted by trained USET employees or contractors, and documented by the responsible individuals.

4.1 Site Inspections and Maintenance

Items to be inspected during post-closure care include the final cover, landfill perimeter berms, stormwater drainage system, leachate collection and leak detection systems, site perimeter fences and signs, and permanent benchmarks. The site will be thoroughly inspected by qualified technical personnel throughout the duration of the post-closure care period.

At a minimum, the following site inspection and maintenance activities will be provided to ensure continued effectiveness of control and monitoring of facilities as necessary to comply with the closure performance standard regulatory requirements.

4.1.1 Final Cover and Perimeter Berms

The surface of the final cover and perimeter berms will be inspected for proper grade and evidence of settlement and/or erosion on a quarterly basis. The uppermost portion of the final cover includes a 24-inch thick layer consisting of vegetated topsoil. If inspections reveal any significant depressions, gullies, burrowing animals, or other cover integrity issues, then these problems will be promptly repaired through select filling, re-vegetation, or other appropriate measures. Vegetative mowing will be conducted on at least a semi-

annual basis.

4.1.2 Stormwater Drainage System

The stormwater drainage system will be inspected for proper grade and evidence of erosion, siltation, and debris on a quarterly basis. If inspections reveal any stormwater issues, then these problems will be promptly corrected.

4.1.3 Leachate Collection System

Inspection of leachate collection system sump risers will be conducted on a quarterly basis to identify damage and/or maintenance needs. The leachate collection system will also be inspected for proper pump operation and levels on a monthly basis for the first six years, quarterly for years seven through sixteen, followed by semi-annually for the remaining 14 years. Any identified problems will be repaired promptly.

4.1.4 Leak Detection System

Inspection of the leak detection system risers will be conducted on a quarterly basis to identify any damage and/or maintenance needs. Initially, the leak detection system will also be inspected at least monthly for proper pump operation and the presence of liquids. If the liquid level in the riser stays below the pump operating level for two consecutive months, the inspection frequency for proper pump operation and the presents of liquids will be reduced to at least semi-annually. If a pump operating level in a riser is exceeded during a quarterly or semi-annual inspection, the inspection frequency for that riser will be increased back to at least monthly. Any problems identified during the inspections will be repaired promptly.

4.1.5 Perimeter Fences and Signs

The condition of the fence surrounding the facility will be evaluated concurrently during inspection of other site features described in this Plan. At a minimum, the perimeter fences and signs will be inspected on a quarterly basis to ensure their integrity. Fence components, gates, locks, and warning signs will be repaired or replaced as needed. Fence repair or replacement may be chainlink or barbed wire fencing.

4.1.6 Permanent Benchmarks

Once every five years, and every time a general inspection reveals damage to the benchmarks, the validity of the benchmarks will be verified by a registered public surveyor.

4.1.7 Site Security

Site security will be maintained throughout the post-closure period. The fence that surrounds the site will be maintained, and gates will be kept locked to prevent tampering. Monitoring well caps will also be locked.

4.1.8 Leachate Collection and Leak Detection Systems Operation

Each landfill cell is constructed with leachate collection and leak detection systems as part of the bottom liner system. Pumps will be installed at the base of each leachate collection and leak detection riser when constructed. The pumps may either be equipped with automatic controllers and conveyance systems to remove leachate in an essentially labor free manner, or may be used to collect leachate manually. Leachate will be conveyed to the site's deepwell facility via pipeline or truck.

Once the final cover system is installed over the landfill, no new liquid will be introduced into the landfilled waste and the quantity of leachate accumulating in the collection sumps will dramatically decrease. Based on experience at other minimum technological requirement (MTR) landfill facilities, leachate quantities are expected to be minimal within five years following closure. Collection of leachate will continue as long as leachate continues to be produced and as necessary to maintain levels below one foot on the primary liner system.

5.0 SURVEY PLAT

No later than the date when the certification of final closure is submitted, USET will submit to the TCEQ Executive Director, and to the Recorder's Office of Nueces County, Texas a survey plat indicating the location and dimensions of each landfill cell with respect to permanently surveyed benchmarks. The plat will be prepared and certified by a professional land surveyor, and will contain a note, prominently displayed, stating USET's obligation to restrict disturbance in accordance with the requirements of 40 CFR 264.117(c)

6.0 POST CLOSURE CERTIFICATION

Within 60 days of completing the established post-closure care period for the landfill, a certification will be submitted to the TCEQ Executive Director by registered mail. The certification will state that the post-closure care period for the landfill has been performed completed in accordance with the specifications of the approved post-closure care plan and will be signed by USET and an independent engineer registered in the State of Texas. To facilitate this certification, USET will contract with one or more independent registered engineers to review the post-closure care activities and maintain documentation of those activities. Documentation supporting the independent engineer's certification will be maintained and provided upon request to the TCEQ Executive Director until such time as USET is released by the TCEQ from financial assurance requirements of post-closure care, in accordance with 40 CFR 264.120.

7.0 POST CLOSURE CARE ESTIMATE

The post-closure cost estimate for financial assurance is included in Attachment VII.1 of the RCRA Permit Renewal Application.

APPENDIX 4 – Training Plan

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PERSONNEL TRAINING PLAN

TABLE OF CONTENTS

TABLES

PERSONNEL TRAINING PLAN

This section describes the facility's personnel training program developed to comply with the requirements of 40 CFR 264.16 as adopted by the Texas Commission on Environmental Quality in 30 TAC 335.152(a)(1). The program's goal is to provide personnel involved in hazardous waste management activities with the basic knowledge and skills required to perform their assigned duties in an efficient and safe manner, and to respond effectively to any emergency that may develop. As described below, the plan will fulfill applicable regulatory requirements, and will be updated as needed, within this regulatory framework, to reflect current training needs of the facility.

§264.16(a)(1) DESCRIPTION

The training program is designed to ensure that the amount and type of training offered to facility personnel is adequate to allow efficient and safe performance of the tasks associated with each job description. The training program focuses on the training needs of facility personnel assigned to active areas of the facility and will include classroom instruction or on-the-job training. An example training program outline is included as Table III.B.1.

§264.16(a)(2) IMPLEMENTATION

The training program implementation is the responsibility of the General Manager or designee, with corporate overview. The General Manager or designee functions as the training coordinator and is responsible for selecting qualified instructors, planning and organizing the training sessions, and ensuring proper adherence to documentation and recordkeeping procedures. The General Manager or designee must be trained in hazardous waste management procedures and demonstrate knowledge and understanding of applicable state and federal regulations, facility permits, operations, procedures and policies.

§264.16(a)(3) & (4) CONTENT

Active areas of the facility include all areas where hazardous wastes are received, stored, handled or disposed. The training program incorporates different levels of training to fulfill the needs of employees whose primary job positions include waste management responsibilities and those whose primary job positions do not include waste management responsibilities.

Specialized Training

Facility personnel, who will be assigned to work in the active areas where hazardous wastes are received, stored, handled or disposed, are required to complete a detailed training program. The training program will address the Contingency Plan implementation relevant to the position in which they are employed and the emergency procedures, equipment, and systems located at the facility. This training program includes the following subjects:

- *Procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment;*

- *Key parameters for automatic waste feed cut-off systems;*
- *Communications or alarm systems;*
- *Response to fires or explosions;*
- *Response to ground-water contamination incidents;*
- *Shutdown of operations; and*
- *Any other topics deemed necessary by facility management.*

Employee participation in these sessions will be documented in accordance with Section §264.16(d) & (e) of this plan.

General Training

Facility employees who do not work in active areas (i.e. administrative personnel, accountants, security guards, etc.) will receive sufficient instructions to understand the posting of active areas, the general operations conducted in those areas, and the restrictions imposed on their entrance and access to such areas. This generalized training program includes training on basic facility safety, permit requirements, and the contingency plan.

Visitors and contractors whose specific functions at the facility require access to active areas of the facility for extended periods of time may be subject to some level of training, if determined necessary by the General Manager or designee. The General Manager or designee will determine the need for training according to the work to be performed and the location of the work at the facility.

§264.16(b) INITIAL TRAINING SCHEDULE

The personnel training program will be completed within six months after an employee's date of employment or assignment to a new position at the facility, whichever is later.

§264.16(c) ANNUAL REVIEW

Annual review of the initial training will be accomplished through a continuous training program consisting of sessions offered during the regularly scheduled safety meetings. The continuous training program involves subjects addressed during the initial training as well as other topics related to hazardous waste management and the facility's industrial hygiene and safety program.

§264.16(d) & (e) DOCUMENTATION AND RECORDKEEPING

The responsibility for maintenance of training records at the facility resides with the General Manager or designee. Personnel training records will be retained at the facility during an employee's active employment and for at least three (3) years after termination. Training records will accompany personnel transferred within the company.

The documentation which will be retained as part of the training record includes the following:

- *Job titles for each position related to hazardous waste management and name of employee filling the position;*
- *Written job description for each position related to hazardous waste management. The job descriptions for current hazardous waste management positions at the facility will list required qualifications, duties of the position, and the type and amount of introductory and continuing training required for the position; and*
- *Training documentation records for each employee who manages hazardous waste.*

TABLE III.B.1
EXAMPLE RCRA TRAINING PROGRAM OUTLINE

TABLE III.B.1
EXAMPLE RCRA TRAINING PROGRAM OUTLINE

I. Review of applicable RCRA regulations governing the treatment, storage and disposal of waste materials

II. Review of permit requirements governing facility operations
   1. Waste Acceptance
   2. Container Storage
   3. Waste Treatment
   4. Landfilling Operations

III. Basic Facility Safety Procedures, Practices & Requirements
   1. Proper use and limitations of Personal Protective Equipment (PPE)
   2. Use and location of all safety and emergency equipment to include fire extinguishers, safety showers, eyewash stations, and decontamination equipment

IV. General Facility Security Procedures, Practices & Requirements
   1. Posting of active areas
   2. Operations conducted in active areas
   3. Restrictions to active areas

V. Contingency Plan
   1. Duties of emergency response personnel
   2. Communication systems
   3. Alarm systems
   4. Evacuation procedures
   5. Implementation procedures

VI. Spill Prevention Control and Countermeasure (SPCC) Plan
   1. Spill prevention
   2. Spill response

Table V.B. - Container Storage Area

Permit Unit No.	Container Storage Area	N.O.R. No.	Waste Nos.[4]	Rated Capacity[3]	Dimensions	Containment Volume (including rainfall for unenclosed areas)	Unit will manage Ignitable[1], Reactive[1], or Incompatible[2] waste (state all that apply)	Unit Status
002	Drum Processing Building	024	Various Nos. from Table IV.B (1-124)	972 55-gallon containers for a total of 53,460 gallons	Three (3) 25.6 ft x 55 ft bays housed in 8,000 sq ft building	7,039 gallons	Yes. Compliance with 264.17, 264.176 and 264.177 addressed on the Container Management Report, Section V.B. of the Application	Active
003	Controlled Parking / Storage Building I (East Side)	017	Various Nos. from Table IV.B (1-124)	Twenty (20) roll-off boxes or trailers, 20 cubic yards each, for a total of 400 cubic yards	Ten (10) 12.7 ft x 50 ft bays housed in a 6,500 sq ft (50 ft X 130 ft) building	29,172 gallons (144 cubic yards)	Yes. Compliance with 264.17, 264.176 and 264.177 addressed on the Container Management Report, Section V.B. of the Application	Active
004	Controlled Parking / Storage Building II (West Side)	070	Various Nos. from Table IV.B (1-124)	55-gallon containers, roll-off boxes or trailers for a total of not more than 500 cubic yards or 101,000 gallons	Two (2) modules housed in a 17,500 sq ft (100 ft x 175 ft) building	28,125 gallons (98 cubic yards)	Yes. Compliance with 264.17, 264.176 and 264.177 addressed on the Container Management Report, Section V.B. of the Application	Active

Permit Unit No.	Container Storage Area	N.O.R. No.	Waste Nos.[4]	Rated Capacity[3]	Dimensions	Containment Volume (including rainfall for unenclosed areas)	Unit will manage Ignitable[1], Reactive[1], or Incompatible[2] waste (state all that apply)	Unit Status
9	Uncovered Waste Storage Areas	062	Various Nos. from Table IV.B (1-124)	Maximum combined capacity is 6,897 cubic yards	Nine (9) areas totaling 246,725 sq ft (9-1: 260 ft x 105 ft; 9-2: 200 ft x 110ft; 9-3: 60 ft x 100 ft; 9-4: 120 ft x 87.5 ft; 9-5: 200 ft x 350 ft; 9-6: 55 ft x 320 ft; 9-7: Thermal Pad: 125 ft x 350 ft; 9-8: Future Distillation Unit (trapezoidal shape): 70 ft x 111.66 ft x 63.33 ft; 9-9: 191 ft x 225 ft	Not Applicable	Yes. Compliance with 264.17, 264.176 and 264.177 addressed on the Container Management Report, Section V.B. of the Application. Storage of liquids prohibited in 9-1 through 9-6 and 9-9 areas	Active

Permit Unit No.	Container Storage Area	N.O.R. No.	Waste Nos.[4]	Rated Capacity[3]	Dimensions	Containment Volume (including rainfall for unenclosed areas)	Unit will manage Ignitable[1], Reactive[1], or Incompatible[2] waste (state all that apply)	Unit Status
069	Thermal Shredder	158	Various Nos. from Table IV.B (1-124)	4,000 gallons	Western portion of building (Area 1 - 29.5 ft x 39 ft; Area 2 - 15 ft x 20.88 ft) ~1,400 sq ft	5,200 gallons	Yes. Compliance with 264.17, 264.176 and 264.177 addressed on the Container Management Report, Section V.B. of the Application.	Proposed

1. Containers managing ignitable or reactive waste must be located at least 15 meters (50 feet) from the facility's property line.
2. Incompatible waste must be separated from other waste or materials stored nearby in other containers, piles, open tanks, or surface impoundments by means of a dike, berm, wall, or other device.
3. Container Storage Areas need to include in capacity calculations any nonhazardous wastes and universal wastes managed in the unit in addition to hazardous wastes.
4. from Table IV.B, first column

Attachment 3:

Controlled Parking Storage Building II Containment Calculations

LNV ENGINEERING
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May 30, 2007

Mr. Kenneth Knibbs
General Manager
US Ecology Texas, LP
P.O. Box 307
Robstown, TX 78380

Re: USET Drum Building, Permitted Unit No. 2
Secondary Containment Calculation

Dear Mr. Knibbs:

As per your request, LNV Engineering has prepared calculations to demonstrate the adequacy of the secondary containment system within the US Ecology Texas, L.P. (USET) Drum Building, Permitted Unit No. 2. It is our understanding that USET Drum Building, Permitted Unit No. 2, has been designated for the storage of PCBs.

In accordance with 40 CFR Part 761.75(b)(ii), PCB storage facilities must provide containment volume equal to at least two times the internal volume of the largest PCB Article or PCB Container or 25 percent of the total internal volume of all PCB Articles or PCB Containers stored there, whichever is greater.

As demonstrated in the attached calculation sheets, the USET Drum Building, Permitted Unit No. 2, has a net containment capacity of 22,381 gallons. The minimum required containment for the storage of PCBs in USET Drum Building, Permitted Unit No. 2, is 13,365 gallons. Therefore, USET Drum Building, Permitted Unit No. 2, has sufficient secondary containment to meet the requirements of the above referenced regulation.

If you have any questions, please feel free to contact me.

Sincerely,

Cathy Skurow

Catherine A. Skurow, P.E.
Vice President of Environmental Services

Enclosure

801 NAVIGATION, SUITE 300 • CORPUS CHRISTI, TEXAS 78408 • (361) 883-1984 • FAX (361) 883-1986

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SUBJECT:	USET Drum Building, Permitted Unit No. 2	PROJECT:	070019.00
	Secondary Containment Calculations	SHEET:	1 of 2
BY:	Catherine A. Skurow, P.E.	DATE:	May 30, 2007

STATE OF TEXAS
CATHERINE A. SKUROW
76166
REGISTERED PROFESSIONAL ENGINEER
5/30/07
For Permitting Purposes Only

Required Containment

In accordance with 40 CFR Part 761.75(b)(ii), PCB storage facilities must provide containment volume equal to at least two times the internal volume of the largest PCB Article or PCB Container or 25 percent of the total internal volume of all PCB Articles or PCB Containers stored there, whichever is greater.

The US Ecology Texas, L.P. (USET) Drum Building, Permitted Unit No. 2, has been designated for PCB storage and is permitted to store a maximum of 972, 55-gallon drums (53,460 gallons) of waste. Therefore, the required secondary containment volume is calculated as follows:

53,460 gallons x 25% = 13,365 gallons (minimum)

Gross Containment

The USET Drum Building, Permitted Unit No. 2, contains three (3) storage bays that are approximately 25.6' W x 55' L. Each bay is separated by 6" concrete separation curbs.

Gross containment volume from finished floor grades (including the concrete separation curbs) to a constant elevation projected from approximately 0.15' below the top of the ramp to the wall furthest from the ramp is approximately 4,968 cubic feet or 37,163 gallons. This volume was calculated using AutoCAD Land Development Desktop software and was based on a topographic survey conducted by LNV Engineering on May 18, 2007.

Displacement Due to Drum Storage

Each bay can hold six rows of 27 drums with three-foot (3') aisles between the walls, curbs and every two (2) rows. Therefore, the maximum number of drums that will be stored on the floor surface is calculated as follows:

6 rows/bay x 27 drums/row x 3 bays = 486 drums

Each drum has an approximate diameter of 23.5 inches with an area of approximately 3.012 ft^2. The maximum depth of the containment area is 1.35 ft at the wall furthest from the ramp. Therefore, the most conservative calculation for the displacement due to drum storage is calculated as follows:

486 drums x 3.012 ft^2/drum x 1.35 ft = 1976.17 ft^3 = 14,782 gallons

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SUBJECT:	USET Drum Building, Permitted Unit No. 2	PROJECT:	070019.00
	Secondary Containment Calculations	SHEET:	2 of 2
BY:	Catherine A. Skurow, P.E.	DATE:	May 30, 2007

Net Containment Capacity

The net containment capacity of the USET Drum Building, Permitted Unit No. 2, is equal to the gross containment volume minus the volume displaced due to drum storage as follows:

Gross Containment Volume	37,163 gallons
Drum Displacement	(14,782) gallons
NET CONTAINMENT CAPACITY	22,381 GALLONS

22,381 gallons > 13,365 gallons, therefore requirement is met.

Attachment 3:

Original Drum Processing Building Containment Calculations

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SUBJECT: US Ecology Texas Class 2 Mod Drum Processing Building (Permit Unit No. 2) Secondary Containment Calculations

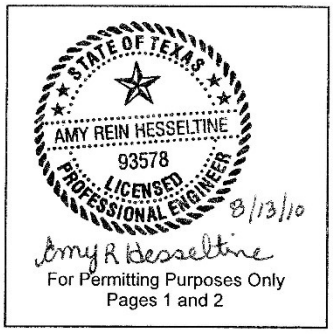
PROJECT NO.: 090001.00

SHEET NO.: 1 of 2

BY: Amy R. Hesseltine, P.E.

DATE: August 13, 2010

Drum Processing Building (Permit Unit No. 2)



PURPOSE:

To determine the adequacy of the two segregated storage areas to contain 10 percent of their maximum container capacities.

ASSUMPTIONS:

- The northern bay is 53 ft wide.
- The southern bay is 26.5 ft wide.
- The bays are 55 ft long including the ramp.
- Separation berms are approximately 6-inches high.
- Slope each way from center of bay is 0.5%.
- Ramp length is 15 ft long and height is 1.24 ft.
- Three foot aisles will be provided at wall or berm and between every two rows.
- Drums are staked two drums high.
- Permitted capacity of Drum Processing Building is 972 55-gallon drums.

Containment Required

972 drums * 7.35 cubic feet per drum * 10% = 715 cubic feet (cf)

Containment Available

From as-built Drawing No. 3688-A02, Rev. 0 (Naismith Engineering 1/95) provided in Appendix C, the average depth of the southern bay is:

73.83 ft - [(73.34 ft + 73.46 ft + 73.41 ft + 73.37 ft) / 4] = 0.435 ft

From as-built Drawing No. 3688-A02, Rev. 0 (Naismith Engineering 1/95) provided in Appendix C, the average depth of the northern bay is:

73.83 ft - [(73.43 ft + 73.41 ft + 73.43 ft + 73.38 ft + 73.43 ft + 73.41 ft + 73.43) / 7] = 0.413 ft

SUBJECT: US Ecology Texas Class 2 Mod Drum Processing Building (Permit Unit No. 2) Secondary Containment Calculations

PROJECT NO.: 090001.00

SHEET NO.: 2 of 2

BY: Amy R. Hesseltine, P.E.

DATE: August 13, 2010

Containment extends up ramp:

Southern bay - 0.435 ft / 1.24 ft * 15 ft = 5.26 ft

Northern bay - 0.412 ft / 1.24 ft * 15 ft = 4.98 ft

Equivalent length of containment:

Southern bay - (0.5 ft * 0.5) + 39.33 ft + (5.26 ft * 0.5) = 42.21 ft

Northern bay - (0.5 ft * 0.5) + 39.33 ft + (4.98 ft * 0.5) = 42.07 ft

Individual bay containment volume:

Southern bay - 26.5 ft * 42.21 ft * 0.453 ft = 506 cf

Northern bay - 53 ft * 42.07 ft * 0.413 ft = 920 cf

Displacement volume of drums:

Southern bay - 141 drums * 2.66 sf / drum * 0.435 ft = 164 cf

Northern bay - 282 drums * 2.66 sf / drum * 0.413 ft = 310 cf

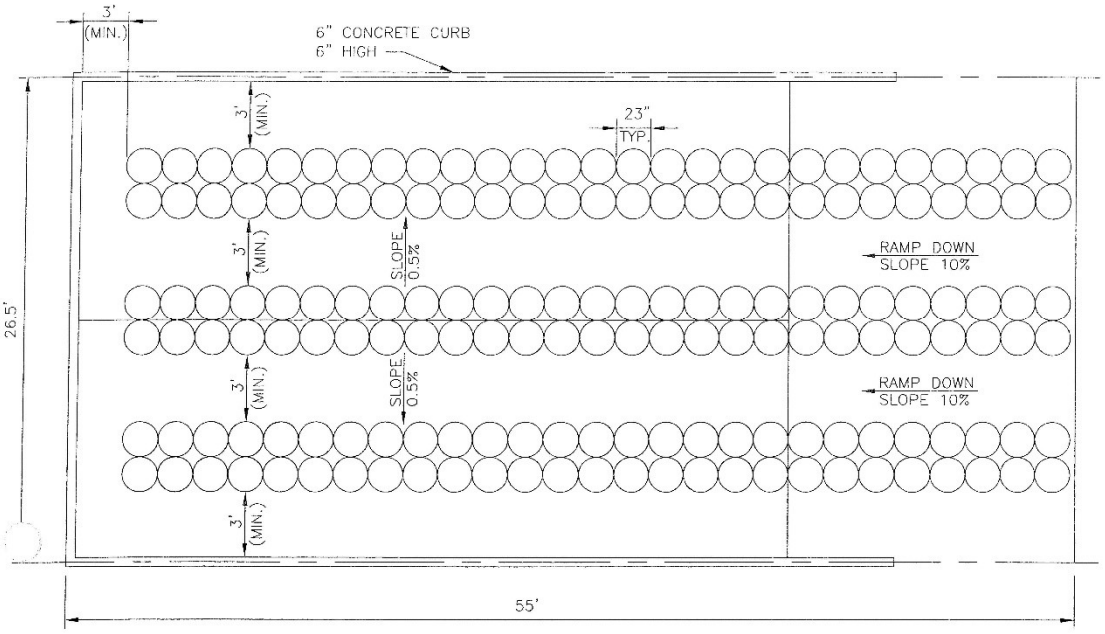
Total Containment Volume

Gross containment volume for both bays = 506 cf + 920 cf = 1,426 cf

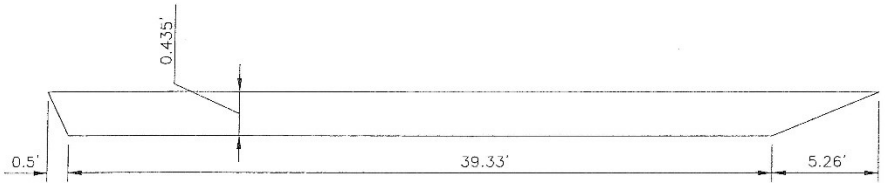
Net containment volume for both bays = 1,426 cf - 474 cf = 952 cf

Conclusion

The required containment volume for the Drum Processing Building is 715 cf (5,348 gallons). The available containment volume provided by the two bays is 952 cf (7,120 gallons). The Drum Processing Building has adequate capacity to contain at least 10 % of the maximum container capacity.



PLAN VIEW (SOUTHERN BAY)



PROFILE VIEW (SOUTHERN BAY)

NOTE:
(1) DEPTH OF SOUTHERN BAY IS AVERAGE DEPTH. SEE SECONDARY CONTAINMENT CALCULATIONS.

STATE OF TEXAS
AMY REIN HESSELTINE
93578
LICENSED PROFESSIONAL ENGINEER

8/13/10

Amy R Hesseltine

FOR PERMITTING PURPOSES ONLY

SECONDARY CONTAINMENT
DRUM PROCESSING BLDG.
U.S. ECOLOGY TEXAS, INC.
TCEQ PERMIT NO. HW-50052-001
ROBSTOWN, NUECES COUNTY, TEXAS

LNV
engineers | architects | contractors
TBPE FIRM NO. F-368 WWW.LNVINC.COM

US Ecology Texas\090001.00 USET Misc. Projects\Drum Processing Building

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APPROVED BY: ARH	
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SHEET: 1 OF 1	