

Attachment H Closure Plan

Table of Contents	Page H-
1. Introduction	1
2. Facility Description	1
3. Hazardous Waste Constituents	2
4. Maximum Inventory	2
4.1 ESTIMATE OF MAXIMUM INVENTORY	2
4.2 MANAGEMENT OF MAXIMUM INVENTORY	3
4.2.1 Hazardous Waste Containers	3
4.2.2 Vacuum Trucks	3
4.2.3 Compressed Gas Cylinders	3
4.2.4 Roll-off Boxes	4
4.2.5 Hazardous Waste Storage Tanks	4
5. Overview of Closure	4
5.1 CLOSURE GOAL	4
5.2 PROJECT CONTROL DOCUMENTS	5
5.2.1 Closure Plan	5
5.2.2 Field Records	5
5.3 SUMMARY OF THE CLOSURE PROCESS	5
5.4 CLOSURE PLAN MODIFICATION	5
6. Waste Removal and Facility Decontamination	6
6.1 REMOVAL OF INVENTORY	6
6.2 DECONTAMINATION PROCEDURES	6
6.2.1 Flammable and Combustible Liquid Waste Storage Tanks	6
6.2.2 Corrosive Liquid Waste Storage Tanks	7
6.2.3 Bulk Solid Waste Storage Tanks	8
6.2.4 Container Storage Rooms and Processing Areas	8
6.2.5 Secondary Containment Systems for the Storage Tanks	9
6.2.6 Secondary Containment System for Loading Dock 100	9
6.2.7 Loading/Unloading/Exterior Canopy Areas	9
6.2.8 Decontamination of Equipment	9
6.3 SAMPLE COLLECTION SUMMARY	10

6.4	MANAGEMENT OF WASTE GENERATED DURING CLOSURE	10
7.	Confirmation Wipe Sampling	10
7.1	SAMPLE SELECTION BY RANDOM NUMBER GENERATION	10
7.2	SUMMARY OF WIPE SAMPLE COLLECTION	11
8.	Soil Sampling Plan	11
8.1	SAMPLE LOCATIONS	11
8.2	SURFACE SOIL SAMPLING	11
	8.2.1 Sample Collection	11
	8.2.2 Sample Management	13
8.3	SAMPLE ANALYSIS	13
8.4	REPORTING	14
9.	Closure Cost Estimate	14
10.	Closure Implementation Schedule	14
10.1	EXTENTION TO CLOSURE	14
11.	Closure Certification	15
11.1	CLOSURE RECORDS	15
11.2	CLOSURE CERTIFICATION	15
12.	Safety	15
13.	Financial Assurance for Closure	16

List of Exhibits

Exhibit H-1	Site Location
Exhibit H-2	Facility Layout

List of Appendices

Appendix H-A	Specimens of Example Closure Insurance Policies
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List of Tables

Table H-1	Units/Areas Subject to Closure Activities
Table H-2	Maximum Inventory of Wastes
Table H-3	Estimate of Waste Generated During Closure
Table H-4	Summary of Sample Collection and Analyses
Table H-5	Summary of Wipe Sample Collection and Analyses
Table H-6	Closure Cost Estimate
Table H-7	Schedule for Closure

1. Introduction

Triumvirate Environmental (Arizona) Inc. (“Facility”) operates a commercial hazardous waste management facility at 73 South Commerce Drive, Casa Grande, Arizona. Triumvirate prepared this Closure Plan, including closure cost estimate, in accordance with 40 CFR Part 264, Subpart G.

This Closure Plan will be implemented at the final closure of the Facility. If closure of individual units of the Facility becomes necessary, the Facility will implement those provisions of this Closure Plan that are applicable to the units being closed (“partial closure”). Partial closures may be necessary due to:

- Decommissioning of unused equipment;
- Changes in regulatory requirements;
- Modification of operations; or,
- Replacement of permitted units or portions of permitted units during the operating life of the facility.

Partial closures would proceed in the same manner described herein for final closure of the Facility, with respect to removal of inventory and residues, decontamination of equipment and structures, and verification sampling and analysis.

This closure plan has been written based on maximum hazardous waste inventory and a third-party contractor is used to conduct the closure.

2. Facility Description

The Facility is a commercial hazardous waste management facility (Standard Industrial Classification 4953/NAICS codes 562112 & 562211) in Pinal County on approximately 25 acres. It is located approximately 4 miles south of the center of the city of Casa Grande in the Central Arizona Commerce Park. A site location map is presented as [Exhibit H-1](#) and a Facility Layout is provided as [Exhibit H-2](#).

The Facility is permitted to storage and treat a wide variety of hazardous wastes from offsite sources that include industrial, commercial, institutional, government, and laboratory customers. Hazardous wastes managed at the Facility include:

- Solids, liquids, and sludges;
- Lab packs;
- Contaminated soils and debris;
- Organic wastes streams such as inks, paints, solvents, and other hydrocarbons;
- Contaminated waters and leachate; and,
- Treatment residues from off-site waste treatment and storage facilities.

Hazardous waste management activities conducted at the Facility include:

- Storage of hazardous wastes in tanks and containers;

- Consolidation of hazardous wastes into containers, including bulk and non-bulk containers, roll off boxes, and dump trucks for transportation;
- Bulking of hazardous into containers such as drums, tote tanks, containers, tanker trucks, and railroad tank cars for transportation; and,
- Hazardous waste treatment activities that include fuel blending, pH neutralization, chemical oxidation, chemical reduction, stabilization, and solidification.

Permitted units at the Facility include:

- Eight aboveground storage tanks with a cumulative capacity of approximately 160,000 gallons for solvent wastes. These tanks are also be used for fuel blending of flammable and combustible liquids;
- Two aboveground storage tanks with a cumulative capacity of approximately 40,000 gallons of corrosive wastes;
- A waste management and processing building approximately 50,000 square feet in size containing:
 - Seven, indoor, hazardous waste container storage areas with a cumulative storage capacity equivalent to approximately 3,136 x 55-gallon drums;
 - Two 80 cubic yard bulk solid waste storage/stabilization tanks;
 - Two indoor waste processing areas;
 - A five-bay, truck loading dock permitted for the storage of liquid hazardous wastes;
 - One, outdoor storage area under canopy for compressed gas cylinders; and,
 - One outdoor, canopied area permitted for the storage of two 40 cubic yard roll-offs of bulk solid hazardous waste;
 - A railcar unloading area with capacity to store four 30,000 gallon railcars.

Table H-1 designates the areas that are subject to closure activities identified in this Closure Plan and includes both permitted units and areas utilized for loading and unloading of hazardous wastes at the Facility.

3. Hazardous Waste Constituents

The hazardous waste constituents covered by this Closure Plan are solid and liquid wastes containing one or more hazardous waste codes identified in the Facility's RCRA permit.

4. Maximum Inventory

4.1 ESTIMATE OF MAXIMUM INVENTORY

The estimate of maximum waste in storage is based on the permitted capacity which includes:

- 40,000 gallons of corrosive liquid wastes stored in tanks;
- 160,000 gallons of organic liquid wastes stored in tanks;
- 160 cubic yards of bulk solid wastes stored in tanks;
- 3,136 fifty-five-gallon drums stored within seven permitted storage rooms;

- 26,000 gallons of organic liquid waste in five vacuum trucks stored in the five-bay, truck loading dock;
- 120,000 gallons of organic liquid waste in four railcars stored at the railcar unloading rack;
- 80 cubic yards of bulk solid toxic waste in two 40 cubic yard roll-offs stored in the outdoor canopied area; and,
- Fifty, 250 cubic foot compressed gas cylinders containing flammable gases.

4.2 MANAGEMENT OF MAXIMUM INVENTORY

A description of the inventory of hazardous waste at the Facility at the time of closure is provided in the following sections and is summarized in **Table H- 2**.

4.2.1 Hazardous Waste Containers

The 3,136 drums of hazardous waste that are in storage will be shipped offsite to licensed hazardous waste treatment, disposal and/or recycling facilities. These drums include:

- 256 drums of flammable solids and 576 drums of combustible and flammable liquids in Room 102
- 720 drums of toxic & highly toxic wastes in Room 103. It is assumed that 360 drums will contain solids and 360 drums will contain liquids.
- 1,008 drums of corrosive liquids and solids in Room 105. It is assumed that 504 drums will contain solids and 504 drums will contain liquids.
- 144 drums of oxidizers and organic peroxides in Room 106. It is assumed that 72 drums will contain solids and 72 drums will contain liquids.
- 48 drums of pyrophoric liquids and solids in Room 120. It is assumed that 24 drums will contain solids and 24 drums will contain liquids.
- 64 drums of water reactive wastes in Room 121. It is assumed that 32 drums will contain solids and 32 drums will contain liquids.
- 576 drums of flammable and combustible liquids and solids in Room 124. It is assumed that 288 drums will contain flammable solids and 288 drums will contain flammable liquids.

4.2.2 Vacuum Trucks

It is assumed that five 5,200-gallon vacuum trucks containing organic liquid waste will be in storage in Area 100 five-bay, truck loading dock for a cumulative total of 26,000 gallons. This waste will be shipped offsite to licensed hazardous waste treatment, disposal and/or recycling facilities.

4.2.3 Compressed Gas Cylinders

Fifty compressed gas cylinders that are in storage in Exterior Storage Area 126 will be shipped offsite to licensed hazardous waste treatment, disposal and/or recycling facilities. It is assumed that all fifty cylinders will contain flammable gases.

4.2.4 Roll-off Boxes

80 cubic yards of hazardous waste solids contained in two, 40-cubic yard, roll-off boxes that are in storage in the Exterior Canopied Area 127 will be shipped in bulk to offsite, licensed hazardous waste treatment, disposal and/or recycling facilities.

4.2.5 Hazardous Waste Storage Tanks

Approximately 160,000 gallons of flammable and combustible liquids, 40,000 gallons of corrosive liquids, and 160 cubic yards of hazardous waste solids will be shipped in bulk to offsite, licensed hazardous waste treatment, disposal and/or recycling facilities.

5. Overview of Closure

The current plan is to decontaminate the Facility to achieve clean closure so that it could potentially be used for other purposes. Therefore, demolition and removal of the Facility's structures is not anticipated.

5.1 CLOSURE GOAL

The activities contained in this Closure Plan are designed to meet the Closure Performance Standard prescribed in 40 CFR, Section 264.111 and to achieve closure of the Facility pursuant to facility closure requirements for Part B Permitted Units in 40 CFR Part 264, Subpart G.

Triumvirate will close the units/areas identified in [Table H-1](#) in a manner that:

- Minimizes the need for further maintenance;
- Controls, minimizes, or eliminates to the extent necessary to be protective of human health and the environment, the escape of hazardous waste, hazardous constituents, leachate, contaminated run-off, or hazardous waste decomposition products to the ground, surface water, or atmosphere; and
- Complies with the closure requirements specified in 40 CFR Part 264, Subparts G, I, and J for container and tank storage areas.

5.2 PROJECT CONTROL DOCUMENTS

5.2.1 Closure Plan

The principal project document governing the closure of the Facility is this Closure Plan. Any amendments to this closure plan will be made in accordance with the requirements for amending the closure plan stipulated in 40 CFR 264.112(c).

5.2.2 Field Records

Field records will be maintained to demonstrate that closure activities were conducted in a manner that is consistent with the approved Closure Plan. Field records generated during the closure of the Facility will be compiled in a field notebook. Information to be recorded during closure implementation includes:

- Date and time period of daily activities,
- Closure activities conducted and representative photographs,
- Facility employees and contractors onsite,
- Waste shipment information,
- Unusual conditions and/or issues that affect closure activities,
- Communications with ADEQ,
- Other information pertinent to closure activities.

5.3 SUMMARY OF THE CLOSURE PROCESS

Closure of the Facility will begin within 90 days after receiving the final volume of hazardous waste. ADEQ will be notified at least 45 days prior to initiating closure of the Facility. Closure will follow the general sequence of:

- 1) Removal and disposal of the waste inventory;
- 2) Decontamination of tanks;
- 3) Decontamination of concrete floors and containment systems;
- 4) Decontamination of equipment used during closure; and
- 5) Collection and disposal of waste generated during closure.

The current plan is to decontaminate the Facility to achieve clean closure so that it may potentially be used for other purposes not requiring a RCRA permit. Therefore, demolition and removal of the Facility's structures is not anticipated.

5.4 CLOSURE PLAN MODIFICATION

In the event a modification to the closure plan becomes necessary, the Facility will submit a request to ADEQ to modify the Closure Plan. Examples that may require a modification to the Closure Plan include:

- Changes in facility design or operation that materially affect the Closure Plan;
- A change in the expected time frame of closure; or,
- Unexpected events are encountered during the closure process that impact the procedures outlined in the approved Closure Plan.

Modification requests will include a copy of the amended Closure Plan and will be submitted for approval at least 60 days prior to the proposed change in facility design or operation, or no later than 60 days after an unexpected event has occurred which has affected the Closure Plan. If an unexpected event occurs during the closure period, the request for modification will be made no later than 30 days after the unexpected event.

6. Waste Removal and Facility Decontamination

6.1 REMOVAL OF INVENTORY

All hazardous waste in inventory will be shipped to one of more licensed hazardous waste treatment, disposal, and/or recycling facilities:

- The 3,136 drums will be loaded onto trucks, segregated based on compatibility;
- The 160,000 gallons of flammable and combustible liquids being stored in eight, 20,000 gallon tanks will either be loaded onto rail cars, or onto tanker trucks;
- The 40,000 gallons of corrosive wastes being stored in two, 20,000 gallon tanks will either be loaded onto rail cars, or onto tanker trucks;
- The organic liquid waste contained in the five, 5,200 gallon, vacuum trucks stored in the loading dock and the hazardous waste solids contained in the two, 40-cubic yard roll-offs stored in the outdoor canopied Area 127.

All hazardous waste shipments will be accompanied by appropriate manifest documentation.

6.2 DECONTAMINATION PROCEDURES

6.2.1 Flammable and Combustible Liquid Waste Storage Tanks

There are eight 19,466 gallon flammable liquid storage tanks that will require decontamination after the wastes have been removed from the storage tanks. The following procedure will be used to decontaminate the tanks:

- a) The piping associated with each tank will be triple rinsed from the unloading racks to the tank. The first rinse will consist of approximately 1,000 gallons of an aqueous, phosphate-free detergent that will be collected in and removed from the tank for appropriate disposal. The second rinse will be approximately 1,000 gallons of water only to remove residual detergent. The final rinse will also be approximately 1,000 gallons of water. Rinse water from the second and final rinse cycles will be collected in and removed from the tank for appropriate disposal.

- b) No attempt will be made to decontaminate processing pumps associated with the tanks. They will be shipped offsite to licensed hazardous waste treatment facility for macro-encapsulation and disposal.
- c) The interiors of the tanks will be cleaned by using the following three-step process.

Step 1 – Washing the Tank

Each tank will first be washed by circulating approximately 500 gallons of phosphate-free detergent in water solution through the tank in a closed-loop system by pumping the solution from the bottom valve of the tank to the top of the tank. The detergent will be delivered to the inside of the tank through a high-pressure tank washing ball or rotary sprayer. The tank will be washed in three sections by positioning the ball to wash the upper one-third of the tank for approximately 10 minutes. Similarly, the middle and lower one-thirds of the tank will each be washed for 10 minutes in succession. After the lower one-third of the tank has been washed, the spent detergent will be pumped into a vacuum truck for disposal as hazardous waste.

Step 2 – Rinsing the Tank

Similar to Step 1, approximately 500 gallons of clean water will be pumped into the tank and the procedure described for Step 1 will be repeated (excluding the detergent). The rinsate will be pumped into a vacuum truck or other appropriate containers (i.e., drums or totes). A composite sample will be collected using the initial volume of water and the last volume of water that are pumped from the tank. The sample will be analyzed for the constituents identified in [Table H-4](#) to determine appropriate disposal methods.

Step 3 – Final Tank Rinsing

Step 3 consists of the final rinse. During this step, rinse water will not be circulated through the tank in a closed loop system. Instead, approximately 500 gallons of clean water will be pumped through the tank wash ball/rotary sprayer. The rinsate will be pumped into a vacuum truck or other appropriate containers (i.e., drums or totes). A composite sample will be collected using the initial volume of water and the last volume of water that are pumped from the tank. The sample will be analyzed for the constituents identified in [Table H-4](#). If analytical results indicated non detect for the analytes, the tanks will be presumed to be clean. The water from the final rinse will be disposed of based on the analytical results.

6.2.2 Corrosive Liquid Waste Storage Tanks

There are 20,000 gallon corrosive waste storage tanks that will require decontamination after the corrosive wastes have been removed. The same three-step procedure described in Section [6.2.1](#) will be

used to decontaminate the two Corrosive Liquid storage tanks; However, the rinse water samples will be field screened for pH in addition to laboratory analyses.

6.2.3 Bulk Solid Waste Storage Tanks

The two 80 cubic yard, bulk solid waste, open-top storage tanks will be decontaminated using the following procedure:

Step 1 – Washing the Interior of the Tank

The interior of each tank will be rinsed using a pressure washer with an aqueous, phosphate-free detergent. The rinsate will be pumped into a vacuum truck or other appropriate containers (i.e., drums or totes) and disposed of as hazardous waste.

Step 2 – Rinsing the Interior of the Tank

After the initial pressure washing using detergent, the tanks will be rinsed using the pressure washer with only water to remove residual detergent. The rinsate will be pumped into a vacuum truck or other appropriate containers (i.e., drums or totes). A composite sample will be collected using the initial volume of water and the last volume of water that are pumped from the tank. The sample will be analyzed for the constituents identified in [Table H-4](#) to determine appropriate disposal methods.

Step 3 – Final Rinsing of the Tank Interior

The tanks will again be rinsed with the pressure washer using only water. The rinsate will be pumped into a vacuum truck or other appropriate containers (i.e., drums or totes). A composite sample will be collected using the initial volume of water and the last volume of water that are pumped from the tank. The sample will be analyzed for the constituents identified in [Table H-4](#). If analytical results indicated non detect for the analytes, the tanks will be presumed to be clean. The water from the final rinse will be disposed of based on the analytical results.

6.2.4 Container Storage Rooms and Processing Areas

There are seven interior storage rooms, one exterior storage area, and two interior processing areas.

The following procedure will be used to clean the floors of the container storage rooms and processing areas.

- a) Floors will be swept to remove loose debris. Collected materials will be managed and disposed of as hazardous wastes.
- b) Residues remaining on the floors after sweeping will be removed mechanically or manually. The actual means of residue removal will depend on the physical properties of the residues present, if any. Removal may be performed using mechanized equipment, or by manual

methods such as scraping, sweeping, or shoveling. Collected residue will be managed and disposed of as hazardous waste.

- c) Floors, trench drains (if any), and sumps (if any) will be pressure-washed using an aqueous, phosphate-free detergent. Rinsate will be collected using vacuum equipment and containerized for disposal as hazardous waste.
- d) After the initial pressure washing using detergent, the floors will be rinsed using the pressure washer with only water to remove residual detergent. Rinsate will be collected using vacuum equipment and containerized. A composite sample will be collected using the initial volume of water and the last volume of water that are collected. The sample will be analyzed for the constituents identified in [Table H-4](#) to determine appropriate disposal methods.
- e) Following the initial rinsing with only water, the floors will be rinsed with the pressure washer a second and final time using only water. Rinsate will be collected using vacuum equipment and containerized. A composite sample will be collected using the initial volume of water and the last volume of water that are collected. The sample will be analyzed for the constituents identified in [Table H-4](#). If analytical results indicated non detect for the analytes, the water from the final rinse will be disposed of based on the analytical results.
- f) An industrial floor cleaning machine may be used to supplement the cleaning of the floors, in the event of residual staining. The vacuum mechanism in the industrial floor cleaner machine may be used to remove the liquids generated during decontamination of these areas. Areas with French drains and sumps will be collected using vacuum equipment. Rinsate will be containerized for appropriate disposal.

6.2.5 Secondary Containment Systems for the Storage Tanks

The secondary containment systems for the storage tanks will be cleaned using the same procedure described in [Section 6.2.4](#).

6.2.6 Secondary Containment System for Loading Dock 100

The secondary containment system for Loading Dock 100 will be cleaned using the same procedure described in [Section 6.2.4](#).

6.2.7 Loading/Unloading/Exterior Canopy Areas

There are two truck loading/unloading areas, one railcar loading/unloading area, and one exterior canopy area. These areas will be cleaned using the same procedure described in [Section 6.2.4](#).

6.2.8 Decontamination of Equipment

Decontamination procedures for equipment used during closure of the Facility may include steam-cleaning, scrubbing the equipment with an industrial grade detergent and rinsing with water, or simply wiping the equipment clean.

6.3 SAMPLE COLLECTION SUMMARY

A total of 74 samples will be collected during the process of decontamination the tanks, equipment, and structures. A summary of sample collection is provided in [Table H-4](#).

6.4 MANAGEMENT OF WASTE GENERATED DURING CLOSURE

A summary of the anticipated quantities of wastes that will be generated during closure activities is provided in [Table H-3](#). Rinsate generated from initial rinsing (i.e., Step 1) of each tank, containment area, or floor specified in Table 1 will be disposed offsite as hazardous waste. Rinsate generated from any subsequent rinsing steps (i.e., Step 2, Step 3) may be disposed offsite as hazardous waste, unless waste determination information produced and documented at the time of closure indicates that management as non-hazardous waste is appropriate. Solid or mixed-phase waste (i.e., sludge) will be presumed to be hazardous waste and disposed offsite accordingly.

7. Confirmation Wipe Sampling

Wipe sampling will be conducted in the areas after decontamination activities are completed to affirm that the surfaces of the floors within the waste management and processing building, Loading Dock 100, and the secondary containment for the tanks and railcar loading/unloading area and have been adequately cleaned.

7.1 SAMPLE SELECTION BY RANDOM NUMBER GENERATION

The surface area in each location will be divided into rectangles or squares having a maximum area of one square meter and a minimum dimension of 10 centimeters. The width and length of each area will be measured in centimeters, rounding off to the nearest centimeter. Two random numbers will be selected for each square meter area, one for the length and one for the width. Eligible random numbers will be from zero to the total width and total length, minus ten centimeters.

The one square meter areas will be oriented so that the length extends left to right and the width extends top to bottom. The reference point for measuring the random number of centimeters for length and width to determine the sampling location will be the lower left corner of the area.

The random number selected for the length will be measured from the lower left corner moving to the right and will be marked at the bottom of the area. From this marked length location, the random number selected for the width will be measured upward from and perpendicular to the marked length location. The randomly selected width location will be marked and will serve as point for the lower left corner of the 10 centimeter by 10 centimeter (10 cm X 10 cm) sample location.

Wipe sampling will be conducted using a standard wipe test that uses a 10 cm X 10 cm (or equivalent that equals 100 cm²) template to outline the sample area and a gauze pad or glass wool that has been saturated with distilled water to collect the sample. The bottom left corner of the wipe sample template will be aligned with the marked location representing the lower left corner of the sample location.

7.2 SUMMARY OF WIPE SAMPLE COLLECTION

Wipe samples will be collected from 2% of the total number of one square meter areas and will be submitted to a certified laboratory analysis for analysis. A summary of wipe sample collection and the analytical parameters are provided in [Table H-5](#).

8. Soil Sampling Plan

The closure performance standard for soil will be demonstrated by sampling of exposed surface soils in or near railcar and truck loading/unloading areas. Results of soil sampling will be compared to predetermined non-residential soil remediation levels (SRL) for analytes that potentially are managed by facility operations and for which non-residential SRLs are established at A.A.C. R18-7-201, et seq.

8.1 SAMPLE LOCATIONS

Surface soil samples will be collected in areas where exposed soils could potentially have been impacted by facility operations. Specially, such exposed soil locations immediately beyond the portion of the railcar transfer area that serves the hazardous waste building. All samples will be collected from exposed soil along a linear transect that runs parallel with the rail spur; sample locations will vary from the linear transect to bias collection of samples from low-lying areas where contaminants could have potentially accumulated. Discrete soil sampling locations will be selected as follows:

Uniform spacing of one discrete soil sampling location per every 40 feet, for a total of 10 discrete soil sample locations;

Authoritative placement of discrete soil sampling locations where soils are observed to be visibly stained, if any; and random selection of discrete soil sampling locations where no soil staining is apparent. Authoritative and random discrete soil sample locations will total 10 locations.

8.2 SURFACE SOIL SAMPLING

8.2.1 Sample Collection

At each discrete sampling location, one discrete sample will be collected from the 0 to 6-inch soil horizon for analysis of all required analytes except VOCs. To obtain VOC analysis of surface soil samples, a second discrete soil sample will be collected from the sidewalls or bottom of a shallow hole that is co-located with the location of corresponding 6-inch surface sample.

The following procedures will be used:

Rocks, vegetation, and debris will be removed from the ground surface from where both discrete samples will be collected.

Soil will be obtained from 0 to 6 inches below ground surface (bgs) using a stainless-steel hand auger (or stainless-steel trowel/spoon or disposable scoop) and deposited into a stainless-steel bowl. Rocks and other debris greater than approximately 0.5 inch in diameter may be manually removed from the bowl and discarded. Transfer all soil cuttings retained in the bowl into labelled, clean glass jars (i.e., two 4-ounce jars).

To obtain VOC analysis of surface soil samples, use a decontaminated stainless-steel trowel or spoon to dig a shallow hole approximately 3 inches deep. Immediately after digging the hole, a miniature core sampler (e.g., Encore sampler, or Terracore sampler) will be used to obtain an undisturbed sample from the bottom of the co-located hole. If the soil at the bottom of the hole is not conducive to sampling using a miniature core sampler (i.e., too coarse), the hole may be deepened to a maximum depth of 2 feet to attempt to sample soil that is conducive to sampling using a miniature core sampler.

Prior to collection of each discrete sample, all reusable sampling equipment will be washed and cleaned using a standard three-step decontamination procedure:

Wash with a potable water and Alconox solution (or equivalent);

Rinse with potable water; and

Rinse with distilled or deionized water.

Decontamination of equipment will be verified by visual inspection; there must be no residual soil remaining on sampling equipment following decontamination.

Field duplicates samples will be collected to assess the repeatability of field sampling and subsequent laboratory analysis, at a rate of 1 blind field duplicate for every 10 samples. The identification of the blind field duplicates will be maintained in the daily field reports.

One equipment rinsate blank will be collected per day. Equipment rinsate blanks will be collected in the following manner:

Decontamination of reusable equipment, using steps described above;

Pouring distilled water through the decontaminated equipment; and

Using laboratory-supplied bottles with the necessary preservatives, collect the water as it flows through the decontaminated equipment.

Equipment rinsate blanks will be identified by the "EB" following the number of the last sample collected prior to the collection of the equipment rinsate blank.

8.2.2 Sample Management

Samples will be labeled with a unique sample identification number that indicates sample location, requested laboratory analysis, date and time of sample collection, and initials of the person who collected the sample. Sample locations (e.g., -01, -02, -03) will be cross-referenced to sampling location map used during the sampling activities to document sampling locations; requested analysis may be represented as different sample ID suffixes (e.g., -A for VOCs, -B for all other analyses).

Labelled samples will be placed into closed resealable bags and placed into coolers with water ice to achieve and maintain a temperature of 4 degrees Celsius until receipt by the laboratory. The sampling team may segregate samples designated for VOCs analysis from all other samples to facilitate timely shipment to the laboratory. Samples for VOC analysis must begin sample preparation by the laboratory no later than 48 hours following sample collection.

Samples submitted to the laboratory will be accompanied by a completed chain-of-custody form. The sample numbers, locations, date/time collected, matrix, requested analyses, and other pertinent comments about the sample will be listed on the chain-of-custody form. When transferring the possession of samples, the individuals relinquishing and receiving will sign, date, and note the time on the record. One copy of the chain-of-custody form will be retained in the project file. The remaining copies of the chain-of-custody form will be placed in a plastic bag and maintained with the samples inside the cooler during sample delivery.

Sampling team members will maintain custody of shipping containers or storage containers until the containers are relinquished to laboratory personnel or transportation personnel (i.e., FedEx, UPS, etc.). If a sample container is to be relinquished to transportation personnel, a member of the sampling team will first place a custody seal on the lid of the container. Custody seals provide assurance that the samples are not tampered with during transportation to the laboratory.

Laboratory personnel will inspect the condition of the sample containers and report the information on the chain-of-custody form. The laboratory will immediately notify TEI or its sampling team if conditions or problems are identified upon sample receipt that require corrective action. Such conditions may include container breakage, missing or improper chain-of-custody forms, missing or improper sample labeling, compromised custody seals, or other issues which could affect sample integrity.

8.3 SAMPLE ANALYSIS

The following methods will be used for the analysis of soil samples. The laboratory will be licensed by the Arizona Department of Health Services (ADHS) for these methods.

- USEPA Test Method 8260 (low level) for VOCs;
- USEPA Test Method 8270 for SVOCs;

- USEPA Test Method 418.1 for Total Petroleum Hydrocarbons;
- USEPA Test Method 6010/6020/7470-7471 for RCRA Metals;
- USEPA Test Method 8082 for PCBs;
- USEPA Test Method EPA 8081 for Organochlorine Pesticides
- USEPA Test Method 8151 for herbicides; and
- USEPA 9213 for free cyanide.

All USEPA test methods are as referenced in *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods* (SW-846; USEPA, 2014). Analytes reporting by the laboratory for each analytical method may be limited to those for which predetermined, non-residential SRLs are established.

Laboratory QA/QC will be performed in accordance with the laboratory's written QA/QC program. A summary of sample collection and analyses are presented in [Table H-4](#).

8.4 REPORTING

Sampling results will be reported as a component of the closure certification report. Information to be included will include a summary of field activities, a figure that depicts sampling locations, and data tables for laboratory analytical results including comparison to predetermined, non-residential SRLs. Results of data validation and laboratory reports will be appended to the closure certification report.

9. Closure Cost Estimate

The current estimated cost for closure of the Facility and a breakdown of the cost is presented in [Table H-6](#). The cost estimate was developed using third-party labor rates and disposal rates and will be adjusted on an annual basis for inflation as required by 40 CFR 264.142(b).

10. Closure Implementation Schedule

The anticipated length of time that will be required to conduct the tasks necessary to close the Facility is 180 days. A proposed closure schedule is presented in [Table H-7](#).

10.1 EXTENTION TO CLOSURE

If a determination is made that the length of time required to close the Facility will exceed 180 days after closure activities have been initiated, the Facility will request an extension to closure from ADEQ in accordance with 40 CFR 264.113(b).

11. Closure Certification

11.1 CLOSURE RECORDS

At the completion of closure, the Facility will maintain the following records and will make them available to ADEQ upon request:

- The Closure Plan as approved by ADEQ;
- Copies of the independent professional engineer's field observation reports;
- Copies of the analytical results of the samples collected during closure;
- Documentation to demonstrate that QA/QC procedures were properly employed during closure;
- Copies of manifests/shipping papers showing disposition of the waste inventory, demolition debris, and wastes generated during closure;
- The Closure Certification Report; and,
- Other documentation that may be pertinent to demonstrate proper closure of the Facility.

11.2 CLOSURE CERTIFICATION

During closure activities, an Arizona-licensed professional engineer will provide field oversight to document implementation of the Closure Plan. A closure report will be prepared for submittal to ADEQ that will include the following information:

- A description of closure procedures followed by any contractors;
- Modifications and amendments to the Closure Plan, where necessary and approved by ADEQ;
- A summary of closure activities;
- Field engineer observation reports;
- A summary of the total quantities of wastes removed/disposed (by waste type), how, and where each was disposed;
- Waste manifests/shipping papers showing the disposition of the waste;
- Analytical laboratory reports;
- A written discussion of the analytical results;
- Photographs where necessary and appropriate; and,
- A signed statement certifying that the Facility has been clean closed in accordance with the approved Closure Plan so that post-closure care is not needed.

12. Safety

Closure activities will be conducted by one or more independent contractors. Each independent contractor will be responsible for preparing a health and safety plan specific to their closure activities.

Each contractor will be required to submit a health & safety plan prior to the start of their work activities. The health & safety plan should describe precautions to be taken during the execution of their specific work activities. At a minimum, each plan will address:

- Hazard identification and evaluation;
- Required personal protective and safety equipment;
- Designated site work and exclusion zones;
- Emergency procedures;
- Confined spaces;
- Ambient air monitoring procedures;
- Procedures and action levels for upgrading levels of protection;
- On-site safety orientation and training meetings;
- Personnel and equipment decontamination procedures;
- Procedures for decontamination and/or disposal of personal protective equipment (PPE);
- Designated site safety officer requirements;
- Limitations from access to work zones;
- Physical examinations and training for field staff required under 29 Code of Federal Regulations (CFR) 1910.120; and,
- A map showing the address and location of the nearest hospital.

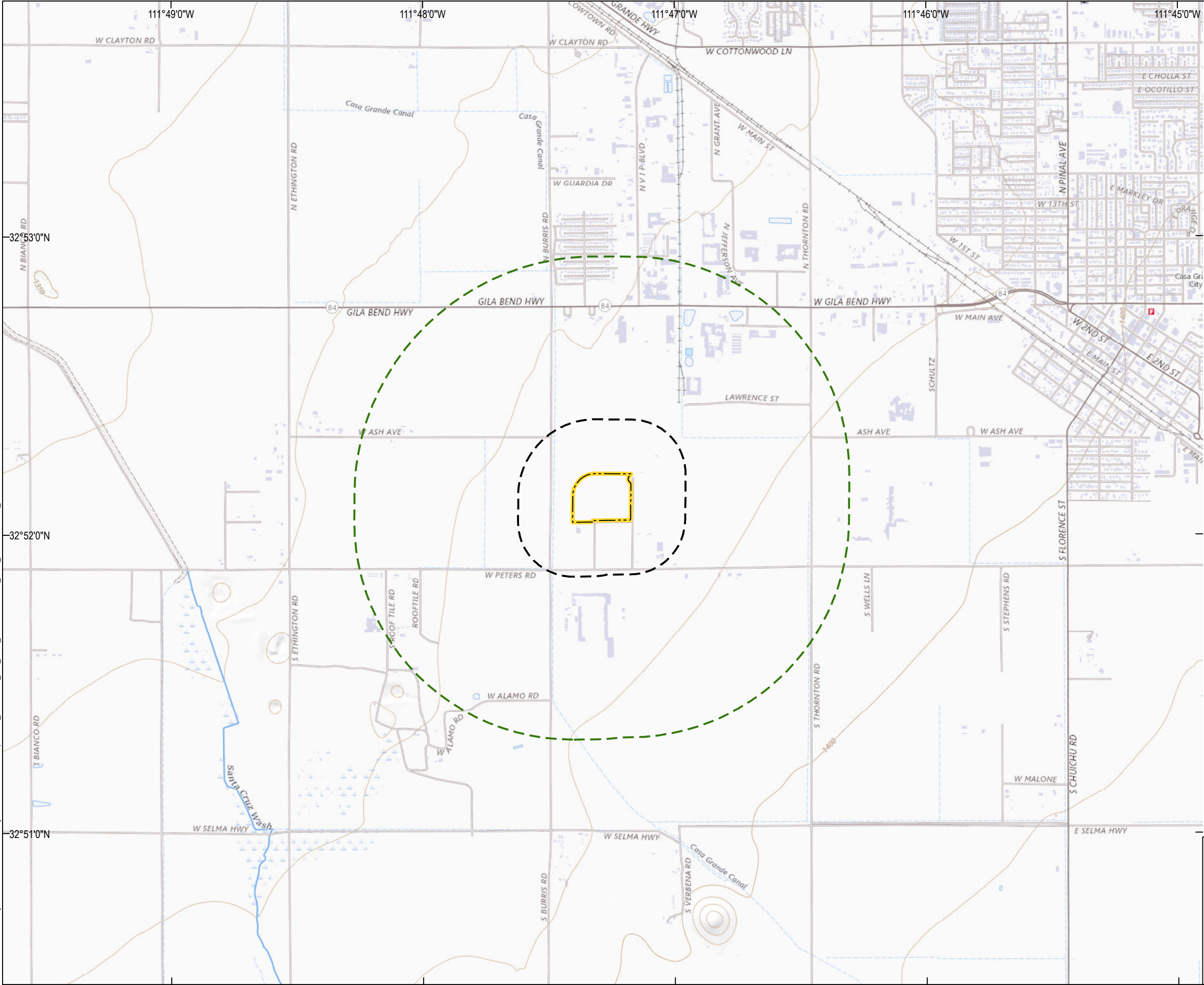
Each contractor involved in the Closure of the Facility will be required to maintain a copy of their health and safety plan at the location of the Facility until closure activities have been completed.

13. Financial Assurance for Closure




Triumvirate anticipates funding closure by obtaining closure insurance that conforms to the requirements of 40 CFR, Section 264.143(e). Triumvirate will obtain the appropriate amount of closure insurance after ADEQ has approved the Closure Plan and associated cost estimate. Specimens of Example Closure Insurance Policies are provided in [Appendix H-A](#).

The closure cost estimate will be modified within 30 days after a revision has been made to the closure plan which increases the cost of closure as required at 40 CFR Part 254.142(c). The total closure cost estimate will be updated annually according to the guidelines provided at 40 CFR Part 264.142(b).

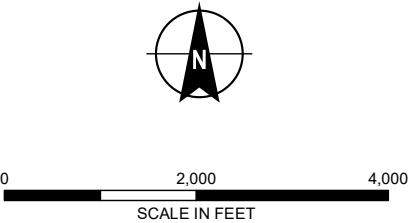
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LEGEND

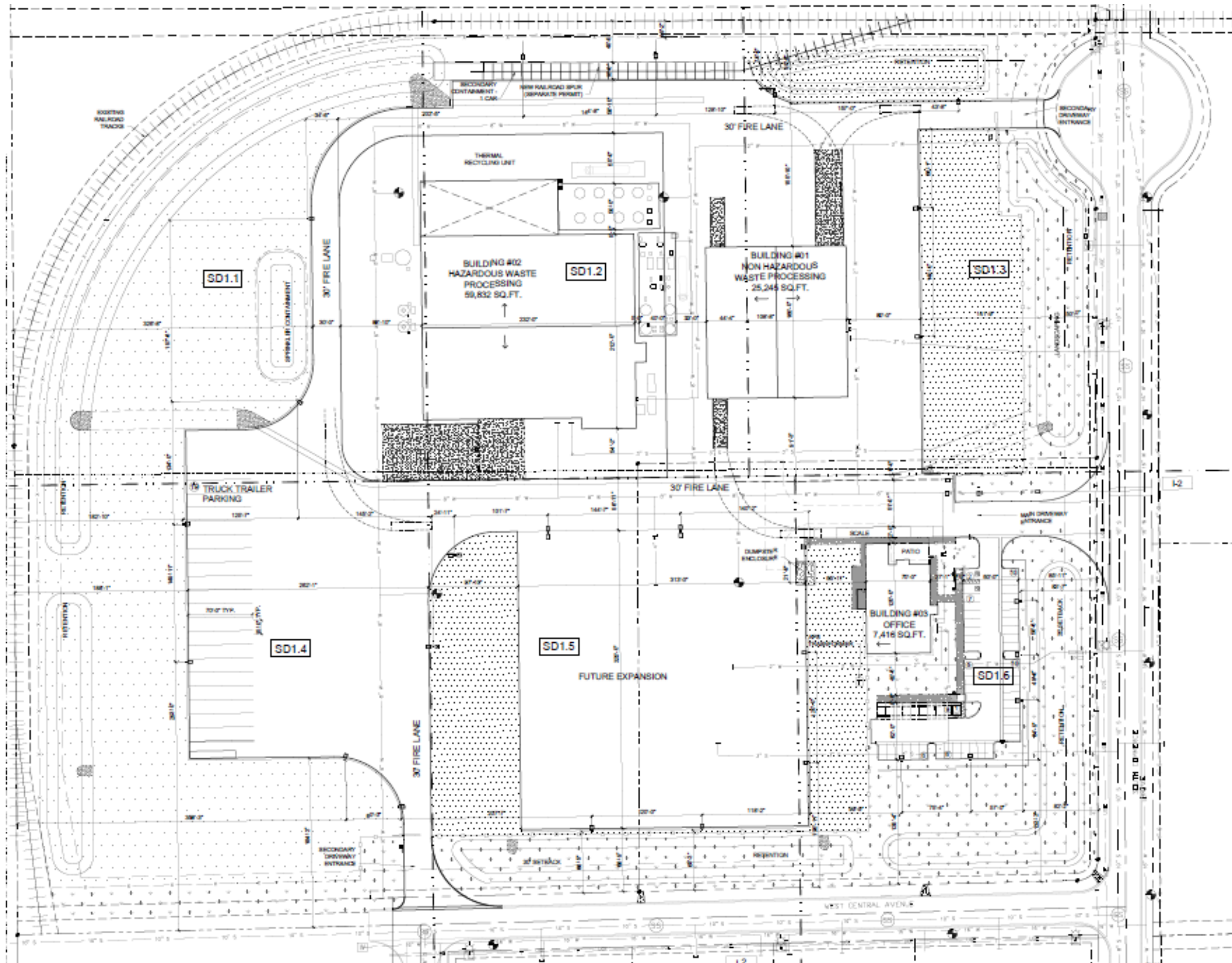
-  SITE BOUNDARY
-  1/4-MILE BUFFER
-  1-MILE BUFFER

- NOTES**
1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE
 2. ASSESSOR PARCEL DATA SOURCE: MARICOPA COUNTY
 3. TOPOGRAPHIC BASE MAP SOURCE: ESRI



HALEY ALDRICH TRIUMVIRATE ENVIRONMENTAL, INC
73 COMMERCE DRIVE
CASA GRANDE, ARIZONA

FACILITY LOCATION



NOTE

BASE MAP SOURCE: F. M GROUP INC.



NOT TO SCALE

**HALEY
ALDRICH**

TRIUMVIRATE ENVIRONMENTAL (ARIZONA), INC.
73 SOUTH COMMERCE DRIVE
CASA GRANDE, ARIZONA

FACILITY LAYOUT

OCTOBER 2023

EXHIBIT H-2

Appendix H-A
Specimens of Example Insurance Closure Policies

GREAT AMERICAN PROTECTION INSURANCE COMPANY

CLOSURE AND POST-CLOSURE FINANCIAL ASSURANCE POLICY SOLID WASTE MANAGEMENT FACILITY(IES)

THIS IS A CLAIMS MADE AND REPORTED POLICY. READ IT CAREFULLY.

THIS POLICY REQUIRES THAT A CLAIM BE MADE AGAINST THE INSURED DURING THE POLICY PERIOD AND REPORTED TO THE COMPANY DURING THE POLICY PERIOD.

SOME OF THE PROVISIONS CONTAINED IN THIS POLICY RESTRICT COVERAGE, SPECIFY WHAT IS AND IS NOT COVERED AND DESIGNATE RIGHTS AND DUTIES.

In this Policy, "the Company" refers to the company providing this insurance. Some other words and phrases that appear in capital letters have special meaning. Refer to Section II – DEFINITIONS.

In consideration of the payment of the Policy Premium and in reliance upon the statements contained in the Application and any other supplemental materials and information submitted in connection with the Application, and subject to Section V. LIMIT OF LIABILITY and all the terms, conditions, exclusions and limitations of this Policy, the Company agrees to provide insurance coverage to the INSURED as described herein.

The purpose of this Policy and any subsequent renewals thereof is to guarantee that funds shall be available to close the SOLID WASTE MANAGEMENT FACILITY(IES) whenever final closure occurs.

SECTION I. INSURING AGREEMENT

The Company agrees to pay the REGULATORY BODY, subject to the Limits of Liability of this Policy, for CLOSURE COSTS or POST-CLOSURE COSTS that the REGULATORY BODY instructs, in writing, the Company to pay on behalf of the INSURED for such amounts as the REGULATORY BODY specifies in writing, but only if:

1. a CLAIM is first made by the REGULATORY BODY, ordering closure or post-closure pursuant to a written directive issued to the Company in accordance with the Code of Federal Regulations contained in 40 CFR §258.74(d)(4) or other applicable federal, state or local regulations during the POLICY PERIOD; and
2. the CLOSURE COSTS or POST-CLOSURE COSTS arise from the PARTIAL OR FINAL CLOSURE that first takes place on or after the Inception Date of the first Policy issued by the Company to the INSURED, provided that such Policy is consecutively renewed; and
3. the INSURED has not already paid such CLOSURE COSTS or POST-CLOSURE COSTS for which reimbursement is sought, pursuant to the CLOSURE PLAN or POST-CLOSURE PLAN as contained in applicable regulations.

The INSURED agrees to reimburse the Company for any payment that the Company makes for CLOSURE COSTS or POST-CLOSURE COSTS, where such costs are not first paid by the INSURED. However, the failure of the INSURED to reimburse the Company for such costs shall not affect the obligations of the Company to pay the REGULATORY BODY as set forth above.

SECTION II. DEFINITIONS

- A. CLAIM** means a request first made in writing to the Company by the INSURED or REGULATORY BODY, pursuant to a written directive issued by the REGULATORY BODY in accordance with 40 CFR §258.74(d)(4) or other applicable federal, state or local regulations for payment of an itemized bill of expenditures made for CLOSURE COSTS or POST-CLOSURE COSTS, by reason of a PARTIAL OR FINAL CLOSURE.
- B. CLOSURE COSTS** means expenses incurred to implement PARTIAL OR FINAL CLOSURE, as set forth in an itemized bill of expenditures, that are specifically identified in the CLOSURE PLAN and approved by the REGULATORY BODY, or are otherwise justified pursuant to applicable law.
- C. CLOSURE PLAN** means the written Closure Plan which is approved and on file with the REGULATORY BODY.
- D. INSURED** means the Named Insured set forth in the Declarations page and any Additional Insured endorsed onto this Policy by the Company.
- E. PARTIAL OR FINAL CLOSURE** means the closure of one or more SOLID WASTE MANAGEMENT UNITS at a SOLID WASTE MANAGEMENT FACILITY(IES) pursuant to the CLOSURE PLAN or POST-CLOSURE PLAN upon written determination by the REGULATORY BODY that the INSURED has defaulted in its obligation to carry out such requirements.
- F. POLICY PERIOD** means the period set forth in the Declarations, or any shorter period arising as a result of:
1. cancellation of this Policy (the Company shall provide notice to the REGULATORY BODY by registered or certified mail not less than 120 days prior to the proposed cancellation date); or
 2. with respect to particular SOLID WASTE MANAGEMENT FACILITY(IES) designated in the Declarations:
 - a. the deletion of such SOLID WASTE MANAGEMENT FACILITY(IES) from this Policy by the Company at the request of the INSURED or Company and with approval from the REGULATORY BODY; or
 - b. the sale, leasing, giving away, abandonment or relinquishing of operational control of such SOLID WASTE MANAGEMENT FACILITY(IES) without the written consent of the Company.
- G. POST-CLOSURE COSTS** means expenses incurred to implement post-closure requirements, as set forth in an itemized bill of expenditures, that are specifically identified in the POST-CLOSURE PLAN and approved by the REGULATORY BODY, or are otherwise justified pursuant to applicable law.
- H. POST-CLOSURE PLAN** means the written Post-Closure Plan which is approved and on file with the REGULATORY BODY.
- I. REGULATORY BODY** means the Regional Administrator of the United States Environmental Protection Agency for the EPA region in which the SOLID WASTE MANAGEMENT FACILITY(IES) is located or any person or State Agency designated, in writing, by the Regional Administrator.

J. SOLID WASTE MANAGEMENT FACILITY(IES) means the entire facility designated by the location description in the Declarations which has received authorization from the REGULATORY BODY to engage in the treatment, storage or disposal of solid waste and which includes one or more SOLID WASTE MANAGEMENT UNIT(s) on, within or under such facility.

K. SOLID WASTE MANAGEMENT UNIT means a surface impoundment, waste pile, land treatment area, landfill cell, incinerator, tank and its associated piping and underlying containment system, or a container storage area, or other contiguous area of land on or in which solid waste is placed, or the largest area in which there is significant likelihood of mixing solid waste constituents in the same area. Such unit must be located on, within or under a SOLID WASTE MANAGEMENT FACILITY(IES). A container alone does not constitute a unit; a unit includes containers and the land or pad upon which they are placed.

SECTION III. TERRITORY

This Policy applies only to CLAIMS first made or brought in the United States, its territories or possessions or Puerto Rico, but only if the INSURED'S responsibility to pay for CLOSURE COSTS or POST-CLOSURE COSTS is determined by the REGULATORY BODY.

SECTION IV. EXCLUSIONS

Except as may be set forth in the CLOSURE PLAN or POST-CLOSURE PLAN, this Policy does not apply to any expenses, losses, liabilities of, or damages of any kind incurred by, accruing to, or alleged to be liabilities of the INSURED, by reason of:

1. (a) Any criminal or civil penalties imposed by reason of the violation of any law or regulation; or
(b) Any CLOSURE COSTS or POST-CLOSURE COSTS based upon or attributable to the INSURED's intentional, knowing, willful or deliberate noncompliance with any statute, regulation, ordinance, administrative complaint, notice of violation, notice letter, executive order or instruction of any governmental agency or body.

However, the acts of the INSURED do not affect the obligation of the Company to the REGULATORY BODY. The INSURED agrees to reimburse the Company for any payment that the Company would not have been obligated to make under the provisions of the Policy but for acts of non-compliance of the INSURED specified above, including all costs and expenses, including attorneys' fees, the Company incurs in seeking such reimbursement.

2. Any attorneys' fees and other charges and expenses incurred in the investigation, adjustment or defense of any CLAIM.

SECTION V. LIMIT OF LIABILITY

- A. The Limits of Liability shown in the Declarations and the rules below fix the most the Company will pay regardless of the number of INSUREDS, SOLID WASTE MANAGEMENT FACILITIES, CLAIMS made, or persons or organizations making CLAIMS.
- B. Subject to C. below, this Policy is to pay 100% of any CLAIM, and is subject to a Guaranty Agreement between the Company and the INSURED, which in no event shall affect the obligations of the Company to the REGULATORY BODY.
- C. The Company's total liability for the sum of all CLOSURE COSTS and POST-CLOSURE COSTS as respects any and all CLAIMS reported to the Company for which coverage is

requested under this Policy shall not exceed the "Total for all CLAIMS" Limit of Liability shown in the Declarations.

SECTION VI. REPORTING AND COOPERATION

1. In the event that the INSURED receives, formally or informally, information to the effect that CLOSURE COSTS or POST-CLOSURE COSTS or PARTIAL OR FINAL CLOSURE of a SOLID WASTE MANAGEMENT FACILITY(IES) is under consideration by the REGULATORY BODY, the INSURED shall immediately forward to the Company any demand or notice from the REGULATORY BODY regarding the CLOSURE COSTS or POST-CLOSURE COSTS or PARTIAL OR FINAL CLOSURE received by the INSURED or his or her representative.
2. The INSURED shall cooperate with the Company and, upon the Company's request, assist in obtaining information relative to any CLAIM made. The INSURED shall not, except at its own cost, voluntarily make or approve any payments, assume any obligations or incur any expense relating to CLOSURE COSTS or POST-CLOSURE COSTS which are not in accordance with the CLOSURE PLAN or POST-CLOSURE PLAN without the written consent of the Company and the REGULATORY BODY.

Notice of Default - In the event that the INSURED receives a notice from the REGULATORY BODY that the INSURED is in default of its obligations to carry out the CLOSURE PLAN or POST-CLOSURE PLAN requirements, the INSURED shall immediately forward such notice to the Company at the address shown in this policy.

3. Any notices required by these conditions shall be sent to:

Great American Insurance Company
Attention: Claims
401 Plymouth Road
Suite 100
Plymouth Meeting, Pennsylvania 19462

or other address(es) as substituted by the Company in writing.

4. Non-compliance by the INSURED with the above provisions shall not affect any rights of the REGULATORY BODY. The INSURED agrees to reimburse the Company for any payment that the Company would not have been obligated to make under the provisions of the Policy but for the failure of the INSURED to comply with the above provisions, including all costs and expenses, including attorneys fees, the Company incurs in seeking such reimbursement.

SECTION VII. CONDITIONS

- A. ACTION AGAINST COMPANY** - No action brought by an organization or entity, other than a REGULATORY BODY, shall lie against the Company unless, as a condition precedent thereto, the INSURED has fully complied with all of the terms of this Policy and, the amount of the INSURED's obligation to pay shall have been finally determined either by judgment against the INSURED after actual trial or by written agreement of the INSURED, the claimant and the Company.

Any person or organization or the legal representative thereof who has secured such judgment or written agreement shall thereafter be entitled to recover under this Policy to the extent of the insurance afforded by this Policy. Except for the REGULATORY BODY, no person or organization shall have any right under this Policy to join the Company as a party to any action against the INSURED to determine the INSURED's liability, nor shall the Company be impleaded by the INSURED or his legal representative.

- B. ASSIGNMENT** - This Policy shall be void as to the assignee or transferee, if assigned or transferred without written consent of the Company.
- C. BANKRUPTCY** - Bankruptcy or insolvency of the INSURED or of the INSURED's estate shall not relieve the Company of any of its obligations hereunder.
- D. CANCELLATION** - The Company shall not cancel, terminate or fail to renew the coverages provided herein except for failure to pay the full premium shown in the Declarations. The Company shall notify the INSURED and the REGULATORY BODY of its intent to cancel, terminate or not to renew by sending, by certified mail, to the INSURED at the address shown in this Policy and to the REGULATORY BODY, written notice stating the date not less than 120 days thereafter beginning with the date of receipt of the notice by both the REGULATORY BODY and the INSURED, as evidenced by the return receipt, provided, however, that no cancellation shall become effective, and all the INSURED's obligations under the Policy shall continue, including its obligations to pay premium, maintain collateral, and under the Guaranty Agreement, until the REGULATORY BODY approves of the cancellation and authorizes the INSURED and the Company to release coverage on the SOLID WASTE MANAGEMENT FACILITY(IES) specified in the Declarations.

This Policy may be canceled by the Named Insured pursuant to applicable statute by surrender thereof to the Company or any of its authorized agents or by mailing to the Company written notice stating the date thereafter the cancellation shall be effective. The mailing of notice as aforesaid shall be sufficient proof of notice. The time of surrender or the effective date and hour of cancellation stated in the notice shall become the end of the POLICY PERIOD.

In the event of (i) cancellation or nonrenewal by the INSURED or (ii) cancellation by the Company for nonpayment of premium, the full Insurance Premium shown in the Declarations and any reimbursement obligations on the part of the INSURED to the Company, shall be deemed earned and the unpaid portion thereof shall be immediately due and payable. Upon the effective date of cancellation by the INSURED, all indemnity obligations on the part of the Company hereunder shall automatically cease and the INSURED shall have no further recourse against the Company with respect to unpaid CLAIMS.

Notwithstanding any of the above stated provisions, cancellation is subject to 40 CFR §258.74 (d)(5) or §258.74 (d) (8), or other applicable federal, state or local regulations.

- E. CHANGES** - Notice to any agent or knowledge possessed by any agent or by any other person shall not affect a waiver or a change in any part of this Policy or estop the Company from asserting any right under the terms of this Policy; nor shall the terms of this Policy be waived or changed, except by an endorsement issued by the Company to form a part of this Policy.
- F. DECLARATIONS AND REPRESENTATIONS** - By acceptance of this Policy, the INSURED agrees that the statements contained in the Declarations, the application and any other supplemental materials and information submitted in connection with the application or any amendments to the Policy during the POLICY PERIOD are the INSURED's declarations and representations, that they shall be deemed material, that this Policy is issued in reliance upon the truth of such declarations and representations and that this Policy embodies all agreements existing between the INSURED and the Company or any of its agents relating to this insurance.
- G. HEADINGS** - The descriptions in the headings of this Policy are solely for convenience and form no part of the Policy terms and conditions.

H. INSPECTION AND AUDIT - The Company shall be permitted but not obligated to inspect and monitor on a continuing basis the INSURED's property or operations and any COVERED LOCATION(s), at any time. Neither the Company's right to make inspections and monitor nor the actual undertaking thereof nor any report thereon shall constitute an undertaking, on behalf of the INSURED or others, to determine or warrant that property or operations are safe, healthful or conform to acceptable engineering practice or are in compliance with any law, rule or regulation. Access for the inspection and audit will be coordinated through the broker or agent of the Named Insured.

I. OTHER INSURANCE - The Company's obligations are as follows:

- a. For purposes of compliance with the 40 CFR §258.74 (d) or other applicable federal, state or local regulations, with respect to the REGULATORY BODY, this insurance is primary over any other valid and collectable insurance unless this insurance has been replaced by another financial assurance mechanism approved by the REGULATORY BODY. If another financial assurance mechanism has been approved by the REGULATORY BODY to replace this Policy, this Policy shall no longer be in force.
- b. If this Policy and another financial assurance mechanism have been approved by the REGULATORY BODY pursuant to 40 CFR §258.74(d) or other applicable federal, state or local regulations this Policy will apply as follows: If the other financial assurance mechanism does not specify whether it is primary or excess or specifies that it is primary, this Policy will apply as excess over the other financial assurance mechanism. If the other financial assurance mechanism specifies that it is also excess, then this Policy will share equally with the other financial assurance mechanism as primary.
- c. Solely with respect to the INSURED, in the event other valid and collectable insurance issued to the INSURED and not intended to meet the INSURED's regulatory obligations under 40 CFR §258.74(d) or other applicable federal, state or local regulations, is available to the INSURED, the Company's obligation is as follows:
 - (i) This Policy shall apply as excess insurance over any other valid and collectable insurance be it primary or excess. This excess insurance shall in no way be increased or expanded as a result of the receivership, insolvency, or inability to pay of any insurer with respect to both the duty to indemnify and the duty to defend. This also applies to the INSURED while acting as a self-insured for any coverage;
 - (ii) Where this Policy is excess over other valid and collectable insurance, the Company will pay only its share of the amount of CLOSURE COSTS and/or POST-CLOSURE COSTS, if any, that exceeds the total amount that all such other insurance will pay for the CLOSURE COSTS and/or POST-CLOSURE COSTS in the absence of this insurance.

This Section c. will not affect the Company's obligations with respect to the REGULATORY BODY.

J. PREMIUM -The full Policy premium for coverage hereunder shall be payable in accordance with the amount shown in the Declarations. It is an absolute condition that the full amount of each premium installment be actually received by the Company in accordance with said schedule to be or continue to be effective.

K. REGULATORY PROVISIONS - As between the INSURED and the Company, any term or condition of this Policy to which any federal or state administrative or regulatory provisions apply shall be governed only by those regulations or provisions in effect at the inception date of this Policy. However, the preceding sentence shall not affect the obligation of the Company to pay claims arising under any federal or state administrative or regulatory provision that

becomes effective subsequent to the inception date of this policy, except that no such provision of law shall act to increase the limit of liability stated herein. The INSURED agrees to reimburse the Company for any payment that the Company would not have been obligated to make under the first sentence of this paragraph.

- L. SOLE AGENT** - The Named Insured stated in the Declarations shall act on behalf of all INSURED(s) for the payment or return of premium, receipt and acceptance of any endorsement issued to form a part of this Policy, and giving and receiving notice of cancellation or non-renewal.
- M. SUBROGATION** – If the INSURED has rights to recover, from another person or organization, all or any part of a payment the Company makes under this Policy, those rights are transferred to the Company. The INSURED shall execute and deliver instruments and papers and do whatever else is necessary to secure such rights. The INSURED shall do nothing to prejudice such rights. Any monies recovered as a result of subrogation proceedings shall accrue first to the INSURED to the extent of any payments it made in excess of the limits of liability, then to the Company to the extent of its payment under the Policy, and then to the INSURED to the extent of its payment of the self-insured retention. Expenses incurred in such subrogation proceedings shall be apportioned amongst the INSURED and Company in the proportion that each interested party's share in the recovery bears to the total recovery.

Specimen



GREAT AMERICAN PROTECTION INSURANCE COMPANY

CLOSURE AND POST-CLOSURE FINANCIAL ASSURANCE POLICY HAZARDOUS WASTE FACILITY(IES)

THIS IS A CLAIMS MADE AND REPORTED POLICY. READ IT CAREFULLY.

THIS POLICY REQUIRES THAT A CLAIM BE MADE AGAINST THE INSURED DURING THE POLICY PERIOD AND REPORTED TO THE COMPANY DURING THE POLICY PERIOD.

SOME OF THE PROVISIONS CONTAINED IN THIS POLICY RESTRICT COVERAGE, SPECIFY WHAT IS AND IS NOT COVERED AND DESIGNATE RIGHTS AND DUTIES.

In this Policy, "the Company" refers to the company providing this insurance. Some other words and phrases that appear in capital letters have special meaning. Refer to Section II – DEFINITIONS.

In consideration of the payment of the Policy Premium and in reliance upon the statements contained in the Application and any other supplemental materials and information submitted in connection with the Application, and subject to Section V. LIMIT OF LIABILITY and all the terms, conditions, exclusions and limitations of this Policy, the Company agrees to provide insurance coverage to the INSURED as described herein.

The purpose of this Policy and any subsequent renewals thereof is to guarantee that funds shall be available to close the HAZARDOUS WASTE FACILITY(IES) whenever final closure occurs.

SECTION I. INSURING AGREEMENT

The Company agrees to pay the REGULATORY BODY, subject to the Limits of Liability of this Policy, for CLOSURE COSTS or POST-CLOSURE COSTS that the REGULATORY BODY instructs, in writing, the Company to pay on behalf of the INSURED for such amounts as the REGULATORY BODY specifies in writing, but only if:

1. a CLAIM is first made by the REGULATORY BODY, ordering closure or post-closure pursuant to a written directive issued to the Company in accordance with the Code of Federal Regulations contained in 40 CFR, Part 264, §264.143(e)(4), §264.143(e)(5), §264.145(e)(4) or §264.145(e)(5), or other applicable federal, state or local regulations during the POLICY PERIOD; and
2. the CLOSURE COSTS or POST-CLOSURE COSTS arise from the PARTIAL OR FINAL CLOSURE that first takes place on or after the Inception Date of the first Policy issued by the Company to the INSURED, provided that such Policy is consecutively renewed; and
3. the INSURED has not already paid such CLOSURE COSTS or POST-CLOSURE COSTS for which reimbursement is sought, pursuant to the CLOSURE PLAN or POST-CLOSURE PLAN as contained in applicable regulations.

The INSURED agrees to reimburse the Company for any payment that the Company makes for CLOSURE COSTS or POST-CLOSURE COSTS, where such costs are not first paid by the INSURED. However, the failure of the INSURED to reimburse the Company for such costs shall not affect the obligations of the Company to pay the REGULATORY BODY as set forth above.

SECTION II. DEFINITIONS

- A. CLAIM** means a request first made in writing to the Company by the INSURED or REGULATORY BODY, pursuant to a written directive issued by the REGULATORY BODY in accordance with 40 CFR, Part 264, §264.143(e)(4), §264.143(e)(5), §264.145(e)(4) or §264.145(e)(5), or other applicable federal, state or local regulations for payment of an itemized bill of expenditures made for CLOSURE COSTS or POST-CLOSURE COSTS, by reason of a PARTIAL OR FINAL CLOSURE.
- B. CLOSURE COSTS** means expenses incurred to implement PARTIAL OR FINAL CLOSURE, as set forth in an itemized bill of expenditures, that are specifically identified in the CLOSURE PLAN and approved by the REGULATORY BODY, or are otherwise justified pursuant to applicable law.
- C. CLOSURE PLAN** means the written Closure Plan which is approved and on file with the REGULATORY BODY.
- D. HAZARDOUS WASTE FACILITY(IES)** means the entire facility designated by the location description in the Declarations which has received authorization from the REGULATORY BODY to engage in the treatment, storage or disposal of hazardous waste and which includes one or more HAZARDOUS WASTE MANAGEMENT UNIT(s) on, within or under such facility.
- E. HAZARDOUS WASTE MANAGEMENT UNIT** means a surface impoundment, waste pile, land treatment area, landfill cell, incinerator, tank and its associated piping and underlying containment system, or a container storage area, or other contiguous area of land on or in which hazardous waste is placed, or the largest area in which there is significant likelihood of mixing hazardous waste constituents in the same area. Such unit must be located on, within or under a HAZARDOUS WASTE FACILITY(IES). A container alone does not constitute a unit; a unit includes containers and the land or pad upon which they are placed.
- F. INSURED** means the Named Insured set forth in the Declarations page and any Additional Insured endorsed onto this Policy by the Company.
- G. PARTIAL OR FINAL CLOSURE** means the closure of one or more HAZARDOUS WASTE MANAGEMENT UNITS at a HAZARDOUS WASTE FACILITY(IES) pursuant to the CLOSURE PLAN or POST-CLOSURE PLAN upon written determination by the REGULATORY BODY that the INSURED has defaulted in its obligation to carry out such requirements.
- H. POLICY PERIOD** means the period set forth in the Declarations, or any shorter period arising as a result of:
1. cancellation of this Policy (the Company shall provide notice to the REGULATORY BODY by registered or certified mail not less than 120 days prior to the proposed cancellation date); or
 2. with respect to particular HAZARDOUS WASTE FACILITY(IES) designated in the Declarations:
 - a. the deletion of such HAZARDOUS WASTE FACILITY(IES) from this Policy by the Company at the request of the INSURED or Company and with approval from the REGULATORY BODY; or

- b. the sale, leasing, giving away, abandonment or relinquishing of operational control of such HAZARDOUS WASTE FACILITY(IES) without the written consent of the Company.
- I. **POST-CLOSURE COSTS** means expenses incurred to implement post-closure requirements, as set forth in an itemized bill of expenditures, that are specifically identified in the POST-CLOSURE PLAN and approved by the REGULATORY BODY, or are otherwise justified pursuant to applicable law.
- J. **POST-CLOSURE PLAN** means the written Post-Closure Plan which is approved and on file with the REGULATORY BODY.
- K. **REGULATORY BODY** means the Regional Administrator of the United States Environmental Protection Agency for the EPA region in which the HAZARDOUS WASTE FACILITY(IES) is located or any person or State Agency designated, in writing, by the Regional Administrator.

SECTION III. TERRITORY

This Policy applies only to CLAIMS first made or brought in the United States, its territories or possessions or Puerto Rico, but only if the INSURED'S responsibility to pay for CLOSURE COSTS or POST-CLOSURE COSTS is determined by the REGULATORY BODY.

SECTION IV. EXCLUSIONS

Except as may be set forth in the CLOSURE PLAN or POST-CLOSURE PLAN, this Policy does not apply to any expenses, losses, liabilities of, or damages of any kind incurred by, accruing to, or alleged to be liabilities of the INSURED, by reason of:

- 1. (a) Any criminal or civil penalties imposed by reason of the violation of any law or regulation; or
- (b) Any CLOSURE COSTS or POST-CLOSURE COSTS based upon or attributable to the INSURED's intentional, knowing, willful or deliberate noncompliance with any statute, regulation, ordinance, administrative complaint, notice of violation, notice letter, executive order or instruction of any governmental agency or body.

However, the acts of the INSURED do not affect the obligation of the Company to the REGULATORY BODY. The INSURED agrees to reimburse the Company for any payment that the Company would not have been obligated to make under the provisions of the Policy but for acts of non-compliance of the INSURED specified above, including all costs and expenses, including attorneys' fees, the Company incurs in seeking such reimbursement.

- 2. Any attorneys' fees and other charges and expenses incurred in the investigation, adjustment or defense of any CLAIM.

SECTION V. LIMIT OF LIABILITY

- A. The Limits of Liability shown in the Declarations and the rules below fix the most the Company will pay regardless of the number of INSUREDS, HAZARDOUS WASTE FACILITIES, CLAIMS made, or persons or organizations making CLAIMS.
- B. Subject to C. below, this Policy is to pay 100% of any CLAIM, and is subject to a Guaranty Agreement between the Company and the INSURED, which in no event shall affect the obligations of the Company to the REGULATORY BODY.

- C. The Company's total liability for the sum of all CLOSURE COSTS and POST-CLOSURE COSTS as respects any and all CLAIMS reported to the Company for which coverage is requested under this Policy shall not exceed the "Total for all CLAIMS" Limit of Liability shown in the Declarations.

SECTION VI. REPORTING AND COOPERATION

1. In the event that the INSURED receives, formally or informally, information to the effect that CLOSURE COSTS or POST-CLOSURE COSTS or PARTIAL OR FINAL CLOSURE of a HAZARDOUS WASTE FACILITY(IES) is under consideration by the REGULATORY BODY, the INSURED shall immediately forward to the Company any demand or notice from the REGULATORY BODY regarding the CLOSURE COSTS or POST-CLOSURE COSTS or PARTIAL OR FINAL CLOSURE received by the INSURED or his or her representative.
2. The INSURED shall cooperate with the Company and, upon the Company's request, assist in obtaining information relative to any CLAIM made. The INSURED shall not, except at its own cost, voluntarily make or approve any payments, assume any obligations or incur any expense relating to CLOSURE COSTS or POST-CLOSURE COSTS which are not in accordance with the CLOSURE PLAN or POST-CLOSURE PLAN without the written consent of the Company and the REGULATORY BODY.

Notice of Default - In the event that the INSURED receives a notice from the REGULATORY BODY that the INSURED is in default of its obligations to carry out the CLOSURE PLAN or POST-CLOSURE PLAN requirements, the INSURED shall immediately forward such notice to the Company at the address shown in this policy.

3. Any notices required by these conditions shall be sent to:

Great American Insurance Company
Attention: Claims
401 Plymouth Road
Suite 100
Plymouth Meeting, Pennsylvania 19462

or other address(es) as substituted by the Company in writing.

4. Non-compliance by the INSURED with the above provisions shall not affect any rights of the REGULATORY BODY. The INSURED agrees to reimburse the Company for any payment that the Company would not have been obligated to make under the provisions of the Policy but for the failure of the INSURED to comply with the above provisions, including all costs and expenses, including attorneys fees, the Company incurs in seeking such reimbursement.

SECTION VII. CONDITIONS

- A. **ACTION AGAINST COMPANY** - No action brought by an organization or entity, other than a REGULATORY BODY, shall lie against the Company unless, as a condition precedent thereto, the INSURED has fully complied with all of the terms of this Policy and, the amount of the INSURED's obligation to pay shall have been finally determined either by judgment against the INSURED after actual trial or by written agreement of the INSURED, the claimant and the Company.

Any person or organization or the legal representative thereof who has secured such judgment or written agreement shall thereafter be entitled to recover under this Policy to the extent of the insurance afforded by this Policy. Except for the REGULATORY BODY, no person or organization shall have any right under this Policy to join the Company as a party

to any action against the INSURED to determine the INSURED's liability, nor shall the Company be impleaded by the INSURED or his legal representative.

- B. ASSIGNMENT** - This Policy shall be void as to the assignee or transferee, if assigned or transferred without written consent of the Company.
- C. BANKRUPTCY** - Bankruptcy or insolvency of the INSURED or of the INSURED's estate shall not relieve the Company of any of its obligations hereunder.
- D. CANCELLATION** - The Company shall not cancel, terminate or fail to renew the coverages provided herein except for failure to pay the full premium shown in the Declarations. The Company shall notify the INSURED and the REGULATORY BODY of its intent to cancel, terminate or not to renew by sending, by certified mail, to the INSURED at the address shown in this Policy and to the REGULATORY BODY, written notice stating the date not less than 120 days thereafter beginning with the date of receipt of the notice by both the REGULATORY BODY and the INSURED, as evidenced by the return receipt, provided, however, that no cancellation shall become effective, and all the INSURED's obligations under the Policy shall continue, including its obligations to pay premium, maintain collateral, and under the Guaranty Agreement, until the REGULATORY BODY approves of the cancellation and authorizes the INSURED and the Company to release coverage on the HAZARDOUS WASTE FACILITY(IES) specified in the Declarations.

This Policy may be canceled by the Named Insured pursuant to applicable statute by surrender thereof to the Company or any of its authorized agents or by mailing to the Company written notice stating the date thereafter the cancellation shall be effective. The mailing of notice as aforesaid shall be sufficient proof of notice. The time of surrender or the effective date and hour of cancellation stated in the notice shall become the end of the POLICY PERIOD.

In the event of (i) cancellation or nonrenewal by the INSURED or (ii) cancellation by the Company for nonpayment of premium, the full Insurance Premium shown in the Declarations and any reimbursement obligations on the part of the INSURED to the Company, shall be deemed earned and the unpaid portion thereof shall be immediately due and payable. Upon the effective date of cancellation by the INSURED, all indemnity obligations on the part of the Company hereunder shall automatically cease and the INSURED shall have no further recourse against the Company with respect to unpaid CLAIMS.

Notwithstanding any of the above stated provisions, cancellation is subject to 40 CFR §264.143(e)(8) or §264.145(e)(8) or other applicable federal, state or local regulations.

- E. CHANGES** - Notice to any agent or knowledge possessed by any agent or by any other person shall not affect a waiver or a change in any part of this Policy or estop the Company from asserting any right under the terms of this Policy; nor shall the terms of this Policy be waived or changed, except by an endorsement issued by the Company to form a part of this Policy.
- F. DECLARATIONS AND REPRESENTATIONS** - By acceptance of this Policy, the INSURED agrees that the statements contained in the Declarations, the application and any other supplemental materials and information submitted in connection with the application or any amendments to the Policy during the POLICY PERIOD are the INSURED's declarations and representations, that they shall be deemed material, that this Policy is issued in reliance upon the truth of such declarations and representations and that this Policy embodies all agreements existing between the INSURED and the Company or any of its agents relating to this insurance.

G. HEADINGS - The descriptions in the headings of this Policy are solely for convenience and form no part of the Policy terms and conditions.

H. INSPECTION AND AUDIT - The Company shall be permitted but not obligated to inspect and monitor on a continuing basis the INSURED's property or operations and any COVERED LOCATION(s), at any time. Neither the Company's right to make inspections and monitor nor the actual undertaking thereof nor any report thereon shall constitute an undertaking, on behalf of the INSURED or others, to determine or warrant that property or operations are safe, healthful or conform to acceptable engineering practice or are in compliance with any law, rule or regulation. Access for the inspection and audit will be coordinated through the broker or agent of the Named Insured.

I. OTHER INSURANCE - The Company's obligations are as follows:

- a. For purposes of compliance with the 40 CFR §264.143 and §264.145 or other applicable federal, state or local regulations, with respect to the REGULATORY BODY, this insurance is primary over any other valid and collectable insurance unless this insurance has been replaced by another financial assurance mechanism approved by the REGULATORY BODY. If another financial assurance mechanism has been approved by the REGULATORY BODY to replace this Policy, this Policy shall no longer be in force.
- b. If this Policy and another financial assurance mechanism have been approved by the REGULATORY BODY pursuant to 40 CFR §264.143 and §264.145 or other applicable federal, state or local regulations this Policy will apply as follows: If the other financial assurance mechanism does not specify whether it is primary or excess or specifies that it is primary, this Policy will apply as excess over the other financial assurance mechanism. If the other financial assurance mechanism specifies that it is also excess, then this Policy will share equally with the other financial assurance mechanism as primary.
- c. Solely with respect to the INSURED, in the event other valid and collectable insurance issued to the INSURED and not intended to meet the INSURED's regulatory obligations under 40 CFR §264.143 and §264.145 or other applicable federal, state or local regulations, is available to the INSURED, the Company's obligation is as follows:
 - (i) This Policy shall apply as excess insurance over any other valid and collectable insurance be it primary or excess. This excess insurance shall in no way be increased or expanded as a result of the receivership, insolvency, or inability to pay of any insurer with respect to both the duty to indemnify and the duty to defend. This also applies to the INSURED while acting as a self-insured for any coverage;
 - (ii) Where this Policy is excess over other valid and collectable insurance, the Company will pay only its share of the amount of CLOSURE COSTS and/or POST-CLOSURE COSTS, if any, that exceeds the total amount that all such other insurance will pay for the CLOSURE COSTS and/or POST-CLOSURE COSTS in the absence of this insurance.

This Section c. will not affect the Company's obligations with respect to the REGULATORY BODY.

J. PREMIUM -The full Policy premium for coverage hereunder shall be payable in accordance with the amount shown in the Declarations. It is an absolute condition that the full amount of each premium installment be actually received by the Company in accordance with said schedule to be or continue to be effective.

K. REGULATORY PROVISIONS - As between the INSURED and the Company, any term or condition of this Policy to which any federal or state administrative or regulatory provisions

apply shall be governed only by those regulations or provisions in effect at the inception date of this Policy. However, the preceding sentence shall not affect the obligation of the Company to pay claims arising under any federal or state administrative or regulatory provision that becomes effective subsequent to the inception date of this policy, except that no such provision of law shall act to increase the limit of liability stated herein. The INSURED agrees to reimburse the Company for any payment that the Company would not have been obligated to make under the first sentence of this paragraph.

- L. SOLE AGENT** - The Named Insured stated in the Declarations shall act on behalf of all INSURED(s) for the payment or return of premium, receipt and acceptance of any endorsement issued to form a part of this Policy, and giving and receiving notice of cancellation or non-renewal.
- M. SUBROGATION** – If the INSURED has rights to recover, from another person or organization, all or any part of a payment the Company makes under this Policy, those rights are transferred to the Company. The INSURED shall execute and deliver instruments and papers and do whatever else is necessary to secure such rights. The INSURED shall do nothing to prejudice such rights. Any monies recovered as a result of subrogation proceedings shall accrue first to the INSURED to the extent of any payments it made in excess of the limits of liability, then to the Company to the extent of its payment under the Policy, and then to the INSURED to the extent of its payment of the self-insured retention. Expenses incurred in such subrogation proceedings shall be apportioned amongst the INSURED and Company in the proportion that each interested party's share in the recovery bears to the total recovery.

Specimen

Attachment H Tables

Table H-1
Units/Areas Subject to Closure Activities

Unit/Area	Unit Type	Nominal Square Footage
Room 102	Permitted Storage	3,240
Room 103	Permitted Storage	3,240
Room 105	Permitted Storage	4,320
Room 106	Permitted Storage	1,080
Room 120	Permitted Storage	756
Room 121	Permitted Storage	501
Room 124	Permitted Storage	3,015
Exterior Compressed Gas Storage Area 126	Permitted Storage	82
Flammable/Combustible Storage Tank #101	Permitted Storage	N/A
Flammable/Combustible Storage Tank #102	Permitted Storage	N/A
Flammable/Combustible Storage Tank #103	Permitted Storage	N/A
Flammable/Combustible Storage Tank #104	Permitted Storage	N/A
Flammable/Combustible Storage Tank #105	Permitted Storage	N/A
Flammable/Combustible Storage Tank #106	Permitted Storage	N/A
Flammable/Combustible Storage Tank #107	Permitted Storage	N/A
Flammable/Combustible Storage Tank #108	Permitted Storage	N/A
Corrosive Liquid Storage Tank #201	Permitted Storage	N/A
Corrosive Liquid Storage Tank #202	Permitted Storage	N/A
Bulk Solids Storage/Stabilization Tank #301	Permitted Storage	N/A
Bulk Solids Storage/Stabilization Tank #302	Permitted Storage	N/A
Loading Dock 100 ⁽¹⁾	Loading, Unloading, 10-day transfer	N/A
Exterior Canopy Area 127	Permitted Storage	10,164
Entry 104 ⁽¹⁾		3,383
Hood 115 ⁽¹⁾	Depacking/Repacking Lab Packs Container Consolidation	100
Hood 116 ⁽¹⁾	Depacking/Repacking Lab Packs Container Consolidation	100
Hood 117 ⁽¹⁾	Depacking/Repacking Lab Packs Container Consolidation	100
Hood 118 ⁽¹⁾	Depacking/Repacking Lab Packs Container Consolidation	100
Hood 119 ⁽¹⁾	Depacking/Repacking Lab Packs Container Consolidation	144
Interior Processing Area 122 ⁽¹⁾	Processing	11,257
Interior Processing Area 123 ⁽¹⁾	Processing	7,507
Bulk Loading Area 107 ⁽¹⁾	Loading	5,942
Bulk Unloading Area 125 ⁽¹⁾	Unloading	2,670
Bulk Unloading Area 128 ⁽¹⁾	Unloading	5,171
Shipping/Receiving Docks 101 ⁽¹⁾	Loading	3,309
Railcar Loading/Unloading Area	Permitted Storage	5,760

⁽¹⁾ These areas are not permitted for storage of hazardous waste. They are identified as staging, processing, and loading/unloading areas that warrant consideration during Facility closure.

Table H-2
Maximum Inventory of Wastes

Room	Waste Description	Number of Drums
102	Flammable & Combustible Solids	8
102	Flammable & Combustible Liquids	568
103	Toxic/Highly Toxic Solids	360
103	Toxic/Highly Toxic Liquids	360
105	Corrosive Solids	504
105	Corrosive Liquids	504
106	Reactive and Organic Peroxide Solids	72
106	Reactive and Organic Peroxide Liquids	72
120	Pyrophoric Solids	24
120	Pyrophoric Liquids	24
121	Water Reactive Solids	32
121	Water Reactive Liquids	32
124	Flammable & Combustible Solids	296
124	Flammable & Combustible Liquids	296
Maximum Container Inventory		3,152
Area	Waste Description	Number of Cylinders
126	Flammable Compressed Gas	50
Tank Number	Waste Description	Gallons
101	Flammable & Combustible Liquids	19,644
102	Flammable & Combustible Liquids	19,644
103	Flammable & Combustible Liquids	19,644
104	Flammable & Combustible Liquids	19,644
105	Flammable & Combustible Liquids	19,644
106	Flammable & Combustible Liquids	19,644
107	Flammable & Combustible Liquids	19,644
108	Flammable & Combustible Liquids	19,644
General Facility	Flammable & Combustible Liquids	26,000 (5 X 5,200 gallon vacuum tracks)
Maximum Inventory of Bulk Flammable & Combustible Liquids		183,152
Tank Number	Waste Description	Gallons
201	Acid Waste	20,000
202	Caustic Waste	20,000
WWTU Tank 1	Acid Waste	12,500
WWTU Tank 2	Caustic Waste	12,500
Maximum Inventory of Bulk Corrosive Liquids		65,000
Tank Number	Waste Description	Cubic Yards
301	Hazardous Waste Solids	80
302	Hazardous Waste Solids	80
Exterior Canopied Area 127	Hazardous Waste Solids	240 (6 X 40 Cubic Yard Roll-Offs)
Maximum Inventory of Bulk Solids		400

Table H-3
Estimate of Waste Generated During Closure

Storage Tanks		Description	Adjusted Quantity	Unit of Measure
Flammable Liquid Waste Storage Tanks		500 gallons X 3 steps X 8 tanks X 2 cycles	24,000	Gallons
Corrosive Liquid Waste Storage Tanks		500 gallons X 3 steps X 4 tanks X 2 cycles	12,000	Gallons
Flammable Liquid Waste Storage Tank Piping		1,000 gallons X 3 steps	3,000	Gallons
Corrosive Liquid Waste Storage Tank Piping		1,000 gallons X 3 steps	3,000	Gallons
Room/Area/Containment System	Sq Ft	Description		
Bulk Solid Waste Storage Tanks	1,088	817 sq ft/tank X 0.5 gallons/sq ft X 3 steps X 2 tanks X 2 cycles = 4,902 gallons 1) Dimensions of each 80 cubic yard tank are approximately 21' L X 13' W X 8' H 2) Surface area = [(21' X 8') + (13' X 8')] X 2 + 273' = 817 sq ft 3) Rinse water generated at a rate of approximately 0.5 gallons per sq ft.	5,000	Gallons
Loading Dock 100	3,308	0.5 gallons per sq ft. X 3 steps = 4,960 gallons	5,000	Gallons
Shipping/Receiving Dock 101	3,309	0.5 gallons per sq ft. X 3 steps = 4963.5 gallons	5,000	Gallons
Room 102	3,240	0.5 gallons per sq ft. X 3 steps = 4,875 gallons	4,900	Gallons
Room 103	3,240	0.5 gallons per sq ft. X 3 steps = 4,875 gallons	4,900	Gallons
Entry 104	3,383	0.5 gallons per sq ft. X 3 steps = 5,074.5 gallons	5,100	Gallons
Room 105	4,320	0.5 gallons per sq ft. X 3 steps = 6,480 gallons	6,500	Gallons
Room 106	1,080	0.5 gallons per sq ft. X 3 steps = 1,620 gallons	1,700	Gallons
Bulk Loading Area 107	5,942	0.5 gallons per sq ft. X 3 steps = 8,913 gallons	9,000	Gallons
Room 120	756	0.5 gallons per sq ft. X 3 steps = 1,134 gallons	1,200	Gallons
Room 121	501	0.5 gallons per sq ft. X 3 steps = 751.5 gallons	800	Gallons
Interior Processing Area 122	11,257	0.5 gallons per sq ft. X 3 steps = 16,885.5 gallons	16,900	Gallons
Interior Processing Area 123	7,507	0.5 gallons per sq ft. X 3 steps = 11,257.5 gallons	11,300	Gallons
Room 124	3,015	0.5 gallons per sq ft. X 3 steps = 4,522.5 gallons	4,600	Gallons
Containment System for Corrosive Liquid Storage Tanks 125	2,670	0.5 gallons per sq ft. X 3 steps = 4,005 gallons	4,100	Gallons
Exterior Compressed Gas Storage Area 126	82	0.5 gallons per sq ft. X 3 steps = 123 gallons	200	Gallons
Exterior Canopy Area 127	10,164	0.5 gallons per sq ft. X 3 steps = 15,246 gallons	15,300	Gallons
Containment System for Flammable/Combustible Storage Tanks 128	5,171	0.5 gallons per sq ft. X 3 steps = 7,756.5 gallons	7,800	Gallons

Table H-3
Estimate of Waste Generated During Closure

Railcar loading/unloading area concrete apron	9,900	0.5 gallons per sq ft. X 3 steps = 14,850	14,900	Gallons
Containment System for Railcar Loading/Unloading Area	5,760	0.5 gallons per sq ft. X 3 steps = 8,640 gallons	8,700	Gallons
Truck Parking on east side of building	1,280	0.5 gallons per sq ft. X 3 steps = 2,304 gallons	2,400	Gallons
Truck Parking on north side of building	1,280	0.5 gallons per sq ft. X 3 steps = 2,304 gallons	2,400	Gallons
Hood 115	100	0.5 gallons per sq ft. X 3 steps = 150 gallons	200	Gallons
Hood 116	100	0.5 gallons per sq ft. X 3 steps = 150 gallons	200	Gallons
Hood 117	100	0.5 gallons per sq ft. X 3 steps = 150 gallons	200	Gallons
Hood 118	100	0.5 gallons per sq ft. X 3 steps = 150 gallons	200	Gallons
Hood 119	144	0.5 gallons per sq ft. X 3 steps = 216 gallons	300	Gallons
Total Estimated Quantity of Rinse Waste Generated			180,800	Gallons
Component/Equipment	Quantity		Unit of Measure	
Pumps, miscellaneous equipment, empty damaged drums, spill pillows and booms, debris, trash, disposable sampling equipment, disposable decontamination equipment, etc.	2		40 Cubic Yard Roll-offs	

Table H-4
Summary of Sample Collection and Analyses

Section	Location	Sample Matrix	No. of Samples	Analyses
7.1.1	Flammable ad Combustible Liquid Waste Storage Tanks	Rinse Water	16	VOCs, SVOCs, RCRA Metals, Total Petroleum Hydrocarbons, PCBs, Cyanide Pesticides/Herbicides, pH field measured
7.1.2	Corrosive Liquid Waste Storage Tanks	Rinse Water	4	VOCs, SVOCs, RCRA Metals, Total Petroleum Hydrocarbons, PCBs, Cyanide Pesticides/Herbicides, pH field measured
7.1.3	Bulk Solid Waste Storage Tanks	Rinse Water	4	VOCs, SVOCs, RCRA Metals, Total Petroleum Hydrocarbons, PCBs, Cyanide Pesticides/Herbicides, pH field measured
7.1.4	Hazardous Waste Management and Processing Building	Rinse Water	38	VOCs, SVOCs, RCRA Metals, Total Petroleum Hydrocarbons, PCBs, Cyanide Pesticides/Herbicides, pH field measured
7.1.5	Liquid Waste Storage Tank Containment Systems	Rinse Water	4	VOCs, SVOCs, RCRA Metals, Total Petroleum Hydrocarbons, PCBs, Cyanide Pesticides/Herbicides, pH field measured
7.1.6	Loading Dock 100 Containment System	Rinse Water	2	VOCs, SVOCs, RCRA Metals, Total Petroleum Hydrocarbons, PCBs, Cyanide Pesticides/Herbicides, pH field measured
7.1.7	Truck and Railcar Loading/Unloading Areas	Rinse Water	6	VOCs, SVOCs, RCRA Metals, Total Petroleum Hydrocarbons, PCBs, Cyanide Pesticides/Herbicides, pH field measured
Total Number of Rinsate Samples Collected			74	

Table H-4
Summary of Sample Collection and Analyses

7.2	Surface Soil Sampling	Soil	22	VOCs, SVOCs, RCRA Metals, Total Petroleum Hydrocarbons, PCBs, Cyanide Pesticides/Herbicides, pH field measured
7.2	Field Duplicates – 1 Field Duplicate per 10 samples	Soil	3	VOCs, SVOCs, RCRA Metals, Total Petroleum Hydrocarbons, PCBs, Cyanide Pesticides/Herbicides, pH field measured
7.2	Trip Blanks – 1 Trip Blank per day	Water	2	VOCs, SVOCs, RCRA Metals, Total Petroleum Hydrocarbons, PCBs, Cyanide Pesticides/Herbicides, pH field measured
Total Number of Soil/Duplicates/Blanks Samples Collected			27	

Table H-5
Summary of Wipe Sample Collection and Analyses

Location	Square Feet	Square Meters	2%	Number of Wipe Samples	Analyses
Loading Dock 100	3,308	307.644	6.15	6	VOCs, SVOCs, RCRA Metals, Total Petroleum Hydrocarbons, PCBs, Cyanide Pesticides/Herbicides
Room 102	3,240	301.32	6.03	6	VOCs, SVOCs, RCRA Metals, Total Petroleum Hydrocarbons, PCBs, Cyanide Pesticides/Herbicides
Room 103	3,240	301.32	6.03	6	VOCs, SVOCs, RCRA Metals, Total Petroleum Hydrocarbons, PCBs, Cyanide Pesticides/Herbicides
Entry 104	3,383	314.619	6.29	6	VOCs, SVOCs, RCRA Metals, Total Petroleum Hydrocarbons, PCBs, Cyanide Pesticides/Herbicides
Room 105	4,320	401.76	8.04	8	VOCs, SVOCs, RCRA Metals, Total Petroleum Hydrocarbons, PCBs, Cyanide Pesticides/Herbicides
Room 106	1,080	100.44	2.01	2	VOCs, SVOCs, RCRA Metals, Total Petroleum Hydrocarbons, PCBs, Cyanide Pesticides/Herbicides
Bulk Loading Area 107	9,800	911.4	18.23	18	VOCs, SVOCs, RCRA Metals, Total Petroleum Hydrocarbons, PCBs, Cyanide Pesticides/Herbicides
Room 120	756	70.308	1.41	1	VOCs, SVOCs, RCRA Metals, Total Petroleum Hydrocarbons, PCBs, Cyanide Pesticides/Herbicides
Room 121	501	46.593	0.93	1	VOCs, SVOCs, RCRA Metals, Total Petroleum Hydrocarbons, PCBs, Cyanide Pesticides/Herbicides
Interior Processing Area 122	11,257	1046.901	20.94	21	VOCs, SVOCs, RCRA Metals, Total Petroleum Hydrocarbons, PCBs, Cyanide Pesticides/Herbicides
Interior Processing Area 123	7,507	698.151	13.96	14	VOCs, SVOCs, RCRA Metals, Total Petroleum Hydrocarbons, PCBs, Cyanide Pesticides/Herbicides
Room 124	3,015	280.395	5.61	6	VOCs, SVOCs, RCRA Metals, Total Petroleum Hydrocarbons, PCBs, Cyanide Pesticides/Herbicides

Table H-5
Summary of Wipe Sample Collection and analyses

Location	Square Feet	Square Meters	2%	Number of Wipe Samples	Analyses
Containment System for corrosive liquids 125	2,670	248.31	4.97	5	VOCs, SVOCs, RCRA Metals, Total Petroleum Hydrocarbons, PCBs, Cyanide Pesticides/Herbicides
Exterior Compressed Gas Storage Area 126	82	7.626	0.15	1	VOCs, SVOCs, RCRA Metals, Total Petroleum Hydrocarbons, PCBs, Cyanide Pesticides/Herbicides
Exterior Canopy Area 127	10,164	945.252	18.91	19	VOCs, SVOCs, RCRA Metals, Total Petroleum Hydrocarbons, PCBs, Cyanide Pesticides/Herbicides
Containment System for Flammable/Combustible Storage Tanks 128	5,171	480.903	9.62	10	VOCs, SVOCs, RCRA Metals, Total Petroleum Hydrocarbons, PCBs, Cyanide Pesticides/Herbicides
Railcar loading/unloading area concrete apron	9,900	920.7	18.41	18	VOCs, SVOCs, RCRA Metals, Total Petroleum Hydrocarbons, PCBs, Cyanide Pesticides/Herbicides
Containment system for railcars loading/unloading	5,760	535.68	10.71	11	VOCs, SVOCs, RCRA Metals, Total Petroleum Hydrocarbons, PCBs, Cyanide Pesticides/Herbicides
Truck parking on east side of building	1,280	119.04	2.38	2	VOCs, SVOCs, RCRA Metals, Total Petroleum Hydrocarbons, PCBs, Cyanide Pesticides/Herbicides
Truck parking on north side of building	1,280	119.04	2.38	2	VOCs, SVOCs, RCRA Metals, Total Petroleum Hydrocarbons, PCBs, Cyanide Pesticides/Herbicides
Pack/Depack/Repack (Hoods 115-119)	544	50.592	1.01	1	VOCs, SVOCs, RCRA Metals, Total Petroleum Hydrocarbons, PCBs, Cyanide Pesticides/Herbicides

Total number of wipe samples collected 164

Table H-6
CLOSURE COST ESTIMATE
Triumvirate Environmental (Arizona) Inc.
Hazardous Waste Storage and Treatment Facility

	Amount or Number	Unit of Measure	Unit Cost		Estimated Cost
1.0 Removal of Waste Inventory					
1.1 Labor 4 Technicians @ \$67/hour	240	hours	\$268.00	\$	64,320.00
1.2 Disposal of Waste Inventory					
1.2.1 Rooms 102 & 124 Flammable Solid Waste	304	drums	\$190.00	\$	57,760.00
1.2.2 Rooms 102 & 124 Flammable and Combustible Liquid Waste	864	drums	\$275.00	\$	237,600.00
1.2.3 Room 103 Toxic Solid Waste	360	drums	\$275.00	\$	99,000.00
1.2.4 Room 103 Toxic Liquid Waste	360	drums	\$190.00	\$	68,400.00
1.2.5 Room 105 Corrosive Solid Waste	504	drums	\$190.00	\$	95,760.00
1.2.6 Room 105 Corrosive Liquid Waste	504	drums	\$275.00	\$	138,600.00
1.2.7 Room 106 Solid Oxidizer Waste	72	drums	\$275.00	\$	19,800.00
1.2.8 Room 106 Liquid Oxidizer Waste	72	drums	\$190.00	\$	13,680.00
1.2.9 Room 120 Pyrophoric Solid Waste	24	drums	\$575.00	\$	13,800.00
1.2.10 Room 120 Pyrophoric Liquid Waste	24	drums	\$575.00	\$	13,800.00
1.2.11 Room 121 Water Reactive Solid Waste	32	drums	\$575.00	\$	18,400.00
1.2.12 Room 121 Waste Reactive Liquid Waste	32	drums	\$575.00	\$	18,400.00
1.2.13 Area 100 Five Vacuum Trucks @ 6,000 gallons each	30,000	Gallons	\$2.00	\$	60,000.00
1.2.14 Area 127 Bulk Solid Waste Roll-Off Boxes 2 @ 40 cubic Yards @ 1.15 ton/CY	92	Tons	\$225.00	\$	20,700.00
1.2.15 Area 126 Compressed Flammable Gases	50	Cylinders	\$250.00	\$	12,500.00
1.2.16 Flammable Liquid Waste Storage Tanks 8 @ 19,644 gallons	157,152	Gallons	\$2.00	\$	314,304.00
1.2.17 Corrosive Liquid Waste Storage Tanks 2 @ 20,000 gallons + 2 @ 12,500 gallons	65,000	Gallons	\$2.50	\$	162,500.00
1.2.18 Bulk Solid Waste Storage Tanks 2 @ 80 Cubic Yards @ 1.15 ton/CY	182	Tons	\$225.00	\$	40,950.00
1.2.19 Organic Liquid Waste in Railcars 4 @ 30,000 gallons	120,000	Gallons	\$2.00	\$	240,000.00
1.3 Transportation		N/A	Included in disposal cost		
Subtotal of 1.0				\$	1,710,274.00
2.0 Decontamination of Hazardous Waste Storage and Treatment Facility and Equipment					
2.1 Labor					
2.1.1 Storage Tanks, Storage Area Floors, and Containment Systems 4 Technicians @\$67/hour@ 120 hrs each	480	hours	\$268.00	\$	128,640.00
2.2 Disposal of Decontamination Wastes					
2.2.1. Rinse water	180,800	gallons	\$2.25	\$	406,800.00
2.2.2 PPE, Decon equipment, Debris 2 roll-off boxes @ 40 cubic yards @1.15 ton/CY	92	tons	\$225.00	\$	20,700.00
2.3 Transportation		N/A	Included in disposal cost		
2.4 Decon Equipment (pressure washer rental, Hand tools, PPE)	1	estimate	\$10,000.00	\$	10,000.00
2.5 Travel Expenses	1	estimate	\$15,000.00	\$	15,000.00
2.6 Equipment	1	estimate	\$25,000.00	\$	25,000.00
Subtotal of 2.0				\$	606,140.00
3.0 Sampling Analyses					
3.1 Rinsate Samples					
3.1.1. Analyses for:	74	Samples	\$ 840.00	\$	62,160.00
Volatile Organic Compounds					
Semi-Volatile Organic Compounds					
RCRA Metals					
Total Petroleum Hydrocarbons					

Table H-6
CLOSURE COST ESTIMATE
Triumvirate Environmental (Arizona) Inc.
Hazardous Waste Storage and Treatment Facility

Pesticides/Herbicides						
Cyanide						
3.1.2 Sample Disposal	74	Samples	\$	3.00	\$	222.00
3.2 Wipe Sampling						
3.2.1 Analyses for:	164	Samples	\$	860.00	\$	141,040.00
Volatile Organic Compounds						
Semi-Volatile Organic Compounds						
RCRA Metals						
Total Petroleum Hydrocarbons						
Pesticides/Herbicides						
Cyanide						
3.2.2 Wipe Sample Kits	164	Kits	\$	10.00	\$	1,640.00
3.2.3 Sample Disposal	164	Samples	\$	3.00	\$	492.00
3.2.3 Labor						
2 Technicians @\$67/hour @ 40 hours each	80	Hours	\$	134.00	\$	10,720.00
3.3 Soil Sampling - 25 Samples (Soil/Duplicate/Trip Blanks)						
3.3.1 Analyses for:	27	Samples	\$	800.00	\$	21,600.00
Volatile Organic Compounds						
Semi-Volatile Organic Compounds						
RCRA Metals						
Total Petroleum Hydrocarbons						
Pesticides/Herbicides						
Cyanide						
3.3.2 Labor						
2 Technicians @\$67/hour X 2 Days	48	Hours	\$	134.00	\$	6,432.00
P.E. Oversight	12	Hours	\$	137.00	\$	1,644.00
Data Validation	24	Hours	\$	86.00	\$	2,064.00
Subtotal of 3.0					\$	248,014.00
4.2 Certified Engineer's Closure Report	200	hours	\$	137.00	\$	27,400.00
4.3 Clerical Support	60	hours	\$	69.00	\$	4,140.00
4.4 Report supplies	1	Unit	\$	1,500.00	\$	1,500.00
Subtotal of 4.0					\$	33,040.00
Total of 1.0 through 4.0					\$	2,597,468.00
20% Contingency					\$	519,493.60
Grand Total					\$	3,116,961.60

TABLE H-7
Schedule for Closure of Triumvirate Environmental (Arizona) Inc.
Hazardous Waste Storage and Treatment Facility

Item No.	Description	Time Elapsed (Days)	Completion Day
1	Contractor(s) provide(s) HASP		-14
2	Pre-closure planning	14	14
3	Removal and disposal of waste inventory	30	44
4	Decontamination of flammable storage tank piping	2	46
5	Decontamination of Flammable Storage Tanks 101-108	10	56
6	Decontamination of flammable liquid Storage tank containment system and truck loading/unloading area	2	58
7	Decontamination of corrosive liquids storage tank piping	2	60
8	Decontamination of Corrosive Liquid Storage Tanks 201 & 202 and WWTU tanks WWTU 1 & WWTU 2	5	65
9	Decontamination of corrosive liquid storage tank containment system and truck loading/unloading area	2	67
10	Decontamination of railcar loading/unloading area and adjoining concrete apron	5	72
11	Decontamination of Bulk Solid Waste Storage/Stabilization Tanks 301 & 302 and Room 107	4	76
12	Decontamination of Rooms 102 & 103	3	79
13	Decontamination of Rooms 105, 106 & Entry Area 104	4	83
14	Decontamination of Rooms 120 & 121 and Processing Area 122 (including hoods 115-119)	5	88
15	Decontamination of Room 124 and Processing Area 123	4	92
16	Decontamination of Storage Area 126 and Exterior Canopy Area 127	4	96
17	Conduct Confirmation Wipe Sampling	5	101
18	Decontamination of Loading Dock 100 and Shipping/Receiving Dock 101	3	104
19	Remove and disposal of pump stations	3	107
20	Sampling and disposal of wastes generated during closure (includes lab turn-around time)	21	128
21	Consulting Engineer's Certification Report	45	173
22	Submittal of Certification to ADEQ	7	180