Allworth, LLC Birmingham, Alabama EPA I.D. Number ALD 094 476 793

FACT SHEET

A draft modification to the Alabama Hazardous Waste Management and Minimization Act (AHWMMA) permit has been prepared for the Allworth, LLC (Allworth) facility. This hazardous waste facility is located in Birmingham, Alabama. This fact sheet has been prepared to briefly advise the public of the principal permitting, legal and policy issues of the draft permit.

I. PERMIT PROCESS

The purpose of the permitting process is to allow the State and the public to evaluate Allworth's ability to comply with the hazardous waste management requirements of the AHWMMA, as amended. Allworth must comply with hazardous waste management conditions set forth in the permit during the effective period of the permit, which is ten (10) years from the last permit renewal (September 1, 2017).

II. PROCEDURES FOR REACHING A FINAL DECISION

The Alabama Department of Environmental Management (ADEM or Department) is proposing a modification to the Allworth permit for operating storage of hazardous waste in containers, storage and treatment in tanks, and loading and unloading areas.

ADEM Admin. Code r. 335-14-8-.08(6)(b)1. requires that the public be given a 45-day comment period for each draft permit. The comment period will begin on January 1, 2021, which is the date of publication of the public notice in major local newspaper(s) of general circulation, and will end on February 15, 2021. The public notice will also be broadcast over local radio station(s).

Any person interested in commenting on the application or draft permit must do so within the 45-day comment period discussed above.

All persons wishing to comment on any of the permit conditions or the permit application should submit their comments in writing to the Alabama Department of Environmental Management, Permits and Services Division, 1400 Coliseum Blvd. (zip 36110-2059), P.O. Box 301463 (zip 36130-1463) Montgomery, Alabama, ATTENTION: Mr. Russell A. Kelly.

ADEM will consider all written comments received during the comment period while making a permit decision for this facility. When the Department makes its final permit decision, notice will be given to the applicant and each person who has submitted written comments or requested notice of the final permit decision.

III. FACILITY DESCRIPTION

Allworth is a facility that recycles industrial solvents by distillation, and blends hazardous waste derived fuels for energy recovery. Operations also include consolidation and trans-shipment of various hazardous wastes, universal wastes, and non-hazardous wastes. Hazardous waste storage occurs in tanks and containers, and treatment occurs in tanks. No waste disposal occurs on site.

IV. SUMMARY OF PROPOSED MODIFICATIONS

This draft permit modification addresses the revisions to permit and permit application for planned facility modifications for the addition of a new permitted waste management unit, Trailer Staging Area, with a storage capacity of 64,000 gallons. This area will be used for the storage and management of bulk tank trailers and containers in freight trailers. In addition, a loading dock will be constructed.

V. CHANGES TO THE EXISTING PERMIT

The specific changes to the permit are explained below.

Section/Appendix	<u>Reason</u>
Permit Cover Page	Updated major modification date
Permit Signature Page	Updated major modification date
Permit Table of Contents	Updated major modification date
Table III.1 of the Permit	Update permit to reflect add the 64,000 gallons for the Trailer Staging Area.
Part A of the Permit Application	Increase the facility storage by 64,000 gallons for the Trailer Storage Area.
Section 2.0 of the Permit Application	Revised to include the additional storage capacity of 64,000 gallons.
Section 2.0 of the Permit Application	Revised permit application text to reflect the description of the Trailer Staging Area.
Section 4.0 of the Permit Application	Updated permit application text to include secondary containment calculations and preliminary drawings of the Trailer Staging Area.
Section 5.0 of the Permit	Revised text to include the Trailer Staging Area and
Application Section 7.0 of the Permit Application	Updated inspection logs. Updated text to include the Trailer Staging Area.
Section 8.0 of the Permit Application	Updated text to include the Trailer Staging Area and revised closure cost.

VI. TECHNICAL CONTACT

Charmaine Roche
Engineering Services Section
Industrial Hazardous Waste Branch, Land Division
Alabama Department of Environmental Management
1400 Coliseum Blvd (zip 36110-2059)
P.O. Box 301463 (zip 36130-1463)
Montgomery, Alabama
(334) 271-7763



ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT HAZARDOUS WASTE PERMIT

Permittee: Permit Number: ALD 094 476 793

OWNER:Identification Number:ALD 094 476 793Allworth, LLCModification 1:XXXX, XX, 2021500 Medco Road

Birmingham, Alabama 35217

Jefferson County

OPERATOR: Allworth, LLC 500 Medco Road Birmingham, Alabama 35217

Jefferson County

Pursuant to the Alabama Hazardous Wastes Management and Minimization Act (AHWMMA), <u>Code of Ala.</u> 1975, Section 22-30-1, <u>et. seq.</u>, as amended, and attendant regulations promulgated thereunder by the Alabama Department of Environmental Management (ADEM or the Department), a permit is issued to Allworth, LLC for the facility located in Birmingham, Alabama, at latitude N 33° 35' 39" and longitude W 86° 46' 17".

The Permittee must comply with all terms and conditions of this permit, which consists of the conditions set forth herein (including those in any attachments), and the regulations applicable to the Permittee's facility contained in Chapters 335-14-1, 335-14-2, 335-14-5, 335-14-8, and 335-14-9 of the ADEM Administrative Code of Regulations (hereinafter referred to as the "ADEM Admin. Code Rule"). Applicable regulations are those which are in effect on the date of issuance of this permit.

This permit is based on the assumption that the information submitted in the permit application attached to the Permittee's letter dated April 8, 2016, as modified by subsequent amendments dated September 23, 2016, May 9, 2017, May 26, 2017, June 15, 2017, February 5, 2020, and July 15, 2020 (hereby incorporated by reference and hereafter referred to as the Application) is accurate and that the facility will be constructed and operated as specified in the Application. Any inaccuracies found in this information could lead to the termination or modification of this permit in accordance with ADEM Admin. Code Rules 335-14-8-.04(2), 335-14-8-.04(3), and 335-14-8-.04(4) and could lead to potential enforcement action. The Permittee must inform ADEM of any deviation from or changes in the information provided in the Application that would affect the Permittee's ability to comply with the applicable regulations or permit conditions.

This permit is effective as of September 1, 2017, as modified XXXX, XX, 2021 and shall remain in effect until August 31, 2027 unless revoked and reissued, or terminated under ADEM Admin. Code Rules 335-14-8-.04(2) and 335-14-8-.04(4) or continued in accordance with ADEM Admin. Code Rule 335-14-8-.05(2).

Alabama Department of Environmental Management	Date Signed	
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Documents Incorporated By Reference:

Part A and Part B Permit Application submitted on April 8, 2016, as modified by subsequent amendments dated September 23, 2016, May 9, 2017, May 26, 2017, June 15, 2017, February 5, 2020, and July 15, 2020.

Corrective Measures Implementation Plan date November 30, 2005, as modified by subsequent amendments dated February 27, 2006 and May 18, 2006.

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PART I

STANDARD FACILITY CONDITIONS

I.A. EFFECT OF PERMIT

Issuance of this permit does not authorize any injury to persons or property, any invasion of other private rights, or any infringement of state or local law or regulations. Compliance with the terms of this permit does not constitute a defense to any action brought under the AHWMMA, or any other law governing the protection of public health or the environment, for any imminent and substantial endangerment to human health, welfare, or the environment. (ADEM Admin. Code Rule 335-14-8-.01(4)).

I.B. SEVERABILITY

The provisions of this permit are severable and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

I.C. DUTIES AND REQUIREMENTS

1. Duty to Comply

The Permittee shall comply with all conditions of this permit, except to the extent and for the duration such noncompliance is authorized by an emergency permit. Any permit noncompliance, other than noncompliance authorized by an emergency permit, constitutes a violation of the AHWMMA, and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application.

2. Duty to Reapply

a. Operating Units

If the Permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the Permittee must apply for and obtain a new permit. The application for a new permit must be submitted at least 180 calendar days before the expiration of this permit, as required by ADEM Admin. Code Rule 335-14-8-.03(1)(b)2.

b. SWMU Corrective Action Requirements

The Permittee must submit an application for a new permit for both post-closure and Solid Waste Management Unit (SWMU) corrective measures at least 180 calendar days before the expiration of this permit. The Permittee must reapply in order to fulfill the 30-year post-closure care period required by ADEM Admin. Code Rule 335-14-5-.07(8)(a)1. The Department may shorten or extend the post-closure care period applicable to the hazardous waste facility in accordance with ADEM Admin. Code Rules 335-14-5-.07(8)(a)2. and 335-14-8-.03(1)(b).





3. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

4. Duty to Mitigate

In the event of noncompliance with this permit, the Permittee shall take all reasonable steps to minimize releases to the environment, and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment.

5. Proper Operation and Maintenance

The Permittee shall, at all times, properly operate and maintain all facilities and systems of treatment, monitoring, and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance (O&M) includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this permit.

6. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause as specified in ADEM Admin. Code Rules 335-14-8-.04(2), (3), and (4). The filing of a request for a permit modification, revocation and reissuance, or termination, or the notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any permit condition.

7. Property Rights

Issuance of this permit does not convey any property rights of any sort, nor any exclusive privilege.

8. Duty to Provide Information

The Permittee shall furnish to the Department, within a reasonable time as determined by the Department, any relevant information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Department, upon request, copies of records required to be kept by this permit.

9. Inspection and Entry

The Permittee shall allow duly designated officers and employees of the Department, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:





- a. Enter at reasonable times upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and,
- d. Sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the AHWMMA, any substances or parameters at any location. The Permittee shall have the opportunity to split samples during sampling.

10. Monitoring and Records

- a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the waste to be analyzed must be the appropriate method from ADEM Admin. Code Rule 335-14-2-Appendix I, or the methods specified in Waste Analysis Plan (WAP) Section 3.0 and Appendix 3-4 of the permit application. Laboratory methods must be those specified in Test Methods for Evaluating Solid Waste: Physical/Chemical Methods SW-846 (latest edition), Methods for Chemical Analysis of Water and Wastes (EPA-600/4-79-020), Standard Methods for the Examination of Water and Wastewater (latest edition), the methods specified in Section 3.0 and Appendix 3-4 of the permit application, or an alternative method approved by ADEM. [ADEM Admin. Code Rule 335-14-8-.03(1)(j)1.]
- b. The Permittee shall maintain, at the facility, records of all monitoring information including all calibration and maintenance records, all original strip chart recordings for continuous monitoring instrumentation, the certification required by ADEM Admin. Code Rule 335-14-5-.05(4)(b)9, records of all data used to prepare documents required by this permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three (3) years from the date of the certification, application, sample, measurement, report or record, or until corrective action is completed, whichever date is later. This period may be extended by the Department at any time and is automatically extended during the course of any unresolved enforcement action regarding this facility. [ADEM Admin. Code Rules 335-14-5-.05(5)(b) and 335-14-8-.03(1)(j)2.]
- c. The Permittee shall maintain, at the facility, records of all groundwater monitoring wells, piezometers, and associated groundwater surface elevations throughout the term of this permit. These records shall include the surveyed location, surveyed elevation, surveyed elevation reference point, total depth, screened interval, construction details, well log, and all other pertinent information for each well and piezometer.





- d. Records for monitoring information shall include:
 - i. The date(s), exact place, and times of sampling or measurements;
 - ii. The names of individual(s) who performed the sampling or measurements:
 - iii. The date(s) analyses were performed;
 - iv. The names of individual(s) who performed the analyses;
 - v. The analytical techniques or methods used; and,
 - vi. The results of such analyses.
- e. The following documents and information shall be maintained throughout the term of this permit at the Facility:
 - i. Complete copy of this permit and the permit application.
 - ii. Operating record as required by ADEM Admin. Code Rule 335-14-5-.05(4) and this permit.
 - iii. Copies of all plans, reports, inspection schedules, inspection logs as required by ADEM Admin. Code Rule 335-14-5 and this permit.

11. Signatory Requirements

All applications, reports or information required by this permit and submitted to the Department shall be signed and certified in accordance with ADEM Admin. Code Rules 335-14-8-.02(2) and 335-14-8-.03(1)(k).

12. Reporting Requirements

a. Planned Changes

The Permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility and any solid waste management units identified under PART V of this permit.

b. Anticipated Noncompliance

The Permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements.





c. Transfer of Permits

This permit may be transferred to a new owner or operator only if it is modified or revoked and reissued pursuant to ADEM Admin. Code Rules 335-14-8-.04(1) or 335-14-8-.04(3)(a)1.(vii). Before transferring ownership or operation of the facility during the term of this permit, the Permittee shall notify the new owner or operator, in writing, of the requirements of ADEM Admin. Code Rules 335-14-5 and 335-14-8 and this permit.

d. Monitoring Reports

Monitoring results shall be reported at the intervals specified elsewhere in this permit.

e. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted to the Department no later than 14 calendar days following each schedule date.

f. Twenty-Four Hour Reporting

- i. The Permittee shall report to the Department any noncompliance with this permit that may endanger human health or the environment. Any such information shall be reported orally within 24 hours from the time the Permittee becomes aware of the circumstances. This report shall include, but is not limited to, the following:
 - (I) Information concerning the release of any hazardous waste which may endanger public drinking water supplies; and,
 - (II) Information concerning the release or discharge of any hazardous waste, or hazardous waste constituents, or of a fire or explosion at the facility, which could threaten the environment or human health outside the facility.
- ii. The description of the occurrence and its cause shall include:
 - (I) Name, address, and telephone number of the owner or operator;
 - (II) Name, address, telephone number, and EPA Identification Number of the facility;
 - (III) Date, time, and type of incident;
 - (IV) Name and quantity of material(s) involved;
 - (V) The extent of injuries, if any;





- (VI) An assessment of actual or potential hazards to the environment and human health outside the facility, where this is applicable; and.
- (VII) Estimated quantity and disposition of recovered material that resulted from the accident.
- iii. A written submission shall also be provided within 5 calendar days of the time that the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the periods of noncompliance (including exact dates and times); whether the noncompliance has been corrected, and if not, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

g. Other Noncompliance

The Permittee shall report to the Department all instances of noncompliance not otherwise required by Permit Conditions I.C.12.d., I.C.12.e., or I.C.12.f. at the time any other reports required by this permit are submitted. The reports shall contain the information required by Permit Condition I.C.12.f.

h. Other Information

Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or information. In addition, upon request, the Permittee shall furnish to the Department any information related to compliance with this permit.

13. Certification of Construction

The Permittee may not commence treatment, storage or disposal of hazardous waste or contaminated media at any new or modified portion of the facility until the Permittee has submitted to the Department, by certified mail or hand-delivery, a letter (together with the certification by the Construction Quality Assurance (CQA) officer required by ADEM Admin. Code Rule 335-14-5-.02(10)(d) and any other certifications required by this permit or ADEM Admin. Code Rule 335-14) signed by the Permittee and a registered Professional Engineer (State of Alabama) stating that the facility has been constructed or modified in compliance with this permit where appropriate; and,

- a. The Department has inspected the modified or newly constructed facility and finds it is in compliance with the conditions of this permit; or
- b. The Department has either waived the inspection or has not notified the Permittee, within 15 calendar days of the notification from the Permittee, of its intent to inspect. [ADEM Admin. Code Rule 335-14-8-.03(1)(1)2.]





- 14. The Permittee shall assure that all measures necessary to maintain and/or achieve compliance with all applicable requirements of ADEM Admin. Code Rules 335-14 are taken during the active life of the facility, post-closure care period, corrective action period, and throughout the term of this permit.
- 15. In the event that circumstances beyond the Permittee's control arise to prevent achievement of any deadline set forth by this permit, the Permittee may immediately, upon the occurrence thereof, request an extension by sending a written request to the Department explaining the need for the extension. The Department may, after consideration of the circumstances, grant the extension. Requests for extensions may require a permit modification pursuant to ADEM Admin. Code Rule 335-14-8-.04(2) or (3).

I.D. CONFIDENTIAL INFORMATION

The Permittee may claim confidential any information required to be submitted by this permit if the information is protected under the <u>Code of Alabama 1975</u>, §22-30-18, as amended. The term "trade secret" as used in §22-30-18 is defined in the <u>Code of Alabama 1975</u>, §22-30-2(12).

I.E. DEFINITIONS

For the purposes of this permit, terms used herein shall have the same meaning as those in ADEM Admin. Code Rules 335-14-1, 335-14-2, 335-14-5, and 335-14-8, unless this permit specifically provides otherwise. Where terms are not defined in the regulations or this permit, a standard dictionary reference or the generally accepted scientific or industrial meaning of the term shall define the meaning associated with such terms.

"Alternative Concentration Limit" (ACL), for the purposes of this permit, refers to a groundwater concentration limit which is established pursuant to ADEM Admin. Code Rule 335-14-5-.06(5)(b).

"Area of concern" (AOC), for the purposes of this permit, includes any area having a probable release of a hazardous waste or hazardous constituent which is not from a solid waste management unit and is determined by the Department to pose a current or potential threat to human health or the environment. Such areas of concern may require investigations and remedial action as required under Section 3005(c)(3) of the Resource Conservation and Recovery Act and ADEM Admin. Code Rule 335-14-8-.03(3)(b)2. in order to ensure adequate protection of human health and the environment.

"Contamination", for the purposes of this permit, refers to the presence of any hazardous constituent in a concentration that exceeds the naturally occurring concentration of that constituent in the immediate vicinity of the facility (i.e., areas not affected by the facility).

"Corrective action", for the purposes of this permit, is the sum of all corrective measures necessary to protect human health and the environment for all releases of hazardous constituents from any SWMU at the facility, regardless of the time at which waste was placed in the unit, as required by ADEM Admin. Code Rule 335-14-5-.06(11) and/or 335-14-5-.06(12). Corrective measures may address releases to air, soils, surface water, or groundwater.





"Corrective Action Management Unit" (CAMU), for the purposes of this permit, includes any area within a facility that is designated by the Department under ADEM Admin. Code Rule 335-14-5-.19 for the purpose of implementing corrective action requirements under ADEM Admin. Code Rule 335-14-5-.06(12), §22-30-19 et seq., Code of Alabama 1975, and/or RCRA section 3008(h). A CAMU shall only be used for the management of remediation waste pursuant to implementing such corrective actions requirements at the facility.

"Corrective measures", for the purposes of this permit, include all individual measures taken and/or necessary to remedy releases and to protect human health and the environment for all releases of hazardous waste or hazardous constituents from any SWMU at the facility, regardless of the time at which waste was placed in the unit, as required under ADEM Admin. Code Rule 335-14-5-.06(12). Corrective measures may address releases to air, soils, surface water, or groundwater. The sum of all individual corrective measures is known as corrective action.

"Extent of contamination", for the purposes of this permit, is defined as the horizontal and vertical areas in which the concentrations of hazardous constituents in the environmental media being investigated are above detection limits or background concentrations indicative of the region, whichever is appropriate as determined by the Department.

"Hazardous constituents", for the purposes of this permit, are those substances listed in ADEM Admin. Code Rule 335-14-2-Appendix VIII and/or ADEM Admin. Code Rule 335-14-5-Appendix IX and include hazardous constituents released from solid waste, hazardous waste, and hazardous waste constituents that are reaction by-products.

"Interim measures", for the purposes of this permit, are actions necessary to minimize or prevent the further migration of contaminants and limit actual or potential human and environmental exposure to contaminants while long term corrective action remedies are evaluated and, if necessary, implemented.

"Land Disposal", for the purposes of this permit, and ADEM Admin. Code Rule 335-14-9 means placement in or on the land and includes, but is not limited to, placement in a landfill, surface impoundment, waste pile, injection well, land treatment facility, salt dome formation, underground mine or cave, or concrete vault or bunker intended for disposal purposes.

"Landfill", for the purposes of this permit, includes any disposal facility or part of a facility where hazardous waste is placed in or on the land and which is not a pile, a land treatment facility, a surface impoundment, an underground injection well, a salt dome formation, a salt bed formation, an underground mine, a cave, or a corrective action management unit.

"Land Use Controls", for the purposes of this permit, is as defined by ADEM Admin. Code Rule 335-15-1-.02.

A "maximum concentration limit" (MCL), for the purposes of this permit, refers to a groundwater concentration limit in Table 1 of ADEM Admin. Code Rule 335-14-5-.06(5), or which is listed in ADEM Admin. Code Rule 335-7-2 (Primary Drinking Water Standard) or ADEM Admin. Code Rule 335-7-3 (Secondary Drinking Water Standards) or analogous Federal safe drinking water regulators (40 CFR 141). In cases where a constituent is listed in multiple sources (ADEM Admin. Code Rule 335-14 and/or ADEM Admin. Code Rule 335-7, and /or 40 CFR 141), the most stringent standard shall apply.





"Method detection limit" (MDL), for the purposes of this permit, means the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

"Mixed waste", for the purposes of this permit, means a solid waste that is a mixture of hazardous waste (as defined in ADEM Admin. Code Rule 335-14-2-.01(3)) and radioactive waste (as defined in 10 CFR 61.2). The radioactive component of mixed waste is subject to regulation by the Atomic Energy Act (AEA)/Nuclear Regulatory Commission (NRC). The non-radioactive chemically hazardous component of mixed waste is subject to regulation by the AHWMMA and ADEM Admin. Code Rule 335-14.

"Miscellaneous unit", for the purposes of this permit, means a hazardous waste management unit where hazardous waste is treated, stored, or disposed of and that is not a container, tank, surface impoundment, pile, land treatment unit, landfill, incinerator, boiler, industrial furnace, underground injection well with appropriate technical standards under 40 CFR Part 146, containment building, corrective action management unit, unit eligible for a research, development and demonstration permit under 335-14-8-.06(4); or staging pile.

"Munitions Debris" for purposes of this permit means remnants of munitions (*e.g.*, fragments, penetrators, projectiles, shell casings, links, fins) remaining after munitions use, demilitarization, or disposal.

"Non-regulated waste", for the purposes of this permit, means waste that is not otherwise regulated as RCRA listed and/or characteristic hazardous waste. In this case, non-regulated includes, but it not limited to, solid and universal waste, used oil, PCB, etc. Universal waste and used oil are subject to ADEM Admin. Code Rule 335-14-11, Standards for Universal Waste Management and ADEM Admin. Code Rule 335-14-17, Standards for the Management of Used Oil, respectively.

"Operating day", for the purposes of this permit, means any day on which hazardous waste is treated, stored, or disposed of in a unit. For example, each day that a hazardous waste storage unit contains hazardous waste is an operating day, as is each day that a disposal unit contains or receives hazardous waste, or each day that hazardous waste is treated in a treatment unit.

"Open burning" (OB), for the purposes of this permit, means the combustion of any material without the control of combustion air to maintain adequate temperature for efficient combustion, containment of the combustion-reaction in an enclosed device to provide sufficient residence time and mixing for complete combustion, and control of emission of the gaseous combustion products.

"Open detonation" (OD), for the purposes of this permit, means the explosion in which chemical transformation passes through the material faster than the speed of sound (0.33 kilometers/second at sea level) and which produces the uncontrolled emission of the gaseous detonation products.

"Practical quantitation limits" (PQL), for the purposes of this permit, are the lowest concentrations of analytes in groundwater that can be reliably determined within specified limits of precision and accuracy by a given method under routine laboratory operating conditions, as listed in ADEM Admin. Code Rule 335-14-5-Appendix IX.





"Release", for the purposes of this permit, includes any spilling, leaking, pouring, emitting, emptying, discharging, injecting, escaping, leaching, pumping, or disposing into the environment of any hazardous waste or hazardous constituent.

"Remediation waste" for the purpose of this permit includes all SWMUs and all media (including groundwater, surface water, soils, and sediments) and debris, which contain listed hazardous wastes or which themselves exhibit a hazardous waste characteristic, that are managed for the purpose of implementing corrective action requirements under ADEM Admin. Code Rule 335-14-5-.06(12) and RCRA Section 3008(h). For a given facility, remediation wastes may originate only from within the facility boundary, but may include waste managed in implementing RCRA Sections 3004(v) or 3008(h) for releases beyond the facility boundary.

"Solid waste", for the purposes of this permit, means any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded materials, including solid, liquid, semisolid, or contained gaseous materials resulting from industrial, commercial, mining, and agricultural operations, and from community activities. It does not include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to permits under Section 402 of the Federal Water Pollution Control Act, as amended (86 Stat. 880), or source, special nuclear, or by-product material as defined by the Atomic Energy Act of 1954, as amended (68 Stat. 923).

"Solid waste management unit" (SWMU), for the purposes of this permit, includes any unit that has been used for the treatment, storage or disposal of solid waste at any time, irrespective of whether the unit is or ever was intended for the management of solid waste. RCRA-regulated hazardous waste management units are also solid waste management units. SWMUs include areas that have been contaminated by routine and systematic releases of hazardous waste or hazardous constituents, excluding one-time accidental spills that are immediately remediated and cannot be linked to solid waste management activities (*e.g.*, product or process spills).

"Storm event", for the purposes of this permit, is defined as a 1-year, 24-hour storm event or rainfall that measures 1 inch or greater in 1 hour or less. Rainfall measurements may be taken at the site, or the closest official weather monitoring station may be used.

"Temporary Unit" (TU), for the purposes of this permit, includes any temporary tanks and/or container storage areas used solely for treatment or storage of hazardous remediation wastes during specific remediation activities. Designated by the Department, such units must conform to specific standards and may only be in operation for a period of time as specified in this permit.

"Thermal treatment", for the purposes of this permit, includes open burning and open detonation of hazardous energetics and energetic contaminated waste.

"unit", for the purposes of this permit, includes any contiguous discernable area used for the management of hazardous waste (or non-hazardous waste in the case of a SWMU) and may include, but is not limited to, any landfill, surface impoundment, waste pile, land treatment unit, incinerator, injection well, tank, container storage area, septic tank, drain field, wastewater treatment unit, elementary neutralization unit, transfer station, recycling unit or the OB and OD units.



I.F. EXPIRATION AND CONTINUATION OF PERMIT

This permit and all conditions herein will remain in effect beyond this permit's expiration date if the Permittee has submitted a new application as required by Permit Condition I.C.2. and, through no fault of the Permittee, the Department has not issued a new permit (ADEM Admin. Code Rule 335-14-8-.05(1) and 335-14-8-.05(2)).

I.G. WASTE MINIMIZATION

1. Certification Requirements

Pursuant to ADEM Admin. Code Rule 335-14-5-.05(4)(b)9, the Permittee must certify, no less often than annually, that:

- a. The Permittee has a program in place to reduce the volume and toxicity of hazardous waste to the degree determined by the Permittee to be economically practicable; and,
- b. The proposed method of treatment, storage, or disposal is the most practicable method available to the Permittee and that it minimizes the present and future threat to human health and the environment.

2. Recording Requirements

- a. The Permittee shall maintain copies of this certification in the facility operating record as required by ADEM Admin. Code Rules 335-14-5-.05(4)(b)9.
- b. The Waste minimization Program required under I.G.1. should at a minimum address the following topics:
 - i. Identity of each hazardous waste stream and the source of generation.
 - ii. Types and amount of hazardous waste that is generated at the facility.
 - iii. Present and proposed method of treatment, storage, or disposal that is available to the Permittee.
 - iv. Description of techniques implemented in the past for hazardous waste reduction and their effectiveness.
 - v. An evaluation of technically and economically feasible hazardous waste reduction techniques.
 - vi. A program and schedule for implementing the selected hazardous waste reduction technique.

3. Solid Waste Minimization Objectives

If Condition I.G. of this permit is applicable, the Waste Minimization program required under Condition I.G. above should address the objectives listed in Appendix A of this permit.



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I.H. COST ESTIMATES

- 1. The Permittee shall maintain detailed written cost estimates, in current dollars, at the location specified in Permit Condition I.C.10.e. and on file with ADEM in accordance with ADEM Admin. Code Rules 335-14-5-.08(3), (5), and (10).
- 2. All cost estimates must be updated annually as required by ADEM Admin. Code Rules 335-14-5-.08(3)(b), 335-14-5-.08(5)(b), and 335-14-5-.08(10)(b).
- 3. The cost estimate shall be maintained and submitted in the form designated by the Department.
- 4. The Permittee must update the cost estimate no later than 30 calendar days after the Department has approved a modification to the Closure Plan, Post-Closure Plan, or Corrective Action Plan, or any other plan required or referenced by this permit, if the change in the plan results in an increase in the amount of the cost estimate.

I.I. FINANCIAL ASSURANCE

- 1. The Permittee shall demonstrate continuous compliance with ADEM Admin. Code Rule 335-14-5-.08 by providing documentation of financial assurance in at least the amount that equals or exceeds the cost estimate. Changes in financial assurance mechanisms must be approved by the Department.
- 2. The Permittee shall submit itemized statements for all capital expenditures and a complete, revised cost estimate to the Department when requesting approval for a reduction in the financial assurance mechanism.

I.J. PERMIT MODIFICATIONS

The Permittee shall request a permit modification whenever changes in operating plans or facility design affect any plan (*e.g.* groundwater monitoring, closure, post-closure, or corrective action) required or referenced by this permit. The Permittee must submit a written request for a permit modification, pursuant to the requirements of ADEM Admin. Code Rule 335-14-8-.04(2), at least 60 calendar days prior to the proposed change in facility design or operation.



Permit Number ALD 094 476 793

L.K. REPORTS

I.K. REPORTS, NOTIFICATIONS, AND SUBMISSIONS TO THE DEPARTMENT

One hard copy and one electronic (an optical character recognition or text-searchable) copy of all reports, notifications, or other submissions that are required by this permit should be sent via certified mail or given to:

Chief, Land Division
Alabama Department of Environmental Management
P.O. Box 301463 (Zip 36130-1463)
1400 Coliseum Boulevard (Zip 36110-2059)
Montgomery, Alabama

and

Director, RCRA Division USEPA Region 4 Atlanta Federal Center 61 Forsyth Street SW Atlanta, Georgia 30303-3104





PART II

GENERAL FACILITY CONDITIONS

II.A. GENERAL WASTE ANALYSIS

- 1. The Permittee shall comply with all requirements set forth under ADEM Admin. Code Rule 335-14-5-.02(4) and shall follow the procedures in the WAP described in Section 3.0 of the permit application.
- 2. The Permittee shall utilize the methods specified in Section 3.0 and Appendix 3-4 of the permit application for the analysis of any of the wastes listed in Section 1.0, Part A and Section 3.0 of the permit application. Modification of the WAP shall require a modification of this permit pursuant to ADEM Admin. Code Rule 335-14-8-.04(2).
- 3. The Permittee shall subject samples from incoming waste shipments to the fingerprint parameters identified in Section 3.4 and Appendix 3-3 of the permit application.
- 4. The Permittee shall classify waste as non-conforming when the receiving analysis does not match the information contained in the accompanying manifest, profile, and/or equivalent information described in Section 3.3 of the permit application.
- 5. Before storing, treating, or disposing of a hazardous waste stream, the Permittee shall obtain a detailed chemical and physical analysis of a representative sample of the waste, as described in Section 3.4 of the permit application.

II.B. SECURITY

- 1. The Permittee shall comply with the security provisions set forth under ADEM Admin. Code Rule 335-14-5-.02(5) and as describe in Section 5.1 of the permit application.
- 2. In order to comply with ADEM Admin. Code Rule 335-14-5-.02(5), the hazardous waste storage areas of the facility shall remain fenced with at least a six-foot high chain link fence. The fence shall be kept in good repair. All entrances to the permitted hazardous waste management areas shall be closed and locked when security and/or operations personnel are not present.
- 3. The Permittee shall maintain signs along the perimeter fence of the permitted hazardous waste management areas. The signs shall read "Danger Unauthorized Personnel Keep Out". At least one sign must be legible from a distance of at least 25 feet from any approach to each area (ADEM Admin. Code Rule 335-14-5-.02(5)(c)).

II.C. GENERAL INSPECTION REQUIREMENTS

- 1. The Permittee shall comply with all requirements of ADEM Admin. Code Rule 335-14-5-.02(6) and 335-14-5-.09(5),
- 2. The Permittee shall follow the inspection procedures and schedules, as described in Section 5.2 and Appendices 5-2, 5-3, 5-4, 5-5, 5-6, 5-7, and 5-8 of the permit application.
- 3. The Permittee shall remedy any deterioration or malfunction (of equipment or structure(s)) discovered during any inspection as required by ADEM Admin. Code Rule 335-14-5-.02(6).



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4. Records of inspections shall be maintained at the facility as required by ADEM Admin. Code Rule 335-14-5-.02(6).

II.D. PERSONNEL TRAINING

The Permittee shall conduct personnel training as required by ADEM Admin. Code Rule 335-14-5-.02(7). This training program shall follow the procedures and outline, described in Section 7.0 of the permit application. The Permittee shall maintain training documents and records at the facility as required by ADEM Admin. Code Rule 335-14-5-.02(7)(d) and (e).

II.E. GENERAL REQUIREMENTS FOR IGNITABLE, REACTIVE, OR INCOMPATIBLE WASTE

- 1. The Permittee shall comply with all requirements for ignitable, reactive, or incompatible wastes set forth under ADEM Admin. Code Rule 335-14-5-.02(8).
- 2. "No Smoking" signs must be conspicuously placed wherever there is a potential hazard from ignitable waste.

II.F. LOCATION STANDARDS AND UNIT MAINTENANCE

- 1. The Permittee shall comply with all locations standards set forth under ADEM Admin. Code Rule 335-14-5-.02(9).
- 2. If changes are made to the design or operation of a hazardous waste management or treatment unit, these changes must receive approval by the Department before they are implemented, and may require permit modification pursuant to ADEM Admin. Code Rule 335-14-8-.04(2).

II.G. PREPAREDNESS AND PREVENTION

1. Required Equipment

The Permittee shall comply with ADEM Admin. Code Rule 335-14-5-.03(3) and, at a minimum, shall equip the facility with the equipment set forth in the Contingency Plan, Section 6.0 of the permit application.

2. Testing and Maintenance of Equipment

The Permittee shall test and maintain the equipment specified in the Contingency Plan, Section 6.0 of the permit application, as necessary to assure its proper operation in time of emergency as required by ADEM Admin. Code Rule 335-14-5-.03(4).

3. Access to Communication or Alarm System

The Permittee shall maintain access to the communications or alarm system as required by ADEM Admin. Code Rule 335-14-5-.03(5).

4. Arrangements with Local Authorities

The Permittee shall maintain arrangements with state and local authorities as required by ADEM Admin. Code Rule 335-14-5-.03(8). The Permittee shall develop and maintain a



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Preparedness and Prevention Plan providing information on the Type, approximate quantities and locations of hazardous wastes within the facility. The Plan shall be provided to state and local authorities in both written paper format and in appropriate electronic format that is most useful to emergency responders. Updated copies of the Plan shall be provided to reflect significant changes in operations (*e.g.*, significant changes in waste streams and/or volumes, facility design changes, etc.). A copy of the Plan and documentation that the Plan has been submitted to all local police departments, fire departments, hospitals and local emergency response teams that may be called upon to provide emergency services, shall be submitted to the Department within 45 calendar days from the effective date of this permit. If state or local officials refuse to enter into preparedness and prevention arrangements with the Permittee, the Permittee must document this refusal in the operating record.

5. Required Aisle Space

The Permittee shall maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency (ADEM Admin. Code Rule 335-14-5-,03(6)).

II.H. CONTINGENCY PLAN

1. Implementation of Plan

The Permittee shall immediately carry out the provisions of the Contingency Plan, Section 6.0 of the permit application) and follow the emergency procedures as required by ADEM Admin. Code Rule 335-14-5-.04(2) whenever there is a fire, explosion, or release of hazardous waste or hazardous constituents which threatens or could threaten human health or the environment.

2. Copies of Plan

A copy of the Contingency Plan and all current revisions to the plan must be maintained at the facility and submitted to all local police departments, fire departments, hospitals, and state and local emergency response teams that may be called upon to provide emergency services, as described in Section 6.0 of the permit application, and as required by ADEM Admin. Code Rule 335-14-5-.04(4).

3. Amendments to Plan

The Permittee shall review and immediately amend, if necessary, the Contingency Plan, as required by ADEM Admin. Code Rule 335-14-5-.04(5).

4. Emergency Coordination

The Permittee shall comply with the requirements of ADEM Admin. Code Rule 335-14-5-.04(6) concerning the emergency coordinator as specified in the Contingency Plan, Section 6.4 of the permit application).





II.I. RECORDKEEPING AND REPORTING

1. Operating Record

The Permittee shall maintain a written operating record at the facility in accordance with ADEM Admin. Code Rule 335-14-5-.05(4).

2. Availability, Retention, and Disposition of Records

The Permittee shall comply with the Availability, Retention, and Disposition of Records at the facility in accordance with ADEM Admin. Code Rule 335-14-5-.05(5).

3. Biennial Report

The Permittee shall comply with the biennial report requirements of ADEM Admin. Code Rule 335-14-5-.05(6).

II.J. CLOSURE

1. Performance Standard

The Permittee shall close the permitted hazardous waste management areas, as required by ADEM Admin. Code Rules 335-14-5-.07(2), 335-14-5-.09(9), 335-14-5-.10(8), and in accordance with the Closure Plan, Section 8.0 of the permit application.

2. Amendment to Closure Plan

The Permittee shall amend the Closure Plan as required by ADEM Admin. Code Rule 335-14-5-.07(3)(c).

3. Notification of Closure

As required by ADEM Admin. Code Rule 335-14-5-.07(3)(d), the Permittee shall notify the Department at least 60 calendar days prior to the date closure activities are initiated at either unit.

4. Time Allowed for Closure

The Permittee shall comply with the requirements of ADEM Admin. Code Rule 335-14-5-.07(4). After receiving or treating the final volume of hazardous waste, the Permittee shall complete closure activities in accordance with the schedule specified in the Closure Plan, Section 8.9 and Appendix 8-1 of the permit application.

5. Disposal or Decontamination of Equipment

The Permittee shall decontamination or dispose of all facility equipment as required by ADEM Admin. Code Rules 335-14-5-.07(5), 335-14-5-.09(9), 335-14-5-.10(8), 335-14-5-.11(9), and 335-14-5-.12(9) and as specified in the Closure Plan, Section 8.0 of the permit application.





6. Certification of Closure

The Permittee shall certify that each individual unit has been closed in accordance with the specification presented in the Closure Plan, Section 8.8 of the permit application, and as required by ADEM Admin. Code Rule 335-14-5-.07(6). The Permittee shall maintain copies of this closure certification in the facility operating record as required by ADEM Admin. Code Rule 335-14-5-.05(4).

II.K. POST-CLOSURE

If at closure not all waste and contaminated structures and soils at a unit can be removed or decontaminated, the Permittee shall close the container storage or treatment unit as a landfill and perform post-closure care as specified in ADEM Admin. Code Rules 335-14-5-.09(9)(b) and 335-14-5-.14(11).

1. Post-Closure Care Period

The Permittee shall begin post-closure care at all units, where closure by removal is not achieved, after completion of unit closure and shall continue for the duration of the post-closure period. The post-closure care shall continue for a period of 30 years after the closure of each hazardous waste management unit, unless shortened or extended pursuant to ADEM Admin. Code Rule 335-14-5-.07(8). Each post-closure care period is initiated upon certification by a registered Professional Engineer (State of Alabama) and upon acceptance by the Department pursuant to ADEM Admin. Code Rule 335-14-5-.07(6), that closure has been completed and waste has been left in place. The post-closure care period shall automatically extend through the end of the compliance period.

2. Post-Closure Security

The Permittee shall maintain security at the facility during post-closure care period in accordance with the post-closure plan included in the permit application.

3. Amendment to Post-Closure Plan

The Permittee shall amend the Post-Closure Plan in accordance with ADEM Admin. Code Rule 335-14-5-.07(9), whenever necessary.

- 4. The Permittee shall maintain continuous compliance with the following:
 - a. Post closure care of property. (ADEM Admin. Code Rule 335-14-5-.07(8))
 - b. Notice to local land authority and in deed to property. (ADEM Admin. Code Rule 335-14-5-.07(10))

II.L. LAND DISPOSAL RESTRICTIONS

1. General Restrictions

ADEM Admin. Code Rule 335-14-9 identifies hazardous wastes that are restricted from land disposal and defines those limited circumstances in which an otherwise prohibited waste may continue to be placed on or in a land treatment, storage or disposal unit. The Permittee shall maintain compliance with the requirements of ADEM Admin. Code Rule 335-14-9. Where the Permittee has applied for an extension, waiver, or variance under



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ADEM Admin. Code Rule 335-14-9 the Permittee shall comply with all restrictions on land disposal under this Part once the effective date for the waste has been reached pending final approval of such a land disposal permit application.

- 2. Land Disposal Prohibitions and Treatment Standards
 - a. A restricted waste identified in ADEM Admin. Code Rule 335-14-9-.03 may not be placed in a land disposal unit without further treatment unless the requirements of ADEM Admin. Code Rules 335-14-9-.03 and/or .04 are met.
 - b. The storage of hazardous wastes restricted from land disposal under ADEM Admin. Code Rule 335-14-9 is prohibited unless the requirements of ADEM Admin. Code Rule 335-14-9-.05 are met.

II.M. ORGANIC AIR EMISSION REQUIREMENTS

- 1. General Introduction
 - a. Process Vents and Equipment

Phase I Organic Air Emission Standards consist of ADEM Admin. Code Rule 335-14-5-.27 and 335-14-5-.28 for hazardous waste treatment, storage, and disposal (TSD) facilities. ADEM Admin. Code Rule 335-14-5-.27 contains emission standards for process vents associated with distillation, fractionation, thin-film evaporation, solvent extraction, and air or steam stripping operations that process hazardous waste with an annual average total organic concentration of at least ten (10) parts per million by weight (ppmw). ADEM Admin. Code Rule 335-14-5-.28 contains emission standards that address leaks from specific equipment (i.e., pumps, valves, compressors, etc.) containing or contacting hazardous waste with a total organic concentration of at least ten-percent by weight.

b. Tanks, Containers, Surface Impoundments and Miscellaneous Units

The Phase II Organic Emission Standards consist of ADEM Admin. Code Rule 335-14-5-.29 for hazardous waste treatment, storage, and disposal facilities, including certain hazardous waste generator standards for accumulating waste on-site in RCRA permit—exempt (90-day) tanks and containers. In general, under these standards air emission controls must be used for tanks, surface impoundments, containers, and miscellaneous units that contact hazardous waste containing an average organic concentration greater than 500 ppmw at the point of origination determined by the procedures outlined in ADEM Admin. Code Rule 335-14-5 .29(4), except as specifically exempted under ADEM Admin. Code Rules 335-14-5-.29(1) and 335-14-5-.29(3).

- 2. Notification of New Units
 - a. Process Vents and Equipment

Prior to constructing any equipment with process vents subject to the requirements of ADEM Admin. Code Rule 335-14-5-.27, or installing any

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additional equipment subject to the requirements of ADEM Admin. Code Rule 335-14-5-.28, or prior to modifying the current process such that existing equipment previously not subject to the requirement of ADEM Admin. Code Rule 335-14-5-.28 the Permittee shall supply the specific Part B information required pursuant to ADEM Admin. Code Rules 335-14-8-.02(15) and 335-14-8-.02(16) as applicable, and shall obtain a permit modification in accordance with the requirements of ADEM Admin. Code Rule 334-14-8-.04(3) and Condition I.J of this permit.

b. Tanks, Containers, Surface Impoundments, Miscellaneous Units

Prior to installing any tank, container, surface impoundment or miscellaneous unit subject to ADEM Admin. Code Rule 335-14-5-.29, or modifying an existing process waste handling or tank or container such that the unit(s) will become subject to ADEM Admin. Code Rule 335-14-5-.29, the Permittee shall obtain a permit modification under ADEM Admin. Code Rule 335-14-8-.04(3), and provide specific Part B application information required under ADEM Admin. Code Rules 335-14-8-.02(5) –thru (8) and 335-14-8-.02(18), as applicable, with the modification request.

II.N. WASTE REJECTION NOTIFICATION

The Permittee shall notify the Department in writing of all hazardous wastes that are rejected after arrival at the facility. If the discrepancy is not resolved within fifteen (15) calendar days after receiving the waste the Permittee must submit a letter to the Department describing the discrepancy and attempts to resolve it along with a copy of the manifest and the applicable waste profile. If the discrepancy is not resolved within twenty-five (25) calendar days after receiving the waste, the Permittee must ship the rejected waste immediately to an alternate facility or back to the original generator and submit a *Waste Rejection Report* to the Department. The Waste Rejection Report shall include the following information:

- 1. The EPA Identification Numbers, name and addresses of the facility, the names of generator and transporter;
- 2. The reason and the date the facility rejected the waste;
- 3. A description and the quantity of each hazardous waste rejected by the facility with copies of the manifest(s) or shipping papers; and,
- 4. The certification (as required by ADEM Admin. Code Rule 335-14-8-.02(2)(d)) signed by the owner or operator of the facility or his or her authorized representative.

II.O. MANIFEST SYSTEM

The Permittee shall comply with the requirements of ADEM Admin. Code Rules 335-14-5-.05(2), 335-14-5-.05(3), and 335-14-5-.05(7).





1. Use of the Manifest System

- a. The Permittee shall provide the manifest form to persons prior to their shipment of hazardous waste, as required by ADEM Admin. Code R. 335-14-5-.05(1). All manifests shall include the state manifest document number as designated by the Department. (ADEM Admin. Code R. 335-14-5-.05(2)(a))
- b. If the Permittee receives hazardous waste accompanied by a manifest, the Permittee must:
 - i. Sign and date each copy of the manifest acknowledging receipt of the waste:
 - ii. Note any significant discrepancies in the manifest as described in ADEM Admin. Code R. 335-14-5-.05(3)(a);
 - iii. Immediately give the transporter at least one copy of the signed manifest;
 - iv. Within 30 days after delivery, send a copy of the manifest to the generator;
 - v. Retain a copy of each manifest for at least three years; and
 - vi. Within 60 days after delivery of the waste to the facility, send a copy of the manifest to the Department, as required by §22-30-17(c) of the AHWMMA. Manifests should be submitted to the Department on a monthly basis.
- c. When the decision is made to accept the waste shipment for storage, treatment, and/or disposal at the facility (after the waste shipment has been inspected, sampled, and analyzed), the Permittee shall place the proper handling code on the manifest, as described in Section 3.0 and Section 5.0 of the permit application.
- d. The Permittee may stage a waste shipment for up to 72 hours after the shipment has been received (in accordance with Condition II.O.1.b.i. of this permit) before placing the waste into a permitted treatment, storage, or disposal area, as described in Section 3.0 and Section 5.0 of the permit application.

2. Manifest Discrepancies

- a. Upon discovering a significant discrepancy (as defined by ADEM Admin. Code R. 335-14-5-.05(3)(a)), the Permittee must attempt to reconcile the discrepancy with the generator or transporter.
- b. If the discrepancy is not resolved within 15 calendar days after receiving the waste, the Permittee must immediately submit to the Department a letter describing the discrepancy and attempts to reconcile it, a copy of the manifest or shipping paper at issue, and a description of what resolution(s) occurred. If a discrepancy is not resolved within 15 calendar days, the waste must be rejected back to the generator within 10 calendar days.

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3. Unmanifested Waste Report

- a. If the Permittee accepts for treatment, storage, or disposal any hazardous waste from an off-site source without an accompanying manifest, or without an accompanying shipping paper as described in ADEM Admin. Code R. 335-14-4-.02(1)(e)2., and if the waste is not excluded from the manifest requirement by ADEM Admin. Code R. 335-14-2-.01(5), then the Permittee must prepare and submit a single copy of the report to the Department within 15 days after receiving the waste. [Note: Hazardous waste which arrives at the facility with other manifested hazardous waste and which is accepted for treatment, storage or disposal at the facility, but which is not included on a manifest, shall be reported as unmanifested waste pursuant to this Condition. Hazardous wastes which are not accepted for treatment, storage, or disposal at the facility are subject to the waste rejection reporting requirements contained in Condition II.N. of this permit.] (ADEM Admin. Code R. 335-14-5-.05(7)).
- b. The unmanifested waste report must be submitted to the Department. Such report must be designated "Unmanifested Waste Report" and include the following information:
 - i. The EPA Identification Number, name and address of the facility;
 - ii. The date the facility received the waste;
 - iii. The EPA Identification Number, name and address of the generator and the transporter, if available;
 - iv. A description and the quantity of each unmanifested hazardous waste the facility received;
 - v. The method of storage for each hazardous waste;
 - vi. The certification signed by the owner or operator of the facility or his or her authorized representative; and
 - vii. A brief explanation of why the waste was unmanifested, if known.

4. Waste Acceptance

The Permittee shall not accept (*i.e.*, assign handling codes) any shipment of waste until the waste analysis has confirmed that the waste matches the waste profile, that the facility is authorized to manage the waste, and all manifest discrepancies are resolved pursuant to ADEM Admin. Code R. 335-14-5-.05(3).



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II.P. LOADING OF OUTGOING WASTES VIA RAILCAR

- 1. The Permittee shall ship railcars within one day following the transfer of wastes from the permitted storage area to the railcar loading/unloading station. Shipment occurs when:
 - a. The transporter signs the manifest acknowledging acceptance of the railcar, and returns it to the Permittee; and
 - b. The railcar crosses the facility boundary.
- 2. The Permittee must maintain a log of the date and time of each railcar's arrival and departure from the facility. If, due to circumstances beyond the control of the Permittee, the loaded railcar cannot be shipped offsite in one day, it must be recorded in the tracking log along with the reason for the delay.
- 3. Each loaded railcar that is not shipped offsite within one day must be inspected daily for defects or deficiencies in its condition that could result in release of its content. Any such conditions must be repaired immediately.
- 4. The Permittee must notify the Department immediately if, due to circumstances beyond its control, one or more loaded railcars must remain onsite for more than three business days.

Inbound railcars are subject to the sampling and staging requirements as specified in Permit Conditions II.A and III.C.4.

II.Q. CONSTRUCTION COMPLIANCE SCHEDULE FOR PROPOSED UNITS (RESERVED)





PART III

MANAGEMENT IN CONTAINERS

III.A. PERMITTED OPERATIONS

The Permittee may operate the units and processes described in Table III.1. and Table III.2. of this permit, subject to the terms of this permit. Operation of any process or unit not listed in Table III.1. and Table III.2. of this permit, operation of any process in a unit or area other than that for which the process is listed, or exceedance of any capacity listed therein, for the treatment, storage, or disposal of hazardous waste is prohibited.

III.B. WASTE IDENTIFICATION

- 1. The Permittee may store and treat the hazardous wastes, listed in Section 1.0 of the permit application, in containers at the facility, subject to the terms of this permit. The storage of any hazardous waste not listed in Section 1.0 of the permit application is prohibited.
- 2. The Permittee shall not store mixed waste in containers at the facility.

III.C. STORAGE IN CONTAINERS

- 1. The Permittee shall maintain and operate the container storage areas in accordance with the procedures specified in Section 4.0 of the permit application.
- 2. The container storage capacity and loading storage capacity is distributed throughout the container storage areas as shown in Table III.1 and loading storage areas as shown in Table III.2 of this permit, and as described in Section 4.0 of the permit application. The maximum quantity of hazardous waste stored in each unit or containment area shall not exceed the capacity listed in Table III.1 or Table III.2 of this permit.
- 3. The maximum combined quantity of hazardous and non-hazardous waste stored in a given area shall not exceed ten times the capacity of the containment system for that area. Individual container should not be stored in an area with a volume that exceeds the capacity of the containment system for that area.
- 4. The sampling and staging of drums shall not exceed 72 hours. All containers that are to be fingerprinted or are awaiting analysis shall be segregated from other containers in the container storage area. Each container shall be marked with the date of receipt.

III.D. TREATMENT IN CONTAINERS

The Permittee shall treat hazardous wastes in containers only in the container processing areas listed in this permit and as described in Section 4.2 of the permit application.

III.E. CONDITION OF CONTAINERS

If a container holding hazardous waste is not in good condition (*e.g.*, severe rusting, apparent structural defects) or if it begins to leak, upon discovery the Permittee shall immediately transfer the hazardous waste from such container to a container that is in good condition or otherwise





manage the waste in compliance with the conditions of ADEM Admin. Code Rule 335-14-5-.09(2).

III.F. COMPATIBILITY OF WASTE WITH CONTAINERS

The Permittee shall assure that the ability of the container to contain the waste is not impaired, as required by ADEM Admin. Code Rule 335-14-5-.09(3).

III.G. MANAGEMENT OF CONTAINERS

- 1. The Permittee shall manage containers as required by ADEM Admin. Code Rule 335-14-5-.09(4) and Section 4.0 of the permit application.
- 2. A container holding hazardous waste must always be closed during storage, except when it is necessary to add, remove, sample, or inspect the waste.
- 3. A container holding hazardous waste must not be opened, handled, or stored in a manner that may rupture the container or cause it to leak.
- 4. Adequate aisle space will be maintained at all times, as shown in Section 4.0 and Section 5.3.3 of the storage permit application, and as necessary to provide adequate access for emergency equipment and inspection.
- 5. Containers having a capacity greater than or equal to 30 gallons shall not be stacked over two containers high at any time.

III.H. CONTAINMENT

- 1. The Permittee shall maintain the containment systems of the container storage << and treatment>> areas in accordance with the requirements of ADEM Admin. Code Rule 335-14-5-.09(6)(b) and as specified in Section 4.0 of the permit application.
- The Permittee shall maintain an impervious coating that is free of cracks, gaps, or other deterioration on all containment system surfaces that may be exposed to hazardous wastes or hazardous constituents (or releases of hazardous wastes or hazardous constituents).

III.I. INSPECTIONS

The Permittee shall conduct weekly inspection of areas where containers are stored or handled to detect leaking containers and deterioration of containers or containment systems and to ensure stacking is no more than two high as specified in Permit Condition III.G.5. and as required by ADEM Admin. Code Rule 335-14-5-.09(5). The Permittee shall note the number and capacity of hazardous waste containers present.

III.J. SPECIAL REQUIREMENTS FOR IGNITABLE OR REACTIVE WASTES

1. The Permittee shall not locate containers holding ignitable or reactive waste within 15 meters (50 feet) of the facility's property line as required by ADEM Admin. Code Rule 335-14-5-.09 (7).



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2. The Permittee shall take precautions to prevent accidental ignition or reaction of ignitable or reactive waste and follow the procedures specified in Section 4.0 of the permit renewal application and as required by ADEM Admin. Code Rule 335-14-5-.02(8).

III.K. SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTE

The Permittee shall separate containers of incompatible wastes as specified in Section 4.0 of the permit application.

- 1. Incompatible wastes, or incompatible wastes and materials, must not be placed in the same container unless the Permittee is in compliance with ADEM Admin. Code Rule 335-14-5-.02(8)(b).
- 2. The Permittee shall not place hazardous waste in an unwashed container that previously held an incompatible waste or material.
- 3. The Permittee must document compliance with Conditions III.K.1. and III.K.2. of this permit as required by ADEM Admin. Code Rule 335-14-5-.05(4) and place this documentation in the operating record.
- 4. The Permittee shall separate containers of incompatible wastes as required by ADEM Admin. Code Rule 335-14-5-.09(8)(c).

III.L. CLOSURE

- 1. Following the receipt of the final volume of hazardous wastes, the Permittee shall close the container storage and treatment areas in accordance with the requirements of the Closure Plan, Section 8.0 of the permit application and of ADEM Admin Code Rules 335-14-5-.07(2) and 335-14-5-.09(9).
- 2. If at closure not all waste and contaminated structures and soils at a unit can be removed or decontaminated, the Permittee shall close the container storage or treatment unit as a landfill and perform post-closure care as specified in ADEM Admin. Code Rules 335-14-5-.09(9)(b) and 335-14-5-.14(11).





TABLE III.1
STORAGE IN CONTAINERS

UNIT NAME	CONTAINMENT AREA	PERMITTED STORAGE CAPACITY (gallons)	CONTAINMENT CAPACITY (gallons)	DESCRIPTION OF UNIT (Section¹)	LOCATION OF UNIT (Figure ¹)
Container Storage Area A (SWMU 8)	Main warehouse	18,920	3,637	Section 4.2	Drawing 4-1, Figure 1.5
Container Storage Area B (SWMU 24)	Main warehouse	19,800	2,019	Section 4.2	Drawing 4-1, Figure 1.5
Container Storage Area D (SWMU 21)	Covered area also containing LA-1 and LA-2	18,480	3,308	Section 4.2	Drawing 4-1, Figure 1.5
Container Storage Area E (SWMU 22)	Covered area also containing LA-1 and LA-2	30,000	8,182	Section 4.2	Drawing 4-1, Figure 1.5
Solids Bulking Area (Roll- Off Box) (SWMU 22)	Covered area also containing LA-1 and LA-2	NA*	NA*	Section 4.2	Drawing 4-1, Figure 1.5
Container Storage Area F (SWMU 23A)	Main warehouse	1,320	254	Section 4.2	Drawing 4-1, Figure 1.5
Trailer Staging Area		64,000	38,902	Section 4.1 & 4.2	Drawing 4-1
TOTAL CONTAINER TREATMENT CAPACITY		152,520	56,302		

^{1.} Location in permit application containing description (text) or location (figure) of unit.

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^{*}NA is defined as Not Applicable. The solids bulking area should remain in compliance with ADEM Admin. Code R. 335-14-5-.09(6)(c). Area E is for roll-off and container storage and has a capacity to store five 30-yard/6,000 gallon roll-offs (30,000 gals) or 540 containers



TABLE III.2

LOADING AND UNLOADING AREA

UNIT NAME	CONTAINMENT AREA	PERMITTED LOADING CAPACITY (gallons)	CONTAINMENT CAPACITY (gallons)	DESCRIPTION OF UNIT (Section¹)	LOCATION OF UNIT (Figure¹)
Loading / Unloading Area -1 (SWMU 14)	LA-1	6,000	8,012	Section 4.2	Drawing 4-1, Figure 1.5
Loading / Unloading Area -2 (SWMU 13)	LA-2	6,000	8,012	Section 4.2	Drawing 4-1, Figure 1.5
TOTAL CONTAINER TREATMENT CAPACITY		12,000	16,024		

^{1.} Location in permit application containing description (text) or location (figure) of unit.



PART IV

MANAGEMENT IN TANKS

IV.A. PERMITTED OPERATIONS

The Permittee may operate the units and processes described in Table IV.1. or Table IV.2. of this permit, subject to the terms of this permit. Operation of any process or unit not listed in Table IV.1. or Table IV.2. of this permit, operation of any process in a unit or area other than that for which the process is listed, or exceedance of any capacity listed therein, for the treatment, storage, or disposal of hazardous waste is prohibited.

IV.B. WASTE IDENTIFICATION

- 1. The Permittee may store and treat the hazardous wastes listed in Section 1.0 of the permit application in tanks at the facility, subject to the terms of this permit. The storage or treatment of any hazardous waste not listed in Section 1.0 of the permit application is prohibited.
- 2. The Permittee shall not store or treat mixed waste in tanks at the facility.

IV.C. STORAGE IN TANKS

- 1. The tank storage capacity is distributed among the various tanks and tank farms as shown in Table IV.1. of this permit, and as described in Section 4.3 of the permit application. The maximum quantity of hazardous waste stored in each unit or containment area shall not exceed the capacity listed in Table IV.1. of this permit.
- 2. The Permittee shall maintain and operate the tank storage areas in accordance with the procedures specified in Section 4.3 of the permit application and in ADEM Admin. Code Rule 335-14-5-.10.
- 3. The maximum combined quantity of hazardous and non-hazardous wastes stored in a given area shall not exceed ten times the capacity of the containment system for that area. The maximum combined quantity of hazardous and non-hazardous wastes stored in an individual tank in a given area shall not exceed the capacity of the containment system for that area.

IV.D. TREATMENT IN TANKS

- 1. The Permittee shall comply with the tank treatment process and capacity restrictions listed in Table IV.2. of this permit.
- 2. The Permittee shall ensure that the structural integrity of tanks, and processes of treatment are in accordance with Section 4.3 of the permit application and ADEM Admin. Code Rule 335-14-5-10.
- 3. The Permittee shall not substitute dilution of chemicals for treatment, except as allowed by ADEM Admin. Code Rule 335-14-9-.01(3).





- 4. The Permittee shall ensure that all chemical reactions have sufficiently occurred to prevent subsequent uncontrolled reactions before the process is stopped.
- 5. The Permittee shall manage all treatment residues in accordance with all applicable provisions of ADEM Admin. Code Rule 335-13 and/or 335-14.
- 6. The Permittee shall enter records of all treatment activities, including hazardous waste numbers and descriptions, quantities, method(s) of treatment, and date(s) of treatment, into the operating record for each batch of waste treated.

IV.E. INSTALLATION REQUIREMENTS

The tank system must be installed in accordance with Section 4.3 of the permit application and ADEM Admin. Code Rule 335-14-5-.10(3).

IV.F. GENERAL OPERATING REQUIREMENTS

The Permittee shall comply with the tank-operating requirements of ADEM Admin. Code Rules 335-14-5-.02(6), 335-14-5-.10(2), 335-14-5-.10(5)(a), 335-14-5-.10(5)(b), 335-14-5-.10(5)(c), and 335-14-5-.10(6)(b).

IV.G. SECONDARY CONTAINMENT REQUIREMENTS

The Permittee shall maintain the secondary containment systems for all storage and/or treatment tanks and for all ancillary equipment as specified in Section 4.3 of the permit application and in accordance with the requirements of ADEM Admin. Code Rule 335-14-5-.10(4).

IV.H. INSPECTIONS

- 1. The Permittee shall inspect each tank system (to include the ancillary equipment and secondary containment) and the area surrounding each tank as specified in Section 4.3 and Section 5.0 of the permit application and in accordance with the requirements of ADEM Admin. Code Rule 335-14-5-.10(6).
- 2. The Permittee must document weekly in the operating record of the facility the results of inspection required by Condition IV.H.1 of this permit.

IV.I. RESPONSE TO LEAKS OR SPILLS

The Permittee shall comply with the requirements of ADEM Admin. Code Rule 335-14-5-.10(7).

IV.J. SPECIAL REQUIREMENTS FOR IGNITABLE OR REACTIVE WASTES

The Permittee shall comply with the requirements specified in Section 4.3 and Section 5.4 of the permit application and in accordance with the requirements of ADEM Admin. Code Rule 335-14-5-.10(9).



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IV.K. SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTES

The Permittee shall comply with the requirements specified in Section 4.3 and Section 5.4 of the permit application and in accordance with the requirements of ADEM Admin. Code Rule 335-14-5-.10(10).

IV.L. CLOSURE

- 1. Following the receipt of the final volume of hazardous waste, the Permittee shall close the tank in accordance with the Closure Plan contained in Section 8.0 of the permit application and in accordance with the requirements of ADEM Admin. Code Rule 335-14-5-.10(8).
- 2. If at closure not all contaminated soils can be practically removed or decontaminated, the Permittee shall close the tank as a landfill and perform post-closure care as specified in ADEM Admin. Code Rule 335-14-5-.10(8)(b).





TABLE IV.1.

STORAGE IN TANKS

UNIT NAME	TANKS	PERMITTED STORAGE CAPACITY (gallons)	CONTAINMENT CAPACITY (gallons)	DESCRIPTION OF UNIT (Section¹)	LOCATION OF UNIT (Figure ¹)
	B-5	18,000		Section 4.3	Drawing 4-1, Figure 1.5
	B-7	18,000	38,544	Section 4.3	Drawing 4-1, Figure 1.5
Tank System TS-1	W-1	6,000		Section 4.3	Drawing 4-1, Figure 1.5
	W-2	6,000		Section 4.3	Drawing 4-1, Figure 1.5
	O-1	4,100		Section 4.3	Drawing 4-1, Figure 1.5
	NH-1	6,000		Section 4.3	Drawing 4-1, Figure 1.5
	F-1	6,000		Section 4.3	Drawing 4-1, Figure 1.5
	F-2	6,000		Section 4.3	Drawing 4-1, Figure 1.5
Tank System TS-2	F-3	6,000	8,387	Section 4.3	Drawing 4-1, Figure 1.5
	F-4	6,000		Section 4.3	Drawing 4-1, Figure 1.5
	F-5	6,000		Section 4.3	Drawing 4-1, Figure 1.5
	F-6	6,000		Section 4.3	Drawing 4-1, Figure 1.5
Total Tank Storage Capacity		94,100	46,931	Section 4.3	Drawing 4-1, Figure 1.5

^{1.} Location in permit application containing description (text) or location (figure) of unit.





TABLE IV.2

TREATMENT IN TANKS

TREATMENT PROCESS (Code ¹)	UNIT(S) PERMITTED	PERMITTED TREATMENT CAPACITY (gallons per day)	DESCRIPTION OF PROCESS (Section ²)	LOCATION OF PROCESS (Figure ²)	DESCRIPTION OF UNIT (Section ²)
	B-5				
Bulking, Fuel Blending	B-7				
	W-1	100.000	Section 4.3 &	Appendix 4-7,	Section 1.0 & 4.3
	W-2	100,000	Appendix 4-7	Figure 1.5	Section 1.0 & 4.5
	O-1				
	NH-1				
	F-1				
Solvent Distillation	F-2				
	F-3		Section 4.3 &	Appendix 4-7,	Section 1.0 & 4.3
	F-4	100,000	Appendix 4-7	Figure 1.5	Section 1.0 & 4.5
	F-5				
	F-6				
Total Tank Treatment Capacity		200,000			

^{1.} Treatment process codes as defined in ADEM Admin. Code R. 335-14-5-Appendix I.

^{2.} Location in permit application containing description (text) or location (figure) of unit.

PART V

SOLID WASTE MANAGEMENT UNIT AND AREAS OF CONCERN IDENTIFICATION AND EVALUATION

V.A. APPLICABILITY

The Conditions of this Part apply to:

- 1. The solid waste management units (SWMUs) and areas of concern (AOCs) identified in Table V.6., which require investigation and/or remediation;
- 2. The SWMUs identified in Table V.3., which require no further investigation under this permit at this time;
- 3. The SWMUs identified in Table V.4., which require actions under other programs, such as Military Munitions Response Program (MMRP), Comprehensive Environmental Response Compensation and Liability Act (CERCLA), etc., and this permit;
- 4. The SWMUs/AOCs identified in Table V.5, which require Interim Measures and/or Source Removal:
- 5. The SWMUs/AOCs identified in Table V.7, which require a Corrective Measures Implementation (CMI) Plan.
- 6. Any additional SWMUs or AOCs discovered during the course of groundwater monitoring, field investigations, environmental audits, or other means; and,
- 7. Contamination beyond the facility boundary, if applicable. The Permittee shall implement corrective actions beyond the facility boundary where necessary to protect human health and the environment, unless the Permittee demonstrates to the satisfaction of the Department that, despite the Permittee's best efforts, as determined by the Department, the Permittee was unable to obtain the necessary permission to undertake such actions. The Permittee is not relieved of all responsibility to clean up a release that has migrated beyond the facility boundary where off-site access is denied. On-site measures to address such releases will be determined on a case-by-case basis. Assurance of financial responsibility for completion of such off-site corrective action will be required.

V.B. NOTIFICATION AND ASSESSMENT REQUIREMENTS FOR NEWLY IDENTIFIED SWMUs AND AOCs

1. The Permittee shall notify the Department in writing, within 15 calendar days of discovery, of any additional AOC(s) as described under Permit Condition V.A.6. The notification shall include, at a minimum, the location of the AOC(s) and all available information pertaining to the nature of the release (*e.g.*, media affected, hazardous constituents released, magnitude of release, etc.). If the Department determines that further investigation of an AOC is required, the permit will be modified in accordance with ADEM Admin. Code Rule 335-14-8-.04(2).





- 2. The Permittee shall notify the Department in writing, within 15 calendar days of discovery, of any additional SWMUs as described under Permit Condition V.A.6.
- 3. The Permittee shall prepare and submit to the Department, within 90 calendar days of notification, a SWMU Assessment Report (SAR) for each SWMU identified under Permit Condition V.B.2. At a minimum, the SAR shall provide the following information:
 - a. Location of unit(s) on a topographic map of appropriate scale such as required under ADEM Admin. Code Rule 335-14-8-.02(5)(b)19.
 - b. Designation of type and function of unit(s).
 - c. General dimensions, capacities and structural description of unit(s) (supply any available plans/drawings).
 - d. Dates that the unit(s) was operated.
 - e. Specification of all wastes that have been managed at/in the unit(s) to the extent available. Include any available data on hazardous constituents in the wastes.
 - f. All available information pertaining to any release of hazardous waste or hazardous constituents from such unit(s) (to include soil analyses, air, groundwater data, and/or surface water data).
- 4. Based on the results of the SAR, the Department shall determine the need for further investigations at the SWMUs covered in the SAR. If the Department determines that such investigations are needed, the Permittee shall initiate an investigation as outlined in Permit Condition V.D.1. immediately upon receiving notification of the Department's determination.

V.C. NOTIFICATION REQUIREMENTS FOR NEWLY DISCOVERED RELEASES AT PREVIOUSLY IDENTIFIED SWMUs or AOCs

- 1. The Permittee shall notify the Department in writing of any newly discovered release(s) of hazardous waste or hazardous constituents discovered during the course of groundwater monitoring, field investigations, environmental audits, or other means, within 15 calendar days of discovery. Such newly discovered releases may be from SWMUs or AOCs identified in Permit Condition V.A.2. or SWMUs or AOCs identified in Permit Condition V.A.6. for which further investigation was not required.
- 2. If the Department determines that further investigation of the SWMUs or AOCs is needed, the Permittee shall initiate an investigation as outlined in Permit Condition V.D. immediately upon receiving notification of the Department's determination.

V.D. RCRA FACILITY INVESTIGATION (RFI)

1. The Permittee must perform an RFI for any SWMU and AOC identified by the Department in accordance with Permit Conditions V.A.1, V.B.4, and V.C.2.





- 2. The RFI must completely identify the concentration of hazardous constituents released from each SWMU and AOC and fully delineate the area where such hazardous constituents have come to be located.
- 3. The RFI must fully characterize the nature and extent of contamination released from each SWMU or AOC under investigation.
- 4. The RFI must be performed in a manner consistent with the most recent edition of the Alabama Environmental Investigation and Remediation Guidance (AEIRG).
- 5. Except as provided by Permit Condition V.D.6., the RFI must be completed within 180 calendar days from the effective date of this permit or, for SWMUs or AOCs identified pursuant to Permit Conditions V.B. and V.C., within 180 calendar days from the receipt of notification from the Department that an RFI is required. If, prior to the effective date of this permit, the Department has approved a work plan that includes a schedule for completing the RFI, the RFI shall be completed in accordance with the approved schedule.

6. RFI Schedule of Compliance

- a. For RFIs expected to require greater than 180 calendar days to complete, the Permittee may submit a schedule of compliance subject to Departmental approval and/or modification.
- b. Submittal of an RFI Schedule of Compliance does not delay or otherwise postpone the Permittee's obligation to initiate the RFI.
- c. The Schedule of Compliance must include:
 - i. A detailed narrative discussion which explains why the RFI cannot be completed within 180 days; and,
 - A detailed and chronological listing of milestones, with estimated durations, which provides sufficient information to track the progress of the investigation.
- d. The RFI Schedule of Compliance shall be reviewed by the Department in accordance with Permit Condition V.G.
- e. The Permittee shall complete the RFI in accordance with the approved RFI Schedule of Compliance.

7. RFI Progress Reports

- a. For an RFI being conducted in accordance with the approved RFI Schedule of Compliance, the Permittee must submit progress reports on a monthly basis.
- b. The RFI Progress Reports must include:
 - i. A description of the RFI activities completed during the reporting period;



- ii. Summaries of any problems or potential problems encountered during the reporting period;
- iii. Actions taken to rectify problems;
- iv. Changes in relevant personnel;
- v. Projected work for the next reporting period;
- vi. Any proposed revisions to the RFI Schedule of Compliance.

 Modifications of the RFI Schedule of Compliance are subject to approval by the Department; and,
- vii. A summary of any data collected during the reporting period, including:
 - A. The location of each sampling point identified on a site map;
 - B. The concentration of each hazardous constituent detected at each sampling point; and
 - C. Submittal of RFI Progress Reports, work plans, or other documents during the RFI does not alter the approved RFI Schedule of Compliance.

8. RFI Reports

- a. The Permittee shall prepare and submit to the Department an RFI Report within 60 calendar days from the completion of investigation activities in accordance with the approved RFI Schedule of Compliance, if applicable.
- b. The RFI Report must provide a detailed description of all required elements of the investigation as described in the most recent edition of the AEIRG.
- c. The RFI Report shall be reviewed by the Department in accordance with Permit Condition V.G.

V.E. SELECTION OF CORRECTIVE MEASURES AND PERMIT MODIFICATION

- 1. The Permittee shall develop and submit to the Department a Corrective Measures Implementation (CMI) Plan for any areas of the Permittee's site where hazardous constituents have come to be located at concentrations exceeding those appropriate for the protection of human health and the environment. The CMI Plan must include all applicable elements of the proposed remedy pursuant to the most recent edition of the AEIRG.
- 2. The CMI Plan shall be submitted to the Department within 120 calendar days following the Permittee's submittal of the RFI Report indicating that hazardous constituents have come to be located at any area of the Permittee's facility, or beyond the facility, at concentrations exceeding those appropriate for the protection of human health and the environment, or within 120 calendar days following notification from the Department that a CMI Plan is required, whichever occurs earlier.

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- 3. The CMI Plan shall be submitted along with a request for permit modification pursuant to ADEM Admin. Code Rule 335-14-8-.04(2), and shall include any applicable fees pursuant to ADEM Admin. Code Rule 335-1-6. This modification will serve to incorporate the proposed final remedy, including all procedures necessary to implement and monitor the remedy, into this permit.
- 4. Within 120 calendar days after this Permit has been modified in accordance with Permit Condition V.E.3., the Permittee shall demonstrate financial assurance for completing the approved remedy, except for federal and state facilities.
- 5. The Permittee shall submit to the Department the CMI Plan for the SWMUs/SWMUs and AOCs listed in Table V.5 for review and approval within 120 calendar days from the effective date of this permit.

V.F. INTERIM MEASURES (IM)

- 1. IM Work Plan(s)
 - a. Upon notification by the Department, the Permittee shall prepare and submit an Interim Measures (IM) Work Plan for any SWMU or AOC that the Department determines is necessary. IM are necessary in order to minimize or prevent further migration of contaminants and limit human and environmental exposure to contaminants while long-term corrective measures are evaluated and, if necessary, implemented. The IM Work Plan shall be submitted within 30 calendar days of such notification and shall include the elements listed in Permit Condition V.F.1.b. Such IM may be conducted concurrently with investigations required under the terms of this permit. The Permittee may initiate IM by submitting an IM Work Plan for approval and reporting in accordance with the requirements under Permit Condition V.F.
 - b. The IM Work Plan shall ensure that the IM are designed to mitigate any current or potential threat(s) to human health or the environment and is consistent with and integrated into any long-term solution at the facility. The IM Work Plan shall include the IM objectives, procedures for implementation (including any designs, plans, or specifications), and schedules for implementation.
 - c. The IM Work Plan must be approved by the Department in writing prior to implementation. The Department shall specify the start date of the IM Work Plan schedule in the letter approving the IM Work Plan.
 - d. The IM Report shall be reviewed by the Department in accordance with Permit Condition V.G.
 - e. The Permittee shall submit IM WPs for the SWMUs and AOCs listed in Table V.5 of this permit to the Department for review and approval. The IM WPs shall be submitted within 180 days from the effective date of this permit.





2. IM Implementation

- a. The Permittee shall implement the IM in accordance with the approved IM Work Plan.
- b. The Permittee shall give notice to the Department as soon as possible of any planned changes, reductions or additions to the IM Work Plan.
- c. Final approval of corrective action required under ADEM Admin. Code Rule 335-14-5-.06(12), which is achieved through IM, shall be in accordance with ADEM Admin. Code Rule 335-14-8-.04(2) and Permit Condition V.E.

3. IM Reports

- a. If the time required for completion of IM is greater than one year, the Permittee shall provide the Department with Progress Reports at intervals specified in the approved work plan. The Progress Reports shall, at a minimum, contain the following information:
 - i. A description of the portion of the IM completed;
 - ii. Summaries of any deviations from the IM Work Plan during the reporting period;
 - iii. Summaries of any problems or potential problems encountered during the reporting period;
 - iv. Projected work for the next reporting period; and,
 - v. Copies of laboratory or monitoring data.
- b. The Permittee shall prepare and submit the IM Report to the Department within 90 calendar days of completion of IM conducted under Permit Condition V.F. The IM Report shall, at a minimum, contain the following information:
 - i. A description of IM implemented;
 - ii. Summaries of results:
 - iii. Summaries of all problems encountered;
 - iv. Summaries of accomplishments and/or effectiveness of IM; and,
 - v. Copies of all relevant laboratory or monitoring data, etc., in accordance with Permit Condition I.C.10.



V.G.

SUBMITTALS

- 1. All work plans, reports, schedules, and other documents ("submittals") required by this permit shall be subject to approval by the Department to assure that such submittals and schedules are consistent with the requirements of this Permit and with applicable regulations and guidance. The Permittee shall revise all submittals and schedules as directed by the Department.
- 2. The Department will review all submittals in accordance with the conditions of this permit. The Department will notify the Permittee in writing of any submittal that is disapproved, and the basis therefore. If the Department disapproves a submittal, the Department shall (1) notify the Permittee in writing of the submittal's deficiencies and specify a due date for submission of a revised submittal, (2) revise the submittal and notify the Permittee of the revisions, or (3) conditionally approve the submittal and notify the Permittee of the conditions. Permit Condition V.H. shall apply only to submittals that have been disapproved and revised by the Department, or that have been disapproved by the Department, then revised and resubmitted by the Permittee, and again disapproved by the Department.
- 3. All submittals shall be submitted within the time frame specified by the Department and in accordance with the approved schedule of compliance. Extensions of the due date for submittals may be granted by the Department based on the Permittee's demonstration that sufficient justification for the extension exists.
- 4. All submittals required by this permit shall be signed and certified in accordance with ADEM Admin. Code Rule 335-14-8-.02(2).
- 5. All submittals shall be provided by the Permittee in accordance with Permit Condition I.K.

V.H. **DISPUTE RESOLUTION**

Notwithstanding any other provision in this permit, in the event the Permittee disagrees, in whole or in part, with the Department's revision of a submittal or disapproval of any revised submittal required by this Part, the following may, at the Permittee's discretion, apply:

- 1. In the event that the Permittee chooses to invoke the provisions of this section, the Permittee shall notify the Department in writing within 30 calendar days of receipt of the Department's revision of a submittal or disapproval of a revised submittal. Such notice shall set forth:
 - The specific matters in dispute; a.
 - The position the Permittee asserts should be adopted as consistent with the b. requirements of this permit;
 - The basis for the Permittee's position; and, c.
 - d. Any matters considered necessary for the Department's determination.



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- 2. The Department and the Permittee shall have an additional 30 calendar days from the Department's receipt of the notification provided for in Permit Condition V.H.I. to meet or confer to resolve any disagreement.
- 3. In the event agreement is reached, the Permittee shall submit and implement the revised submittal in accordance with and within the time frame specified in such agreement.
- 4. If agreement is not reached within the 30-day period, the Department will notify the Permittee in writing of the decision on the dispute, and the Permittee shall comply with the terms and conditions of the Department's decision in the dispute. For the purposes of this provision in this permit, the responsibility for making this decision shall not be delegated below the Department's Land Division Chief.
- 5. With the exception of those conditions under dispute, the Permittee shall proceed to take any action required by those portions of the submission and of this permit that the Department determines are not affected by the dispute.

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Table V.1

The following Solid Waste Management Unit(s) (SWMU) and/or Area(s) of Concern (AOC) numbers and descriptions correspond with those noted in the RCRA Facility Assessment (RFA) Report. Where discrepancies exist, the permit will take precedence.

Master List of known SWMUs/ AOCs at the facility:

SWMU/AOC NUMBER	SWMU/AOC NAME	POTENTIALLY AFFECTED MEDIA
SWMU 1	Tank 100	Soil / Groundwater
SWMU 2	Tank 200	Soil / Groundwater
SWMU 3	Tank 300	Soil / Groundwater
SWMU 4	Tank 400	Soil / Groundwater
SWMU 5	Tank B-1	Soil / Groundwater
SWMU 6	Tank B-2	Soil / Groundwater
SWMU 7	Former Bottoms Tank	Soil / Groundwater
SWMU 8	Permitted Drum Storage Area	Soil / Groundwater
SWMU 9	Waste Process Area	Soil / Groundwater
SWMU 10	Waste Repackaging Area	Soil / Groundwater
SWMU 11	RCRA Empty Drum Storage Trailer	Soil / Groundwater
SWMU 11B	Empty Container Storage Area	Soil / Groundwater
SWMU 12	Container Loading/Unloading Dock	Soil / Groundwater
SWMU 13	Auxiliary Loading/Unloading Dock	Soil / Groundwater
SWMU 14	Tanker Loading/Unloading Area	Soil / Groundwater
SWMU 15A	Laboratory Satellite Accumulation Area A	Soil / Groundwater
SWMU 15B	Laboratory Satellite Accumulation Area B	Soil / Groundwater
SWMU 15C	Laboratory Satellite Accumulation Area C	Soil / Groundwater
SWMU 16A	Dumpster	Soil / Groundwater
SWMU 16B	Dumpster	Soil / Groundwater
SWMU 16C	Dumpster	Soil / Groundwater
SWMU 17	Stormwater Drainage Ditches	Soil / Groundwater
SWMU 18	Evaporator	Soil / Groundwater
SWMU 19	Tank System 2 (TS-2)	Soil / Groundwater





Table V.1 (Continued)

The following Solid Waste Management Unit(s) (SWMU) and/or Area(s) of Concern (AOC) numbers and descriptions correspond with those noted in the RCRA Facility Assessment (RFA) Report. Where discrepancies exist, the permit will take precedence.

Master List of known SWMUs/ AOCs at the facility:

SWMU/AOC NUMBER	SWMU/AOC NAME	POTENTIALLY AFFECTED MEDIA
SWMU 20	Tank System 1 (TS-1)	Soil / Groundwater
SWMU 20A	Fuel Blending Tanks (TS-1)	Soil / Groundwater
SWMU 20B	Out-of-Service Product Tanks	Soil / Groundwater
	(TS-1)	
SWMU 20C	Toxic Liquid Tanks	Soil / Groundwater
SWMU 20D	Non RCRA Tanks (TS-1)	Soil / Groundwater
SWMU 21	Container Storage Area D	Soil / Groundwater
SWMU 22	Container Storage Area E	Soil / Groundwater
SWMU 23A	Container Storage Area F	Soil / Groundwater
SWMU 23B	Container Loading Area	Soil / Groundwater
SWMU 24	Container Storage Area B Satellite Accumulation Area B	Soil / Groundwater
SWMU 25	PPE Satellite Accumulation Area	Soil / Groundwater
SWMU 26	Boiler Blowdown	Soil / Groundwater
SWMU 27	Inbound Trailer Storage Area	Soil / Groundwater
SWMU 28	Outbound Trailer Storage Area	Soil / Groundwater
SWMU 29	Universal Waste Trailer Staging	Soil / Groundwater
	Area	
SWMU 30	In-transit Trailer Storage Area	Soil / Groundwater
SWMU 31	Lugger Can	Soil / Groundwater
SWMU 32	Brine Solution	Soil / Groundwater



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Table V.2

The following Solid Waste Management Unit(s) (SWMU) and/or Area(s) of Concern (AOC) numbers and descriptions correspond with those noted in the RCRA Facility Assessment (RFA) Report. Where discrepancies exist, the permit will take precedence.

List of SWMUs and AOCs requiring a RCRA Facility Investigation (RFI):

SWMU/AOC NUMBER	SWMU/AOC NAME	UNIT COMMENT	POTENTIALLY AFFECTED MEDIA
None at This Time			

Table V.3

The following Solid Waste Management Unit (SWMU) and/or Area of Concern (AOC) numbers and descriptions correspond with those noted in the RCRA Facility Assessment (RFA) Report. Where discrepancies exist, the permit will take precedence.

List of SWMUs and AOCs requiring no further action at this time:

SWMU/AOC NUMBER	SWMU/AOC NAME	UNIT COMMENT	POTENTIALLY AFFECTED MEDIA
None at this time			



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Table V.4

The following Solid Waste Management Unit(s) (SWMU) and/or Area(s) of Concern (AOC) numbers and descriptions correspond with those noted in the RCRA Facility Assessment (RFA) Report. Where discrepancies exist, the permit will take precedence.

List of SWMUs and AOCs requiring action under other programs, such as MMRP, CERCLA, etc.:

SWMU/AOC NUMBER	SWMU/AOC NAME	UNIT COMMENT	POTENTIALLY AFFECTED MEDIA
None at this time			

Table V.5

The following Solid Waste Management Unit(s) (SWMU) and/or Area(s) of Concern (AOC) numbers and descriptions correspond with those noted in the RCRA Facility Assessment (RFA) Report. Where discrepancies exist, the permit will take precedence.

List of SWMUs and AOCs requiring Interim Measures (IM) and/or Source Removal:

SWMU/AOC NUMBER	SWMU/AOC NAME	UNIT COMMENT	POTENTIALLY AFFECTED MEDIA
None at This Time			





Table V.6

The following Solid Waste Management Unit(s) (SWMU) and/or Area(s) of Concern (AOC) numbers and descriptions correspond with those noted in the RCRA Facility Assessment (RFA) Report. Where discrepancies exist, the permit will take precedence.

List of SWMUs and AOCs regulated by Parts I – VIII of this permit:

SWMU/AOC NUMBER	SWMU/AOC NAME	POTENTIALLY AFFECTED MEDIA
SWMU 1	Tank 100	Soil / Groundwater
SWMU 2	Tank 200	Soil / Groundwater
SWMU 3	Tank 300	Soil / Groundwater
SWMU 4	Tank 400	Soil / Groundwater
SWMU 5	Tank B-1	Soil / Groundwater
SWMU 6	Tank B-2	Soil / Groundwater
SWMU 7	Former Bottoms Tank	Soil / Groundwater
SWMU 8	Permitted Drum Storage Area	Soil / Groundwater
SWMU 9	Waste Process Area	Soil / Groundwater
SWMU 10	Waste Repackaging Area	Soil / Groundwater
SWMU 11	RCRA Empty Drum Storage Trailer	Soil / Groundwater
SWMU 11B	Empty Container Storage Area	Soil / Groundwater
SWMU 12	Container Loading/Unloading Dock	Soil / Groundwater
SWMU 13	Auxiliary Loading/Unloading Dock	Soil / Groundwater
SWMU 14	Tanker Loading/Unloading Area	Soil / Groundwater
SWMU 15A	Laboratory Satellite Accumulation Area A	Soil / Groundwater
SWMU 15B	Laboratory Satellite Accumulation Area B	Soil / Groundwater
SWMU 15C	Laboratory Satellite Accumulation Area C	Soil / Groundwater
SWMU 16A	Dumpster	Soil / Groundwater
SWMU 16B	Dumpster	Soil / Groundwater
SWMU 16C	Dumpster	Soil / Groundwater
SWMU 17	Stormwater Drainage Ditches	Soil / Groundwater
SWMU 18	Evaporator	Soil / Groundwater
SWMU 19	Tank System 2 (TS-2)	Soil / Groundwater





Table V.6 (Continued)

SWMU/AOC NUMBER	SWMU/AOC NAME	POTENTIALLY AFFECTED MEDIA
SWMU 20	Tank System 1 (TS-1)	Soil / Groundwater
SWMU 20A	Fuel Blending Tanks (TS-1)	Soil / Groundwater
SWMU 20B	Out-of-Service Product Tanks (TS-1)	Soil / Groundwater
SWMU 20C	Toxic Liquid Tanks	Soil / Groundwater
SWMU 20D	Non RCRA Tanks (TS-1)	Soil / Groundwater
SWMU 21	Container Storage Area D	Soil / Groundwater
SWMU 22	Container Storage Area E	Soil / Groundwater
SWMU 23A	Container Storage Area F	Soil / Groundwater
SWMU 23B	Container Loading Area	Soil / Groundwater
SWMU 24	Container Storage Area B Satellite	Soil / Groundwater
	Accumulation Area B	
SWMU 25	PPE Satellite Accumulation Area	Soil / Groundwater
SWMU 26	Boiler Blowdown	Soil / Groundwater
SWMU 27	Inbound Trailer Storage Area	Soil / Groundwater
SWMU 28	Outbound Trailer Storage Area	Soil / Groundwater
SWMU 29	Universal Waste Trailer Staging Area	Soil / Groundwater
SWMU 30	In-transit Trailer Storage Area	Soil / Groundwater
SWMU 31	Lugger Can	Soil / Groundwater
SWMU 32	Brine Solution	Soil / Groundwater

Note: At this time the site is being addressed as a single Solid Waste Management Area (SWMA), or more specifically, as an area containing several noncontiguous buy potentially related SWMUs that can be evaluated as a single, all-encompassing area. The SWMA contains onsite soil and groundwater contamination requiring remediation and offsite groundwater contamination requiring remediation.



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Table V.7

The following Solid Waste Management Unit(s) (SWMU) and/or Area(s) of Concern (AOC) numbers and descriptions correspond with those noted in the RCRA Facility Assessment (RFA) Report. Where discrepancies exist, the permit will take precedence.

List of SWMUs and AOCs requiring a Corrective Measure Implementation (CMI) Plan:

SWMU/AOC NUMBER	SWMU/AOC NAME	UNIT COMMENT	POTENTIALLY AFFECTED MEDIA
None at This Time			





PART VI

CORRECTIVE MEASURES IMPLEMENTATION

VI.A. APPLICABILITY

The conditions of this Part apply to SWMUs and AOCs identified in Table VI.1.

VI.B. GENERAL CONDITIONS

1. The Permittee is required to perform corrective measures for the SWMUs and AOCs identified in Condition VI.A. The approved remedy for these defined units, waterway areas, or land parcels, includes any and all actions set forth in this permit and in the approved Interim Measures Plans, Corrective Measures Studies (CMSs), and Corrective Measures Implementation (CMI) Plans approved by the Department, as noted in Table VI.1.

2. Remedial Cleanup Levels

Upon approval, pursuant to Condition VI.E., of the CMI Plan designating applicable cleanup level(s), the cleanup level(s) for the areas specific to the CMI Plan will be deemed to be a condition of this permit.

3. Groundwater Monitoring and Remediation

Where required pursuant to Conditions VI.B.1. and/or VI.C. of this permit, the Permittee shall comply with the general groundwater monitoring requirements of Part VII of this permit.

4. Land Use Controls

Where required pursuant to Conditions VI.B.1 and VI.C of this permit, the Permittee shall establish appropriate land use controls to achieve protection of human health and the environment. The Permittee shall comply with Conditions VI.B.5 and VI.B.6 of this permit when implementing corrective measures requiring land use controls. In the event an off-site property owner does not allow an environmental covenant to be imposed, the Permittee shall notify the Department within 14 calendar days of receipt of such written notification of the refusal by the off-site property owner. If the property owner does not provide a written refusal of the request to allow an environmental covenant to be imposed, the Permittee shall notify the Department within 14 calendar days of delivery of the request to the off-site property owner. In such cases, the Department may allow the Permittee to propose an alternate area-specific land use control in accordance with ADEM Admin. Code Rule 335-5-1-.02(i), subject to the Department's review and approval.

5. Survey Plat

For corrective measures where residual concentrations of contaminants will remain inplace at levels greater than those appropriate for unrestricted land use, or for corrective measures that rely on land use controls, the Permittee must:





- a. Within 90 calendar days following the effective date of a permit modification addressing remedy selection, submit to the local zoning authority, or the authority with jurisdiction over local land use, and to the Department, a survey plat indicating the location and dimensions of the SWMUs, AOCs, and capped or partially remediated areas with respect to permanently surveyed benchmarks, the locations of sampling points, and the concentrations of hazardous constituents detected. This plat must be prepared and certified by a professional land surveyor registered in the State of Alabama. The plat must be filed with the local zoning authority or the authority with jurisdiction over local land use and must contain a note, prominently displayed, which states the Permittee's obligation to limit the property to the specified restricted uses.
- b. Maintain the survey plat as described in Condition VI.B.5.a. of this permit and in the CMI Plan/Report until the Permittee has demonstrated, to the satisfaction of the Department, that the levels of hazardous constituents in all contaminated media are within limits appropriate for unrestricted land uses.

6. Environmental Covenant

No later than the submission of the survey plat required in Condition VI.B.5., the Permittee must:

- a. Record in the probate judges office of the county in which the property is located or a portion thereof an environmental covenant in accordance with ADEM Admin. Code Rule 335-5 and ADEM Policy Memo #304 that will in perpetuity notify any potential purchaser of the property that:
 - i. The land is contaminated with hazardous constituents in concentrations that exceed unrestricted use standards;
 - ii. The use of the property is restricted by this permit for certain residential, municipal, or industrial purposes and may lead to an increased risk of exposure to hazardous constituents depending upon the activities initiated at the site. Such activities may yield an increased level of human health risk to the owner:
 - iii. The potential purchaser or entity that desires to work in the contaminated area should notify the Permittee before mobilizing to the area covered by the land use control.
- b. Submit to the Department a certification, signed by the Permittee in accordance with Permit Condition I.C.11. that the environmental covenant specified in this part has been performed. This certification must include a copy of the document in which the notation has been placed.
- c. Maintain the environmental covenant described in Permit Condition VI.B.6. until the Permittee has demonstrated, to the satisfaction of the Department, that the levels of hazardous constituents in all contaminated media are within limits appropriate for unrestricted land uses.



d. Submit fees in accordance with ADEM Admin. Code Rule 335-5-1-.06, Fee Schedule J, to provide the Department with the funds required to implement the provisions of the Alabama Uniform Environmental Covenants Act.

7. Security

Security measures, where required by Conditions VI.B.1 and/or VI.C., of this permit, will be conducted in accordance with ADEM Admin. Code Rule 335-14-5-.02(5) and as prescribed in the approved CMI Plan.

8. Inspection

Where corrective measures addressed in Conditions VI.B.1. include provisions to cap in place or partially remediate properties or land areas, whether owned or not owned by the Permittee, the Permittee shall specify inspection protocols on a scheduled basis to ensure continued integrity of the remedy and to ensure that land use remains appropriately restricted per the environmental covenant established pursuant to Permit Condition VI.B.6. Inspection provisions shall be as prescribed in the approved CMI Plan.

VI.C. AREA SPECIFIC CONDITIONS (RESERVED)

VI.D. CORRECTIVE MEASURES IMPLEMENTATION (CMI) REPORTS

1. CMI Progress Reports

If the time required to complete implementation of a specific set of corrective measures, as described in the Department-approved CMI Plan, is greater than 180 calendar days, the Permittee shall provide ADEM with progress reports according to the schedule in the ADEM-approved CMI Plan. If no schedule has been approved as part of the associated plan, progress reports shall be submitted at least quarterly. The progress reports shall, at a minimum, contain the following information:

- a. A description of the portion of CMI Plan completed;
- b. Summaries of and deviations from the approved CMI Plan during the reporting period;
- c. Summaries of current and potential problems, including recommended solutions and alternatives as well as corrective actions undertaken;
- d. Any monitoring data (soil, air, dust, water) collected for any reason during the construction period for the purposes of monitoring potential for human and ecological exposure; and,
- e. Projected work for the next period and impacts to the approved schedule.

2. Final CMI Reports

Upon completion of construction of corrective measures systems, implementation of land use controls, interim removal actions, or other short-term activities required by this





permit and/or the approved CMI Plan, the Permittee shall submit to the Department a Final CMI Report containing, at a minimum, the following:

- a. A description of activities completed;
- b. For cap and cover remedies, as-built construction drawings presenting the final in-place three-dimensional location of contaminated material. A plan view of the remediated areas shall be presented in addition to a cross section of the in-place capped areas;
- c. Hazardous waste manifests indicating the handling of any excavated material that has been shipped off-site to a Department approved, certified landfill;
- d. For remedies involving land use controls, a copy of the survey plat and environmental covenant required by Condition VI.B. of this permit;
- e. Monitoring data (soil, air, dust, water) collected for any reason during the construction period for the purposes of monitoring potential for human and ecological exposure; and,
- f. Certification, prepared in accordance with ADEM Admin. Code Rule 335-14-8-02 (2)(d) by the Permittee and a registered Professional Engineer (State of Alabama), that the corrective measures implementation phase (*i.e.*, construction) required by this permit is complete and that the approved system and/or facilities are ready for operation in accordance with the intended design (*i.e.*, CMI Plan).
- 3. Corrective Measures (CM) Effectiveness Reports
 - a. For corrective measures that have been fully implemented and where the corrective measures system(s) must operate for a period of time to achieve cleanup goals or levels, the Permittee shall submit CM Effectiveness Reports (addressing all Corrective Measures systems at the facility which are subject to this permit condition) annually ,unless otherwise approved by the Department, beginning 180 calendar days following the Department's approval of the Final CMI Report for the initial Corrective Measures system subject to this permit condition. The overall CM Effectiveness Reports shall include, at a minimum, the following information for each SWMU and/or AOC included in the report:
 - i. A detailed narrative presenting an evaluation of the effectiveness of the selected remedy;
 - ii. Summaries of compliance with and progress toward achieving cleanup goals;
 - iii. Any significant revisions, adjustments, or proposed modifications to the selected remedy;
 - iv. Tabulated environmental sampling and monitoring data including, but not limited to, groundwater quality, elevation data, and a graphical representation of all constituents detected during each sampling event from recovery wells, monitoring wells, drinking water wells, and other locations;





- v. Chain of custody, field reports, and laboratory data sheets to include the date of collection, the date the sample was extracted, and the date of sample analysis for samples collected during the reporting period;
- vi. Any monitoring data (soil, air, dust, water) collected for any reason during the post-construction period for the purposes of monitoring potential for human and ecological exposure;
- vii. Isoconcentration maps depicting the distribution of parameters for each sampling event;
- viii. Time versus concentration plots for each monitoring parameter for each recovery well and for each monitoring wells;
- ix. RESERVED
- x. RESERVED
- xi. Potentiometric surface maps;
- xii Description of land use during the reporting period at the designated area requiring corrective measures; and,
- xiii Findings of the Permittee's investigation into the continued effectiveness of land use controls per Condition VI.B.
- b. If at any time the Permittee determines that any remedy selection specified in Condition VI.B. or VI.C. of this permit no longer satisfies the applicable requirements of ADEM Admin. Code Rule 335-14-5-.06(12) or this permit for releases of hazardous waste or hazardous constituents originating from SWMUs or AOCs, the Permittee must, within 90 calendar days, submit an application for a permit modification, pursuant to Permit Condition I.J., to make any appropriate changes to the CMI Plan.
- c. The application for changes in the CMI Plan, including changes in inspection and monitoring provisions of the CMI Plan, shall be submitted as an application for a permit modification pursuant to the requirements of ADEM Admin. Code Rule 335-14-8-.04.

4. Final Report of Corrective Measures

Within 90 calendar days following attainment of cleanup levels or goals as outlined in this Permit and the approved CMI Plan, the Permittee shall submit to the Department a Final Report of Corrective Measures (FRCM). The FRCM shall contain a certification by the Permittee and an independent professional engineer registered in the State of Alabama that all remedial measures required by this permit and the approved CMI Plan have been completed. The FRCM shall outline any procedures and schedules for dismantling of corrective measures systems, groundwater monitoring or recovery systems, removal of land use controls, and any other remedial systems or controls required by this permit or the approved CMI Plan.

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Table VI.1

The following Solid Waste Management Unit(s) (SWMU) and/or Area(s) of Concern (AOC) numbers and descriptions correspond with those noted in the RCRA Facility Assessment (RFA) Report. Where discrepancies exist, the permit will take precedence.

List of SWMUs and AOCs requiring Corrective Measures:

Applicable SWMU/AOC NAME	CMS/CMI	Approval Date
Site-Wide	Corrective Measures Implementation Plan dated November 30, 2005, as revised February 27, 2006, as revised May 18, 2006.	September 15, 2006





PART VII

GROUNDWATER MONITORING AND CORRECTIVE ACTION

VII.A. REQUIRED PROGRAM(S)

- 1. Groundwater monitoring shall consist of the General Groundwater Monitoring Program of Permit Condition VII.B., the Compliance Monitoring Program contained in Permit Condition VII.D., and the Corrective Action Monitoring Program contained in Permit Condition VII.E.
- 2. The Permittee shall commence groundwater monitoring as required by this permit not later than 120 calendar days after the effective date of this permit.

VII.B. GENERAL GROUNDWATER MONITORING PROGRAM

1. Well Location, Installation and Construction

The Permittee shall install and/or maintain a groundwater monitoring system to comply with the requirements of ADEM Admin. Code Rules 335-14-5-.06(8), 335-14-5-.06(9), 335-14-5-.06(10), and 335-14-5-.06(11) as applicable and as specified below:

- a. The Permittee shall maintain all groundwater monitoring wells at the facility as identified in Table VII.1. of this permit, at the locations specified on Figure 10 of the CMI Plan and Drawing 6.5, Appendix 10-4-1 of the permit application and/or CMI Plan, and any other groundwater monitoring wells specified by Permit Condition VII.B.1.d. and VII.B.1.e.
 - i. All groundwater monitoring wells shall be maintained in accordance with the plans and specifications presented in Section 6 of the CMI Plan and Section 10.2 of the permit application and/or CMI Plan and in accordance with ADEM Admin. Code Rule 335-14-5-.06.
 - ii. A groundwater monitoring well shall not be removed from any monitoring program specified in this permit without an approved permit modification pursuant to Permit Condition I.J.
 - iii. If a groundwater monitoring well is damaged, the Permittee shall immediately notify the Department in writing, which includes a description of the well repair activities to be conducted. The well repair procedures must be approved by the Department prior to implementation. Within 30 calendar days after the well is repaired, the Permittee shall submit a written notification to the Department that the well repair activities were conducted in accordance with the approved procedures.
 - iv. If a groundwater monitoring well is deleted from the monitoring program(s) required by this permit in accordance with Permit Conditions VII.B.1.a.ii. and I.J., it shall be abandoned within 90 calendar days after deletion using procedures to be approved by the Department. Within 30 calendar days after the well is abandoned, the Permittee shall submit a

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written notification to the Department that the well abandonment activities were conducted in accordance with the approved procedures.

b. RESERVED

- c. The Permittee shall maintain groundwater monitoring well(s) BR-1 and BR-7 as the background monitoring well(s) for the entire facility as specified in Section 6 of the CMI and Section 10.2 of the permit application.
- d. The Permittee shall install and maintain additional groundwater monitoring wells as necessary to assess changes in the rate and extent of any plume of contamination or as otherwise deemed necessary to maintain compliance with ADEM Admin. Code Rules 335-14-5-.06(6), 335-14-5-.06(8), 335-14-5-.06(9), 335-14-5-.06(10), and 335-14-5-.06(11), as applicable. A plan in the form of a permit modification request specifying the design, location and installation of any additional monitoring wells should be submitted to the Department at least 90 calendar days prior to installation which, at a minimum, shall include:
 - i. Well construction techniques including casing depths and proposed total depth of well(s);
 - ii. Well development method(s);
 - iii. A complete description of well construction materials;
 - iv. A schedule of implementation for construction; and,
 - v. Provisions for determining the lithologic characteristics, hydraulic conductivity, grain size distribution, and porosity for the applicable aquifer unit(s) at the location of the new well(s).
- e. RESERVED
- f. RESERVED
- 2. General Groundwater Monitoring Requirements
 - a. The Permittee shall determine the groundwater surface elevation from all monitoring wells listed in Table VII.1. of this permit at least semi-annually and each time a sampling event is conducted. The results of these determinations should be submitted in accordance with Permit Condition VII.B.6. Elevation data should be recorded and reported as mean sea level (MSL) and referenced to an appropriate national geodetic vertical datum (NGVD) benchmark.
 - b. The Permittee shall determine the groundwater flow rate and direction in the underlying aquifer(s) at least annually and submit the results in accordance with Permit Condition VII.B.6.
 - c. The Permittee shall determine background concentrations of hazardous constituents and other chemical parameters required to be monitored by this





permit in accordance with Section 6 of the CMI and Section 10.2 of the permit application and ADEM Admin. Code Rule 335-14-5-.06(8)(g).

3. Groundwater Protection Standard

- a. The groundwater protection standard, as required under ADEM Admin. Code Rule 335-14-5-.06(3), shall consist of Table VII.3. of this permit which lists the hazardous constituents and their respective concentration limits.
- b. The groundwater protection standard applies to all hazardous waste or hazardous constituent releases as deemed appropriate by the Department to protect human health and the environment.

4. Compliance Period

- a. The compliance period, during which the groundwater protection standard specified in Permit Condition VII.B.3. applies, shall begin at the time of the first sampling event of the compliance monitoring program (Permit Condition VII.D.), or the corrective action monitoring program (Permit Condition VII.E.), whichever is earlier.
- b. The compliance period shall continue (after beginning pursuant to Permit Condition VII.B.4.a.) until the groundwater protection standard as defined by Permit Condition VII.B.3.a. has not been exceeded for a period of three consecutive years.
- c. If the Permittee is engaged in a corrective action program pursuant to Permit Condition VII.E., then the compliance period shall continue as required by ADEM Admin. Code Rule 335-14-5-.06(7)(c) until the groundwater protection standard has not been exceeded for a period of three consecutive years after corrective action has been terminated and this permit has been modified, in accordance with Permit Condition I.J., to implement a compliance monitoring program pursuant to Permit Condition VII.D. or a detection monitoring program pursuant to Permit Condition VII.C., as required by ADEM Admin. Code Rule 335-14-5-.06(11)(f).

5. Sampling and Analysis Procedures

The Permittee shall use the following techniques and procedures when obtaining and analyzing samples from the groundwater monitoring wells described in Permit Condition VII.B.1. to provide a reliable indication of the quality of the groundwater as required under ADEM Admin. Code Rules 335-14-5-.06(8)(d), (e), and (g):

- a. Samples shall be collected, preserved, and shipped (when shipped off-site for analysis) in accordance with the procedures specified in Section 6 of the CMI and Section 10.2 of the permit application.
- Samples shall be analyzed according to the procedures specified in Section 6 of the CMI and Section 10.2 of the permit application, the most recent edition of SW-846 or other appropriate methods approved by the Department. Analytical method detection limits shall be less than or equal to the concentration limits





- specified in Table VII.2. or VII.3., unless otherwise approved in writing by the Department.
- c. Samples shall be tracked and controlled using the chain-of-custody procedures specified in Section 6 of the CMI and Section 10.2 of the permit application.
- d. Statistical analyses used to evaluate the groundwater monitoring data shall be as described in Section 6 of the CMI and Section 10.2 of the permit application and ADEM Admin. Code Rule 335-14-5-.06(8)(h).
- e. All samples taken in accordance with this permit shall not be filtered prior to analysis.

6. Recordkeeping and Reporting

- a. The Permittee shall keep and maintain all monitoring, testing, and analytical data obtained in accordance with Permit Conditions VII.B., VII.C., VII.D., and VII.E. as required by Permit Condition I.C.10.
- b. The Permittee shall submit to the Department a written report to include all analytical sampling data, established background values, statistical evaluations, groundwater elevations, associated potentiometric maps, and the annual groundwater flow rate and direction determinations. The analytical method and the method detection limit (MDL) for each constituent must be integrated into all reports of analysis. The report shall be submitted within 90 calendar days after the first sampling event and on an annual basis thereafter. Copies of this report shall be kept at the facility in accordance with Permit Conditions I.C.10.c and I.C.10.e.
- c. The Permittee shall submit progress reports to the Department describing implementation of groundwater monitoring and/or corrective action activities at the site as required by Part III of this permit on a quarterly basis. The first progress report shall be submitted to the Department within 90 calendar days after the effective date of this permit. The progress reports shall continue until such time as the required monitoring and/or corrective action systems and activities required by this permit are fully constructed and operational. In the event that additional monitoring and/or corrective action requirements are imposed through a permit modification, in accordance with Permit Condition I.J., the annual reporting requirement shall resume, commencing upon the effective date of the permit modification and continuing until the required monitoring and/or corrective action systems and activities are again fully constructed and operational.

VII.C. DETECTION MONITORING PROGRAM (RESERVED)

VII.D. COMPLIANCE MONITORING PROGRAM (RESERVED)

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VII.E. CORRECTIVE ACTION MONITORING PROGRAM

The requirements of this Condition are applicable to the entire facility and the impacted off-site locations. Except as specified otherwise in this permit, the Corrective Action Monitoring Program shall be implemented in accordance with Section 6 of the CMI and Section 10.2 of the permit application and ADEM Admin. Code Rule 335-14-5-.06(11).

1. Monitoring Systems

In addition to the point of compliance and background well monitoring systems identified in Permit Conditions VII.B.1.b. and VII.B.1.c., the Permittee shall:

- a. Maintain groundwater monitoring wells POE-1 and POE-2 as boundary wells for the entire facility as specified in Table VII.1. of this permit and as shown on Figure 10 of the CMI Plan and Drawing 6.5, Appendix 10-4-1 of the permit application.
- b. Maintain groundwater monitoring wells LB-4, BR-2, BR-5, BR-6, BR-10, and seasonal surface water seep SW-15 as effectiveness wells as specified in Table VII.1. of this permit and as shown on Figure 10 of the CMI Plan and Drawing 6.5, Appendix 10-4-1 of the permit application.
- c. RESERVED
- d. RESERVED

2. Corrective Action Program

- a. The Permittee shall conduct a Corrective Action Program, as described in Section 5, 6, and 8 of the CMI Plan and Section 10.2 of the permit application, to remove or treat in place all hazardous constituents that exceed their respective groundwater protection standards as described in Table VII.3. of this permit at the point of compliance, between the point of compliance and the down-gradient facility property boundary, and beyond the facility boundary in accordance with ADEM Admin. Code Rule 335-14-5-.06(11)(e)2.
- b. Pursuant to ADEM Admin. Code Rules 335-14-5-.06(11)(c) and 335-14-5-.06(11)(e)3., the Permittee shall continue to implement the corrective action program as described in Section 5, 6, and 8 of the CMI Plan and Section 10.2 of the permit application within 120 calendar days after the effective date of this permit.
- c. The Permittee shall handle/treat groundwater in accordance with Section 5, 6, and 8 of the CMI Plan and Section 10.2 of the permit application and with the applicable requirements of NPDES permit number AL0032298 and UIC permit number ALS19937808, as issued by the Department.

3. Monitoring Requirements

In addition to the general groundwater monitoring requirements specified in Permit Condition VII.B.2., the Permittee shall:





- a. Sample all background, point of compliance and effectiveness monitoring wells shown in Table VII.1. of this permit and analyze for the constituents listed in Table VII.2. of this permit on a semi-annual basis beginning within 120 calendar days of the effective date of this permit and continuing through the end of the compliance period.
- b. Sample all background, point of compliance, effectiveness, and boundary monitoring wells shown in Table VII.1. of this permit and analyze for the constituents listed in Table VII.3. of this permit on an annual basis beginning within 120 calendar days of the effective date of this permit and continuing through the end of the compliance period.
- c. Sample all background, point of compliance, effectiveness, and boundary monitoring wells shown in Table VII.1. of this permit and analyze for temperature (degrees F or C), specific conductance (Mhos/cm), and pH (standard units) each time the well is sampled. The data obtained should be submitted as raw data in the reports required by Permit Condition VII.B.6.
- d. When evaluating the monitoring results to determine the effectiveness of the corrective measures, in accordance with Permit Condition VII.E.4., the Permittee shall:
 - i. Determine if the corrective action system effectively addresses the entire plume of contamination;
 - ii. Determine if the concentration of the hazardous constituents are decreasing (pH increasing or decreasing toward neutrality, as applicable) in the effectiveness wells specified in Permit Condition VII.A.1.;
 - iii. Determine if hazardous waste or hazardous constituents are being released into the environment; and,
 - iv. Determine if hazardous constituents have been detected in the boundary wells specified in Permit Condition VII.A.1.
- 4. Reporting and Response Requirements

In addition to the recordkeeping and reporting requirements specified in Permit Condition VII.B.6.:

a. The Permittee shall report the effectiveness of the corrective action program annually, as required under ADEM Admin. Code Rule 335-14-5-.06(11)(g). These reports shall be submitted to the Department within 60 calendar days of each annual anniversary of this permit after corrective action is initiated and continue until corrective action is completed. The Permittee must provide data from groundwater monitoring along with an analysis of that data and any conclusions regarding the effectiveness of the program in accordance with Permit Condition VII.E.3.d. If the analysis of the data warrants any change to the corrective action program, the Permittee must include these revisions in the

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- annual report which will be followed up within 90 calendar days with an application for permit modification in accordance with Permit Condition I.J.
- b. If corrective action is terminated under Permit Condition VII.B.4.c., the Permittee must sample all background, point of compliance, effectiveness and boundary sampling locations for the compounds listed in ADEM Admin. Code Rule 335-14-5-Appendix IX. Based upon the sampling results, the Permittee may petition the Department, in accordance with Permit Condition I.K, for a permit modification to implement either a detection monitoring program or a compliance monitoring program.

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TABLE VII.1

MONITORING WELL DESIGNATIONS

WELL NUMBER	WELL TYPE *	WELL LATITUDE	WELL LONGITUDE	UNIT(S) MONITORED	WELL DEPTH (ft)	GROUND ELEVATION (ft. MSL)	TOP-OF- RISER ELEVATION (ft. MSL)	SCREENED INTERVAL (ft. MSL)	MONITORED ZONE**
BR-1	BKG	10308599.9400	2190265.9400	ALL	50.0	565.35	567.97	529.85 – 519.85	2
BR-7	BKG	1308826.3385	2190688.4574	ALL	54.0	558.39	558.19	514.39 – 504.39	3
POE-1	BDY	1308380.2967	2190171.3733	ALL	27	562.95	562.84	525.84 – 535.84	1
POE-2	BDY	1308376.8234	2190167.7766	ALL	76.5	562.70	562.61	496.11 – 486.11	3
LB-4	EFF	1307739.0326	2189652.0174	ALL	200.0	549.38	552.02	429.38 – 409.38	3
BR-2	EFF	1308260.0900	2190381.1600	ALL	31.0	554.80	554.52	534.80 – 524.80	2
BR-5	EFF	1307726.7997	2189697.7190	ALL	32.0	549.42	552.42	527.32 – 517.32	2
BR-6	EFF	1307832.9614	2189511.2040	ALL	53.7	547.05	550.56	505.45 – 495.45	2
BR-10	EFF	1308266.1092	2190387.8847	ALL	200.0	554.42	554.84	439.42 – 429.42	3
$SW-15^2$	SFW	1307817.0864	2189582.7409	ALL	NA	NA	NA	NA	NA
MW-2	TRN	1308305.4546	2190285.7254	ALL	18	561.87	561.55	552.22 – 542.22	1
BR-3	TRN	1308287.0000	2190190.0000	ALL	35.0	562.19	560.96	535.80 – 525.80	2
REM-1	TRN	1308351.2599	2190212.7569	ALL	27	562.88	562.67	535.67 – 545.67	2

* Well Type:

EFF - Effectiveness Monitoring Wells

BKG - Background Wells

BDY - Boundary Monitoring Wells

TRN - Trench Well (microbial/remediation monitoring)

** Monitored Zone

- (1) Residuum to Top of Bedrock (<25 ft-bgs)
- (2) Shallow Bedrock (25-50 ft-bgs)
- (3) Intermediate Bedrock (50-150 ft-bgs)
- (4) Deep Bedrock (150+ ft-bgs)
- SW-15 is a seasonal intermittent surface water seep and not a well, but is part of the monitoring program. Since SW-15 is seasonal, sufficient water may not be present to allow sampling during every monitoring event.
- NA Not applicable



TABLE VII.2

GROUNDWATER QUALITY MONITORING CONSTITUENTS¹

HAZARDOUS CONSTITUENT			
tetrachloroethene (PCE)			
trichloroethene (TCE)			
cis 1-2 dichloroethene (cis 1-2 DCE)			
trans 1,2 dichloroethene(trans 1,2 DCE)			
vinyl chloride (VC)			
1,1,1-trichloroethane (1,1,1-TCA)			
1,1-dichloroethane (1,1-DCA)			
1,1-dichloroethene (1,1-DCE)			
chloroethane			
carbon tetrachloride (CT)			
chloroform			
methylene chloride			
chloromethane (methyl chloride)			
1,2-dichloroethane (1,2-DCA)			
chlorobenzene			
1,1,1,2-tetrachloroethane			
1,1,2,2-tetrachloroethane			
1,1,2-trichloroethane (1,1,2-TCA)			
bromomethane (methyl bromide)			
bromodichloromethane			
benzene			
toluene			
ethylbenzene			
xylenes (total)			
1,2,4-trimethylbenzene			
naphthalene			
carbon disulfide			
sec-butyl benzene			
acetone			
methyl ethyl ketone (2-butanone)			
methyl isobutyl ketone			
arsenic			
barium			
cadmium			
chromium (total)			
lead			
mercury			
selenium			
silver			
aluminum			
copper			
iron			
manganese			
zinc			

1. The constituents listed herein are the subset of the Groundwater Protection Standard listed in Table VII.3 for which monitoring is required.



TABLE VII.3
GROUNDWATER PROTECTION STANDARD

HAZARDOUS CONSTITUENT	CONCENTRATION LIMIT (mg/L)
tetrachloroethene (PCE)	5.00E-03
trichloroethene (TCE)	5.00E-03
cis 1-2 dichloroethene (cis 1-2 DCE)	7.00E-02
trans 1,2 dichloroethene(trans 1,2 DCE)	1.00E-01
vinyl chloride (VC)	2.00E-03
1,1,1-trichloroethane (1,1,1-TCA)	2.00E-01
1,1-dichloroethane (1,1-DCA)	8.10E-02
1,1-dichloroethene (1,1-DCE)	7.00E-03
chloroethane	2.94E-02
carbon tetrachloride (CT)	5.00E-03
chloroform	8.00E-02
methylene chloride	5.00E-03
chloromethane (methyl chloride)	6.55E-03
1,2-dichloroethane (1,2-DCA)	5.00E-03
chlorobenzene	1.00E-01
1,1,1,2-tetrachloroethane	3.28E-03
1,1,2,2-tetrachloroethane	4.26E-04
1,1,2-trichloroethane (1,1,2-TCA)	5.00E-03
bromomethane (methyl bromide)	2.19E-03
bromodichloromethane	8.00E-02
benzene	5.00E-03
toluene	1.00E+00
ethylbenzene	7.00E-01
xylenes (total)	1.00E+01
1,2,4-trimethylbenzene	7.82E-02
naphthalene	3.13E-02
carbon disulfide	1.56E-01
sec-butyl benzene	5.39E+02
acetone	1.41E+00
methyl ethyl ketone (2-butanone)	9.39E-01
methyl isobutyl ketone	2.00E-01
arsenic	1.00E-02
barium	2.00E+00
cadmium	5.00E-03
chromium (total)	1.00E-01
lead	1.50E-02
mercury	2.00E-03
selenium	5.00E-02
silver	7.82E-03
aluminum	1.56E+00
copper	1.30E+00
iron	1.10E+00
manganese	7.20E-02
zinc	4.69E-01

Note: Derived from Table 1 of ADEM Admin. Code Rule 335-14-5-.06(5).



PART VIII

SUMMARY OF DEADLINES

The summary information provided herein is intended only as a guide to the requirements of this permit. It is not intended to be all inclusive, nor is it intended to be used as a substitute for the full text of this permit.

PERMIT CONDITION	ITEM	DUE DATE
I.C.2.b.	Reapply for a renewal	180 calendar days before the expiration of the current permit.
I.C.12.a.	Give notice to the Department of any planned physical alterations or additions to the permitted facility and any solid waste management units.	As soon as possible
I.C.12.f.	Report any noncompliance with this permit that may endanger human health or the environment.	Orally within 24 hours from the time the Permittee becomes aware of the circumstances. Written submission shall also be provided within 5 calendar days of the time that the Permittee becomes aware of the circumstances.
I.G.	Waste Minimization Certification	Annually
I.H.	Update cost estimates	No later than 30 calendar days after the Department has approved a modification to the Closure Plan, Post-Closure Plan, or Corrective Action Plan, or any other plan required or referenced by this permit, if the change in the plan results in an increase in the amount of the cost estimate and annually.as required by ADEM Admin. Code Rules 335-14-508(3)(b), (5)(b), and (10)(b).
I.J.	Submit a written request for a permit modification pursuant to the requirements of ADEM Admin. Code Rule 335-14-804(2).	At least 60 calendar days prior to a proposed change in facility design or operation.
V.B.1.	Notify the Department, in writing, of the discovery of any additional AOCs.	Within 15 calendar days of discovery.
V.B.2.	Notify the Department, in writing, of the discovery of any additional SWMUs.	Within 15 calendar days of discovery
V.B.3.	Submit a SWMU Assessment Report (SAR) for each SWMU identified under V.B.2.	Within 90 calendar days of notification.



PERMIT CONDITION	ITEM	DUE DATE
V.C.1.	Notify the Department, in writing, of any newly discovered release(s) of hazardous waste or hazardous constituents from SWMUs or AOCs discovered during the course of groundwater monitoring, field investigations, environmental audits, or other means.	Within 15 calendar days of discovery.
V.D.7.	Submit RFI progress reports.	Monthly basis beginning in the second month following the initiation of the RFI.
V.D.8	Submit RFI Report	Within 60 calendar days from the completion of investigation activities.
V.E.2	Submit CMI Plan	Within 120 calendar days following the Permittee's submittal of the RFI Report indicating that hazardous constituents have come to be located at any area of the Permittee's facility, or beyond the facility, at concentrations exceeding those appropriate for the protection of human health and the environment, or within 120 calendar days following notification from the Department that a CMI Plan is required, whichever occurs earlier.
V.E.4.	Demonstrate financial assurance for completing the approved remedy.	Within 120 calendar days after this Permit has been approved.
V.F.1.	Submit IM Work Plan	Within 30 calendar days upon notification by the Department.
V.F.3.	Submit IM Report	Within 90 calendar days of completion of IM.
VI.B.5.a.	Submit to the local zoning authority, or the authority with jurisdiction over local land use, and to the Department, a survey plat indicating the location and dimensions of the SWMUs, AOCs, and capped or partially remediated areas with respect to permanently surveyed benchmarks, the locations of sampling points, and the concentrations of hazardous constituents detected	Within 90 calendar days following the effective date of a permit modification addressing remedy selection.
VI.B.6.a.	Record environmental covenant	No later than the submission of the survey plat required in Condition VI .B.5.
VI.B.6.b.	Submit to the Department a certification that the environmental covenant has been performed.	No later than the submission of the plat required in Condition VI.B.5.

PERMIT		
CONDITION	ITEM	DUE DATE
VI.B.6.d.	Submit fees in accordance with ADEM Admin. Code Rule 335-5-106	No later than the submission of the survey plat required in Condition VI.B.5.
VI.D.3.	Begin Submitting Corrective Measures Effectiveness Reports	Annually beginning 180 calendar days following the Department's approval of the Final CMI Report.
VI.D.4.	Submit a Final Report of Corrective Measures (FRCM)	Within 90 calendar days following attainment of cleanup levels or goals.
VII.B.1.a.iii.	Notification of damaged groundwater monitoring wells.	Immediately in writing. The well must be repaired within 30 calendar days of damage, and repair report must be submitted within 30 calendar days of repair.
VII.B.1.d.	Install additional groundwater monitoring wells	As necessary to assess changes in the rate and extent of any plume of contamination, or as otherwise deemed necessary. Note: a permit modification request must be submitted within 90 calendar days prior to installation of additional groundwater monitoring well(s).
VII.B.2.a.	Determine groundwater surface elevation.	At least annually and each time a well is sampled.
VII.B.2.b.	Determine groundwater flow rate and direction.	At least annually.
VII.B.6.b.	Submit groundwater monitoring report	Within 60 calendar days of the first sampling event and annually thereafter.
VII.B.6.c.	Submit progress reports.	Within 90 calendar days after the effective date of this permit and quarterly thereafter. See permit condition for start/stop/resume provisions.
VII.E.2.b.	Implement corrective action plan	No later than 120 calendar days after the effective date of this permit.
VII. E.4.a.	Submit corrective action effectiveness reports.	Annually within 60 calendar days of each annual anniversary of this permit after corrective action is initiated and until corrective action is completed.

SECTION 1.0

PART A APPLICATION

RCRA SUBTITLE C SITE IDENTIFICATION

United States Environmental Protection Agency RCRA SUBTITLE C SITE IDENTIFICATION FORM



1.	Reas	on for Su	ıbmitta	al (Sel	ect o	nly or	ne.)													
			Obtai time.	_		_) numl	ber f	or ar	n on-	goir	ng reg	gulate	d activi	ity that v	will c	continue for a	period of
			Subm	itting	as a d	comp	onen	t of t	he Haz	zardo	ous V	Vaste	e Re	port	for _		(Re	port	ing Year)	
				ha	azardo	ous w	aste,	or>		g of a	acute	haza	ardo	ous w					us waste, > 1 or more mor	kg of acute oths of the re-
			Notify	ing tl	nat re	gulat	ed ac	tivity	is no	long	er oc	curri	ing a	at this	s Site					
			Obtai	ning o	or upo	dating	an E	PA ID) numl	oer f	or co	ondu	ctin	g Elec	tronic	c Manif	est Brol	ker a	ctivities	
		\checkmark	Subm	itting	a nev	w or r	evise	d Par	t A Fo	rm										
2.	Site I	PA ID N	umber																	
		A L	D	0	9	4	4	7	6	7	9	3								
3.	Site I	Name																		
		Allwor	th, LL	С																
4.	Site l	ocation.	Addre	ss					·											
		Street A	ddress	;	5	00 N	ledc	o Ro	ad											
		City, To	wn, or	Villag	e T	arra	nt										County	J	efferson	
		State	Alaba	ma			Со	untry	Unit	ed S	State	es					Zip Cod	e 3	5217	
5.	Site I	Mailing A	ddress	5														v	Same as Lo	ocation Address
		Street A	ddress																	
		City, Tov	vn, or ۱	Villag€	9															
		State					Cou	untry								7	Zip Code	9		
6.	Site L	and Typ	e																	
		√ Priva	te	C	ounty	,	D	istric	t	F	eder	ral		Tri	bal		Municipa	al	State	Other
7.	North	n Americ	an Ind	ustry	Class	ificati	on S	ysten	n (NAI	CS) C	Code	(s) fo	or th	e Site	e (at le	east 5-	digit cod	des)		
		A. (Prin	nary)		562	111							C.			3259	98			
		В.			562	112							D.							

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State	Alabama					Coun	try I	USA				Zip Co	de 3	6217			
Email	Todd.Wil	lliamsor	n@Ste	ricyc	le.c	om											
Phone	(205) 841	-1707				Ext						Fax	(2	205) 8	841-174	4	
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Phone	(770) 891	-2531				Ext						Fax					
Comme	nts																

EPA ID Number	Α	L	D	0	9	4	4	7	6	7	9	3	OMB# 2050-0024; Expires 05/31/2020

Type of Regulated Waste Activity (at your si
--

Mark "Yes" or "No" for all current activities (as of the date submitting the form); complete any additional boxes as instructed.

-				
Α.	Hazaro	lous	waste	Activities

a. LQG -Generates, in any calendar month (includes quantities imported by importer site) 1,000 kg/mo (2,200 lb/mo) or more of non-acute hazardous waste; or - Generates, in any calendar month, or accumulates at any time, more than 1 kg/mo (2.2 lb/mo) of acute hazardous waste; or - Generates, in any calendar month or accumulates at any time, more than 100 kg/m (220 lb/mo) of acute hazardous spill cleanup material. b. SQG 100 to 1,000 kg/mo (220-2,200 lb/mo) of non-acute hazardous waste and no more		1 Gen	erator of H	lazardous Waste—If "Yes", mark only one of the following—a, b, c
1,000 kg/mo (2,200 lb/mo) or more of non-acute hazardous waste; or - Generates, in any calendar month, or accumulates at any time, more than 1 kg/mc (2.2 lb/mo) of acute hazardous waste; or - Generates, in any calendar month or accumulates at any time, more than 100 kg/m (220 lb/mo) of acute hazardous spill cleanup material.	N IN	1. Gen		
1 kg (2.2 lb) of acute hazardous waste and no more than 100 kg (220 lb) of any acute hazardous spill cleanup material. C. VSQG Less than or equal to 100 kg/mo (220 lb/mo) of non-acute hazardous waste. Y		✓	a. LQG	1,000 kg/mo (2,200 lb/mo) or more of non-acute hazardous waste; or - Generates, in any calendar month, or accumulates at any time, more than 1 kg/mo (2.2 lb/mo) of acute hazardous waste; or - Generates, in any calendar month or accumulates at any time, more than 100 kg/mo
2. Short-Term Generator (generates from a short-term or one-time event and not from on-going processes). If "Yes", provide an explanation in the Comments section. Note: If "Yes", you MUST indicated that you are a Generator of Hazardous Waste in Item 10.A.1 above. 3. Treater, Storer or Disposer of Hazardous Waste—Note: Part B of a hazardous waste permit is required for these activities. Y N 4. Receives Hazardous Waste from Off-site Y N 5 Recycler of Hazardous Waste a. Recycler who stores prior to recycling b. Recycler who does not store prior to recycling A Company of the second			b. SQG	100 to 1,000 kg/mo (220-2,200 lb/mo) of non-acute hazardous waste and no more than 1 kg (2.2 lb) of acute hazardous waste and no more than 100 kg (220 lb) of any acute hazardous spill cleanup material.
processes). If "Yes", provide an explanation in the Comments section. Note: If "Yes", you MUST indicated that you are a Generator of Hazardous Waste in Item 10.A.1 above. 3. Treater, Storer or Disposer of Hazardous Waste—Note: Part B of a hazardous waste permit is required for these activities. 4. Receives Hazardous Waste from Off-site 5. Recycler of Hazardous Waste a. Recycler who stores prior to recycling b. Recycler who does not store prior to recycling b. Recycler who does not store prior to recycling 7. N 6. Exempt Boiler and/or Industrial Furnace—If "Yes", mark all that apply. a. Small Quantity On-site Burner Exemption			c. VSQG	Less than or equal to 100 kg/mo (220 lb/mo) of non-acute hazardous waste.
for these activities. 4. Receives Hazardous Waste from Off-site 5 Recycler of Hazardous Waste a. Recycler who stores prior to recycling b. Recycler who does not store prior to recycling 7 N 6. Exempt Boiler and/or Industrial Furnace—If "Yes", mark all that apply. a. Small Quantity On-site Burner Exemption	□Y ✓N	proces	ses). If "Ye	s", provide an explanation in the Comments section. Note: If "Yes", you MUST indicate
	VY N			
a. Recycler who stores prior to recycling b. Recycler who does not store prior to recycling c. P. N 6. Exempt Boiler and/or Industrial Furnace—If "Yes", mark all that apply. a. Small Quantity On-site Burner Exemption	VY N	4. Rece	ives Hazaro	dous Waste from Off-site
b. Recycler who does not store prior to recycling 6. Exempt Boiler and/or Industrial Furnace—If "Yes", mark all that apply. a. Small Quantity On-site Burner Exemption	VY N	5 Recyc	cler of Haza	ardous Waste
A. Small Quantity On-site Burner Exemption		√	a. Recycle	r who stores prior to recycling
a. Small Quantity On-site Burner Exemption			b. Recycle	r who does not store prior to recycling
	Y VN	6. Exen	npt Boiler a	nd/or Industrial Furnace—If "Yes", mark all that apply.
b. Smelting, Melting, and Refining Furnace Exemption			a. Small Q	uantity On-site Burner Exemption
— ·			b. Smeltin	g, Melting, and Refining Furnace Exemption

B. Waste Codes for Federally Regulated Hazardous Wastes. Please list the waste codes of the Federal hazardous wastes handled at your site. List them in the order they are presented in the regulations (e.g. D001, D003, F007, U112). Use an additional page if more spaces are needed.

See	Att.	10B	Pg 4		

C. Waste Codes for State Regulated (non-Federal) Hazardous Wastes. Please list the waste codes of the State hazardous wastes handled at your site. List them in the order they are presented in the regulations. Use an additional page if more spaces are needed.

N/A			

RCRA SUBTITLE C IDENTIFICATION FORM

10B. Waste Codes for Federally Regulated Hazardous Wastes

D 001 F 001 D 002 F 002 D 003 F 003 D 004 F 004 D 005 F 005 D 006 F 006 D 007 F 007 D 008 F 008 D 009 F 009 D 010 F 010 D 011 F 011 D 012 F 012 D 013 F 019 D 014 F 020 D 015 F 021 D 016 F 022 D 017 F 023	K 0 0 1 K 0 0 2 K 0 0 3 K 0 0 4 K 0 0 5 K 0 0 6 K 0 0 7 K 0 0 8 K 0 0 9 K 0 1 1 K 0 1 1 K 0 1 3 K 0 1 4 K 0 1 5 K 0 1 6 K 0 1 7 K 0 1 8	K 0 6 0 K 0 6 1 K 0 6 2 K 0 6 9 K 0 7 1 K 0 8 3 K 0 8 4 K 0 8 5 K 0 8 6 K 0 8 7 K 0 8 8 K 0 9 3 K 0 9 4 K 0 9 5 K 0 9 7	K 1 4 8 K 1 4 9 K 1 5 0 K 1 5 1 K 1 5 6 K 1 5 7 K 1 5 8 K 1 6 1 K 1 6 9 K 1 7 0 K 1 7 1 K 1 7 2 K 1 7 4 K 1 7 5 K 1 7 6 K 1 7 7	P001 P002 P003 P004 P005 P006 P007 P008 P009 P010 P011 P012 P013 P014 P015 P016 P017	P 0 5 9 P 0 6 0 P 0 6 2 P 0 6 3 P 0 6 4 P 0 6 5 P 0 6 6 P 0 6 6 P 0 6 7 P 0 6 8 P 0 7 0 P 0 7 1 P 0 7 2 P 0 7 3 P 0 7 4 P 0 7 5 P 0 7 6	P120 P121 P122 P123 P127 P128 P185 P188 P189 P190 P191 P192 P194 P196 P197 P198 P199	U 0 0 1 U 0 0 2 U 0 0 3 U 0 0 4 U 0 0 5 U 0 0 6 U 0 0 7 U 0 0 0 8 U 0 0 9 U 0 1 1 U 0 1 1 U 0 1 1 U 0 1 1 U 0 1 5 U 0 1 6 U 0 1 7 U 0 1 8	U 0 5 5 U 0 5 6 U 0 5 7 U 0 5 8 U 0 6 0 U 0 6 1 U 0 6 2 U 0 6 3 U 0 6 4 U 0 6 6 U 0 6 7 U 0 6 8 U 0 6 9 U 0 7 1 U 0 7 2	U109 U110 U111 U112 U113 U114 U115 U116 U117 U118 U119 U120 U121 U122 U123 U124 U125	U 1 6 1 U 1 6 2 U 1 6 3 U 1 6 4 U 1 6 5 U 1 6 6 U 1 6 7 U 1 6 8 U 1 6 9 U 1 7 0 U 1 7 1 U 1 7 2 U 1 7 3 U 1 7 4 U 1 7 6 U 1 7 7 U 1 7 8	U217 U218 U219 U220 U221 U222 U223 U225 U226 U227 U228 U234 U235 U234 U235 U234 U235 U234
D 020 F 026 D 021 F 027 D 022 F 028 D 023 F 032 D 024 F 034 D 025 F 035 D 026 F 037 D 027 F 038 D 029 D 030 D 031 D 032 D 033 D 034 D 035 D 036 D 037 D 038 D 039 D 040 D 041 D 042 D 043	K021 K022 K0223 K00224 K00226 K00226 K00230 K00333 K00335 K00336 K00336 K00336 K00336 K0044 K0044 K0044 K0044 K0044 K0044 K0045 K0040 K0055 K0055	K100 K101 K102 K103 K104 K105 K107 K108 K110 K111 K1112 K1113 K1114 K1115 K1116 K1117 K112 K1124 K1125 K1136 K1131 K1142 K1131 K1144 K1144 K144 K1447		P021 P022 P023 P024 P026 P027 P027 P033 P033 P033 P033 P033 P033 P041 P042 P044 P045 P044 P045 P044 P045 P055 P055	P081 P082 P0884 P0885 P0887 P0888 P0888 P0993 P0996 P0998 P0999 P1002 P1003 P1006 P1008 P1101 P1112 P1113 P1114 P1115 P1118 P1119	P 2 0 3 P 2 0 4 P 2 0 5	U021 U022 U023 U024 U025 U026 U027 U029 U030 U031 U033 U033 U033 U033 U034 U035 U044 U044 U044 U044 U044 U047 U048 U049 U049 U049 U049 U049 U049 U049 U049	U075 U076 U077 U078 U0879 U0881 U0883 U0884 U0885 U0886 U0887 U0888 U0991 U0991 U0993 U0995 U0996 U0997 U0998 U0996 U0997 U0998 U0999 U1010 U102 U103 U106 U107 U108	U128 U129 U130 U131 U132 U133 U134 U135 U134 U144 U1443 U1443 U1446 U1447 U1448 U1447 U1450 U151 U153 U153 U153 U153 U153 U153 U153	U181 U182 U183 U184 U185 U186 U187 U188 U190 U191 U192 U193 U194 U196 U197 U2001 U2001 U2001 U2001 U2001 U2001 U201 U2	U 2 4 4 U 2 4 6 U 2 4 7 U 2 4 8 U 2 2 4 9 U 2 7 7 8 U 2 2 7 9 U 3 2 8 U 3 3 5 9 U 3 3 6 4 U 3 7 3 U 3 8 7 U 3 8 7 U 3 8 9 U 3 2 8 U 4 0 9 U 4 1 0 U 4 1 1

TY VN	1. Tr	ransporter of Hazardous Waste—If "Yes", mark all that apply.
		a. Transporter
		b. Transfer Facility (at your site)
Y VN	2. U	Underground Injection Control
Y VN	3. U	Inited States Importer of Hazardous Waste
N N	4. R	ecognized Trader—If "Yes", mark all that apply.
		a. Importer
		b. Exporter
YVN		mporter/Exporter of Spent Lead-Acid Batteries (SLABs) under 40 CFR 266 Subpart G—If "Yes", mark apply.
		a. Importer
		b. Exporter
MYLN	apply.	ge Quantity Handler of Universal Waste (you accumulate 5,000 kg or more) - If "Yes" mark all that Note: Refer to your State regulations to determine what is regulated. a. Batteries
	✓	a. Batteries
		b. Pesticides
	<u> </u>	c. Mercury containing equipment
	V	d. Lamps
	닏	e. Other (specify)
		f. Other (specify)
	\sqcup	g. Other (specify)
N N A	2. Dactivit	estination Facility for Universal Waste Note: A hazardous waste permit may be required for this y.
C. Used Oil A	Activitie	es s
YVN	1. Use	ed Oil Transporter—If "Yes", mark all that apply.
		a. Transporter
		b. Transfer Facility (at your site)
	2. Use	ed Oil Processor and/or Re-refiner—If "Yes", mark all that apply.
Y V N		a. Processor
Y V N		
Y V N		b. Re-refiner
N N N	3. Off-	b. Re-refiner -Specification Used Oil Burner
		L _u
Y V N		Specification Used Oil Burner

3

OMB# 2050-0024; Expires 05/31/2020

A L D 0 9 4 4 7 6 7 9

EPA ID Number

ID Number	Α	L	D	0	9 4	4	7	6	7	9	3		OMB# 2050-0024; Expires 05/31/202
D. Pharma	ceuti	cal A	tiviti	es									
Y / N	"Ye	es", m	ark o		ne. Note								of hazardous waste pharmaceuticals—if for definitions of healthcare facility and
		a.	Hea	lthcar	e Facility								
	F] b	. Rev	erse D	istributo	r							
Y N		arma											r the management of hazardous waste ealthcare facility that is no longer an LQG or
igible Acade es pursuant to						sNo	tificat	tion fo	or opt	ing i	nto or	r wi	thdrawing from managing laboratory hazar
Y V N	was	stes i	n lab	orato	The second second second	Yes",	mark	all th			THE RESERVE OF THE PERSON NAMED IN		t K for the management of hazardous the item-by-item instructions for defini-
		1.	Colle	ege o	Univers	ity							
		2.	Tead	hing	Hospital	that is	s own	ed by	or ha	s a f	ormal	wr	itten affiliation with a college or university
		3.	Non	-profi	t Institut	e that	is ow	ned b	y or	nas a	form	al v	vritten affiliation with a college or universit
Y V N	B. V	Vithd	rawir	ng fro	m 40 CFF	262	Subpa	art K f	or the	mai	nager	nen	nt of hazardous wastes in laboratories.
pisodic Gen	erati	on											
Y VN	no r	nore	than	60 da		nove							anned or unplanned episodic event, lasting tegory. If "Yes", you must fill out the Ad-
QG Consolid	ation	of V	sqg	Hazar	dous Wa	ste							
Y VN	Are	you	an LC	G no	tifying of	cons							ste Under the Control of the Same Person dendum for LQG Consolidation of VSQGs
lotification o	of LQ	G Site	Clos	ure fo	or a Cent	ral Ac	cumu	latio	n Area	a (CA	A) (o _l	ptio	onal) OR Entire Facility (required)
YVN	LQG	Site	Closu	re of	a Centra	l Accı	ımula	tion A	rea (CAA)	or En	tire	e Facility.
	Α.	Ce	ntral	Accu	mulation	Area	(CAA) or	Entir	e Fac	ility		
	В. І	Exped	ted c	losur	e date: _			mr	n/dd,	′уууу			
	C. I	Requ	esting	g new	closure	date:			n	nm/d	d/yyy	/y	
												_	
										stan	dards	s 40	CFR 262.17(a)(8)
		2. No	t in c	ompli	ance witl	n the	closur	e per	form	ance	stand	lard	ls 40 CFR 262.17(a)(8)

Notification	1						_	•				the last of the la	
Y VN	hazard	ous se	cond	lary n	nater	ial ur	nder 4	10 CF	R 260	.30, 4	O CF	managing, are managing, or will stop manag R 261.4(a)(23), (24), (25), or (27)? If "Yes", yo for Managing Hazardous Secondary Materia	ou
lectronic M	anifest Br	oker											
Y VN		obtair	n, con	nplet	te, an							electing to use the EPA electronic manifest est under a contractual relationship with a h	
Comments (include it	em nu	ımbei	r for	each	comi	ment))					
			· · · · · · · · · · · · · · · · · · ·										
												achments were prepared under my direction	
ision in acco	rdance w	ith a s	ysten	n des	signe	d to a	assure	e that	qual	ified p	oerso	nnel properly gather and evaluate the infor	ma
rision in acco mitted. Based g the informa	rdance w d on my ir ation, the	ith a s nquiry infori	of the matio	n des ne per on sub	signe rson (bmitt	d to a or pe ed is,	assure rsons , to th	that who he be	qual man st of	ified p age th my kn	perso ne sys owle	nnel properly gather and evaluate the information or those persons directly responsible finding and belief, true, accurate, and complete	ma for e. I
rision in acco mitted. Based g the informa re that there	rdance w d on my ir ation, the are signi	ith a s nquiry infori ficant	of the matio pena	m des ne per on sul alties	signed rson d bmitt for su	d to a or pe ed is, ubmit	assure rsons , to th tting f	that who ne be false	qual man st of i	ified p age th my kn matio	oerso ne sys owle n, inc	nnel properly gather and evaluate the inform stem, or those persons directly responsible f dge and belief, true, accurate, and complete luding the possibility of fines and imprisonm	ma for e. I nen
vision in acco mitted. Based g the informa are that there	rdance w d on my ir ation, the are signi ns. Note:	ith a s nquiry infori ficant For t	of the matio pena	m des ne per on sul alties	signed rson d bmitt for su	d to a or pe ed is, ubmit	assure rsons , to th tting f	that who ne be false	qual man st of i	ified p age th my kn matio	oerso ne sys owle n, inc	nnel properly gather and evaluate the information or those persons directly responsible finding and belief, true, accurate, and complete	ma for e. I nen
vision in acco mitted. Based g the informate re that there wing violatio 270.10(b) ar	rdance will on my in ation, the are signings. Note: and 270.11	ith a s nquiry infori ficant For t	of th matio pena he RC	m des ne per on sub lities CRA H	signed rson of bmitt for su Hazar	d to a or pe ed is, ubmit dous	rsons , to th tting t	e that who ne be false te Pa	qual man st of r inforr rt A p	ified page the my known artion mation permin	persone sys owle owle n, inc t App	nnel properly gather and evaluate the information, or those persons directly responsible fidge and belief, true, accurate, and complete duding the possibility of fines and imprisonmalication, all owners and operators must signification.	ma for e. I ner
vision in acco mitted. Based g the informa re that there wing violatio	rdance will on my in ation, the are signings. Note: and 270.11	ith a s nquiry infori ficant For t	of th matio pena he RC	m des ne per on sub lities CRA H	signed rson of bmitt for su Hazar	d to a or pe ed is, ubmit dous	rsons , to th tting t	e that who ne be false te Pa	qual man st of r inforr rt A p	ified page the my known artion mation permin	persone sys owle owle n, inc t App	nnel properly gather and evaluate the inform stem, or those persons directly responsible f dge and belief, true, accurate, and complete luding the possibility of fines and imprisonm	ma for e. I nen
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rision in accomitted. Based g the informative that there wing violatio 270.10(b) ar Signature of T.J. Mct	rdance will don my in atton, the are signins. Note: and 270.11 f legal ow re (First, Caustlan	ith a sinquiry information inf	of the mation pena he RC	tor of	signed rson of bmitt for su Hazar r autl	d to a or pe ed is, ubmit dous	rsons, to the tting to Wass	e that who ne be false te Pa	qual man st of r inforr rt A p	ified page the my known the matio permiter we	opersoone system owle system owle system owle on, income the control of the contr	nnel properly gather and evaluate the information, or those persons directly responsible fidge and belief, true, accurate, and complete duding the possibility of fines and imprisonmulication, all owners and operators must significant the many significant of the second	ma for e. I nen

United States Environmental Protection Agency HAZARDOUS WASTE PERMIT PART A FORM



1. Facility Permit Contact

First Name	Thaddeus	MI J	Last Name	McCaustland
Title	Permit Compliance Manag	ger		
Email	TMcCaustland@Stericycl	e.com		
Phone	(770) 891-2531	Ext	Fax	(888) 240-4312

2. Facility Permit Contact Mailing Address

Street Address 500 Me	dco Road	
City, Town, or Village Birmin	gham	
State Alabama	Country United States	Zip Code 35217

3. Facility Existence Date (mm/dd/yyyy)

10/1/197	8	

4. Other Environmental Permits

A. Permit Type			В	. Per	mit	Num	ber			C. Description
										See 4A Attached Page 2
										-

5. Nature of Business

Allworth, LLC recycles industrial solvents by distillation, and blends hazardous waste derived fuels for energy recovery at BIFs. Operations also include consolidation and transshipment of various hazardous wastes, universal wastes, and non-hazardous wastes. Hazardous waste storage occurs in tanks and containers, and treatment occurs in tanks. Refer to Part B permit application Sections 2, 3, and 4 for specific operations. No waste disposal occurs on site.

HAZARDOUS WASTE PERMIT PART A FORM

4A. Other Environmental Permit

A. Permit Type					E	B. Peri	nit N	umb	er					C. Description
R	А	L	D	0	9	4	4	7	6	7	9	3		RCRA Part B Hazardous Waste Facility Permit
N	Α	L	0	0	3	2	2	9	8					NPDES Non-process Discharge Permit
E	4	0	7	0	0	1	8	0	0	0	1	0	1	Jefferson County - VOC Product Storage Tanks (23)
E	4	0	7	0	0	1	8	0	0	0	3	0	1	Jefferson County - Solvent Loading/Unloading Emissions
E	4	0	7	0	0	1	8	0	0	4	6	0	1	Jefferson County - Boiler Air Emissions
E	4	0	7	0	0	1	8	0	0	5	3	0	1	Jefferson County - Tank W-1 Air Emissions
E	4	0	7	0	0	1	8	0	0	5	4	0	1	Jefferson County - Tank W-2 Air Emissions
E	4	0	7	0	0	1	8	0	0	5	5	0	1	Jefferson County - Tank F-1 Air Emissions
E	4	0	7	0	0	1	8	0	0	5	6	0	1	Jefferson County - Tank F-2 Air Emissions
E	4	0	7	0	0	1	8	0	0	5	7	0	1	Jefferson County - Tank F-3 Air Emissions
E	4	0	7	0	0	1	8	0	0	5	8	0	1	Jefferson County - Tank F-4 Air Emissions
E	4	0	7	0	0	1	8	0	0	5	9	0	1	Jefferson Cty - Tank F-5 Air Emissions)
E	4	0	7	0	0	1	8	0	0	6	0	0	1	Jefferson County - Tank F-6 Air Emissions
E	4	0	7	0	0	1	8	0	0	6	1	0	1	Jefferson County - Tank O-1 Air Emissions
E	4	0	7	0	0	1	8	0	0	6	2	0	1	Jefferson County - Tank B-5 Air Emissions
E	4	0	7	0	0	1	8	0	0	6	3	0	1	Jefferson County - Tank B-6 Air Emissions
E	4	0	7	0	0	1	8	0	0	6	4	0	1	Jefferson County - Tank B-7 Air Emissions
U	А	L	S	1	9	9	3	7	8	0	8			ADEM Class V Injection Well Permit

6. Process Codes and Design Capacities

Line	A. Process Code	B. Process De	sign Capacity	C. Process Total	
Number		(1) Amount	(2) Unit of Measure	Number of Units	D. Unit Name
					See 6A Attached Page 4
					1

7. Description of Hazardous Wastes (Enter codes for Items 7.A, 7.C and 7.D(1))

	A.	EPA H	lazard	ous	B. Estimated	C. Unit of				1		1.50	D	. Pro	cesse	es .
Line No.		Wast	e No.		Annual Qty of Waste	Measure			(:	L) Pro	ocess	Code	es			(2) Process Description (if code is not entered in 7.D1)
																See 7A Attached
																Page 5 - 20
							$oxed{oxed}$							1		
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8. Map

Attach to this application a topographical map, or other equivalent map, of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all spring, rivers, and other surface water bodies in this map area. See instructions for precise requirements.

9. Facility Drawing

All existing facilities must include a scale drawing of the facility. See instructions for more detail.

10. Photographs

All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures; existing storage, treatment, and disposal areas; and sites of future storage, treatment, or disposal areas. See instructions for more detail.

11. Comments

See Page 20		

HAZARDOUS WASTE PERMIT PART A FORM

6A. Process Codes and Design Capacities

Line	Number	A. Pr	ocess (Code	B. Process Design (Capacity	C. Process Total Number of Units	D. Unit Name
					(1) Amount	(2) Unit of Measure		
х	1	S	0	2	533.788	G	001	
	1	S	0	1	18,920	G	001	Container Storage Area A
	2	S	0	1	19,800	G	001	Container Storage Area B
	3	S	0	1	18,480	G	001	Container Storage Area D
	4	S	0	1	30,000	G	001	Container Storage Area E
	5	S	0	1	1,320	G	001	Container Storage Area F
	6	s	0	1	64,000	G	001	Trailer Staging Area
	7	S	0	2	48,000	G	001	Tank System 1
	8	S	0	2	36,000	G	001	Tank System 2
	9	Т	0	1	100,000	U	001	Tank System 1
	10	Т	0	1	100,000	U	001	Tank System 2
1	0				I	A Comment		
1	1							
1	2							
1	3					4 1		
					. 1	As the second		
					1		-	
				<u> </u>				
					1			

EPA ID Number | A | L | D | 0 | 9 | 4 | 4 | 7 | 6 | 7 | 9 | 3 | OMB#: 2050-0024; Expires 05/31/2020

A. Des	criptio	n of Ha	zardo	us Was	stes (I	Enter codes for Item	s 7.A, 7.C and 7.D	(1)	L								
ine Nu	nber	На	zardo			B. Estimated Annual Qty of	C. Unit of Measure	D. P	ROC	ESSE	S	***					
		110	zaruo			Waste	(Enter code)	(1) P	ROC	CESS	CODE	S (Ent	ter Co	de)			(2) PROCESS DESCRIPTION (If code is not entered in 9.D.1)
0	1	D	0	0	1	4,000	Т	S	0	1	S	0	2	Т	0	1	
0	2	D	0	0	2	2,000	Т	S	0	1	S	0	2	Т	0	1	
0	3	D	0	0	3	1,000	Т	S	0	1							
0	4	D	0	0	4	2,000	T	S	0	1	S	0	2	T	0	1	
0	5	D	0	0	5	2,000	Т	S	0	1	S	0	2	Т	0	1	
0	6	D	0	0	6	2,000	Т	S	0	1	S	0	2	Т	0	1	
0	7	D	0	0	7	2,000	Т	S	0	1	S	0	2	T	0	1	
0	8	D	0	0	8	2,000	Т	S	0	1	S	0	2	Т	0	1	
0	9	D	0	0	9	2,000	Т	S	0	1	S	0	2	Т	0	1	
1	0	D	0	1	0	2,000	Т	S	0	1	S	0	2	Т	0	1	=
1	1	D	0	1	1	2,000	T	S	0	1	S	0	2	Т	0	1	
1	2	D	0	1	2	500	Т	S	0	1	S	0	2	Т	0	1	
1	3	D	0	1	3	500	Т	S	0	1	S	0	2	Т	0	1	2 1
1	4	D	0	1	4	500	Т	S	0	1	S	0	2	Т	0	1	
1	5	D	0	1	5	500	Т	S	0	1	S	0	2	Т	0	1	
1	6	D	0	1	6	500	Т	S	0	1	S	0	2	Т	0	1	
1	7	D	0	1	7	500	Т	S	0	1					П		
1	8	D	0	1	8	500	Т	S	0	1	S	0	2	Т	0	1	
1	9	D	0	1	9	500	Т	S	0	1	S	0	2	Т	0	1	
2	0	D	0	2	0	500	Т	S	0	1					П		
2	1	D	0	2	1	500	Т	S	0	1	S	0	2	Т	0	1	
2	2	D	0	2	2	500	Т	S	0	1	S	0	2	T	0	1	
2	3	D	0	2	3	500	Т	S	0	1	S	0	2	Т	0	1	
2	4	D	0	2	4	500	Т	S	0	1	S	0	2	Т	0	1	
2	5	D	0	2	5	500	Т	S	0	1	S	0	2	Т	0	1	179
2	6	D	0	2	6	500	Т	S	0	1	S	0	2	Т	0	1	
2	7	D	0	2	7	500	Т	S	0	1	S	0	2	Т	0	1	
2	8	D	0	2	8	500	T	S	0	1	S	0	2	Т	0	1	
2	9	D	0	2	9	500	Т	S	0	1	S	0	2	Т	0	1	
3	0	D	0	3	0	500	Т	S	0	1	S	0	2	Т	0	1	
3	1	D	0	3	1	500	Т	S	0	1	S	0	2	Т	0	1	
3	2	D	0	3	2	500	Т	S	0	1	S	0	2	Т	0	1	
3	3	D	0	3	3	500	Т	S	0	1	S	0	2	Т	0	1	
3	4	D	0	3	4	500	Т	S	0	1	S	0	2	Т	0	1	
3	5	D	0	3	5	500	Т	S	0	1	S	0	2	T	0	1	
3	6	D	0	3	6	500	Ţ	S	0	1	S	0	2	Т	0	1	

PAGE 5 of 20

1/23/2020

'A. De	scriptio	n of Ha	zardo	us Was	stes (Enter codes for Item	s 7.A, 7.C and 7.D	(1)									7
ine Nu	mber	Haa	zardo	us Was	te No	B. Estimated Annual Qty of	C. Unit of Measure	D. P	ROC	ESSE	s						
				(Enter	code	Waste	(Enter code)	(1) F	ROC	CESS	CODE	S (Ent	er Co	de)			(2) PROCESS DESCRIPTION (If code is not entered in 9.D.1)
3	7	D	0	3	7	500	Ť	S	0	1	S	0	2	Т	0	1	
3	8	D	0	3	8	500	Т	S	0	1	S	0	2	Т	0	1	
3	9	D	0	3	9	500	Т	S	0	1	S	0	2	T	0	1	
4	0	D	0	4	0	500	Т	S	0	1	S	0	2	Т	0	1	
4	1	D	0	4	1	500	Т	S	0	1	S	0	2	Т	0	1	
4	2	D	0	4	2	500	Т	S	0	1	s	0	2	Т	0	1	
4	3	D	0	4	3	500	Т	S	0	1	S	0	2	Т	0	1	
4	4	F	0	0	1	4,000	Т	s	0	1	S	0	2	Т	0	1	
4	5	F	0	0	2	4,000	T	S	0	1	S	0	2	Т	0	1	
4	6	F	0	0	3	4,000	T	S	0	1	s	0	2	Т	0	1	
4	7	F	0	0	4	4,000	Т	S	0	1	S	0	2	Т	0	1	
4	8	F	0	0	5	4,000	T	S	0	1	S	0	2	Т	0	1	
4	9	F	0	0	6	500	Т	S	0	1	s	0	2	Т	0	1	
5	0	F	0	0	7	500	Т	S	0	1							
5	1	F	0	0	8	500	Т	S	0	1					Н		
5	2	F	0	0	9	500	Т	S	0	1					Н		
5	3	F	0	1	0	500	Т	S	0	1							
5	4	F	0	1	1	500	Т	S	0	1							
5	5	F	0	1	2	500	Т	S	0	1	S	0	2	T	0	1	
5	6	F	0	1	9	500	Т	S	0	1	S	0	2	Т	0	1	
5	7	F	0	2	0	500	T	S	0	1	-				Н		
5	8	F	0	2	1	500	Т	S	0	1					Н	-	
5	9	F	0	2	2	500	Т	S	0	1					Н		
6	0	F	0	2	3	500	Т	s	0	1					Н		
6	1	F	0	2	4	500	T	S	0	1	S	0	2	T	0	1	
6	2	F	0	2	5	500	Т	S	0	1	S	0	2	T	0	1	
6	3	F	0	2	6	500	Ť	S	0	1					Н		
6	4	F	0	2	7	500	T	S	0	1				-	Н		
6	5	F	0	2	8	500	Т	S	0	1				-	Н		
6	6	F	0	3	2	500	Т	S	0	1	S	0	2	Т	0	1	
6	7	F	0	3	4	500	T	S	0	1	S	0	2	Т	0	1	
6	8	F	0	3	5	500	T	S	0	1	S	0	2	Т	0	1	
6	9	F	0	3	7	500	Т	S	0	1	S	0	2	Т	0	1	
7	0	F	0	3	8	500	Т	S	0	1	S	0	2	Т	0	1	
7	1	F	0	3	9	500	Т	S	0	1	S	0	2	Т	0	1	
7	2	K	0	0	1	500	Т	S	0	1	S	0	2	Т	0	1	

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ine Nu	mber				A. EPA	B. Estimated	C. Unit of	D.P	ROC	ESSE	s						
	DC/	На	zardo	us Was	te No.	Annual Qty of Waste	Measure (Enter code)	<u> </u>				S (Ent	er Co	de)			(2) PROCESS DESCRIPTION (If cod
7	3	К	0	0	2	500	Т	S	0	1	S	0	2	T	0	1	is not entered in 9.D.1)
7	4	К	0	0	3	500	T	S	0	1	S	0	2	Т	0	1	
7	5	K	0	0	4	500	T	S	0	1	S	0	2	Т	0	1	
7	6	К	0	0	5	500	Т	S	0	1	S	0	2	T	0	1	
7	7	К	0	0	6	500	T	S	0	1	S	0	2	Т	0	1	
7	8	К	0	0	7	500	Т	S	0	1	S	0	2	Т	0	1	
7	9	К	0	0	8	500	Т	S	0	1	S	0	2	Т	0	1	
8	0	К	0	0	9	500	Т	S	0	1	S	0	2	Т	0	1	
8	1	К	0	1	0	500	Т	S	0	1	S	0	2	Т	0	1	, , , , , , , , , , , , , , , , , , ,
8	2	К	0	1	1	500	Т	S	0	1				-	Н		
8	3	К	0	1	3	500	Т	S	0	1							
8	4	К	0	1	4	500	T	S	0	1	S	0	2	Т	0	1	
8	5	К	0	1	5	500	Ŧ	S	0	1	S	0	2	Т	0	1	
8	6	К	0	1	6	500	Т	S	0	1	S	0	2	Т	0	1	
8	7	К	0	1	7	500	Ť	S	0	1	S	0	2	Т	0	1	
8	8	K	0	1	8	500	Т	S	0	1	S	0	2	Т	0	1	
8	9	K	0	1	9	500	Т	S	0	1	S	0	2	Т	0	1	
9	0	К	0	2	0	500	Т	S	0	1	S	0	2	Т	0	1	
9	1	К	0	2	1	500	Т	S	0	1	S	0	2	Т	0	1	, ,,,-
9	2	К	0	2	2	500	Т	S	0	1					П		
9	3	К	0	2	3	500	T	S	0	1	S	0	2	Т	0	1	
9	4	К	0	2	4	500	Т	S	0	1	S	0	2	Т	0	1	
9	5	К	0	2	5	500	Т	S	0	1	S	0	2	T	0	1	
9	6	K	0	2	6	500	Т	S	0	1	S	0	2	Т	0	1	
9	7	K	0	2	7	500	Т	S	0	1							
9	8	K	0	2	8	500	Т	S	0	1	S	0	2	Т	0	1	ρ.
9	9	K	0	2	9	500	Т	S	0	1	S	0	2	Т	0	1	
1	00	K	0	3	0	500	Т	S	0	1	S	0	2	Т	0	1	
1	01	К	0	3	1	500	Т	S	0	1							
1	02	K	0	3	2	500	T	S	0	1	S	0	2	T	0	1	
1	03	К	0	3	3	500	Т	S	0	1	S	0	2	Т	0	1	
1	04	K	0	3	4	500	Т	S	0	1							
1	05	K	0	3	5	500	Т	S	0	1	S	0	2	T	0	1	
1	06	К	0	3	6	500	Т	S	0	1	S	0	2	T	0	1	
1	07	K	0	3	7	500	Т	S	0	1	S	0	2	T	0	1	
1	80	K	0	3	8	500	Т	S	0	1	S	0	2	Т	0	1	

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ine Nu	mber	Haa		ıs Was	te No.	B. Estimated Annual Qty of Waste	C. Unit of Measure (Enter code)	<u> </u>		ESSE		S /E	er Co	dal			(2) PROCESS DESCRIPTION (If cod
1	09	K	0	3	9	500	Т		lo	1	S	O	2	de)	lη	1	is not entered in 9.D.1)
1	10	K	0	4	0	500	Т	S	0	1	S	0	2	Ţ		1	
1	11	K	0	4	1	500	Т	S	0	1	S	0	2	Т	0	1	
1	12	K	0	4	2	500	Т	S	0	1	S	0	2	Т	0	1	
1	13	K	0	4	3	500	Т	S	0	1	S	0	2	Т	0	1	
1	14	К	0	4	4	500	Т	S	0	1							
1	15	К	0	4	5	500	Т	S	0	1					Г		
1	16	К	0	4	6	500	Т	S	0	1							
1	17	К	0	4	7	500	Т	S	0	1							
1	18	K	0	4	8	500	T	S	0	1	S	0	2	Т	0	1	
1	19	К	0	4	9	500	Т	S	0	1	S	0	2	Т	0	1	
1	20	K	0	5	0	500	- T	S	0	1	S	0	2	Т	0	1	
1	21	K	0	5	1	500	Т Т	S	0	1	S	0	2	T	0	1	
1	22	К	0	- 5	2	500	T	S	0	1	S	0	2	T	0	1	
1	23	K	0	6	0	500	T	S	0	1	S	0	2	T	0		
1	24	K	0	6	1	500	T T	S	0	1	S	0	2	T	0		
1	25	K	0	6	2	500	' т	S	0	1	_	Ļ	_	Ļ.	L		
			0	6	9		<u>'</u>	S	0			0		_	0	1)
1	26	K				500		-		1	S		2	T			
1	27	К	0	7	1	500	Т	S	0	1	S	0	2	Т	0	1	
1	28	K	0	7	3	500	Т	S	0	1	S	0	2	Т	0		
1	29	K	0	8	3	500	Т	S	0	1	s	0	2	Т	0	1	
1	30	K	0	8	4	500	Т	S	0	1	S	0	2	Т	0	1	
1	31	K	0	8	5	500	T	S	0	1	S	0	2	T	0	1	
1	32	K	0	8	6	500	Т	S	0	1	S	0	2	Т	0	1	
1	33	K	0	8	7	500	Т	S	0	1	S	0	2	Т	0	1	
1	34	К	0	8	8	500	Т	S	0	1	S	0	2	Т	0	1	
1	35	K	0	9	3	500	T	S	0	1	S	0	2	Т	0	1	
1	36	К	0	9	4	500	Т	S	0	1	S	0	2	Т	0	1	
1	37	К	0	9	5	500	Т	S	0	1	S	0	2	T	0	1	
1	38	K	0	9	6	500	T	S	0	1					\vdash		
1	39	К	0	9	7	500	T	S	0	1		-	-	-	-		
1	40	K	0	9	8	500	Т	S	0	1		-			\vdash		
1	41	K	0	9	9	500	T		0	1		_			\vdash		
1	42	K	1	0	0	500	' т	S	0	1	S	0	2	T	0	1	
							<u>'</u>		$oxed{oxed}$						0		
1	43	K	1	0	2	500 500	T		0	1	S	0	2	T		1	

7A. Des	scription	n of Ha	zardo	us Was	stes (I	Enter codes for Item:	s 7.A, 7.C and 7.D ([1)	_								
ine Nu	mber				A. EPA	B. Estimated	C. Unit of	D. P	ROC	ESSE	s						
		Haz		us Was	te No.	Annual Qty of Waste	Measure (Enter code)	(1) F	PROC	CESS	CODE	S (Ent	er Cod	de)			(2) PROCESS DESCRIPTION (if code
1	45	K	1	0	3	500	Т	S	0	1	S	0	2	T	0	1	is not entered in 9.D.1)
1	46	К	1	0	4	500	Т	S	0	1	S	0	2	T	0	1	
1	47	K	1	0	5	500	Т	S	0	1	S	0	2	T	0	1	
1	48	K	1	0	6	500	Т	S	0	1	s	0	2	Т	0	1	
1	49	К	1	0	7	500	Т	S	0	1					H	_	
1	50	K	1	0	8	500	Т	S	0	1	S	0	2	Т	0	1	
1	51	K	1	0	9	500	Т	S	0	1	S	0	2	Т	0	1	
1	52	K	1	1	0	500	T	S	0	1	S	0	2	Т	0	1	
1	53	К	1	1	1	500	T	S	0	1	S	0	2	T	0	1	
1	54	К	1	1	2	500	Т	S	0	1	S	0	2	Т	0	1	
1	55	K	1	1	3	500	T	S	0	1	S	0	2	Т	0	1	
1	56	K	1	1	4	500	Т	S	0	1	S	0	2	Т	0	1	
1	57	К	1	1	5	500	Т	S	0	1	S	0	2	Т	0	1	
1	58	K	1	1	6	500	Т	S	0	1	S	0	2	Т	0	1	
1	59	K	1	1	7	500	T	S	0	1	S	0	2	Т	0	1	
1	60	К	1	1	8	500	T	S	0	1	S	0	2	Т	0	1	
1	61	K	1	2	3	500	Т	S	0	1	S	0	2	T	0	1	
1	62	K	1	2	4	500	Т	S	0	1							
1	63	К	1	2	5	500	T	S	0	1	S	0	2	T	0	1	
1	64	K	1	2	6	500	Т	S	0	1	S	0	2	Т	0	1	
1	65	K	1	3	1	500	T	S	0	1	S	0	2	Т	0	1	
1	66	K	1	3	2	500	T	S	0	1	S	0	2	Т	0	1	
1	67	K	1	3	6	500	Т	S	0	-1					Н		
1	68	K	1	4	1	500	Т	S	0	1	S	0	2	Т	0	1	
1	69	K	1	4	2	500	Т	S	0	1	S	0	2	Т	0	1	
1	70	К	1	4	3	500	Т	S	0	1	S	0	2	Т	0	1	
1	71	К	1	4	4	500	Т	S	0	1	S	0	2	Ť	0	1	
1	72	K	1	4	5	500	Т	S	0	1	S	0	2	Т	0	1	
1	73	К	1	4	7	500	Т	S	0	1	S	0	2	T	0	1	
1	74	K	1	4	8	500	Т	S	0	1					Н		
1	75	K	1	4	9	500	Т	S	0	1	S	0	2	Т	0	1	
1	76	К	1	5	0	500	Т	S	0	1	S	0	2	T	0	1	
1	77	К	1	5	1	500	Т	S	0	1	S	0	2	Т	0	1	
1	78	К	1	5	6	500	Т	S	0	1	S	0	2	Т	0	1	
1	79	K	1	5	7	500	Т	S	0	1	S	0	2	Т	0	1	
1	80	K	1	5	8	500	Т	S	0	1	S	0	2	Т	0	1	

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ine Nu	mber	Haz		ıs Was	te No.	B. Estimated Annual Qty of Waste	C. Unit of Measure (Enter code)			ESSE							(2) PROCESS DESCRIPTION (If cod
1	01	V				500	Т Т	(1) F	477		,		er Cod		I 0	1	is not entered in 9.D.1)
1	81	K	1	5	9				0	1	S	0	2	Т			
1	82	K	1	6	1	500	Т	S	0	1	S	0	2	Т	0	1	
1	83	K	1	6	9	500	Т	S	0	1							
1	84	K	1	7	0	500	Т	S	0	1							
1	85	K	1	7	1	500	Т	S	0	1							
1	86	К	1	7	2	500	Т	S	0	1							
1	87	К	1	7	4	500	Т	S	0	1							
1	88	К	1	7	5	500	T	S	0	1	s	0	2	Т	0	1	-
1	89	К	1	7	6	500	Т	S	0	1	S	0	2	Т	0	1	
1	90	К	1	7	7	500	Т	S	0	1	S	0	2	Т	0	1	
1	91	К	1	7	8	500	Т	S	0	1	S	0	2	Т	0	1	
1	92	K	1	8	1	500	T	S	0	1	S	0	2	Т	0	1	
1	93	P	0	0	1	500	Т	S	0	1	S	0	2	Т	0	1	
1	94	Р	0	0	2	500	Т	S	0	1	S	0	2	T	0	1	
1	95	P	0	0	3	500	T	S	0	1	S	0	2	T	0		
1	96	P	0	0	4	500	<u> </u>	S	0	1	S	0	2	Т	0		
1	97	P	0	0	5	500	<u>'</u>	s	0	1	S	0	2	T	0		
1	98	P	0	0	6	500	<u>'</u>	s	0	1	S	0	2	T	0		
1	99	P	0	0	7	500	, T	S	0	1	3				Ŭ	1	
										1				-			
2	00	Р	0	0	8	500	Т	S	0	1	S	0	2	Т	0	1	
2	01	Р	0	0	9	500	Т	S	0	1							
2	02	Ρ	0	1	0	500	Т	S	0	1							
2	03	Р	0	1	1	500	Т	S	0	1							
2	04	Р	0	1	2	500	Т	S	0	1							
2	05	Р	0	1	3	500	Т	S	0	1							
2	06	Р	0	1	4	500	Т	S	0	1	S	0	2	Т	0	1	
2	07	Р	0	1	5	500	Т	S	0	1							
2	08	Р	0	1	6	500	Т	S	0	1	S	0	2	T	Ō	1	
2	09	Р	0	1	7	500	Т	S	0	1							
2	10	Р	0	1	8	500	Т	S	0	1	S	0	2	T	0	1	
2	11	Р	0	2	0	500	Т	S	0	1							
2	12	P	0	2	1	500	Т	S	0	1							
2	13	Р	0	2	2	500	Т	S	0	1	S	0	2	Т	0	1	
2	14	Р	0	2	3	500	T	S	0	1	S	0	2	Т	0	1	
2	15	P	0	2	4	500	Т		0	1	S	0	2	Т		1	
_	16	P	0	2	6	500	T		0	1	S	0	2	T		1	

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ine Nu	mber					B. Estimated	C. Unit of	D. P	ROC	ESSE	s						
		На				Annual Qty of Waste	Measure (Enter code)	(1) F	PRO	CESS	CODE	S (En	ter Co	de)			(2) PROCESS DESCRIPTION (If cod
2	17	Р	0	2	7	500	Т	S	0	1	S	0	2	Т	0	1	io not onto ou in o.b. i)
2	18	Р	0	2	8	500	Т	S	0	1							
2	19	Р	0	2	9	500	Ť	S	0	1							
2	20	Р	0	3	0	500	Т	S	0	1							
2	21	Р	0	3	1	500	Т	S	0	1							
2	22	Р	0	3	3	500	Т	S	0	1					T		
2	23	Р	0	3	4	500	Т	S	0	1	S	0	2	T	0	1	
2	24	Р	0	3	6	500	Т	S	0	1	S	0	2	Т	0	1	
2	25	Р	0	3	7	500	Т	S	0	1	s	0	2	Т	0	1	
2	26	Р	0	3	8	500	Т	S	0	1	s	0	2	Т	0	1	
2	27	Р	0	3	9	500	Т	S	0	1	S	0	2	T	0	1	
2	28	Р	0	4	0	500	Т	S	0	1	s	0	2	Т	0	1	
2	29	Р	0	4	1	500	Т	S	0	1	S	0	2	Т	0	1	
2	30	Р	0	4	2	500	Т	S	0	1	S	0	2	Т	0	1	
2	31	Р	0	4	3	500	Т	S	0	1	S	0	2	T	0	1	
2	32	Р	0	4	4	500	Т	S	0	1	S	0	2	Т	0	1	
2	33	Р	0	4	5	500	Т	S	0	1	S	0	2	Т	0	1	
2	34	Р	0	4	6	500	Т	S	0	1	S	0	2	Ī	0	1	
2	35	Р	0	4	7	500	Т	S	0	1	S	0	2	Т	0	1	
2	36	Р	0	4	8	500	Т	S	0	1	S	0	2	Т	0	1	
2	37	Р	0	4	9	500	Т	S	0	1	S	0	2	Т	0	1	
2	38	Р	0	5	0	500	Т	S	0	1	S	0	2	Т	0	1	
2	39	Р	0	5	1	500	Т	S	0	1	S	0	2	Т	0	1	
2	40	Р	0	5	4	500	Т	S	0	1	S	0	2	Т	0	1	
2	41	Р	0	5	6	500	Т	S	0	1					Н		
2	42	Р	0	5	7	500	Т	S	0	1	S	0	2	Т	0	1	
2	43	Р	0	5	8	500	Т	S	0	1	S	0	2	Т	0	1	
2	44	Р	0	5	9	500	Т	s	0	1	S	0	2	T	0	1	
2	45	Р	0	6	0	500	Т	S	0	1	S	0	2	Т	0	1	-
2	46	Р	0	6	2	500	Т	S	0	1	S	0	2	T	0	1	_
2	47	Р	0	6	3	500	Т	S	0	1					$ \cdot $		
2	48	Р	0	6	4	500	Т	S	0	1					Н		
2	49	Р	0	6	5	500	Т	S	0	1					\forall		
2	50	Р	0	6	6	500	Ť	S	0	1	S	0	2	Т	0	1	
2	51	Р	0	6	7	500	Т	S	0	1	S	0	2	Т	0	1	
2	52	P	0	6	8	500	т	S	0	1	S	0	2	Т	0	1	

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Line Nu	mber					B. Estimated	C. Unit of	D. P	ROC	ESSE	s					-	
		Haa				Annual Qty of Waste	Measure (Enter code)	(1) F	ROC	CESS	CODE	S (Ent	er Co	de)			(2) PROCESS DESCRIPTION (If code is not entered in 9.D.1)
2	53	Р	0	6	9	500	Т	S	0	1	S	0	2	Т	0	1	is not entered in 3.D.1)
2	54	Р	0	7	0	500	T	S	0	1	S	0	2	T	0	1	
2	55	Р	0	7	1	500	Т	S	0	1					Γ		
2	56	Р	0	7	2	500	Т	S	0	1							
2	57	Р	0	7	3	500	Т	S	0	1							
2	58	Р	0	7	4	500	Т	S	0	1							
2	59	Р	0	7	5	500	Т	S	0	1	S	0	2	Т	0	1	
2	60	Р	0	7	6	500	Т	S	0	1							
2	61	Р	0	7	7	500	Т	S	0	1	S	0	2	T	0	1	
2	62	Р	0	7	8	500	Т	S	0	1							
2	63	Р	0	8	1	500	T	S	0	1							
2	64	Р	0	8	2	500	T	S	0	1	S	0	2	Т	0	1	
2	65	Р	0	8	4	500	Т	S	0	1							
2	66	Р	0	8	5	500	T	S	0	1							
2	67	Р	0	8	7	500	Т	S	0	1							
2	68	Р	0	8	8	500	Т	S	0	1	S	0	2	T	0	1	
2	69	Р	0	8	9	500	Т	S	0	1	S	0	2	T	0	1	
2	70	Р	0	9	2	500	Т	S	0	1							
2	71	Р	0	9	3	500	Т	S	0	1							
2	72	Р	0	9	4	500	Т	S	0	1							
2	73	Р	0	9	5	500	Т	S	0	1							
2	74	Р	0	9	6	500	Т	S	0	1							
2	75	Р	0	9	7	500	Т	S	0	1							
2	76	Р	0	9	8	500	Т	S	0	1							
2	77	Р	0	9	9	500	T	S	0	1							
2	78	Р	1	0	1	500	Т	S	0	1	s	0	2	Т	0		1
2	79	Р	1	0	2	500	Т		0	1	S	0	2	Т	0	1	
2	80	P	1	0	3	500	Т		0	1							
2	81	Р	1	0	4	500	T		0	1							
2	82	Р	1	0	5	500	Т		0	1							
2	83	Р	1	0	6	500	Т	S	0	1							
2	84	Р	1	0	8	500	Т	<u> </u>	0	1							
2	85	Р	1	0	9	500	Т		0	1							
2	86	Р	1	1	0	500	Т	S	0	1							
2	87	Р	1	1	1	500	Т		0	1							
2	88	Р	1	1	2	500	Т	S	0	1							

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7A. De	scriptio	n of Ha	zardo	us Wa	stes (Enter codes for Item	s 7.A, 7.C and 7.D	(1)									
ine Nu	ımber	Ha	zardo	us Was	ste No	B. Estimated Annual Qty of	C. Unit of Measure	D. P	ROC	ESSE	s			-			
				(Enter		Waste	(Enter code)		PROC	CESS	CODE	S (Ent	ter Co	de)			(2) PROCESS DESCRIPTION (If code is not entered in 9.D.1)
2	89	P	1	1	3	500	Т	S	0	1							
2	90	Р	1	1	4	500	Т	S	0	1							
2	91	Р	1	1	5	500	Т	S	0	1	S	0	2	Т	0	1	
2	92	Р	1	1	6	500	Т	S	0	1	S	0	2	T	0	1	
2	93	Р	1	1	8	500	Т	S	0	1	S	0	2	Т	0	1	
2	94	Р	1	1	9	500	Т	S	0	1	s	0	2	T	0	1	
2	95	Р	1	2	0	500	Т	s	0	1	s	0	2	Т	0	1	
2	96	Р	1	2	1	500	Т	S	0	1					Н		
2	97	Р	1	2	2	500	Т	S	0	1					Н		
2	98	Р	1	2	3	500	Т	S	0	1		 	\vdash	\vdash	Н		
2	99	Р	1	2	7	500	T	S	0	1		\vdash			-		
3	00	P	1	2	8	500	Т	S	0	1	S	0	2	Т	0	1	
3	01	Р	1	8	5	500	T	S	0	1	S	0	2	Т	0	1	
3	02	Р	1	8	8	500	Т	S	0	1	S	0	2	T	0	1	
3	03	P	1	8	9	500	Т		0	1	S	0	2	T	0		
3	04	P	1	9	0	500	T		0	1	S	0	2	T	0		
3	05	P	1	9	1	500	T		0	1	S	0	2	Ť	0	1	
3	06	P	1	9	2	500	Ť		0	1	S	0	2	T	0	1	
3	07	P	1	9	4	500	т т		0	1	S	0	2	T		1	
		Р					T		Ш								
3	08		1	9	6	500			0	1	S	0	2	Т	0	1	
3	09	Р	1	9	7	500	Т		0	1	S	0	2	Т	0	1	
3	10	P	1	9	8	500	Т		0	1	S	0	2	Т		1	
3	11	Р	1	9	9	500	Т		0	1	S	0	2	Ţ	0	1	
3	12	Р	2	0	1	500	Т	S	0	1	S	0	2	Т	0	1	
3	13	Р	2	0	2	500	Ť	S	0	1	S	0	2	Т	0	1	
3	14	Р	2	0	3	500	Т	S	0	1	S	0	2	Т	0	1	
3	15	Р	2	0	4	500	T	S	0	1	S	0	2	Т	0	1	
3	16	Р	2	0	5	500	Т	S	0	1	S	0	2	Т	0	1	
3	17	U	0	0	1	500	Т	S	0	1	S	0	2	Т	0	1	
3	18	U	0	0	2	500	Т	S	0	1	S	0	2	T	0	1	
3	19	U	0	0	3	500	Т	S	0	1	S	0	2	Т	0	1	
3	20	U	0	0	4	500	Т	S	0	1	S	0	2	Т	0	1	
3	21	U	0	0	5	500	Т	S	0	1	S	0	2	Т	0	1	
3	22	U	0	0	6	500	Т	S	0	1		\dashv			\dashv		
3	23	U	0	0	7	500	Т	S	0	1	-	$\vdash\vdash$	\vdash		\dashv	\dashv	
3	24	U	0	0	8	500	T		0	1	S	0	2	Т	n	1	
	13 of 2			J		500	'	3			٥	Ü	2		٥	1	1/23/2020

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ine Nu	mber	Ha		us Was	te No.	B. Estimated Annual Qty of	C. Unit of Measure	D. F	ROC	ESSE	s					11	Lasaca
				(Enter	code)	Waste	(Enter code)	(1) I	PROC	CESS	CODE	S (Ent	er Co	de)			(2) PROCESS DESCRIPTION (If code is not entered in 9.D.1)
3	25	U	0	0	9	500	T	S	0	1							
3	26	U	0	1	0	500	Т	S	0	1							
3	27	U	0	1	1	500	Т	S	0	1							
3	28	U	0	1	2	500	Т	S	0	1							
3	29	U	0	1	4	500	Т	S	0	1	S	0	2	Т	0	1	
3	30	U	0	1	5	500	Т	S	0	1							
3	31	U	0	1	6	500	Т	S	0	1	S	0	2	Т	0	1	
3	32	U	0	1	7	500	- Т	S	0	- 1							
3	33	U	0	1	8	500	Т	S	0	1	S	0	2	Т	0	1	
3	34	U	0	1	9	500	Т	S	0	1							
3	35	U	0	2	0	500	Т	S	0	1							
3	36	U	0	2	1	500	Т	S	0	1	S	0	2	Т	0	1	
3	37	U	0	2	2	500	Т	S	0	1	S	0	2	Т	0	1	
3	38	U	0	2	3	500	Т	S	0	1							
3	39	U	0	2	4	500	Т	S	0	1	S	0	2	Т	0	1	
3	40	U	0	2	5	500	Т	S	0	1	S	0	2	Т	0	1	
3	41	U	0	2	6	500	Т	s	0	1							
3	42	U	0	2	7	500	Т	S	0	1			Г				
3	43	U	0	2	8	500	Т	S	0	1							
3	44	U	0	2	9	500	Т	S	0	1							
3	45	U	0	3	0	500	T	S	0	1					Г		
3	46	U	0	3	1	500	Т	S	0	1	s	0	2	Т	0	1	
3	47	U	0	3	2	500	Т	S	0	1					Г		
3	48	U	0	3	3	500	Т	S	0	1							1
3	49	U	0	3	4	500	Т	S	0	1	S	0	2	Т	0	1	
3	50	U	0	3	5	500	Т	S	0	1	S	0	2	Т	0	1	
3	51	U	0	3	6	500	Т	S	0	1	s	0	2	Т	0	1	
3	52	U	0	3	7	500	Т	S	0	1	S	0	2	Т	0	1	
3	53	U	0	3	8	500	Т	S	0	1	S	0	2	Т	0	1	
3	54	U	0	3	9	500	Т	S	0	1	S	0	2	Т	0	1	
3	55	U	0	4	1	500	T	S	0	1	S	0	2	Т	0	1	
3	56	U	0	4	2	500	Т	S	0	1	S	0	2	Т	0	1	
3	57	U	0	4	3	500	Т	S	0	1	S	0	2	Т	0	1	
3	58	U	0	4	4	500	Т	S	0	1	S	0	2	Т	0	1	
3	59	U	0	4	5	500	Т	S	0	1	S	0	2	T	0	1	
3	60	U	0	4	6	500	Т	s	0	1	S	0	2	T	0	1	

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ine Nu	ımber	Ha	zardo	us Was	te No.	B. Estimated Annual Qty of	C. Unit of Measure	D. P	ROC	ESSE	S						
				(Enter	code)	Waste	(Enter code)	(1) F	PROC	CESS	CODE	S (En	er Co	de)			(2) PROCESS DESCRIPTION (if cod is not entered in 9.D.1)
3	61	U	0	4	7	500	Т	S	0	1	S	0	2	T	0	1	
3	62	U	0	4	8	500	Т	S	0	1	S	0	2	Т	0	1	
3	63	U	0	4	9	500	Т	S	0	1	S	0	2	Т	0	1	
3	64	U	0	5	0	500	Т	S	0	1	S	0	2	T	0	1	
3	65	U	0	5	1	500	Т	S	0	1	S	0	2	Т	0	1	
3	66	U	0	5	2	500	Т	S	0	1	S	0	2	Т	0	1	
3	67	U	0	5	3	500	T	S	0	1	S	0	2	Т	0	1	
3	68	Ü	0	5	5	500	Т	S	0	1	S	0	2	Т	0	1	
3	69	U	0	5	6	500	Т	S	0	1	S	0	2	Т	0	1	
3	70	U	0	5	7	500	Т	S	0	1	s	0	2	Т	0	1	
3	71	U	0	5	8	500	Т	S	0	1	S	0	2	Т	0	1	
3	72	U	0	5	9	500	Т	S	0	1	S	0	2	Т	0	1	
3	73	U	0	6	0	500	Т	S	0	1	S	0	2	Т	0	1	
3	74	U	0	6	1	500	Т	S	0	1	s	0	2	Т	0	1	
3	75	U	0	6	2	500	Т	S	0	1	S	0	2	Т	0	1	
3	76	U	0	6	3	500	Т	S	0	1	s	0	2	Т	0	1	
3	77	U	0	6	4	500	Т	S	0	1	s	0	2	T	0	1	
3	78	U	0	6	6	500	Т	S	0	1	S	0	2	Т	0	1	
3	79	U	0	6	7	500	Т	S	0	1	S	0	2	Т	0	1	
3	80	U	0	6	8	500	Т	S	0	1	S	0	2	Т	0	1	P
3	81	U	0	6	9	500	T	S	0	1	S	0	2	Т	0	1	
3	82	U	0	7	0	500	Т	S	0	1	S	0	2	Т	0	1	
3	83	U	0	7	1	500	Т	S	0	1	S	0	2	Т	0	1	
3	84	U	0	7	2	500	Т	S	0	1	S	0	2	Т	0	1	
3	85	U	0	7	3	500	Т	S	0	1	S	0	2	Т	0	1	
3	86	U	0	7	4	500	+ = T	S	0	1	S	0	2	Т	0	1	
3	87	U	0	7	5	500	Ť	S	0	1	S	0	2	Т	0	1)
3	88	U	0	7	6	500	Т	S	0	1	S	0	2	T	0	1	
3	89	U	0	7	7	500	Т	S	0	1	S	0	2	Т	0	1	
3	90	U	0	7	8	500	Т	S	0	1	S	0	2	Т	0	1	
3	91	U	0	7	9	500	Т	S	0	1	S	0	2	T	0	1	
3	92	U	0	8	Ō	500	Т	S	0	1	S	0	2	Т	0	1	
3	93	U	0	8	1	500	T	S	0	1	S	0	2	Т	0	1	
3	94	U	0	8	2	500	Т	S	0	1	S	0	2	Т	0	1	
3	95	U	0	8	3	500	Т	S	0	1	S	0	2	T	0	1	
3	96	U	0	8	4	500	Ť	S	0	1	S	0	2	Т	0	1	

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EPA ID Number | A | L | D | 0 | 9 | 4 | 4 | 7 | 6 | 7 | 9 | 3 | OMB#: 2050-0024; Expires 05/31/2020

ine Nu	mber					B. Estimated	C. Unit of	D. P	ROC	ESSE	S						
		Ha				Annual Qty of Waste	Measure (Enter code)	(1) F	PROG	CESS	CODE	S (Ent	er Coo	ie)			(2) PROCESS DESCRIPTION (If code is not entered in 9.D.1)
3	97	U	0	8	5	500	Т	S	0	1	S	0	2	Т	0	1	is not entered in 3.5.1)
3	98	U	0	8	6	500	Т	S	0	1	s	0	2	Т	0	1	
3	99	U	0	8	7	500	Т	S	0	1	S	0	2	T	0	1	
4	00	U	0	8	8	500	Т	S	0	1	S	0	2	T	0	1	
4	01	U	0	8	9	500	Т	S	0	1	S	0	2	Т	0	1	
4	02	U	0	9	0	500	Т	S	0	1	S	0	2	Т	0	1	
4	03	U	0	9	1	500	Т	S	0	1	S	0	2	Т	0	1	
4	04	U	0	9	2	500	Т	S	0	1	S	0	2	T	0	1	
4	05	U	0	9	3	500	Т	S	0	1	S	0	2	Т	0	1	
4	06	U	0	9	4	500	Т	S	0	1	S	0	2	Т	0	1	
4	07	U	0	9	5	500	Т	S	0	1							
4	08	U	0	9	6	500	Т —	S	0	1							
4	09	U	0	9	7	500	Т	S	0	1	S	0	2	Т	0	1	
4	10	U	0	9	8	500	Т	S	0	1							
4	11	U	0	9	9	500	T	S	0	1							
4	12	U	1	0	1	500	Т	S	0	1							
4	13	U	1	0	2	500	Т	S	0	1							
4	14	U	1	0	3	500	Т	S	0	1							
4	15	U	1	0	5	500	Т	S	0	1	S	0	2	Т	0	1	
4	16	U	1	0	6	500	T	S	0	1	S	0	2	Т	0	1	
4	17	U	1	0	7	500	Т	S	0	1	S	0	2	Т	0	1	
4	18	U	1	0	8	500	Т	S	0	1	S	0	2	Т	0	1	
4	19	U	1	0	9	500	T	S	0	1	S	0	2	Т	0	1	
4	20	U	1	1	0	500	Т	S	0	1	S	0	2	Т	0	1	
4	21	U	1	1	1	500	Т	S	0	1	S	0	2	Т	0	1	
4	22	U	1	1	2	500	T ,	S	0	1	S	0	2	Т	0	1	
4	23	U	1	1	3	500	Т	S	0	1	S	0	2	Т	0	1	
4	24	U	1	1	4	500	Т	S	0	1	S	0	2	Т	0	1	
4	25	U	1	1	5	500	Т	S	0	1	S	0	2	Т	0	1	***************************************
4	26	U	1	1	6	500	Т	S	0	1	S	0	2	T	0	1	
4	27	U	1	1	7	500	T	S	0	1	S	0	2	Т	0	1	
4	28	U	1	1	8	500	Т	S	0	1	S	0	2	Т	0	1	
4	29	U	1	1	9	500	Т	S	0	1	S	0	2	Т	0	1	"
4	30	U	1	2	0	500	Т	S	0	1	S	0	2	T	0	1	
4	31	U	1	2	1	500	Т	S	0	1	S	0	2	Т	0	1	
4	32	υ	1	2	2	500	Т	S	0	1	S	0	2	Т	0	1	

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EPA ID Number | A | L | D | 0 | 9 | 4 | 4 | 7 | 6 | 7 | 9 | 3 | OMB#: 2050-0024; Expires 05/31/2020

ine Nu	ımber	Ha	zardo	us Was	te No.	B. Estimated Annual Qty of	C. Unit of Measure	D. P	ROC	ESSE	s						
				(Enter	code)	Waste	(Enter code)	(1) F	RO	CESS	CODE	S (Ent	ter Co	de)			(2) PROCESS DESCRIPTION (If cod is not entered in 9.D.1)
4	33	U	1	2	3	500	T	S	0	1	S	0	2	T	0	1	
4	34	U	1	2	4	500	Т	S	0	1	S	0	2	Т	0	1	
4	35	U	1	2	5	500	Т	S	0	1	S	0	2	Т	0	1	
4	36	U	1	2	6	500	Т	S	0	1	S	0	2	Т	0	1	
4	37	U	1	2	7	500	Т	S	0	1	S	0	2	Т	0	1	
4	38	U	1	2	8	500	Т	S	0	1	S	0	2	Ť	0	1	
4	39	U	1	2	9	500	т	S	0	1	S	0	2	T	0	1	
4	40	U	1	3	0	500	Т	S	0	1	S	0	2	Т	0	1	
4	41	U	1	3	1	500	Т	S	0	1	S	0	2	Т	0	1	
4	42	U	1	3	2	500	1	S	0	1	S	0	2	Т	0	1	
4	43	U	1	3	3	500	Т	s	0	1							
4	44	U	1	3	4	500	T	S	0	1					Г		
4	45	U	1	3	5	500	т	S	0	1	S	0	2	Т	0	1	
4	46	U	1	3	6	500	Т	S	0	1	S	0	2	Т	0	1	
4	47	U	1	3	7	500	Т	S	0	1	S	0	2	Т	0	1	
4	48	U	1	3	8	500	Т	S	0	1	s	0	2	Т	0	1	
4	49	U	1	4	0	500	Т	s	0	1	s	0	2	Т	0	1	
4	50	U	1	4	1	500	Т	s	0	1	S	0	2	T	0	1	
4	51	U	1	4	2	500	Т	S	0	1	S	0	2	T	0	1	
4	52	U	1	4	3	500	Т	s	0	1	S	0	2	Т	0	1	
4	53	U	1	4	4	500	Т	s	0	1	S	0	2	T	0	1	
4	54	U	1	4	5	500	Т	s	0	1	S	0	2	Т	0	1	
4	55	U	1	4	6	500	Т	S	0	1	S	0	2	T	0	1	
4	56	U	1	4	7	500	Т	s	0	1	S	0	2	Т	0	1	*
4	57	U	1	4	8	500	Т	S	0	1	S	0	2	Т	0	1	
4	58	U	1	4	9	500	T	S	0	1	S	0	2	Т	0	1	
4	59	U	1	5	0	500	T	S	0	1	S	0	2	T	0	1	
4	60	U	1	5	1	500	T	S	0	1	S	0	2	Т	0	1	
4	61	U	1	5	2	500	Т	S	0	1	S	0	2	Т	0	1	
4	62	U	1	5	3	500	Т	S	0	1	S	0	2	T	0	1	
4	63	U	1	5	4	500	Т	S	0	1	S	0	2	Т	0	1	
4	64	U	1	5	5	500	Т	S	0	1	S	0	2	Т	0	1	
4	65	U	1	5	6	500	Т	S	0	1	S	0	2	Т	0	1	
4	66	U	1	5	7	500	T	S	0	1	S	0	2	Т	0	1	
4	67	U	1	5	8	500	Т	S	0	1	S	0	2	T	0	1	
4	68	U	1	5	9	500	Т	S	0	1	S	0	2	Т	0	1	

ine Nu	mber	Haz		us Was	te No.	B. Estimated Annual Qty of	C. Unit of Measure	D. P	ROC	ESSE	s		-				
				(Enter	code)	Waste	(Enter code)	(1) F	ROC	ESS	CODE	S (Ent	er Cod	de)			(2) PROCESS DESCRIPTION (If cod is not entered in 9.D.1)
4	69	U	1	6	0	500	Т	S	0	1	S	0	2	Т	0	1	
4	70	U	1	6	1	500	Т	S	0	1	S	0	2	T	0	1	
4	71	U	1	6	2	500	T	S	0	1	S	0	2	Т	0	1	
4	72	U	1	6	3	500	Т	S	0	1	S	0	2	Т	0	1	,
4	73	U	1	6	4	500	Т	S	0	1	S	0	2	T	0	1	
4	74	U	1	6	5	500	Т	S	0	1	S	0	2	T	0	1	
4	75	U	1	6	6	500	Т	S	0	1	S	0	2	Т	0	1	
4	76	U	1	6	7	500	Т	s	0	1	S	0	2	T	0	1	
4	77	U	1	6	8	500	Т	S	0	1	s	0	2	Т	0	1	
4	78	U	1	6	9	500	Т	S	0	1	S	0	2	Т	0	1	
4	79	U	1	7	0	500	Т	S	0	1	S	0	2	Т	0	1	
4	80	U	1	7	1	500	Т	S	0	1	S	0	2	Т	0	1	
4	81	U	1	7	2	500	Т	S	0	1	S	0	2	Т	0	1	
4	82	U	1	7	3	500	Т	S	0	1	s	0	2	Т	0	1	
4	83	U	1	7	4	500	Т	S	0	1	s	0	2	Т	0	1	
4	84	U	1	7	6	500	Т	s	0	1	s	0	2	Т	0	1	
4	85	U	1	7	7	500	Т	S	0	1	S	0	2	Т	0	1	1 2 11 11 11 11
4	86	U	1	7	8	500	Т	S	0	1	s	0	2	Ι	0	1	
4	87	U	1	7	9	500	Т	S	0	1							
4	88	U	1	8	0	500	Т	s	0	1	s	0	2	Т	0	1	C + 0 1 Y
4	89	U	1	8	1	500	Ť	S	0	1	S	0	2	Т	0	1	
4	90	U	1	8	2	500	Т	S	0	1	s	0	2	Т	0	1	
4	91	U	1	8	3	500	Т	s	0	1	S	0	2	Т	0	1	
4	92	U	1	8	4	500	Т	s	0	1	s	0	2	Т	0	1	=
4	93	U	1	8	5	500	Т	S	0	1	S	0	2	Т	0	1	
4	94	U	1	8	6	500	Т	S	0	1	S	0	2	T	0	1	
4	95	U	1	8	7	500	Т	S	0	1	S	0	2	Т	0	1	
4	96	U	1	8	8	500	Т	S	0	1	S	0	2	Т	0	1	
4	97	U	1	8	9	500	Т	S	0	1							
4	98	U	1	9	0	500	Т	S	0	1	S	0	2	Т	0	1	
4	99	U	1	9	1	500	Т	S	0	1	S	0	2	Т	0	1	
5	00	U	1	9	2	500	Т	S	0	1	S	0	2	Т	0	1	
5	01	U	1	9	3	500	Т	S	0	1	S	0	2	T	0	1	
5	02	U	1	9	4	500	Т	S	0	1	S	0	2	Т	0	1	
5	03	U	1	9	6	500	Т	S	0	1	S	0	2	T	0	1	
5	04	U	1	9	7	500	Т	s	0	1	s	0	2	Т	0	1	

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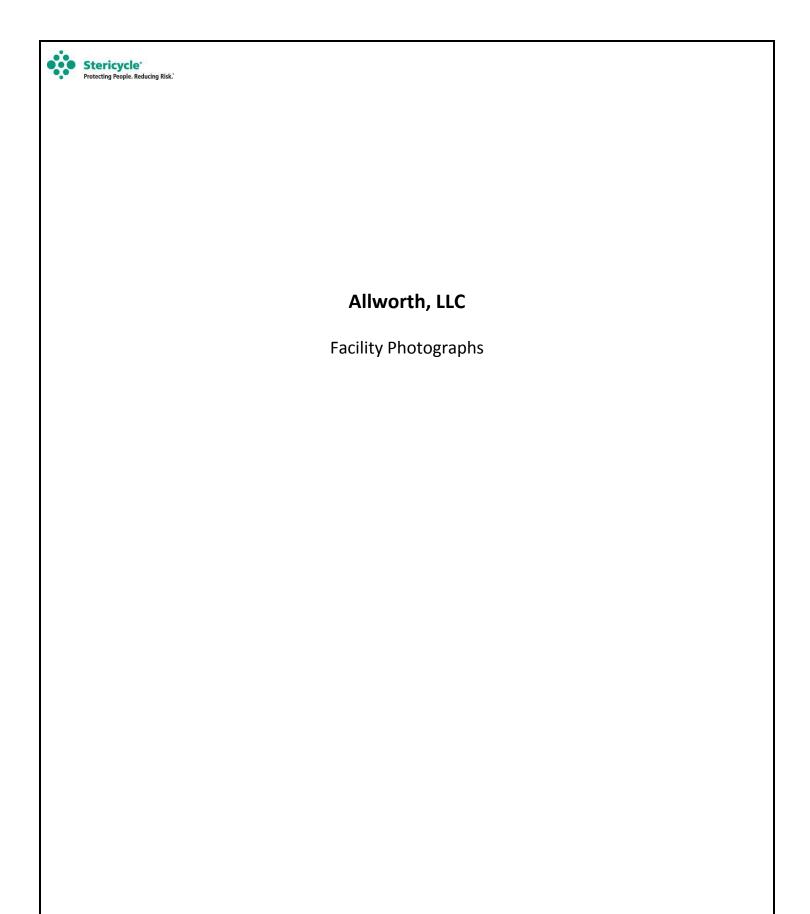
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11. Comments:

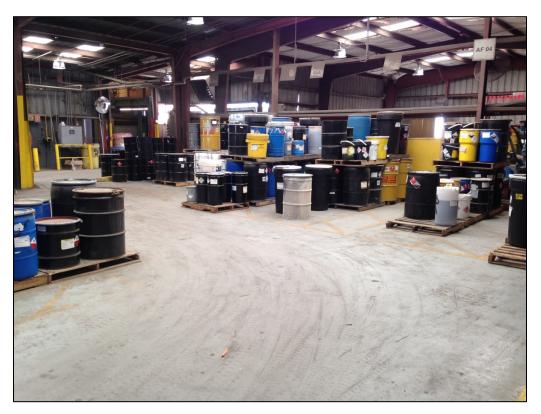
Allworth, LLC receives a broad variety of waste streams from off-site generators which may be described by any combinations shown in Item #7. The estimated annual quantity of waste is based on historical records and on conservative estimates of future waste receipts at the facility. The estimate is intended to reflect all regulated hazardous wastes received, regardless of which waste numbers or treatment processes apply. Inbound wastes are sorted by the appropriate treatment process. On-site waste management options include solvent recycling fuel blending and consolidation. Off-site facility waste management options include solvent recycling, fuel blending, incineration, stabilization, solidification, energy recovery, waste to energy, wastewater treatment/discharge and land disposal.

Specific treatment processes utilized in these waste management options are described in detail in Sections 2, 3 and 4 of the Part B License renewal.

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Allworth, LLC 500 Medco Road Birmingham AL 35217



Container Storage Area A-Southwest View



Waste Processing Area-Northwest View



Facility Photographs



Container Storage Area B-South View



RCRA Empty Drum Storage Area-East View





Container Loading/Unloading Dock-East View



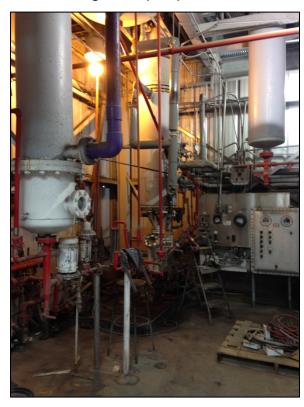
Loading Area 2 (LA-2) - North View



Facility Photographs



Loading Area 1 (LA-1)-North View



Evaporator-Northwest View





Tank System 2–Southeast View



Tank System 1–Southwest View





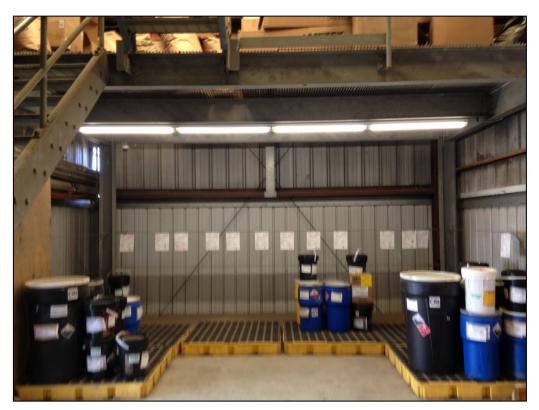
Container Storage Area D-Northwest View



Container Storage Area E-Northwest View



Facility Photographs



Container Storage Area F-East View



Trailer Staging Area – West View





Trailer Staging Area – East View



SECTION 2.0 GENERAL FACILITY INFORMATION

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2.0 GENERAL FACILITY INFORMATION

2.1. <u>Introduction</u>

Allworth, LLC is an existing permitted hazardous waste facility located in Tarrant Alabama, Jefferson County (District 4). The Alabama Department of Environmental Management (ADEM) issued the initial Hazardous Waste Facility Operating Permit (Part B Permit) effective November 29, 1983 through November 30, 1993. The subsequent Hazardous Waste Facility Operating Permit was issued for the period of August 21, 1998 through August 20, 2008. As corrective action activities scheduled for 2006 would require material alterations to facility operations, Allworth requested that the existing Part B permit be revoked and reissued rather than modified. The December 2005 Part B renewal application provides the information necessary to reissue the current Hazardous Waste Facility Operating Permit (Part B Permit) for a third term for the period September 15, 2006 to September 14, 2016. This permit was modified May 21, 2008, September 30, 2009, January 04, 2011 and December 21, 2011. A permit renewal application was submitted to ADEM on April 8, 2016 and with subsequent revisions finalized June 15, 2017. The permit was renewed on September 1, 2017 and expires on August 31, 2027.

2.1.1. Facility History

The facility was designed and constructed in 1977-1978. Facility planning began after the passage of the Resource Conservation and Recovery Act for the purpose of recycling industrial solvents from waste generated by various industries in Alabama and the southeast United States. Fuel blending became a part of the operation as an effective means of managing the residue from the solvent recovery process and to treat waste streams that are not otherwise recoverable.

The facility was first privately owned by two individuals, and then sold in 1992 to Southdown, Inc. located in Houston, Texas. Southdown, Inc. owned the facility until 1995 when it was sold to Nortru, Inc. (now Nortru, LLC) located in Detroit, Michigan. Nortru, LLC and Allworth, LLC are owned by PSC Environmental Services, LLC whose corporate offices are in Houston Texas. In April 2014, Lake Forest IL based Stericycle, Inc., acquired PSC Environmental Services, LLC which is currently a wholly owned subsidiary of Stericycle Environmental Solutions, Inc. An organizational chart of Stericycle, Inc. is included in Appendix 2-7 to provide clarity on the relationships of the various entities. A certification statement by a principal of Stericycle, Inc. is included in Appendix 2.8.

2.1.2. Objectives of Application

This application provides design, operation, procedures to mitigate hazards, and closure information necessary to modify the current Part B Permit. The existing waste management units include the following:

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- Two tank systems identified as TS-1 and TS-2: TS-1 is located in the Northwest portion of the facility and contains seven waste storage tanks (RCRA and non-RCRA storage).TS-2 is located adjacent to the LUWA and container storage Area A and contains six RCRA storage tanks. The total tank waste capacity is 94,100 gallons.
- Five container storage Areas A, B, D, E, and F: Areas A, B and F are within the main warehouse and have capacity for 344 (18,920 gals), 360 (19,800 gals), and 24 (1,320 gals) 55-gallon equivalent containers respectively. Areas D and E are located within the covered area also containing Loading Areas LA-1 and LA-2. Area D has capacity for 336 55-gallon equivalent containers (18,480 gals). Area E has a capacity to store 30,000 gallons in bulk and non-bulk containers or 540 x 55 gallon equivalent containers or five 30-yard/6,000 gallon roll offs (30,000 gals).
- Two covered loading areas LA-1 and LA-2: These areas are located in the central portion of the facility and are designed and used for bulk and non-bulk containers, as well as tank trucks or trailers. The capacity of each unit is 6,000 gallons in bulk and non-bulk containers or 109 x 55 gallon equivalent containers.

This modification is to include the following proposed and unconstructed unit:

Trailer Staging Area: This area is located to the north of the main warehouse and TS-2. The Trailer Staging Area is designed for the storage of up to eight (8) transport trailers. The transport trailers can be either bulk tank (i.e. 8,000 gallon capacity) or freight trailers containing non-bulk containers. The trailer staging area has the capacity to store 64,000 gallons in bulk or non-bulk containers such as 1,163 x 55 gallon equivalent containers (63,965 gallons) stored in freight trailers, eight (8) x 8,000 gallons (64,000 gallons) per bulk tank or some combination less than or equal to 64,000 gallons.

2.2. Types Of Industry Served

Various industries use solvents in their manufacturing and/or maintenance operations and often produce hazardous and non-hazardous waste liquids and solids suitable for recovery of solvents or use as a fuel substitute. These same and other industries also produce hazardous and non-hazardous organic and inorganic wastes. The various industries and generators serviced by Allworth include, but are not limited to:

- Paint and coating manufacturers and operations
- Ink, adhesive, automotive and automotive parts manufacturers
- Petroleum refiners or re-refiners
- Metal machining, printing, and solvent cleaning operations
- High-tech industries (e.g. microchip producers, electronic equipment and accessory manufacturers)
- Household hazardous wastes

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- Retail operations (e.g. consumer and commercial goods and materials)
- Universities, colleges, and research institutions
- Healthcare operations (e.g. pharmaceuticals)
- Other hazardous and non-hazardous waste facilities

2.3. Waste Management Processes

Six processes for managing both hazardous and non-hazardous industrial waste are utilized at the Allworth facility. These are solvent recycling, liquid fuel blending, liquids and solids consolidation, lab pack management, pharmaceutical waste management and waste transshipment. Any materials not suitable for these five processes are shipped to an approved off-site facility for proper management.

2.3.1. Solvent Recycling

The solvents recycled by Allworth include various petroleum-derived liquids used to dissolve other liquids or solids in industrial processes. Solvents are recovered using a steam-heated falling film evaporator (LUWA) having a design capacity of approximately 435 gallons per hour and a recovery rate of approximately 70% with the column bottoms managed as hazardous waste liquid fuels. Examples of specific solvents that are recycled include, but are not limited to:

- Ketones Such as methyl ethyl ketone (MEK), acetone, and methyl isobutyl ketone (MIBK)
- Alcohols Such as isopropanol, methanol and ethanol
- Aromatics Such as toluene and xylene
- Esters Such as butyl acetate and ethyl acetate
- Aliphatics Such as hexane, heptane, and mineral spirits
- Chlorinates Such as 1,1,1 trichloroethane, trichloroethylene, perchloroethylene, and methylene chloride

2.3.2. <u>Liquid Fuel Blending</u>

Wastes meeting certain minimum specifications for heat content and toxic constituents specified by the USEPA and the end user may be utilized in the liquid fuel blending program. These materials include, but are not limited to:

- Spent solvents that are not otherwise economically recoverable
- Bottoms (residues) from solvent recovery
- Used oils
- Off-specification organic chemicals and inks

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- Paint related material
- Ignitable, corrosive and toxic wastes

2.3.3. <u>Liquids and Solids Consolidation</u>

Materials not capable of being used in the solvent recycling process or the liquid fuel blending process may be consolidated into containers meeting USDOT packaging requirements, including roll-offs, and are stored until shipped off-site to an authorized TSD facility. These materials may be received in bulk or non-bulk container quantities or as loose packs and lab packs and include, but are not limited to:

- Spent carbon
- Contaminated personal protective equipment
- Dried Paint and resins
- Tank bottoms
- Wood
- Oily residues
- Cleanup materials (sorbents, rags, etc.)
- Ignitable, corrosive and toxic wastes
- Universal Wastes
- Consumer personal care products
- Non-hazardous wastes

2.3.4. Lab Pack Management

Ignitable, corrosive, reactive, toxic, and acute hazardous wastes and non-hazardous wastes assembled as lab packs are received for de-packing and repacking, and under limited circumstances for pour off or consolidation. The wastes typically are of off-specification commercial chemical products.

2.3.5. Pharmaceutical Waste Management

Pharmaceutical wastes include over-the-counter, prescription, and Federal or State controlled drugs, medicines and substances. Less than ten percent of pharmaceutical wastes are regulated as hazardous waste whereby they exhibit the characteristic of ignitability, corrosivity, reactivity, or toxicity, or are off-specification commercial products (e.g. P028, P081, U006, and U115).

Pharmaceutical wastes are shipped and received as loose packs or lab packs for de-packing and repacking without pour off or bulking/consolidation. Certain pharmaceutical wastes must be

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adulterated by mixing or dissolving in a suitable solvent or corrosive solution to prevent reintroduction into the supply chain.

2.3.6. WasteTrans-shipment

Wastes that are incompatible for consolidation or inconsistent with outbound waste profiles are received into storage then shipped off-site for further management.

2.4. <u>Traffic Information</u>

2.4.1. Traffic Pattern

The Allworth facility is located at 500 Medco Road, Birmingham (Tarrant City), AL 35217. Commercial vehicles access the Allworth facility from Interstate 20-59, exit onto State Highway 79 North for 3 miles, turn left to Pine Hill Road, turn left onto Springdale road, turn right on Clow Road followed by an immediate left onto Medco Road. Parking of automobiles, both visitor and employees, is confined to the lot in front of the office between Medco Road and the Louisville and Nashville Railroad Tracks.

2.4.2. Traffic Control

Plant traffic is normally confined to trucks making pickups or deliveries. Traffic control into the facility is provided by gates that remain closed at all times. All transporters must report to the office upon arrival. Transporters may then enter the facility gates after authorization is granted. All commercial truck traffic for inbound waste receipt or outbound shipments are scheduled in advance to minimize truck traffic congestion on the main road into the facility (Medco Road) and within the facility boundary.

2.4.3. Access Road Surfaces

The maximum weight transported into or out of the facility is 80,000 pounds, the maximum weight allowed on the highway. All roads to and within the facility are capable of carrying this load limit.

2.4.4. Estimated Volume

The estimated volume of waste transported into the facility is two to ten trucks per day. This will include a combination of tank trucks and truck trailers

2.5. Topographic Map

Several figures are used to provide the information required by ADEM Admin. Code Rule 335-14-8-.02(5)(b)19. Since the facility is relatively small and the total surface relief of the site is less than four feet, the Facility Topographic Map at Appendix 2-1 provides details on the site.

The Site Location Map in Appendix 2-2 provides information on the location of the facility.

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Appendix 2.3 is a USGS topographic map of the area. It provides information on features of the area such as surface waters and access roads. There are no known injection or withdrawal wells on site or within 1,000 feet of the site.

The current land usage and the current zoning are provided on the Land Use Map located in Appendix 2-4. The facility is located within an Industrial Park.

The parcel ID is 1300323000027001 with legal description:

TRACT 4 JABCO INDUSTRIAL PROPERTIES & THAT PT OF 3 DESC AS FOLLS: BEG NE COR OF TRACT 4 TH NE 42.9 FT TH SW 428.6 FT TH SE 28.8 FT TH NE 4 FT TH SE 249 FT TH NE 4.4 FT TH NW 245 FT TH NE 390 FT TO POB 106/13.

The Wind Rose provided in Appendix 2-6 is a diagram of meteorological data collected in Tarrant, Alabama.

2.6. Floodplain Standard

The facility is not located within the 100-year floodplain. A Flood Insurance Rate Map (FIRM) and Firmette are found in Appendix 2.5. The map indicates that the facility is located approximately 1/4 mile from the 100-year floodplain.

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Tank System TS-2

Trailer Staging Area

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4.0 PROCESS INFORMATION

4.1. <u>Introduction</u>

This section describes the processes and equipment used at the Allworth, LLC facility. The facility is permitted to store hazardous waste in tanks and containers. Processes for managing both hazardous and non-hazardous industrial waste include solvent recycling, liquid fuel blending, liquids and solids bulking, lab pack management, and pharmaceutical waste management.

Permitted units include the following. See Drawing 4-1, Facility Site Plan.

- Two tank systems identified as TS-1 and TS-2: TS-1 is located in the Northwest portion of the facility and contains seven tanks. TS-2 is located adjacent to the LUWA and container storage Area A, and contains six tanks. Total tank capacity is 94,100 gallons of which 10,100 gallons is for non-RCRA storage and 84,000 gallons is for RCRA storage
- Five container storage Areas A, B, D, E, and F, and the Solids Bulking Area: Areas A, B and F are within the main warehouse and have capacity for 344 (18,920 gals), 360 (19,800 gals), and 24 (1,320 gals) 55-gallon containers respectively. Areas D and E are located within the covered area also containing Loading Areas LA-1 and LA-2. Area D has capacity for 336 55-gallon containers (18,480 gals). Area E is for roll off and containers storage and has a capacity to store five 30-yard/6,000 gallon roll offs (30,000 gals) or 540 containers.
- One Trailer Staging Area: This area is located to the north of the main warehouse and TS-2. The Trailer Staging Area is designed for the storage of up to eight (8) transport trailers. The transport trailers can be either bulk tank (i.e. 8,000 gallon capacity) or freight trailers containing non-bulk containers. The Trailer Staging Area has the capacity to store 64,000 gallons in bulk or non-bulk containers such as 1,163 x 55 gallon equivalent containers (63,965 gallons) stored in freight trailers, eight (8) x 8,000 gallons (64,000 gallons) per bulk tank or some combination less than or equal to 64,000 gallons.
- Two covered loading areas LA-1 and LA-2: These areas are located in the central portion of the facility and are designed and used for bulk liquids, containers, and roll offs.

4.2. <u>Container Storage</u>

The container storage Areas A, B, D, E and F are designed to store hazardous waste containers on pallets up to 2 tiers high. The Trailer Staging Area is designed to store containers on freight trailers and to store up to 8 x 8,000 gallon bulk tanks. Portions of these storage areas may also be used to load/unload and transship containers, sample containers, and to perform additional production functions such as bulking/consolidation or de-packing and re-packing. Container storage Area E is also designed to store up to 5 x 30-cubic yard (6,000 gallon) roll-off containers holding wastes with no free liquids.

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Bulk containers holding hazardous wastes are moved to container storage Areas A, B, D, E or F or stored on freight trailers in the Trailer Staging Area within 72 hours of receipt. Bulk containers holding non-hazardous wastes may remain in the loading areas > 72 hours. The solids bulking operation is discussed in more detail in Section 4.2.5.3.

4.2.1. <u>Container Storage Area Descriptions</u>

All storage and handling procedures for containers are carried out as though the containers contained free liquids. This section presents information about the design of container storage areas and the containment and management of any accumulated liquids.

Container storage Areas A, B, D, E, and F are located within covered buildings. The Trailer Staging Area is located outside of the main building and is partially covered. The floors are reinforced concrete and constructed and/or sealed to prevent cracks or gaps. These containment areas are coated with a material impermeable to and compatible with the wastes to be stored. See Appendix 4-1 for the concrete coating product data sheets.

The inspection procedures as described in Section 5, Procedures to Prevent Hazards, will provide for prompt detection and removal of leaks and spills in these areas.

4.2.2. Containment System Dimensions, Capacities, Design, and Drainage

a. Container Storage Area A

Container storage Area A is approximately 44 feet by 38 feet and has the capacity to hold 18,920 gallons of free liquids in containers or the equivalent of 344 55-gallon drums stacked two high in rows. The containment system for this area is provided by a 4.5-inch curb and will contain 3,637 gallons (see Appendix 4-2 for secondary containment calculations). This is greater than 10% of the total volume of all containers and greater than the volume of the largest container anticipated to be stored. Since the area is enclosed and elevated above the surrounding ground level, rainfall infiltration and run-on will be minimal. Therefore, container storage Area A has sufficient containment capacity. The secondary containment curb also provides segregation for incompatible wastes. The foundation engineering calculations for Container Storage Area A are found in Appendix 4-3.

The floor of container storage Area A is basically level. Containers are placed and stored on pallets to protect them from contact with any accumulated liquids. Accumulated liquids are removed by pumping or with absorbent material. Refer to Drawing 4-2.

b. Container Storage Area B

Container storage Area B is approximately 46 feet by 46 feet and has the capacity to hold 19,800 gallons of free liquids in containers or the equivalent of 360 55-gallon drums

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stacked two pallets high in rows. The sloped floor and trench containment system will contain 2,019 gallons (see Appendix 4-2). This is greater than 10% of the total volume of all containers and greater than the volume of the largest container anticipated to be stored. Since the area is enclosed and elevated above the surrounding ground level, rainfall infiltration and run-on will be minimal. Therefore, container storage Area B has sufficient containment capacity. The secondary containment configuration also provides segregation for incompatible wastes. The foundation engineering calculations for Container Storage Area B are found in Appendix 4-3.

The floor is sloped to a central trench where accumulated liquids are removed. Containers are also stored on pallets as an additional precaution. Refer to Drawing 4-3 and Drawing 4-4.

c. Container Storage Area D

Container storage Area D is approximately 28 feet by 42 feet and has the capacity to hold 18,480 gallons of free liquids in containers or the equivalent of 336 55-gallon drums stacked two pallets high in rows. The containment system for this area is provided by a 6-inch curb and will contain 3,308 gallons (see Appendix 4-2). This is greater than 10% of the total volume of all containers and greater than the volume of the largest container anticipated to be stored. Since the area is enclosed and elevated above the surrounding ground level, rainfall infiltration and run-on will be minimal. Therefore, container storage Area D has sufficient containment capacity. The secondary containment curb also provides segregation for incompatible wastes. The foundation engineering calculations for Container Storage Area D are found in Appendix 4-3.

Container storage Area D is located within the covered area also containing storage Area E and Loading Areas LA-1 and LA-2. The floor of container storage Area D slopes to a collection sump where accumulated liquids are removed. Containers are also stored on pallets as an additional precaution. Refer to Drawings 4-5 and 4-9A through 4-9C.

d. Container Storage Area E

Container storage Area E is approximately 53 feet by 42 feet and has the capacity to hold five 30-cubic yard/6,000 gallon roll-off containers holding wastes with no free liquids or 540 55 gallon containers. The containment system for this area is provided by a 6-inch curb and will contain 8,182 gallons (see Appendix 4-2). This is greater than 10% of the total volume of all containers and greater than the volume of the largest container anticipated to be stored. Since the area is enclosed and elevated above the surrounding ground level, rainfall infiltration and run-on will be minimal. Therefore, container storage Area E has sufficient containment capacity. The secondary containment curb also provides segregation for incompatible wastes. The foundation engineering calculations for Container Storage Area E are found in Appendix 4-3.

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Container storage Area E is located within the covered area also containing storage Area D and Loading Areas LA-1 and LA-2. The floor of container storage Area E slopes to a collection sump where accumulated liquids are removed. The roll offs are elevated on legs to protect them from contact with any accumulated liquids. Refer to Drawings 4-6 and 4-9A through 4-9C.

e. Container Storage Area F

Container storage Area F is approximately 18 feet by 10 feet and has the capacity to hold 1,320 gallons of free liquids in containers. Functionally the maximum storage is limited to 24 55-gallon drums stacked two high in rows. The containment system for this area is provided by a 3-inch curb and will contain 254 gallons (see Appendix 4-2). This is greater than 10% of the total volume of all containers and greater than the volume of the largest container anticipated to be stored. Since the area is enclosed and elevated above the surrounding ground level, rainfall infiltration and run-on will be minimal. Therefore, container storage Area F has sufficient containment capacity. The secondary containment curb also provides segregation for incompatible wastes. The foundation engineering calculations for Container Storage Area F are found in Appendix 4-3.

The floor of container storage Area F is basically level. Containers are placed and stored on pallets to protect them from contact with any accumulated liquids. Accumulated liquids are removed by pumping or with absorbent material. Refer to Drawing 4-7.

f. Loading Areas LA-1 and LA-2

Loading Areas LA-1 and LA-2 are each approximately 91 feet by 24 feet and designed to contain the contents of a 6,000-gallon cargo tank. The containment system for this area is provided by a 6-inch curb and will contain 8,012 gallons (see Appendix 4-2). This is greater than 100% of the volume of the largest container anticipated to be stored. Since the area is enclosed and elevated above the surrounding ground level, rainfall infiltration and run-on will be minimal. Therefore, Loading Areas LA-1 and LA-2 have sufficient containment capacity. The secondary containment curb also provides segregation for incompatible wastes. The foundation engineering calculations for LA-1 and LA-2 are found in Appendix 4-3.

Loading Areas LA-1 and LA-2 are located within the covered area also containing storage Areas D and E. The floors of LA-1 and LA-2 slope to a collection sump where accumulated liquids are removed. The vehicles are elevated to protect them from contact with any accumulated liquids. Refer to Drawings 4-8, 4-11, and 4-9A, 4-9B and 4-9C.

g. Trailer Staging Area

The Trailer Staging Area is approximately 300 feet by 32 feet and includes a contained

access pathway to the main warehouse. The Trailer Staging Area is designed to contain the contents of an 8,000-gallon bulk tanker and a 25-year 24-hour rainfall event. The pathway and a portion of the Trailer Staging Area are covered to minimize contact with stormwater. The containment system for this area is provided by a 6-inch curb and will contain a minimum of 38,991 gallons (see Appendix 4-2). This is the greater than the total (38,326 gallons of 100% of the volume of the largest container anticipated to be stored (8,000 gallons) and the 25-year 24-hour rainfall event (30,326 gallons) for the uncovered portion of the Trailer Staging Area.

The floor of the Trailer Staging Area is sloped to catch basins and a collection trench installed at low spots. The catch basins and collection trench gravity drains through collection pipes equipped with valves to the existing stormwater collection system. The drain valves are spring loaded and normally closed to collect accumulated liquids for inspection prior to discharge. Refer to Drawings 4-18A through 4-18F for preliminary engineering drawings.

4.2.3. Prevention and Management of Run-On

The roof and walls of the buildings that shelter container storage Areas A, B, D, E and F, and Loading Areas LA-1 and LA-2 are intended to exclude rainfall. The finish floor elevation of Areas A, B and F are approximately four feet above ground elevation. Areas D and E and Loading Areas LA-1 and LA-2 are designed with roll-over curbs/berms. The Trailer Staging Area is designed with a minimum of a 6-inch curb to prevent run-on. These measures provide protection from any potential run-on.

4.2.4. Analysis and Removal of Accumulated Liquids

The spill containment areas and trenches are inspected for signs of standing liquids in accordance with the Inspection Schedule of Section 5, Procedures to Prevent Hazards. Other areas that may be subject to spills are also inspected for signs of spillage or leakage. These areas include the truck loading areas, bulking areas, and process areas. Refer to the Inspection Schedule in Section 5.

If accumulated liquids are observed in any secondary containment areas appropriate actions will be initiated. These will include those described in the Contingency Plan of Section 6 if required.

In all cases accumulated liquids in secondary containment areas will be removed as soon as possible to preclude overflow. Stormwater collected in the Trailer Staging Area will be inspected and discharged to the stormwater system in accordance with the facilities NPDES permit. Spills or leaks in the containment areas will be cleaned up by pumping for large spills, or by using industrial absorbent and hand tools for smaller spills. Pumps will be air operated

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diaphragm pumps. Non-sparking hand tools will be used in potentially explosive atmospheres. All collected material will be processed on-site or properly containerized, marked and labeled for shipment to an authorized off-site facility. Spill areas will be decontaminated by use of non-hazardous or aqueous cleaners, and may include use of high- pressure water spray.

4.2.5. Container Management

Various sized bulk containers from roll-offs, portable shipping tanks, and IBCs (totes, cubic yard boxes) to non-bulk containers of 119 gallons or less (pails, drums, salvage drums, boxes) are stored on site. Containers are generally handled by forklifts using pallets, drum grapplers, or other drum handling devices. These containers are generally received from off site, but may also be generated from on-site processes. Containers for off-site shipments meet USDOT specifications for shipping containers (49 CFR 172, 173 and 178). All wastes are stored in containers constructed of materials compatible with the waste stored.

Inbound trucks with containers from off-site generators are directed to the unloading areas. Palletized and single containers are unloaded in these areas by forklift or by hand truck to minimize the possibility of damaging containers. Inbound trucks with roll-offs are directed to Container Storage Area E.

All containers are visually inspected upon receipt, and thereafter in accordance with the inspection schedule in Section 5, Procedures to Prevent Hazards. If a container has signs of leakage and is not in good condition (e.g. severe rusting, apparent structural defects) or if it begins to leak, the cause of the leak will be repaired, or the container placed in an overpack container, processed, or transferred to an approved USDOT specification container. Container markings and labeling will be maintained as received, or will be duplicated on the outside of the packaging if the container is overpacked or the contents transferred to a new container.

During all loading/unloading operations a supply of absorbent material is readily available for use in the event of a spill.

4.2.5.1. Sampling

Sampling of inbound wastes from off-site generators will take place in Loading Areas LA-1 and LA-2, the Trailer Staging Area or in container storage Areas A, B, D, E, and F. Each container is visually inspected for proper markings, labeling and condition. Containers are opened only for the purpose of obtaining samples in accordance with the Waste Analysis Plan (Section 3), or to add or remove waste.

Containers will not remain in the Loading Areas for periods exceeding 72 hours. Once accepted, the containers will be transferred to container storage Areas A, B, D, E and F, placed in transport

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trailers located in the Trailer Staging Area or will be moved to a processing area. Containers may remain in the Trailer Staging Area, including the contained access pathway, outside of freight trailers for periods not to exceed 72 hours. Containers that are not accepted are returned to the generator or shipped to an alternate TSDF designated by the generator.

4.2.5.2. Liquids Processing

Liquid wastes in containers to be processed on site are pumped from the containers to an appropriate storage tank based on the processing to be performed and compatibility of the waste with the tank and its contents. These include recoverable solvents pumped to the falling film evaporator (LUWA) feed tanks and non-recoverable liquids suitable for fuel substitution pumped to fuel blending tanks. Some materials not suitable for either category may be pumped to other tanks (hazardous wastewater, non-hazardous wastewater) and held for bulk shipment to an authorized off-site facility.

Smaller containers of D002 alkali wastes may be bulked/consolidated into larger containers for off-site shipment (e.g. 5-55 gallon containers into IBCs). The direct mixing of the container contents is allowed for wastes from the same generator and/or source, and for dissimilar generators and/or sources.

Smaller containers of D002 acid wastes may be bulked/consolidated into larger containers for off-site shipment (e.g. 5-55 gallon containers into IBCs). The direct mixing of the container contents is allowed for wastes from the same generator and/or source, and for dissimilar generators and/or sources.

Loose pack containers and lab pack containers of ignitable (D001, F- and K-codes), D002 alkali, and toxic (D004-D043, F- and K-codes) wastes may be bulked/consolidated or de-packed and repacked for off-site shipment. When bulked/consolidated, the direct mixing of the inner container contents is allowed for wastes from the same generator and/or source, and for dissimilar generators and/or sources. When de-packed and re-packed, the inner containers are not opened and are simply transferred from one loose pack or lab pack container to another.

Loose pack containers and lab pack containers of D002 acid may be bulked/consolidated or depacked and re-packed for off-site shipment. When bulked/consolidated, the direct mixing of the container contents is allowed only for wastes from the same generator, source, and shipment. When de-packed and re-packed, the inner containers are not opened and are simply transferred from one loose pack or lab pack container to another.

Loose pack containers and lab pack containers of F027 acute waste may only be de-packed and re-packed where the inner containers are transferred from one lab pack or loose pack to another and the inner containers are not opened or their contents bulked/consolidated.

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Loose pack containers and lab pack containers of P- and U- code off-specification commercial chemical products may be bulked/consolidated or de-packed and re-packed for off-site shipment. When bulked/consolidated, the direct mixing of the container contents is allowed for wastes from the same generator and/or source and for dissimilar generators and/or sources providing they have the same primary hazardous properties of T (toxicity), I (ignitability), or C (corrosivity) as identified in 335-14-2-.04(4). For C (corrosivity) wastes, the preceding limitations for D002 alkali and D002 acid wastes regarding generator and source shall apply. When de-packed and repacked, the inner containers are not opened and are simply transferred from one loose pack or lab pack to another.

Gaseous wastes cannot physically be bulked/consolidated and cylinders may only be de-packed and re-packed where the cylinders are transferred from one lab pack or loose pack to another.

Characteristic reactive wastes (D003) are limited to those wastes defined at ADEM Admin. Code Rule 335-14-2-.03(4)(a)(2), (3), (4), (5), and (6). Further, reactive wastes defined at 335-14-2-.03(4)(a)(6) are limited to USDOT Class/Division 1.4, 1.5, 1.6 defined at 49 CFR 173.50. Loose pack and lab pack containers of D003 wastes may be de-packed and re-packed for off-site shipment where the inner containers are transferred from one lab pack or loose pack to another and the inner containers are not opened or their contents bulked/consolidated. Allworth's liquid processing activities are depicted through flow diagrams contained in Appendix 4.7.

4.2.5.3. Solids Processing

Materials not suitable for liquid processing may be processed as solids. Those materials which can be removed from containers using normal means and that can be managed with typical hand tools may be bulked into other containers (e.g. smaller/larger containers, cubic yard boxes, roll-offs) and stored until shipped off-site to an authorized facility. Bulking activities may take place in storage Areas A, B, D, E and F as well as loading areas LA-1 and LA-2. Materials that cannot be processed on site will be accumulated and shipped off-site to an authorized facility.

Smaller containers and loose pack and lab pack containers of ignitable (D001, F- and K-codes), corrosive (D002 alkali and acid), toxic (D004-D043, F- and K-codes), acute (F027), off-specification commercial chemical products (P- and U- codes), and reactive wastes (D003) as solids are bulked/consolidated and/or de-packed and re-packed following the same restrictions described in Section 4.2.5.2, Liquids Processing.

Allworth's solid processing activities are depicted through flow diagrams contained in Appendix 4.7.

4.2.5.4. Management of Empty Containers

Typically containers are rendered empty as defined in ADEM Admin. Code Rule 335-14-2-

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.01(7)(b). Empty containers are accumulated and shipped off-site to a container reconditioning/salvage facility. Any containers that cannot be rendered empty through normal means will be managed as hazardous waste and shipped off-site to an authorized TSDF.

4.2.5.5. Requirements for Ignitable or Reactive and Incompatible Wastes

Allworth only receives D003 reactive wastes limited to those wastes defined at ADEM Admin. Code Rule 335-14-2-.03(4)(a)(2), (3), (4), (5), and (6). Further, reactive wastes defined at 335-14-2-.03(4)(a)(6) are limited to USDOT Class/Division 1.4, 1.5, 1.6 defined at 49 CFR 173.50. Acceptability of each waste stream will be determined by the requirements of Section 3, Waste Analysis Plan.

In the event that incompatible wastes are received and accepted, Allworth will not store incompatible wastes (or incompatible wastes and materials) in the same container except as provided in ADEM Admin. Code Rule 335-14-5-.02(8)(b). Hazardous waste will not be placed in an unwashed container that has previously held an incompatible waste or material. A container that stores waste that is incompatible with other materials will be stored in a separate location from the incompatible materials. The secondary containment curbs in container storage Areas A, B, D, E and F provides segregation for incompatible wastes.

In the event that non-approved reactive wastes are received, they will not be accepted as provided in Section 3, Waste Analysis Plan, and will be returned to the generator or shipped to an alternate TSDF designated by the generator. Shipment will take place as soon as possible and the containers will be segregated from other wastes until the shipment takes place.

Ignitable wastes and materials make up a large portion of the wastes stored in containers. The storage areas are designed and operated to minimize the hazards associated with ignitable wastes/materials. No open flames, welding, smoking or other ignition sources are allowed in the storage areas. A description of the precautions taken to minimize ignition sources is contained in Section 5, Procedures to Prevent Hazards.

Per ADEM Admin. Code Rule 335-14-5-.09(7) containers holding ignitable or reactive waste must be located at least 15 meters (50 feet) from the facility property line. Container storage Areas A, D, E and F meet this requirement. A portion of container storage Area B does not meet this requirement; as a result, Allworth will not store containers holding ignitable or reactive hazardous waste container storage Area B. The Trailer Staging Area does not meet this requirement, ignitable or reactive wastes placed in the Trailer Staging Area will be shipped offsite within 72 hours.

4.3. Tank Storage

The two tank systems TS-1 and TS-2 include 10 RCRA-regulated tanks and 2 non-RCRA

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regulated waste tanks (NH-1, O-1) for a total capacity of 94,100 gallons. The information provided in this section is intended to address the regulatory requirements pertaining to tank design, construction, and installation.

4.3.1. Tank Systems Descriptions

Tank system TS-1 is located in the Northwest portion of the facility and contains four RCRA storage tanks identified as B-5, B-7, W-1, W-2 and two NonRCRA waste storage tanks identified as O-1, and NH-1. Tank system TS-1 also contains six non-RCRA product tanks. Tank system TS-2 is located adjacent to the LUWA and container storage Area A, and contains six tanks identified as F-1, F-2, F-3, F-4, F-5 and F-6 for RCRA storage. The southwest portion of the facility also contains a product storage tank system for storage of recycled product.

Appendix 4-4 provides a summary of the basic tank design information. Tank System TS-1 is shown in Drawing 4-10 and Tank System TS-2 is shown in Drawing 4-17. Piping schematics for both Tank Systems are provided as Drawing 4-12 (Sheets 1 through 3). Tanks B-5 and B-7 are shown in Drawing 4-13. Tanks F-1 through F-6 are shown in Drawing 4-14. Tanks W-1, W-2, and NH-1 are shown in Drawing 4-15, and Tank O-1 in Drawings 4-16.

Tanks B-5, B-7, F-1, F-2, F-3, F-4, F-5 and F-6 are constructed of carbon steel, and tanks W-1, W-2, O-1, and NH-1 are constructed of polyethylene. The Facility Site Plan Drawing 4-1 provides the location of each tank. Tanks B-5, B-7, F-1, F-2, F-3, F-4, F-5 and F-6 are designed and constructed for filling shell full with a liquid having a maximum specific gravity of 2.0 (16.7 pounds/gallon). Tanks W-1, W-2, O-1, and NH-1 are designed for a specific gravity of 1.9 (15.85 pounds/gallon). Design, structural, and loading calculations for all tanks are provided in Appendix 4-5. Tank integrity is assured through inspections as described in Section 5, Procedures to Prevent Hazards. These inspections include an annual measurement of metal thickness using an ultrasonic testing. The current ultrasonic test results for the RCRA storage tanks are found in Appendix 4-6.

Secondary containment for all permitted tanks is provided by external lined vault systems constructed of reinforced concrete and constructed and/or sealed to prevent cracks or gaps. The containment areas are coated with a material impermeable to and compatible with the wastes to be stored. See Appendix 4-1 for typical coating data. Sections 4.3.4 and 4.3.5 provide additional details on the secondary containment systems. Containment capacity calculations are included in Appendix 4-2.

4.3.2. <u>Corrosion Protection</u>

Carbon steel tank construction has proven to be well suited for the materials handled. Materials corrosive to the tank construction material are not stored in the tanks. The annual ultrasonic thickness measurements will indicate if any significant erosion or corrosion of the internal

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surfaces has occurred (these results are kept on file at the facility). In general, paint coatings provide external corrosion protection. All steel tanks, piping and other components subject to corrosion from exposure are paint coated and will be repainted as required to maintain protection. The polyethylene tanks do not require external coatings. Cathodic protection is not required since all tanks and ancillary components are above ground and not in contact with the soil or water.

4.3.3. Tank Systems Installation, Testing and Documentation

The tanks were installed using industry accepted procedures. An independent professional engineer observed the handling and installation of the tank systems and components and inspected the systems for:

- Weld breaks
- Punctures
- Damage to protective coating
- Corrosion
- Other structural damage or inadequate construction/installation

Any defects or damage were repaired and structural repairs to the tanks were completed in accordance with API 650, API 350, or UL-142 standards as appropriate All tanks and ancillary systems were tested for tightness prior to being placed into service. Testing and repairs (if required) were performed in accordance with design and construction codes applicable to the tank system components. All piping systems are adequately supported and protected against damage from external and internal loads.

After the installation of each tank system was complete, the independent professional engineer observing and/or supervising the installation provided a written statement(s) that:

- The tank system is properly designed,
- The tank system is properly installed, and
- Any repairs indicated by inspection and leak testing were properly performed and verified prior to placing the tanks, ancillary equipment, or tank system in service.

The statement(s) included "as built" drawings as needed. The written statement also included the certification statement required by ADEM Admin. Code Rule 335-14-8-.02(2)d and is maintained on file at the facility.

4.3.4. Tank Systems Secondary Containment

Secondary containment for all tanks and ancillary equipment is provided by a concrete external

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lined vault system. Continuous water stops were incorporated where separate pours were necessary. The concrete containment floor provides the foundation for the tanks and the tanks are raised above the containment floor on legs. The containment capacity of for each tank system is adequate to contain the largest tank and the volume of a 25-year 24-hour rainfall event. The containment system are designed and constructed prevent any run on. As the containment structures on ground and not subject to hydraulic pressure, external moisture barriers are not required. Material corrosive to the concrete will not be stored in the tanks. Additional protection against the migration of wastes will be provided by an impermeable coating applied to concrete surfaces subject to exposure to the waste. The coating material chosen will have demonstrated compatibility with the types of wastes stored.

The hazardous waste transfer piping systems are above ground and located within the tank secondary containment systems and/or within the container storage Area D and E and Loading Area LA-1/LA-2 containment system. Where possible the piping is welded to minimize joints and connections. The piping is inspected per Section 5, Procedures to Prevent Hazards, and is monitored for leaks/emissions per Section 9, Air Emissions Standards.

The tank systems are shown on Drawings 4-10 and 4-11. Secondary containment calculations are included in Appendix 4-2. Coating information is provided Appendix 4-1. Piping and instrumentation are shown on Drawing 4-12.

4.3.5. Leak Detection and Removal

Leak detection for tanks is provided by daily visual monitoring. All tanks are above ground and are designed so the entire exterior of the tanks may be inspected. The daily and other periodic inspections are performed and documented as described in Section 5, Procedure to Prevent Hazards.

The tank containment systems are designed to facilitate the removal of any accumulated liquids through the use of sloping floors and collection sumps. If accumulated liquids are observed in any of the secondary containment areas, appropriate actions, including those described in the Contingency Plan, Section 6, will be initiated as required. In all cases, any accumulated liquid in secondary containment areas will be removed as soon as possible. This will normally take place within 24 hours of discovery. If the exact source of the liquid can readily be determined and the liquid identified, it will be handled in accordance with established procedures for that material. If the source or identity cannot be determined, a sample will be collected and analyzed.

4.3.6. Description of Piping Systems, Controls and Safety Systems

The steel hazardous waste tanks are equipped with float type level indicators or with electronic high-level alarms (ultrasonic or light) providing a visual and auditory alarm at the tank when the liquid level approaches tank capacity. The polyethylene tanks (W-1, W-2, O-1, NH-1) are equipped with electronic high-level alarms (ultrasonic or light).

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Liquids may be transferred between the tanks in each tank system, the loading areas, and the processing area. All tanks are designed and installed for bottom filling to minimize splash and the generation of a static charge.

Steel piping is welded and flanged construction designed to ANSI ratings. PVC piping is minimum schedule 40. Where a pipe terminates with a hose coupling, a valve is located prior to the hose coupling connector.

Shut off of liquid flow to and from tanks is provided by trained personnel who monitor the level in the tanks and take action as necessary to prevent overfilling. Manual controls are appropriate as tanks may be filled from several different pumps and an automatic pump cutoff would not be practical. An automatic valve cutoff system is also not practical since it could cause hose failure.

All tanks are operated at atmospheric pressure. Normal venting is provided through roof mounted conservation vents. Emergency venting on tanks B-5, B-7, F-1, F-2, F-3, F-4, F-5, and F-6 is through a weighted manway per API 12F standards. Emergency venting is not required for tanks W-1 and W-2 (hazardous waters), tank O-1 (nonhazardous liquids), and tank NH-1 (nonhazardous liquids).

Piping schematics are shown on Drawing 4-12. A variety of different pumps may be used to transfer material using available separate fill and draw lines. These are located in the process area, in the tank containment area, mounted on tank trucks, and portable pumps located as needed in other areas of the facility. The primary type of pump used will be air-operated diaphragm, however, other types may be used. Fill/draw-off lines terminate with a valve and a quick coupling fitting within secondary containment areas. Routing of material is accomplished with valves or by making the appropriate hose connections.

The practices to prevent overfills involve continuous monitoring by responsible and trained personnel during all transfer operations. Secondary containment is provided in all areas where there is a significant risk of spillage. This includes where hose connections are made, where pumps are located and where valves are located. Loading and unloading takes place only in areas constructed for the purpose and will be attended by trained personnel.

4.3.7. Requirements for Ignitable or Reactive and Incompatible Wastes

All tank systems are designed to safely manage ignitable wastes. The tank locations comply with the protective distance requirements for tanks as specified in the National Fire Protection Association's "Flammable and Combustible Liquid Code" (NFPA 30). Ignitable or reactive and incompatible wastes are not managed in tanks W-1, W-2, O-1 or NH-1. Ignitable wastes for bulking and reclaim or fuel substitution may carry the D002 waste code only as a secondary characteristic code (e.g. Waste Flammable Liquids, Corrosive, n.o.s.). Characteristic reactive

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wastes (D003) are not managed in tanks and are only accepted in containers.

All tank and piping systems managing ignitable wastes are properly grounded. Bonding/grounding equipment is provided at transfer points.

All tanks managing ignitable wastes are designed to be bottom filled to reduce the production of vapors and static charge when filling.

Electrical equipment inside containment areas and within ten feet of the point where hose connections are made and broken will comply with the requirements of the National Electrical Code requirements for Hazardous Locations.

Proper procedures are followed when transferring ignitable wastes. Bottom fill methods are used for all ignitable materials. All tankers are electrically bonded to transfer piping prior to a transfer taking place. No smoking is allowed within the operating areas.

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SECTION 4.0

APPENDICES

- 4-1 CONCRETE COATING DATA
- 4-2 SECONDARY CONTAINMENT CALCULATIONS
- 4-3 CONTAINER STORAGE AREAS A, B, D, E, F, AND LOADING AREAS LA-1/LA-2 ENGINEERING CALCULATIONS
- 4-4 TANK INFORMATION
- 4-5 TANK SYSTEMS ENGINEERING CALCULATIONS
- 4-6 TANK ULTRASONIC THICKNESS TESTING
- 4.7 PROCESS FLOW DIAGRAMS

APPENDIX 4-2 SECONDARY CONTAINMENT CALCULATIONS

APPENDIX 4-2 SECONDARY CONTAINMENT CALCULATIONS

CONTAINER STORAGE AREA A

Container Storage Area A is located indoors within the main warehouse/operations building and is designed to provide storage for 344 55-gallon containers in five rows of 40 containers and six rows of 24 containers stacked two high. The storage area is surrounded by a 6-inch curb with entrance ramps on a 4:1 slope at a height of 4.5 inches. While the containers are stored on pallets, the pallets are open structures and do not displace significant containment volume (one-half of equivalent solid volume is assumed). The interior dimensions of the Container Storage Area A containment structure is:

Length 30 feet Width 305 feet Depth 0.375 feet

Required Secondary Containment Volume

Total Container Volume = 344 containers x 55 gallons= 18,920 gallons 10% of Total Container Volume = 1,892 gallons 25-year 24-hour rainfall event (TR-55 map) = not applicable Total Required Volume = 1,892 gallons

Actual Secondary Containment Volume

Volume of Area A = 43.75 ft x 37.5 ft x 0.375 = 615.23 ft 3 = 4,602 gallons Volume occupied by pallets = 43 x 4 ft x 4 ft x 0.375 ft x 0.5 = 129 ft 3 = 965 gallons Total Volume Area A = 4,602 gallons - 965 gallons = 3,637 gallons

Conclusion

3,637 gallons > 1,892 gallons Actual Containment Volume exceeds Required Containment Volume

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CONTAINER STORAGE AREA B

Container Storage Area B is located indoors within the main warehouse/operations building and is designed to provide storage for 360 55-gallon containers in five rows of 72 containers stacked two high. The storage area floor slopes inward by 0.25 feet to a central trench that slopes sixinches to a low point. While the containers are stored on pallets, the pallets are open structures and do not displace significant containment volume (a maximum of displacement of 0.125 feet assumed). The interior dimensions of the Container Storage Area B containment structures and central trench are:

Length 45.33 feet Width 46.0 feet Depth (center floor at trench) 0.25 feet Length 45.33 feet Width 1.25 feet Max Depth 2.0 feet, Min Depth 1.5 feet

Required Secondary Containment Volume

Total Container Volume = 360 containers x 55 gallons = 19,800 gallons 10% of Total Container Volume = 1,980 gallons 25-year 24-hour rainfall event (TR-55 map) = not applicable Total Required Volume = 1,980 gallons

Actual Secondary Containment Volume

Volume of Area B = 45.33 ft x 46.0 ft x 0.25 x 1/2 = 260.65 ft3 = 1,950 gallons Volume Trench = (45.33 ft x 1.25 ft x 1.5) + (45.33 ft x 1.25 ft x 0.5) = 99.16 ft3 = 742 gals Volume occupied by pallets = 45 x 4 ft x 4 ft x 0.125 ft = 90 ft3 = 673 gallons Total Volume Area B = 1,950 gallons + 742 gallons - 673 gallons = 2,019 gallons

Conclusion

2,019 gallons > 1,980 gallons Actual Containment Volume exceeds Required Containment Volume

Page 2 Date: 02/2020

CONTAINER STORAGE AREA D

Container Storage Area D is located indoors within the building also occupied by Container Storage Area E and Loading Areas LA-1 and LA-2 and is designed to provide storage for 336 55-gallon containers in six rows of 56 containers stacked two high. The storage area is surrounded by a 6-inch curb with entrance ramps on a 4:1 slope also at a height of 6 inches. While the containers are stored on pallets, the pallets are open structures and do not displace significant containment volume (one-half of equivalent solid volume is assumed). The interior dimensions of the Container Storage Area D containment structure is:

Length 28.0 feet Width 41.67 feet Depth 0.5 feet

Required Secondary Containment Volume

Total Container Volume = 336 containers x 55 gallons = 18,480 gallons 10% of Total Container Volume = 1,848 gallons 25-year 24-hour rainfall event (TR-55 map) = not applicable Total Required Volume = 1,848 gallons

Actual Secondary Containment Volume

Volume of Area D = 28.0 ft x 41.67 ft x 0.5 = 583.38 ft 3 = 4,364 gallons Volume occupied by pallets = 42×4 ft x 4×6 f

Conclusion

3,308 gallons > 1,848 gallons Actual Containment Volume exceeds Required Containment Volume

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CONTAINER STORAGE AREA E

Container Storage Area E is located indoors within the building also occupied by Container Storage Area D and Loading Areas LA-1 and LA-2 and is designed to provide storage for five 30-cubic yard/6,000-gallon roll-off containers holding wastes with no free liquids or 540 55 gallon drums. The storage area is surrounded by a 6-inch curb with entrance ramps on a 4:1 slope also at a height of 6 inches. The roll-off containers are elevated on legs and do not displace containment volume. The interior dimensions of the Container Storage Area E containment structure is:

Length 52.5 feet Width 41.67 feet Depth 0.5 feet

Required Secondary Containment Volume

Total Container Volume = $5 \times 6,000$ gallon roll offs = 30,000 gallons 10% of Total Container Volume = 3,000 gallons 25-year 24-hour rainfall event (TR-55 map) = not applicable Total Required Volume = 3,000 gallons

OR

Total Container Volume = 540 containers x 55 gallons = 29,700 gallons 10% of Total Container Volume = 2,970 gallons 25-year 24-hour rainfall event (TR-55 map) = not applicable Total Required Volume = 2,970 gallons

Actual Secondary Containment Volume

Volume of Area E = 52.5 ft x 41.67 ft x 0.5 = 1,093.84 ft 3 = 8,182 gallons Volume occupied by roll-offs = not applicable Total Volume Area E = 8,182 gallons

Conclusion

8,182 gallons > 3,000 gallons Actual Containment Volume exceeds Required Containment Volume

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CONTAINER STORAGE AREA F

Container Storage Area F is located indoors within the main warehouse/operations building and is designed to provide storage for 24 55-gallon containers stacked two high staged on six pallets. The storage area is surrounded by a 3-inch curb. While the containers are stored on pallets, the pallets are open structures and do not displace significant containment volume (one-half of equivalent solid volume is assumed). The interior dimensions of the Container Storage Area F containment structure is:

Length 17.7 feet Width 10.4 feet Depth 0.25 feet

Required Secondary Containment Volume

Total Container Volume = 24 containers x 55 gallons = 1,320 gallons 10% of Total Container Volume = 132 gallons 25-year 24-hour rainfall event (TR-55 map) = not applicable Total Required Volume = 132 gallons

Actual Secondary Containment Volume

Volume of Area F = 17.7 ft x 10.4 ft x 0.25 = 46.02 ft3 = 344 gallons Volume occupied by pallets = 6 x 4 ft x 4 ft x 0.25 ft x 0.5 = 12 ft3 = 90 gallons Total Volume Area F = 344 gallons - 90 gallons = 254 gallons

Conclusion

254 gallons > 132 gallons Actual Containment Volume exceeds Required Containment Volume

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LOADING AREAS LA-1 and LA-2

Loading Areas LA-1 and LA-2 are located indoors within the building also occupied by Container Storage Areas D and E and are designed to provide containment for a 6,000 cargo tank (largest anticipated container). The storage area is surrounded by a 6-inch curb with entrance ramps on a 4:1 slope also at a height of 6 inches. The roll-off containers are elevated on legs and do not displace containment volume. The interior dimensions of the Loading Area LA-1 and LA-2 containment structures are:

Length 90.5 feet Width 23.67 feet Depth 0.5 feet

Required Secondary Containment Volume

Total Container Volume = $1 \times 6,000$ gallon cargo tank = 6,000 gallons 25-year 24-hour rainfall event (TR-55 map) = not applicable Total Required Volume = 6,000 gallons

Actual Secondary Containment Volume

Volume of LA-1/LA-2 = 90.5 ft x 23.67 ft x 0.5 = 1,071.07 ft3 = 8,012 gallons Volume occupied by vehicles = not applicable Total Volume LA-1/LA-2 = 8,012 gallons

Conclusion

8,012 gallons > 6,000 gallons Actual Containment Volume exceeds Required Containment Volume

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TANK SYSTEM TS-1

The Tank System TS-1 containment area holds 13 tanks with excess containment capacity and space for additional tanks. The 13 tanks include waste tanks B-5, B-7, W-1, W-2, NH-1 and O-1, and product tanks T-18, T-22, T-2000, T-3000, T-4000, T-5000 and T-6000. All tanks are raised on legs and therefore do not displace containment volume. The interior dimensions of the Tank System TS-1 containment structure is:

Length 67.5 feet Width 38.17 feet Depth 2.0 feet Required

Secondary Containment Volume

Largest Tank = 18,000 gallons 25-year 24-hour rainfall event (TR-55 map) = 7 inches = 0.583 ft Area of TS-1 = 67.5 ft x 38.17 ft = 2576.48 ft2 Storm Event Volume = 2576.48 ft2 x 0.583 ft = 1502.09 ft3 = 11,236 gallons Total Required Volume = 18,000 gallons + 11,236 gallons = 29,236 gallons

Actual Secondary Containment Volume

Volume of TS-1 = 67.5 ft x 38.17 ft x 2.0 ft = 5,152.95 ft3 = 38,544 gallons Conclusion

38,544 gallons > 29,236 gallons Actual Containment Volume exceeds Required Containment Volume

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TANK SYSTEM TS-2

The Tank System TS-2 containment area holds six tanks (F-1, F-2, F-3, F-4, F-5 and F-6) and consists of two adjoining containment structures each holding three tanks. All tanks are raised on legs and therefore do not displace containment volume. The interior dimensions of each of the two Tank System TS-2 containment structures are:

Length 32.5 feet Width 11.5 feet Depth 3.0 feet

Required Secondary Containment Volume

Largest Tank = 6,000 gallons 25-year 24-hour rainfall event (TR-55 map) = 7 inches = 0.583 ft Area of TS-2 = 32.5 ft x 11.5 ft = 373.75 ft2 Storm Event Volume = 373.75 ft2 x 0.583 ft = 217.90 ft3 = 1,630 gallons Total Required Volume = 6,000 gallons + 1,630 gallons = 7,630 gallons

Actual Secondary Containment Volume

Volume of TS-2 = 32.5 ft x 11.5 ft x 3.0 ft = 1,121.25 ft3 = 8,387 gallons

Conclusion

8,387 gallons > 7,630 gallons

Actual Containment Volume exceeds Required Containment Volume

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TRAILER STORAGE AREA

This Trailer Staging Area (TSA) is located outside to the north of the main warehouse and TS-2. The TSA containment includes a trench, catch basin and a 6-inch (0.5 ft) curb as shown on Drawings 4-18. A portion of the TSA is covered to minimize rainfall into the containment structures. The TSA is designed for the storage of up to eight (8) transport trailers. The transport trailers can be either bulk tank (i.e. 8,000-gallon capacity) or freight trailers containing non-bulk containers (i.e. 55-gallon drums). The TSA has the capacity to store 64,000 gallons in bulk or non-bulk containers such as 1,164 x 55-gallon equivalent containers stored in freight trailers, eight (8) x 8,000 gallons (64,000 gallons) per bulk tank or some combination.

Required Secondary Containment Volume

Largest Container = 8,000 gallons; or

Total Container Volume =1,164 containers x 55 gallons= 64,020 gallons 10% of Total

Container Volume = 6,402 gallons

Largest Container is greater design = 8,000 gallons

25-year 24-hour rainfall event (NOAA, Precipitation Frequency Table

for Birmingham, Al, 12/4/2019) = 7.13 inches = 0.594 ft

Uncovered Area of TSA (see below) = $A1 + B = 6,337.5 \text{ ft}^2 + 487.5 \text{ ft}^2 = 6,825 \text{ ft}^2$

Storm Event Volume = $6,285 \text{ ft}^2 \times 0.594 \text{ ft} = 4,054 \text{ ft}^3 \times 7.481 \text{ gal/ft}^3 = 30,328 \text{ gallons}$

Total Required Volume = 8,000 gallons + 30,328 gallons = 38,328 gallons

Secondary Containment Volume

Area of TSA = 10,305.75 ft² see below

Curbed Volume = $10,305.75 \text{ ft}^2 \times 0.5 \text{ ft} = 5,152.875 \text{ ft}^3 \times 7.481 \text{ gal/ft}^3 = 38,548 \text{ gallons}$

Catch Basin Volume = 3 ft x 3.75 ft x 3.75 ft = 42 ft³ x 7.481 gal/ft³ = 314 gallons

Trench Volume = 14 ft x 1.5 ft x 0.83 ft = 17.43 ft³ x 7.481 gal/ft³ = 130 gallons

Volume of TSA = Curbed Volume + Trench Volume + Catch Basin Volume

Volume of TSA = 38,458 + 314 + 130 = 38,902 gallons

Conclusion

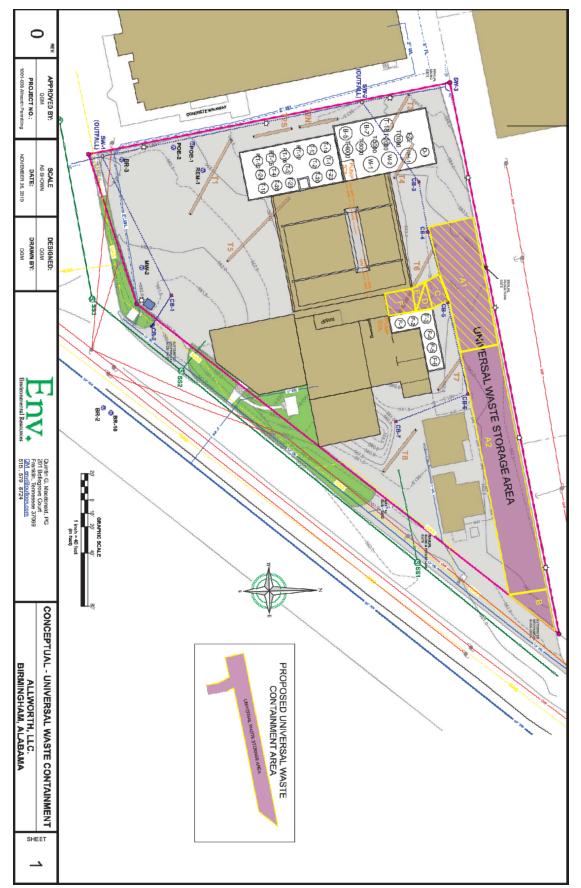
38,902 gallons > 38,328 gallons

Actual Containment Volume exceeds Required Containment Volume

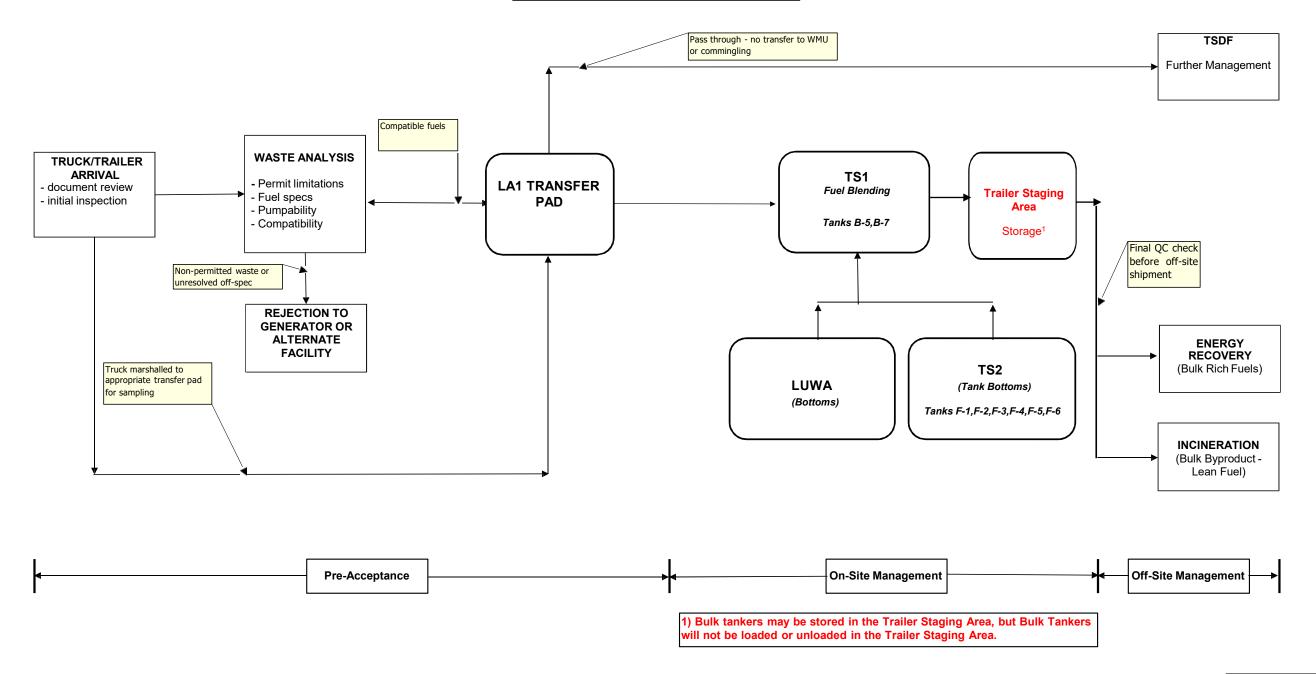
Area Calculation (See attached figure)

Section	Area
A 1 Covered	$32.5 \text{ ft x } 80 \text{ ft} = 2,600 \text{ ft}^2$
A 2 (Uncovered)	$32.5 \times 195 \text{ ft} = 6,337.5 \text{ ft}^2$
B (Uncovered)	(1/2) x 30 ft x 32.5 ft = 487.5 ft ²
C (Covered)	$20 \text{ ft x } 15 \text{ ft} = 300 \text{ ft}^2$
D (Covered)	$(1/2) \times 10 \text{ ft } \times 20 \text{ ft} = 100 \text{ ft}^2$
E (Covered)	(1/2) x 15 ft x 17.5 ft = 131.25 ft ²
F (Covered)	$20 \text{ ft x } 17.5 \text{ ft} = 350 \text{ ft}^2$
Total Area	10,305.75 ft ²

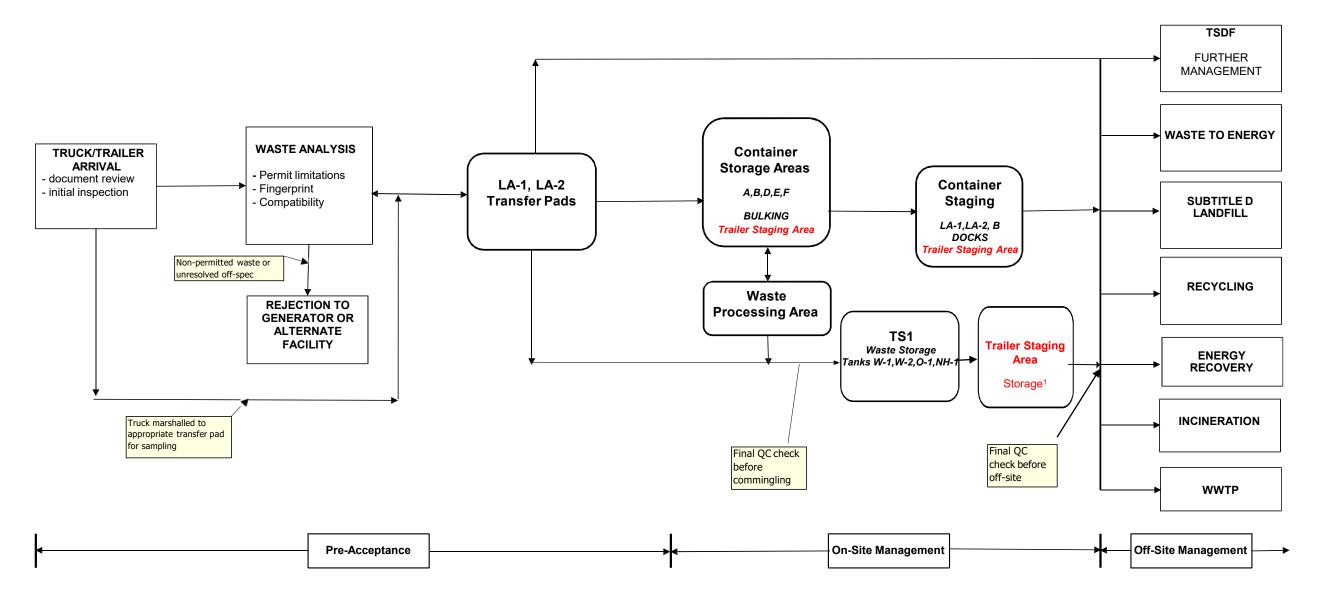
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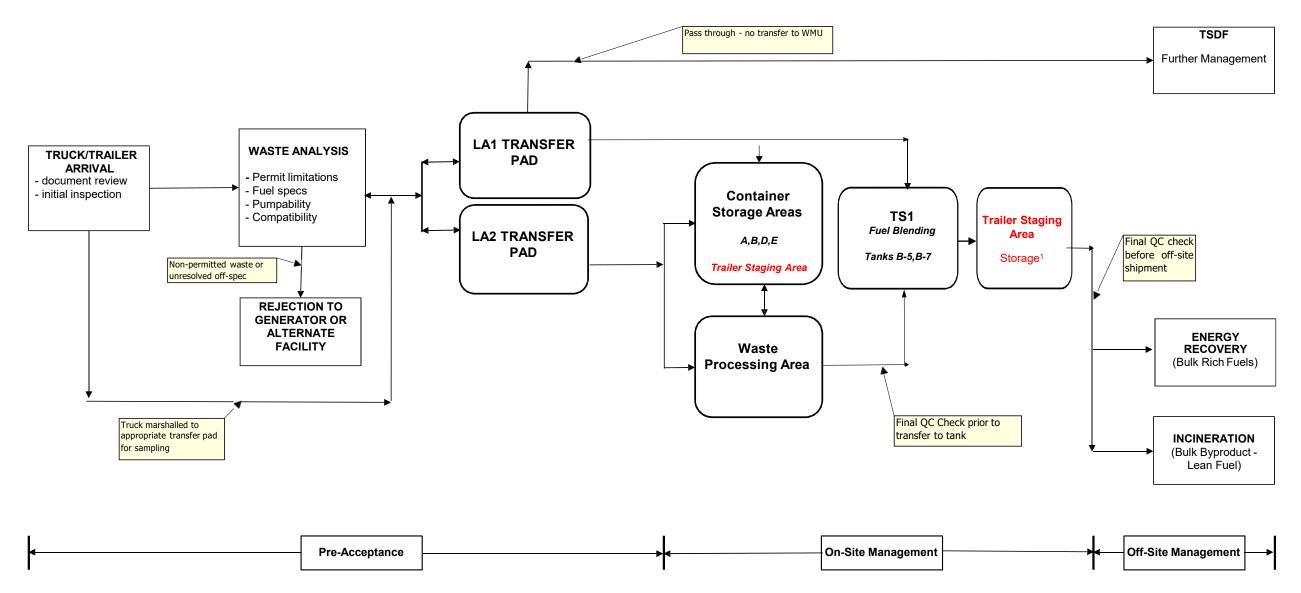
BULK FUEL PROCESS FLOW



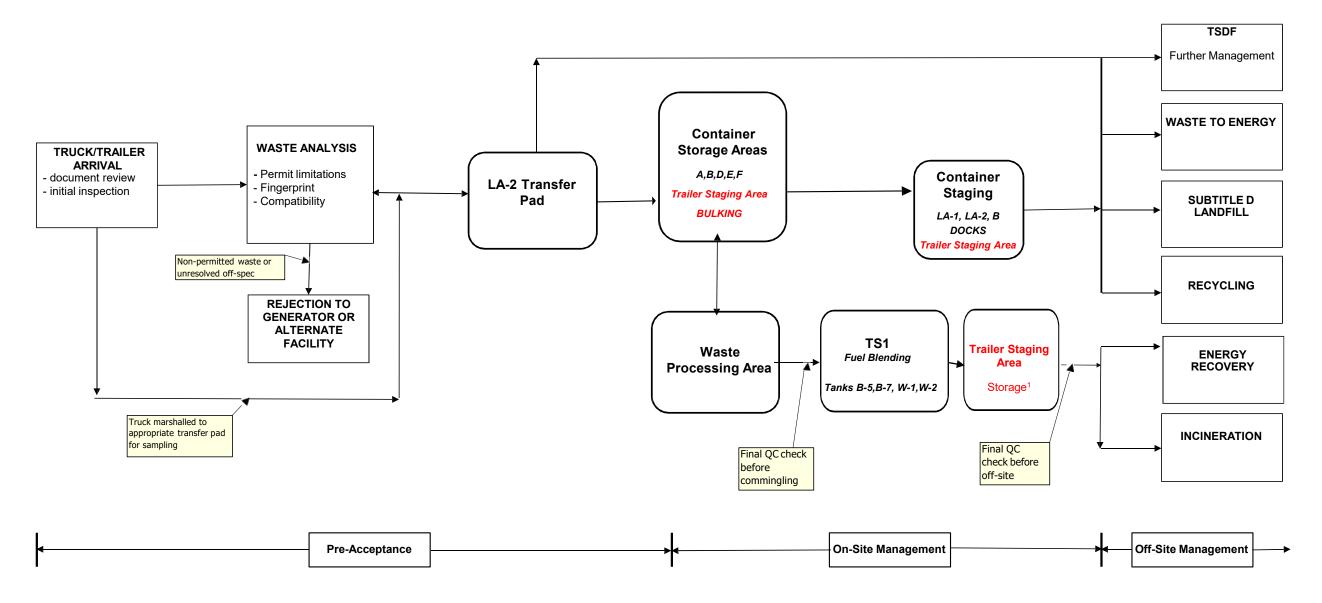
BULKING/CONSOLIDATION PROCESS FLOW



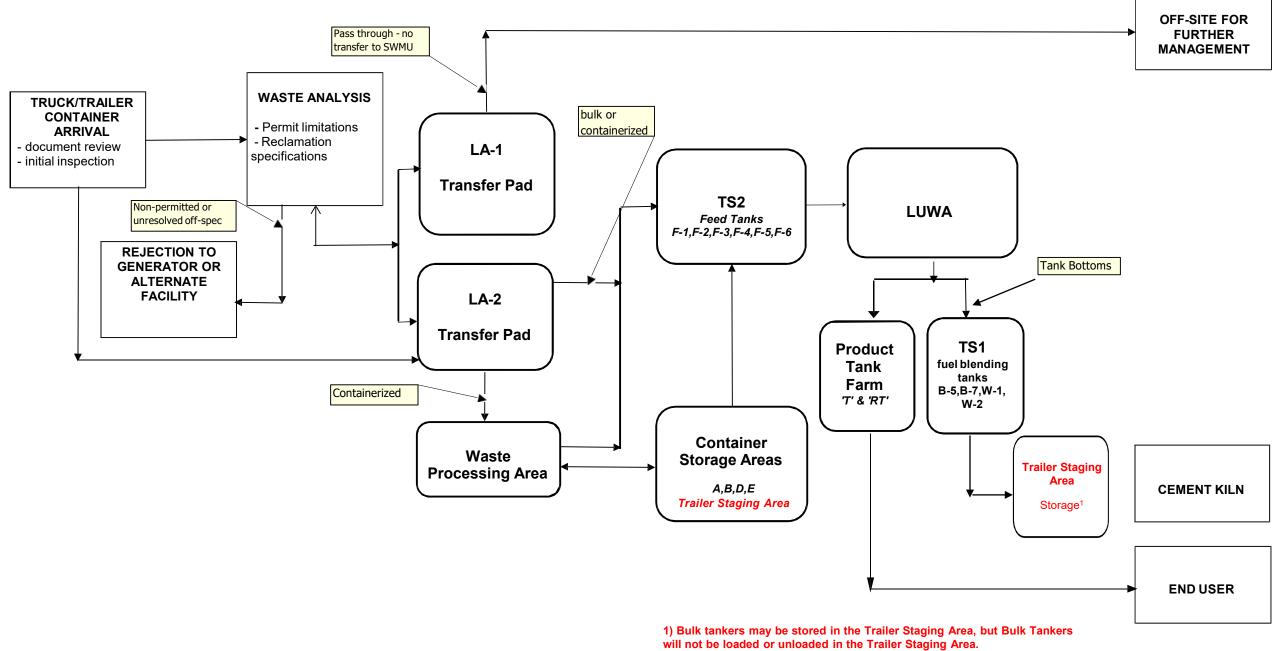
CONTAINERIZED FUEL PROCESS FLOW



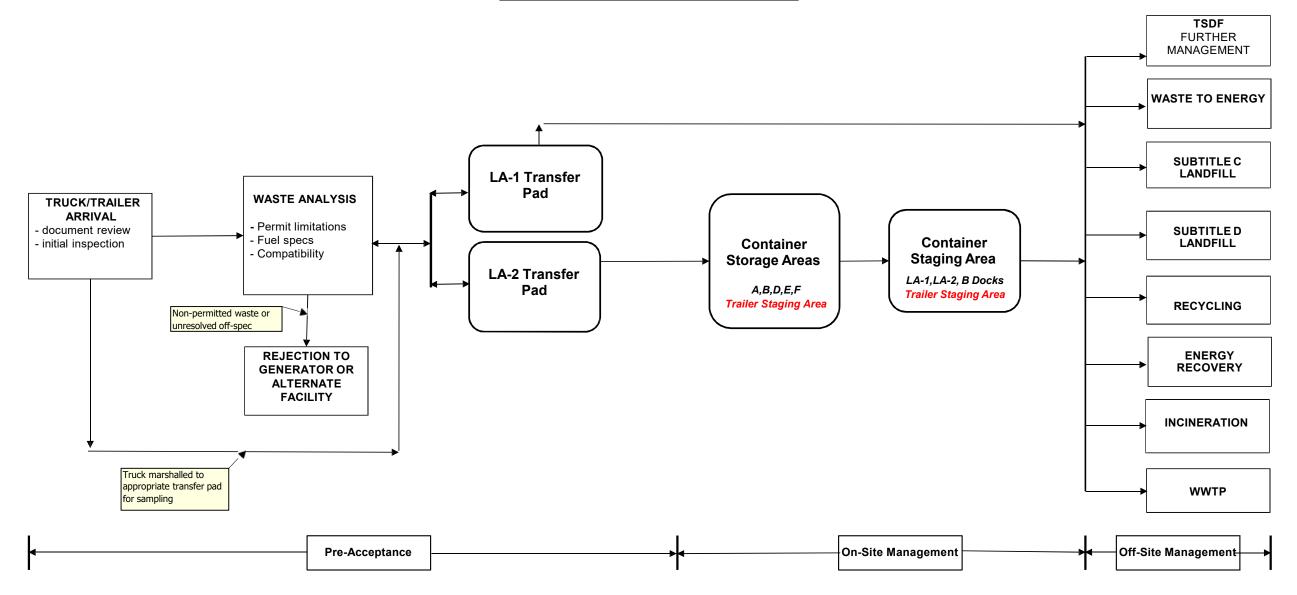
LAB PACK/LOOSE PACK PROCESS FLOW

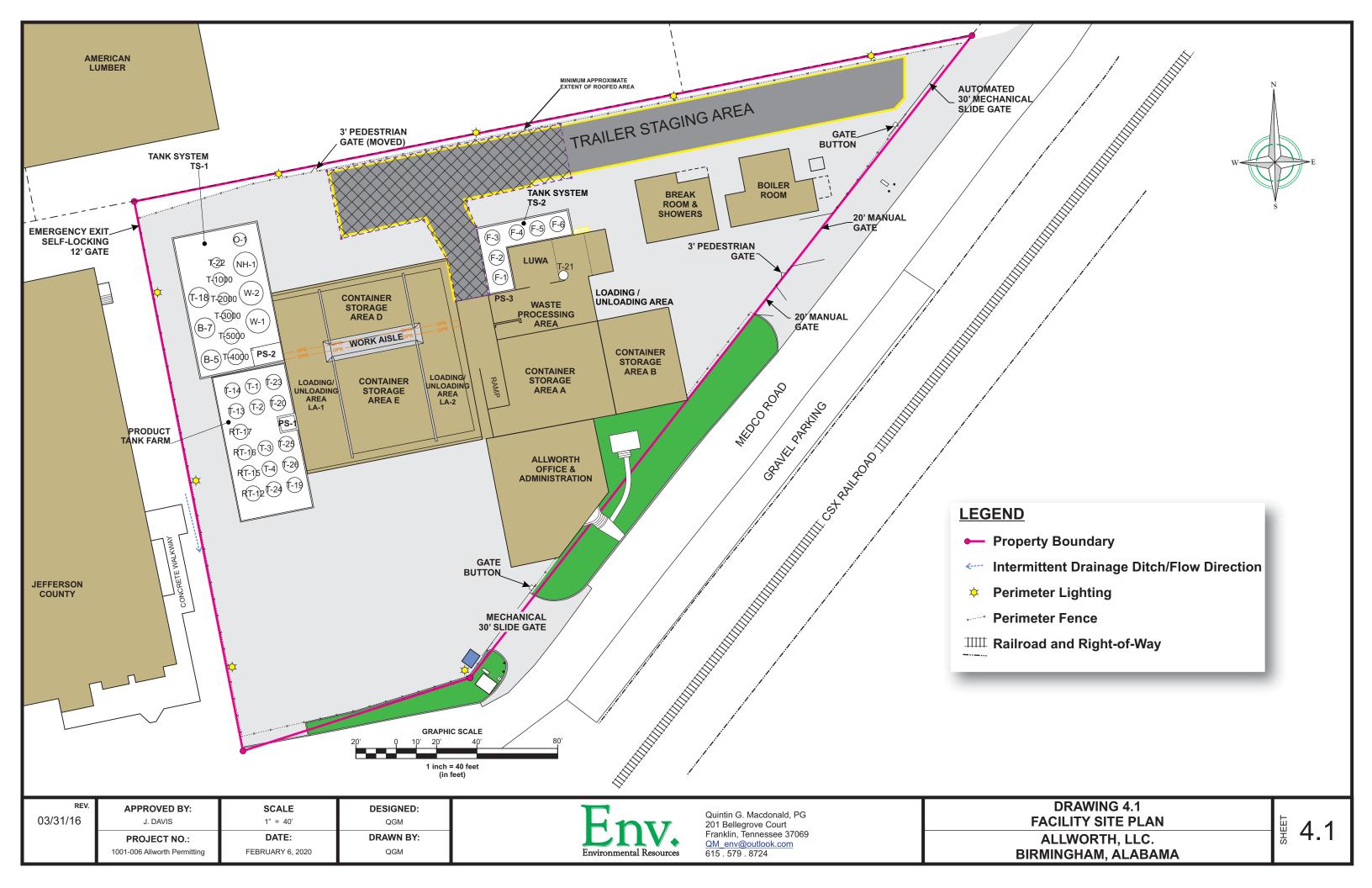


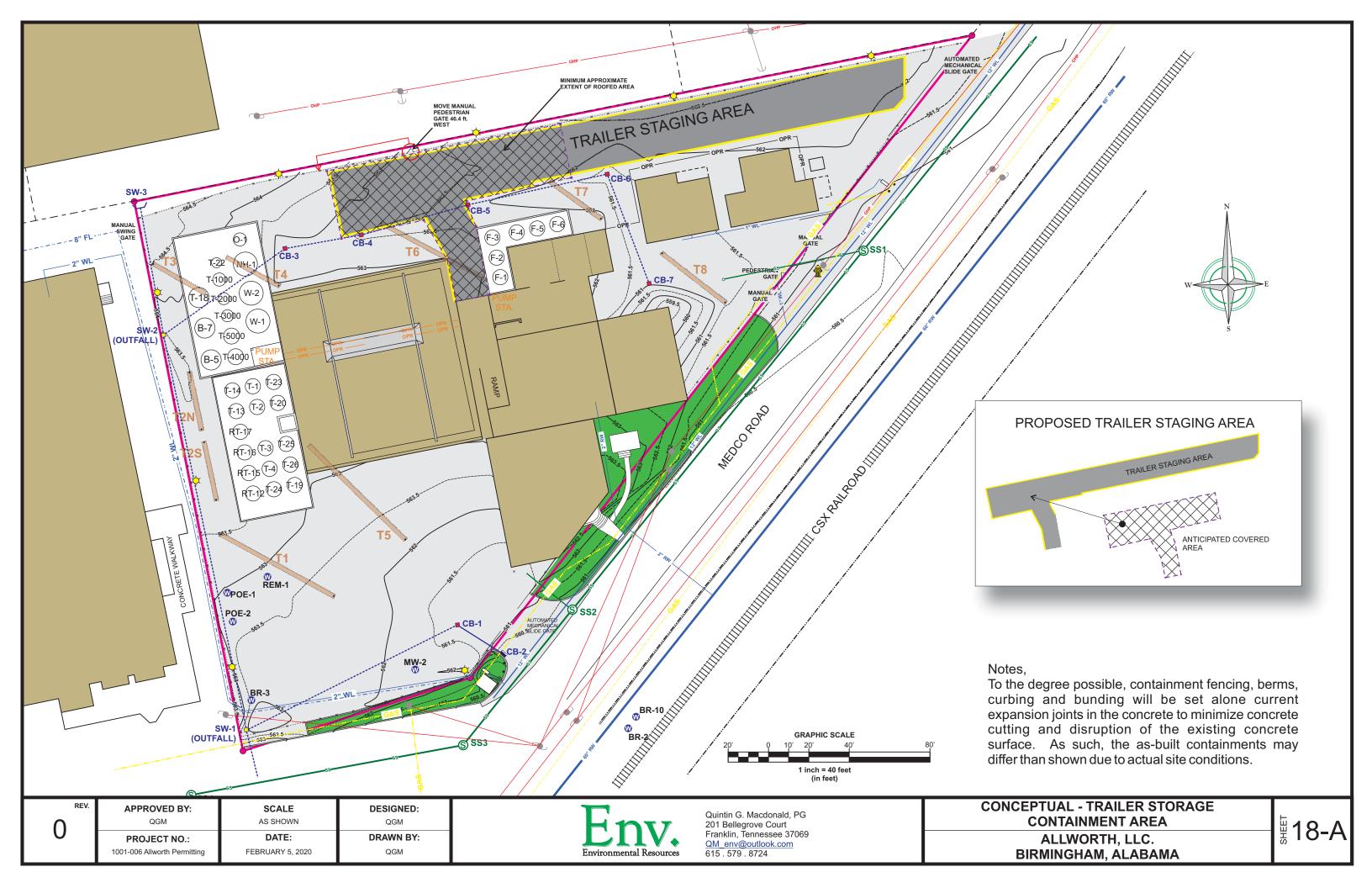
SOLVENT RECLAMATION PROCESS FLOW

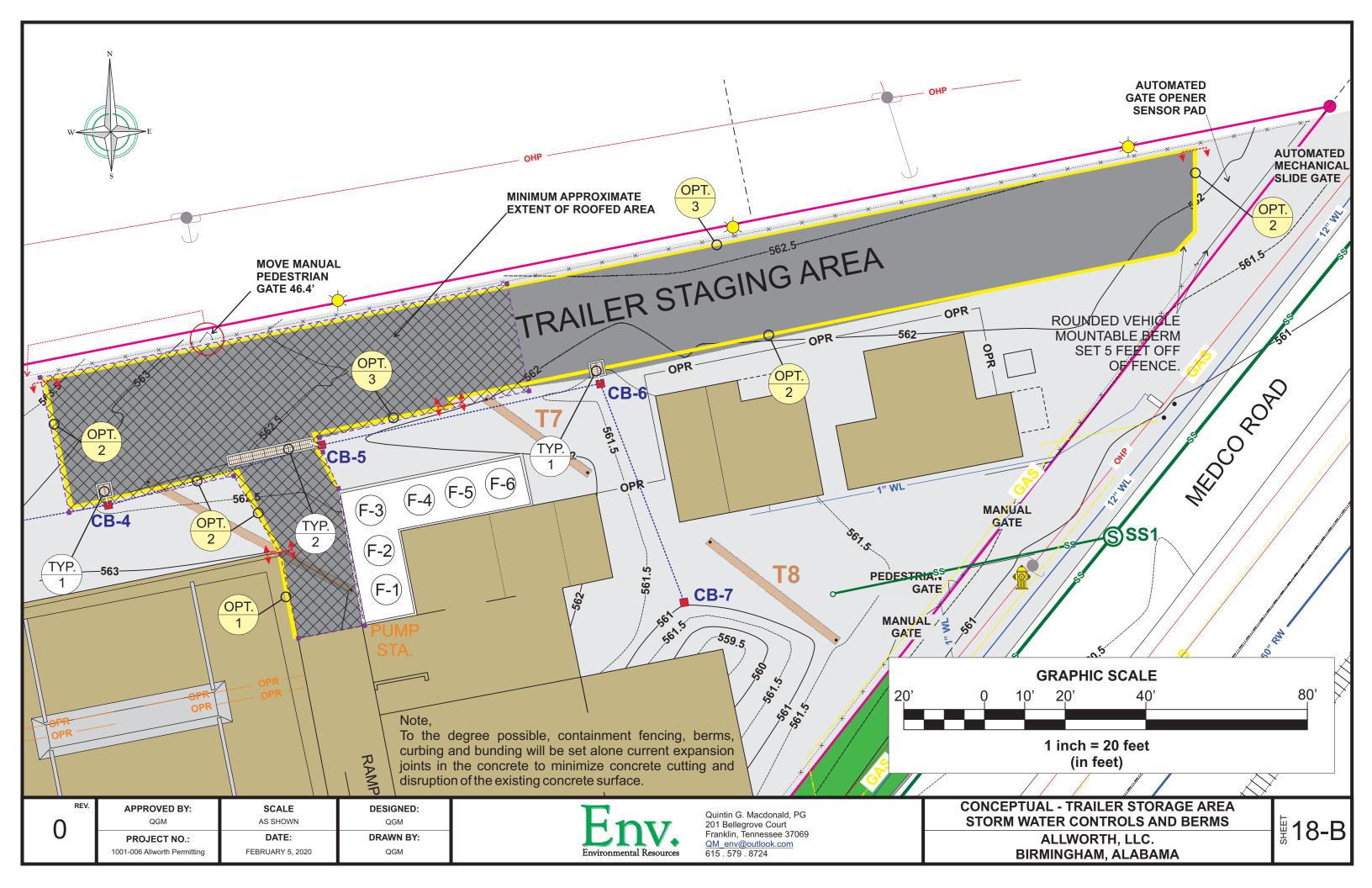


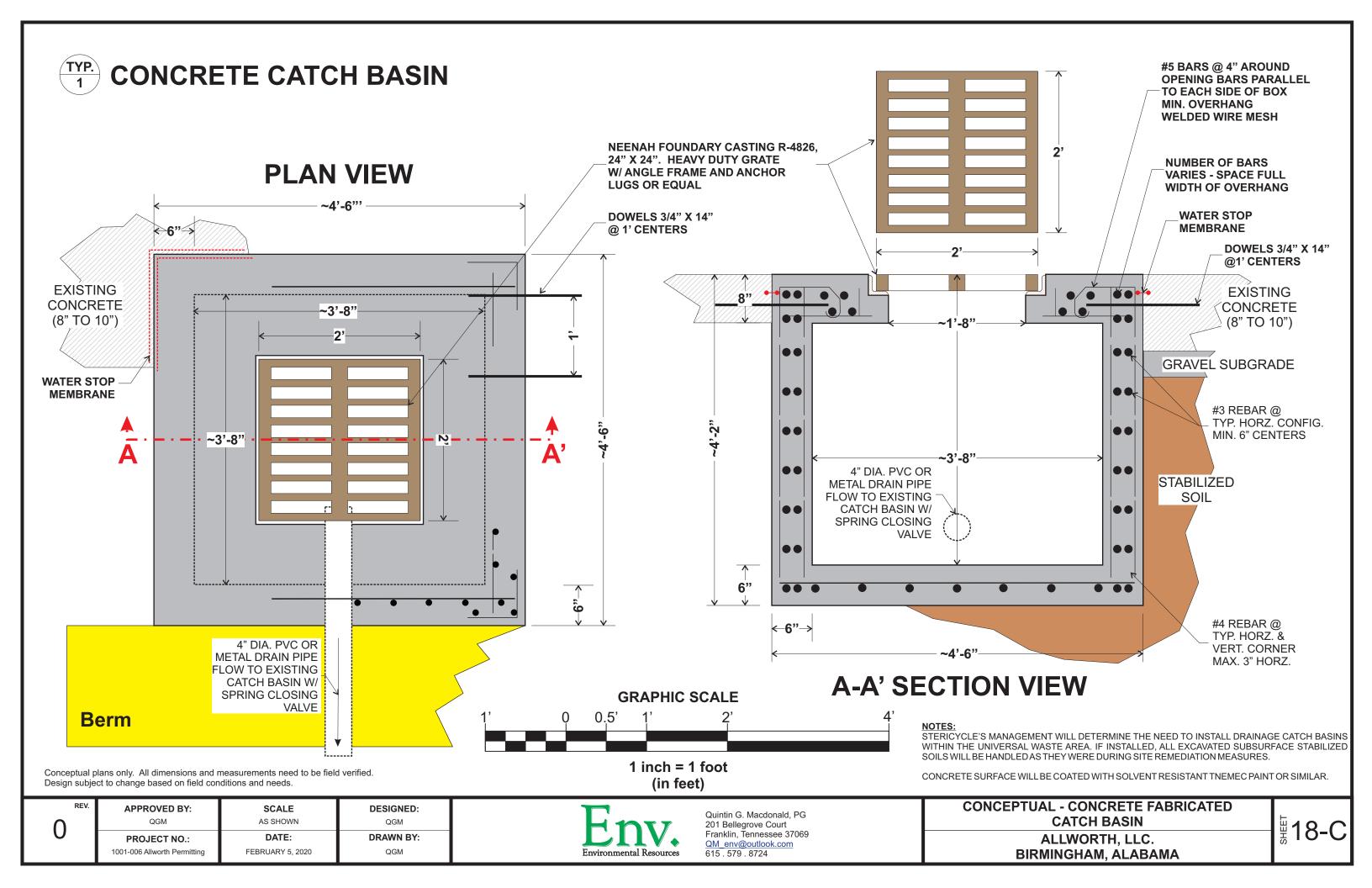
TRANS-SHIPMENT PROCESS

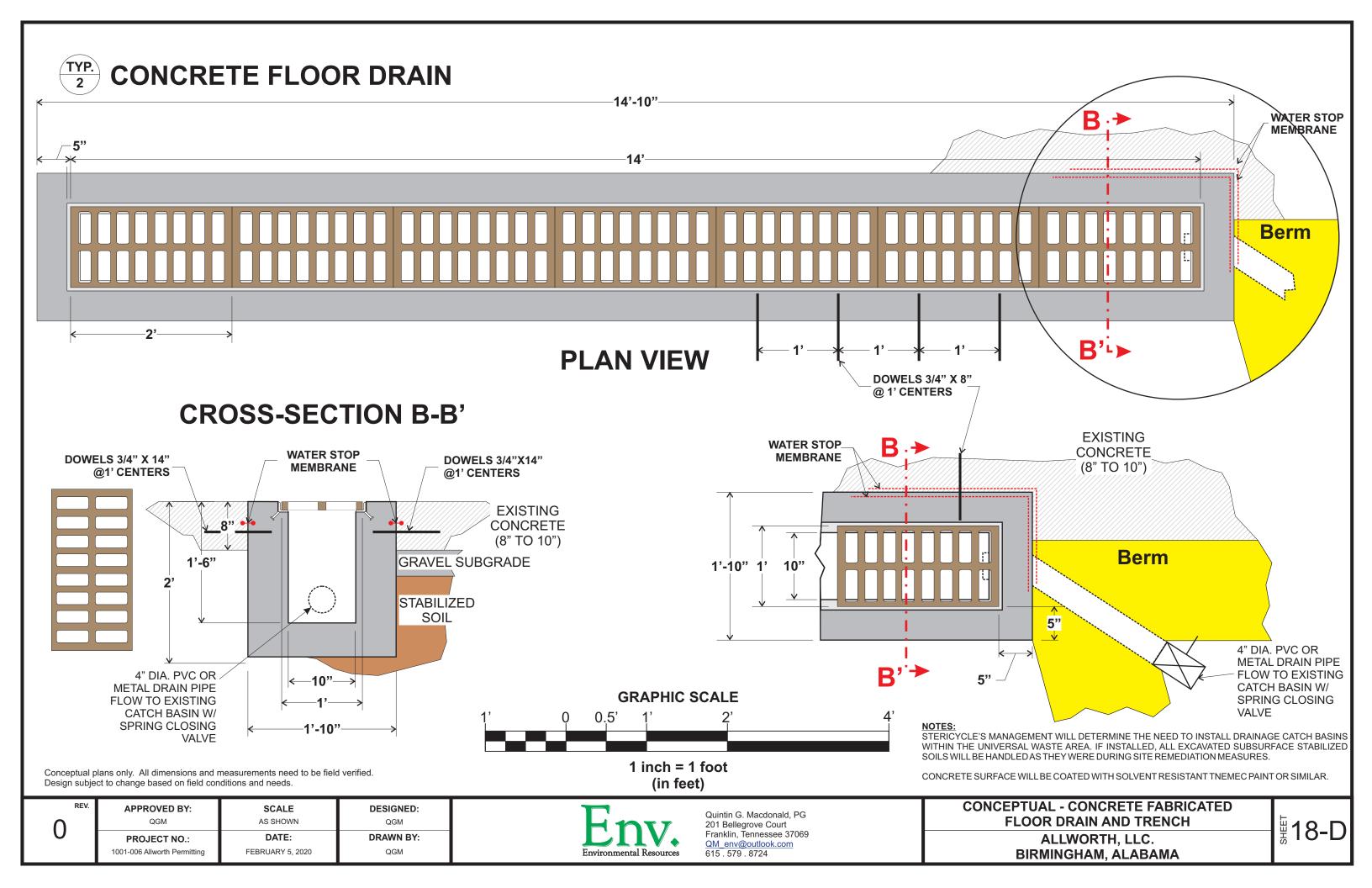


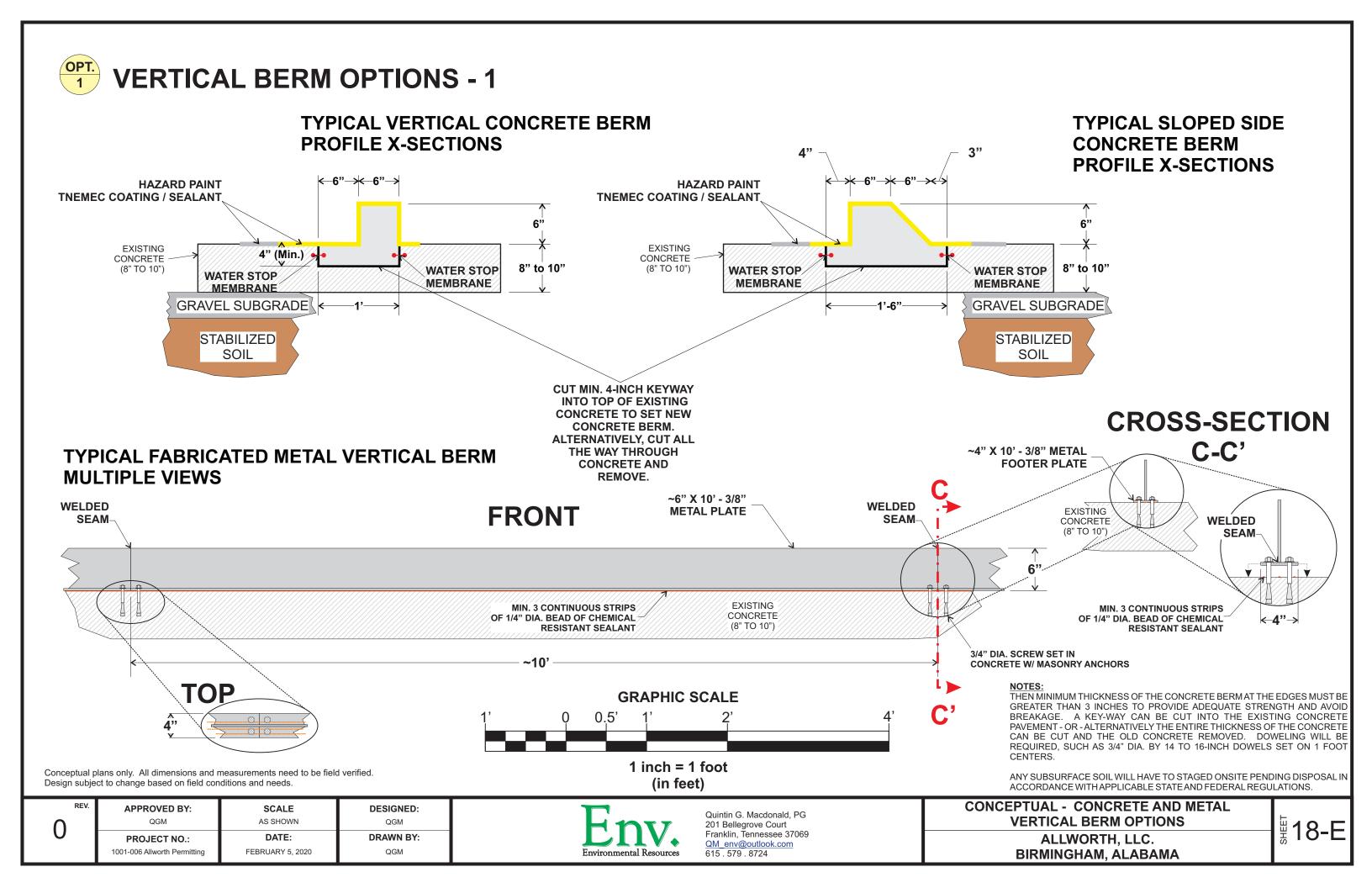






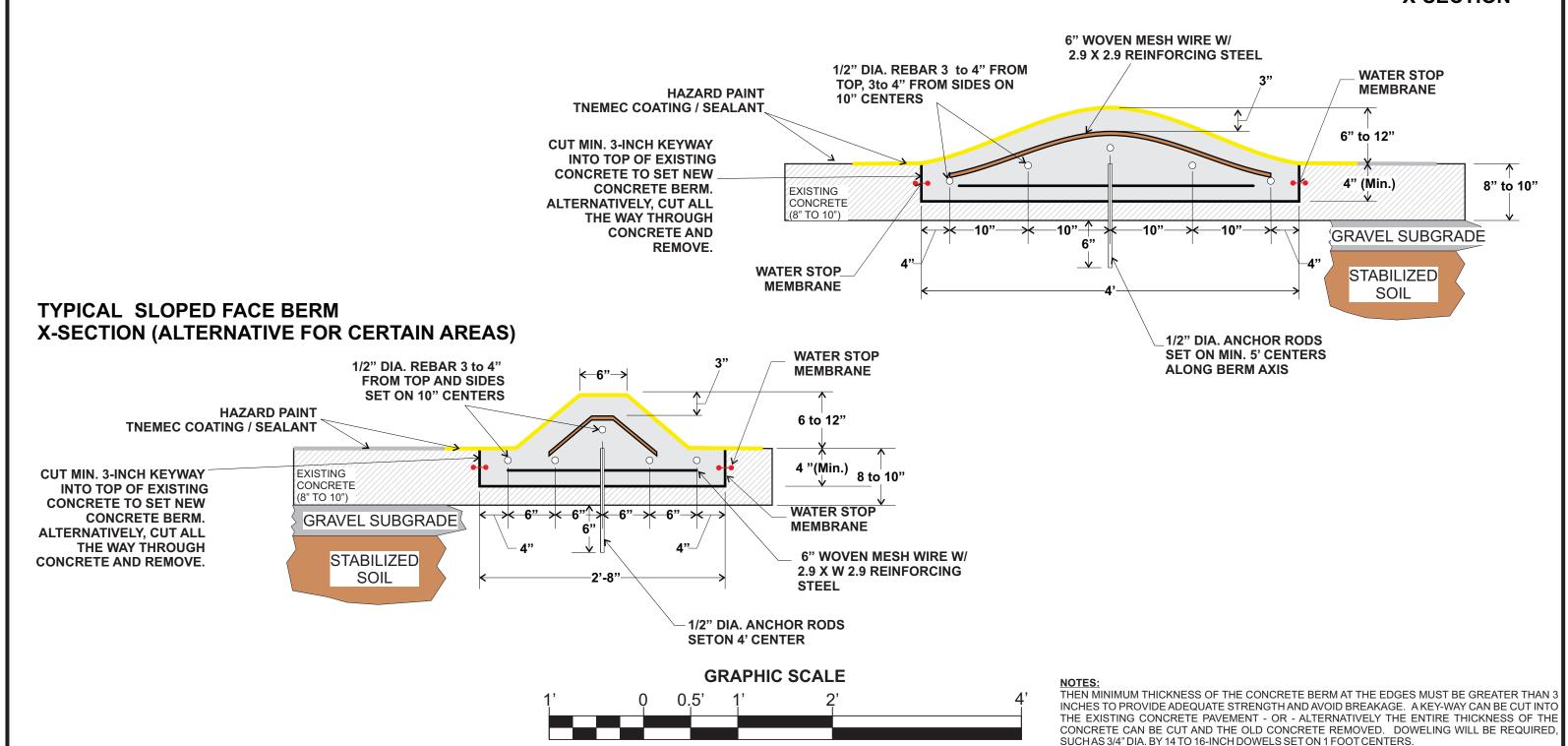






VEHICLE MOUNTABLE BERM OPTIONS - 2

TYPICAL ROUNDED BERM X-SECTION



Conceptual plans only. All dimensions and measurements need to be field verified. Design subject to change based on field conditions and needs.

SCALE

AS SHOWN

DATE:

FEBRUARY 5, 2020

DESIGNED:

QGM

DRAWN BY:

QGM

APPROVED BY:

PROJECT NO.:

1001-006 Allworth Permitting

Env.

1 inch = 1 foot

(in feet)

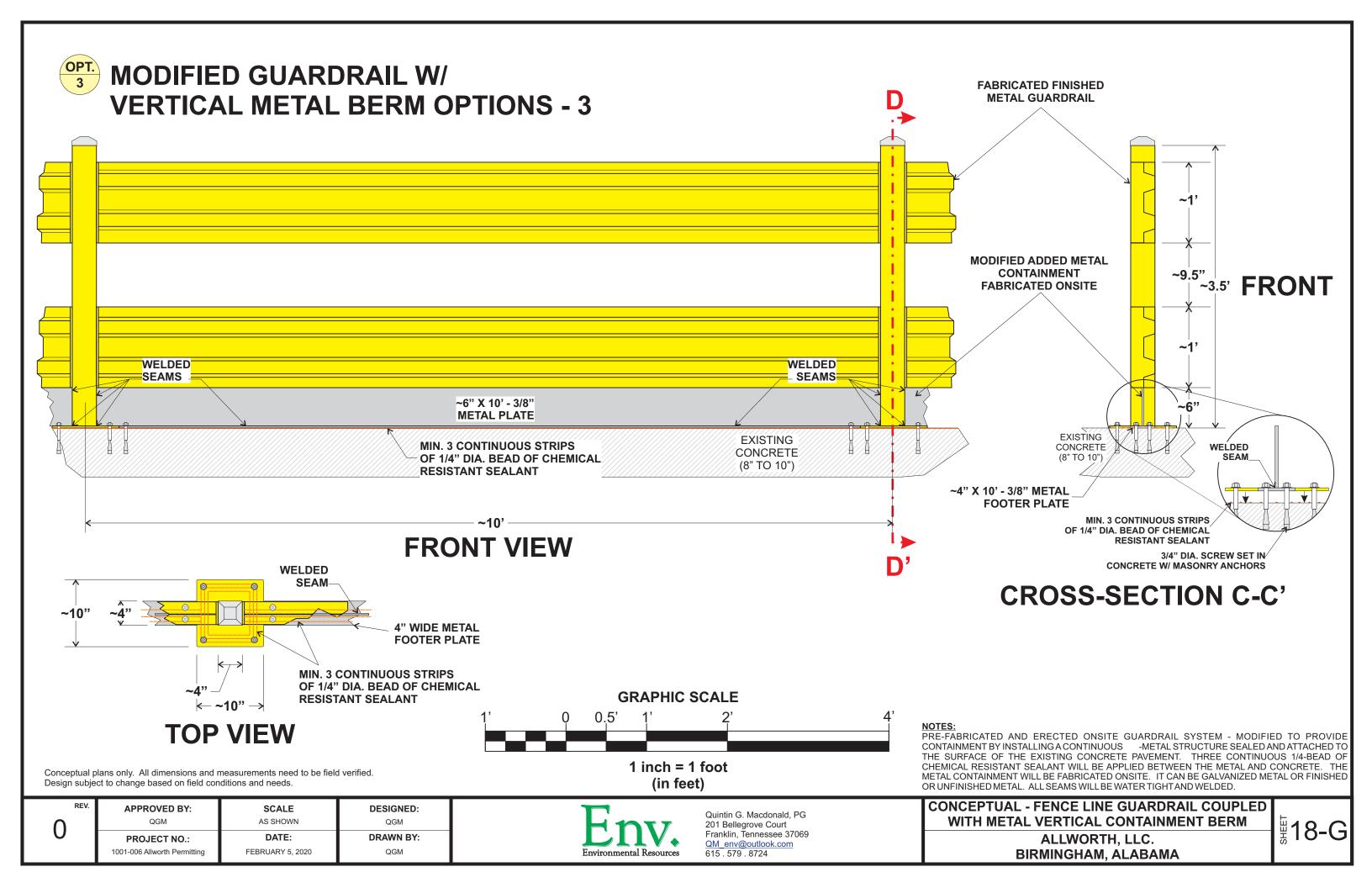
Quintin G. Macdonald, PG 201 Bellegrove Court Franklin, Tennessee 37069 QM_env@outlook.com 615 . 579 . 8724 CONCEPTUAL - VEHICLE MOUNTABLE
CONCRETE BERM OPTIONS

ANY SUBSURFACE SOIL WILL HAVE TO STAGED ONSITE PENDING DISPOSAL IN ACCORDANCE WITH

ALLWORTH, LLC. BIRMINGHAM, ALABAMA

APPLICABLE STATE AND FEDERAL REGULATIONS.

₩ 18-F



SECTION 5.0 PROCEDURES TO PREVENT HAZARDS

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	5.4.3. Management Of Ignitable Wastes In Containers

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5.0 PROCEDURES TO PREVENT HAZARDS

The information provided in this section is submitted in accordance with ADEM Admin. Code Rule 335-14-5-.02(5);(6);(8) and 335-14-5.03. This plan addresses the requirements for the following:

- General security procedures
- Inspection schedule
- Preparedness and prevention procedures

The following presents a discussion of the above-mentioned items.

5.1. Site Security

5.1.1. General

The Security for the Allworth, LLC facility is designed to prevent unauthorized entry into the active portion of the facility. This section describes the precautions taken by the facility to prevent the unknowing entry, as well as to minimize the possibility for the unauthorized entry, of persons or livestock onto active portions of the facility.

5.1.2. <u>Security Precautions</u>

In accordance with ADEM Admin. Code Rule 335-14-5-.02(5), the facility maintains security provisions as discussed below.

5.1.2.1. Existing Barrier and Entry Control

The active portion of the facility is enclosed with a 6-foot high, chain-linked fence topped with three strands of barbed wire. Entry is controlled by three gates; two located along the east side of the facility and one located along the north side of the facility. Appendix 5-1, Site Plan illustrates the location of the gates.

Visitors and contractors entering the plant must sign a log before receiving authorization to enter. All gates and doors will be closed and locked during non-operating days.

5.1.2.2. Warning Signs

Warning signs, containing the legend "DANGER - UNAUTHORIZED PERSONNEL KEEP OUT" are posted at all fence gates and on the fencing facing the street, along the side facing the neighboring warehouse and at the rear facing the railroad tracks. All signs are clearly legible from a distance of 25 feet. Additionally, "No Smoking" signs that are legible from 25 feet have been placed strategically along the fence.

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5.1.2.3. Inspection

Security fencing, gates and warning signs will be inspected on a monthly basis in accordance with the Inspection Schedule in Section 5.2.

5.2. Facility Inspection

5.2.1. General

The inspection of the facility components and equipment is an integral part of an overall personnel safety and environmental security program. The purpose of this section is to describe the procedures for inspecting the hazardous waste management units at the facility and to establish a schedule for conducting the inspections. Routine inspections are required to detect equipment malfunctions, deterioration, leaks, discharges and unauthorized entry that may cause or may lead to:

- A threat to human health;
- The release of hazardous waste constituents to the environment; or
- The interruption and curtailment of normal operation.

It is necessary to conduct facility inspections routinely to identify problems and initiate corrective actions before they can affect human health or the environment.

To accomplish this, inspections are conducted in accordance with this section to ensure that proper safety and emergency equipment is available and in working order, security devices are in good repair, and operating and structural equipment is in a safe working condition.

All items to be routinely inspected at the facility are identified and the minimum frequency of the inspections is established. Daily inspection will be defined as an inspection every operating day and non-operating day, including weekends and holidays, until such time as a leak detection system is incorporated at the facility that will detect releases into the secondary containment system within 24 hours of occurrence. Appendix 5-2 illustrates the general inspection schedule for the facility. The inspection schedule shall be maintained at the facility at all times and updated as required to reflect any changes to the hazardous waste management operations or equipment at the facility.

5.2.1.1. Inspection Log

The results of all inspections shall be entered onto the facility inspection logs included in this plan. The inspection logs provide information regarding the name of the inspector, the date and time of the inspection, the equipment or structures inspected, types of problems that might be encountered, observations made, and any corrective actions required to address unsatisfactory

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conditions. If corrective action is necessary, the facility inspection log entry will include a description of the remedial action as well as the dates of its initiation and completion.

5.2.1.2. Corrective and Preventive Measures

Conditions noted during inspections that require corrective measures will be reported to the Operations Manager or designee following completion of the inspection. If a problem is discovered during the inspection that cannot be immediately corrected (i.e. within 24 hours), the inspector will notify the Operations Manager or designee. The Operations Manager or designee will then perform the following:

- Determine course of action;
- Schedule a proposed completion date for the remedial action; and
- Document the course of action and the proposed completion date.

Corrective action will be scheduled in a timely manner to ensure that the problem does not lead to an environmental or human health hazard. Where a hazard is imminent or has already occurred, the Operations Manager or designee will be notified immediately. Corrective action will be taken immediately. The Operations Manager or designee has the authority to shut down operations until the necessary corrective action is taken.

In the event there is an uncompleted item (e.g. inoperative equipment, item requiring corrective action) on the checklist when the next inspection is due, that item will be shown on the new checklist and an on-going record of the deficiency on the checklist will be noted. Any corrective action not completed by the scheduled date will be reported to the Operations Manager by the inspector. All uncompleted items will be documented on the Work Order Tracking Log (Appendix 5-3) and tracked to completion.

5.2.2. Specific Inspection Requirements

See Appendix 5-4.

5.2.2.1. Container Storage Area Inspection

Hazardous and non-hazardous wastes are stored in containers and roll offs and container storage Areas A, B, D, E and F are inspected daily and weekly. The Facility Manager or a designated supervisor/employee will document on the Daily Inspection Log included in Appendix 5-5 that no hazardous waste is stored outside of permitted storage area for each day that the facility operates and actively manages hazardous wastes. Weekend checks will not be required if no waste is moved on-site.

Freight trailers will be loaded per DOT 49 CFR Subchapter C Regulations with the anticipation

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of loaded trailers being on-site less than one week. Bulk trailers (i.e. 8,000 gallon), the exterior of freight trailers and containers stored exterior to the freight trailers within the Trailer Staging Area will be inspected daily and weekly. The interior of the freight trailers will be inspected weekly for evidence of leaking containers and container deterioration. Freight trailers on-site for more than a month will be unloaded for inspection of individual containers.

When the trailer staging area accumulates precipitation a visual inspection for contaminations, debris and sheen will be performed prior to releasing storm water into the storm drain. Should evidence of contamination or sheen be present liquids will be containerized and this water will be subject to waste characterization and proper disposal. If debris is present which does not present a hazard to the environment the debris will be picked up and properly disposed prior to releasing storm water into the storm drain.

The container storage areas and Trailer Staging Area are inspected daily for evidence of leaks, spills and precipitation, and if a container appears to be deteriorating or leaking free liquid, the container is placed in an overpack or the contents transferred to an appropriate container and the original container is disposed.

The container storage areas are inspected weekly basis for the following items:

- Container placement and stacking (aisle spacing and stack height);
- Container seals (kept closed, unless waste is being added, removed or inspected);
- Container labels (complete, accurate, legible and visible);
- Condition of containers (corrosion, structural defects, and bulging);
- Condition of pallets;
- Container storage area foundation and dikes (cracks, deterioration, spalling, uneven settlement, erosion, wet spots); and.
- Container Inventory (number and capacity of containers onsite).

As described above containers stored in freight trailers within the Trailer Staging Area will be loaded per DOT 49 CFR Subchapter C Regulations. Containers stored in freight trailers for more than a month will be unloaded and the containers individually inspected. The results of the container storage area inspections are recorded on the logs presented in Appendix 5-5 and Appendix 5-6. The completed logs are maintained in the facility's Operating Record for a minimum of three years.

5.2.2.2. Tank System Inspection

Tank systems and ancillary equipment are inspected per the schedule provided in Appendix 5-2. Results of each inspection are recorded on the log included as Appendix 5.5 and Appendix 5-8. The Facility maintains the completed logs as part of the facility Operating Record for a minimum

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of three years.

The tank systems and ancillary equipment associated with the tanks (e.g. piping, pumps, valves, fittings, filters, monitoring equipment, liquid level indicators are inspected daily for the following items.

- Evidence of leaks, spills and precipitation
- Tank system foundation and dikes (cracks, deterioration, spalling, uneven settlement, erosion, wet spots);
- Tank structural support (concrete deterioration and cracking, corrosion of pipe supports);
- Pipes, pumps, valves, fittings, filters (leaks, corrosion or deterioration);
- Monitoring equipment and liquid level indicators (proper operation); and
- Tank shell, roof, and bottom (corrosion, discoloration, cracks, buckles, bulges)

On an annual basis a metal thickness evaluation is completed to certify the compatibility of the tank construction with the contents, and the tank ladders are checked for damage and structural stability.

5.2.2.3. Safety and Emergency Equipment Inspection

Appendix 5-4 specifies the schedule for inspecting safety and emergency equipment. The following emergency equipment is inspected on a weekly or monthly schedule.

- Industrial absorbent quantities, locations and condition (weekly);
- Emergency eyewash and shower accessibility and operation (weekly);
- Safety glasses inventories;
- Face shield and visor inventories;
- Disposable respirator cartridge inventories and expiration dates;
- Fire extinguisher locations, accessibility, charged, and inspection dates;
- Soft sided chemical goggle inventories;
- Hard hat inventories;
- Hearing protection device inventories;
- Emergency oxygen device condition and charged;
- Glove inventories;
- Emergency lighting device condition and operation;
- Protective clothing condition and inventories;
- High pressure washer condition; and

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First aid equipment supply inventory.

Deficiencies identified during the inspection will be documented on the logs included in Appendix 5-6 and Appendix 5-7.

5.2.2.4. Security Devices Inspection

The perimeter security fencing is inspected monthly for general condition (corrosion, damage to chain-link or barbed wire, and breaches/evidence of unauthorized entry). Gates are inspected monthly for corrosion, damage, closure, operation, and breaches/evidence of unauthorized entry. Warning signs are inspected monthly for legibility and that they are present at their designated locations. The fire alarm system is tested monthly for proper function. The telephone is inspected by its ongoing use. The inspection log that includes provisions for inspecting security devices is included as Appendix 5-7.

5.2.3. Recordkeeping

The site inspection checklists (Appendix 5-5 through 5-8) are kept on file at the facility for a period of at least three (3) years from the date of inspection. As shown on these attachments, the records include the date and time of the inspection, the inspector's name, notation of the observations made, and the date any repairs or remedial actions were performed.

5.3. <u>Preparedness And Prevention</u>

5.3.1. Maintenance And Operation Of Facility

The facility will be maintained and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water that could threaten human health or the environment. Allworth, LLC implemented a preventive maintenance program to minimized unplanned outages. Critical parts and supplies are maintained in inventory for change outs during planned and unplanned outages. A manual tracking system is maintained through the use of logs and work orders.

5.3.2. Equipment Requirements

Internal and external communications, emergency equipment and fire control equipment are discussed in Section 6.0, Contingency Plan and below.

5.3.2.1. Internal Communications

The facility has an internal communications system consisting of telephones and a paging system to provide immediate emergency instruction to facility personnel. In addition, an alarm system is located in the facility plant.

5.3.2.2. External Communications

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The facility uses the telephone system for summoning emergency assistance from local police departments, or state or local emergency response teams. Telephones are located in the warehouse, laboratory, and administrative offices.

5.3.2.3. Emergency Equipment

The facility maintains fire control equipment onsite, including extinguishing equipment such as foam and dry chemicals portable fire extinguishers. Spill control equipment and decontamination equipment is available at locations accessible to processing, storage and handling areas around the facility. Safety equipment, including Personal Protection Equipment and First Aid supplies, is located in strategic areas of the facility. A list of the emergency equipment is included in Section 6.0, Contingency Plan.

5.3.2.4. Water for Fire Control

The facility provides portable fire extinguishers in such quantities, sizes, and types as may be needed for the special hazards for operation and storage of hazardous waste management units. Water supplies and fire fighting foam are available to meet the fire demands indicated by the special hazards of operation, storage, and exposures.

5.3.3. Aisle Space Requirements

The facility provides sufficient aisle space in the container storage areas and around the tank storage areas to allow for the unobstructed movement of personnel, fire protection equipment, spill control equipment and decontamination equipment to any area of the facility in an emergency.

In the container storage area, adequate space is provided between rows to allow for the inspection of the containers for visible signs of leakage or damage. Adequate space is provided for the operation of forklifts in the main aisles.

Containers stored in freight trailers in the Trailer Staging Area will be loaded per DOT 49 CFR Subchapter C Regulations.

5.3.4. Preventive Procedures, Structures And Equipment

5.3.4.1. Loading/Unloading Operations

Every shipment that arrives at the facility is sampled in accordance with the Waste Analysis Plan. A complete training program is designed for the operators in procedures to conduct loading/unloading operations in a safe manner. The driver must comply with all plant safety rules and written driver operating procedures. The operators ensure that tank trucks are properly grounded prior to loading/unloading. Trained personnel monitor the truck during the entire transfer process and take corrective action should a problem arise. The truck loading/unloading areas are sloped to provide adequate drainage in case of a spill. All loading and unloading is

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performed by facility employees trained in the handling of hazardous wastes and attended by the drivers of outside transportation vehicles who are responsible for securing their equipment.

Standard Operating Procedures provide methods for removing waste from hoses after the loading/unloading operation is complete. Accidental spills occurring in the pumping station area of the facility will be pumped back to the tanks. In the event of a major spill, the spill can be contained in the adjacent dike. The load/unload area provides containment for major spills within the covered structure.

Trucks with containerized hazardous waste will be received at the loading areas or the Trailer Staging Area. A forklift operated by a trained employee will unload the containers into the contained loading area. The containers are inspected for proper labeling and the load compared to the manifest documents. If the containers are properly labeled and manifested, the containers will be sampled. After the required laboratory work confirms that the material conforms to the facility acceptance requirements, the containers will be stored in a container storage area with compatible materials.

5.3.4.2. Run-On and Run-Off

The facility is designed to minimize run-on, infiltration and run-off from the hazardous waste management units. Container storage Areas A, B, D, E and F, and the waste processing areas are constructed above grade level, are roofed and are completely contained. Therefore, run-off from these areas is minimized. The Trailer Staging Area and two tank systems are outdoors, but the containment systems are designed to prevent run-on and contain the contents of the largest container or tank, in addition to a 25-year 24-hour rainfall event.

5.3.4.3. Water Supplies

All drinking and industrial water used in the vicinity of the site is supplied by the municipal system through pressure mains, minimizing the immediate impact of potential releases to the supply. Contamination of water supply sources is further minimized by secondary containment of all hazardous waste management areas.

5.3.4.4. Equipment and Power Failure

In the event of a power interruption, the emergency lighting system will activate to provide light in critical areas and to illuminate means of egress from the plant. All activities will cease with power failure. All valves will be manually shut off and plant operations discontinued until power is re-supplied. No processing can be accomplished during power failure.

5.3.4.5. Personal Protection Equipment

To prevent undue exposure of personnel to hazardous waste, hard hats, safety shoes, and eye protection equipment are mandatory. In addition, there are certain processing areas and

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operations where respiratory protection is required. Use of coveralls, splash shields, solvent-resistant boots, and gloves is reviewed during personnel training. The documented management inspection of the condition and inventories of this equipment is performed on a monthly basis as specified in Section 5.2. This equipment is selected according to occupational safety and health standards.

5.4. Special Requirements For Of Ignitable, Reactive And Incompatible Waste

5.4.1. Precautions For Ignitable Or Reactive Wastes

The entire processing area of the Facility is considered to handle ignitable wastes. Ignitable wastes for bulking and reclaim or fuel substitution may carry the D002 waste code only as a secondary characteristic code (e.g. Waste Flammable Liquids, Corrosive, n.o.s.). Primary characteristic corrosive wastes (D002) and reactive wastes (D003) are accepted in containers only. Further, D003 reactive wastes are limited to those wastes defined at ADEM Admin. Code Rule 335-14-2-.03(4)(a)(2), (3), (4), (5), and (6). Further, reactive wastes defined at 335-14-2-.03(4)(a)(6) are limited to USDOT Class/Division 1.4, 1.5, 1.6 defined at 49 CFR 173.50. Acidic corrosive wastes (D002) are segregated from alkali corrosive wastes (D002) and reactive cyanide or sulfide bearing wastes (D003) by placing the acidic wastes in self-contained spill pallets separate from the alkali/cyanide/sulfide wastes.

The tanks and containers are tested or otherwise determined to be compatible with the contained wastes. Required precautions contained in the National Fire Protection Association Chapter 30 are taken to prevent a possible source of external ignition. The Facility has posted "No Smoking" signs throughout the facility to reduce the chance of accidental ignition of any waste materials from this identified health and safety hazard. The containers are stored in a manner that minimizes the chance of ignition.

The tanks are painted to reflect solar radiation, reducing temperature of the contents and thus the generation of flammable vapors. The tanks are vented according to NFPA or API guidelines. Placement of tanks within the facility complies with NFPA 30 guidelines for tank storage of flammable liquids.

All tank trucks delivering flammable liquids are grounded to dissipate static electricity accumulation. Approval of any repair or maintenance work, including Hot Work, to be performed in the area must be obtained prior to initiating work. All work must be performed according to approved work orders. Spark-proof tools are used for maintenance or repair work when necessary. All electric equipment used in Division 1 areas is explosion-proof in compliance with the National Electric Codes.

5.4.2. <u>General Precautions For Handling Ignitable Or Reactive Wastes Or Accidental Mixing Prevention Of Incompatible Wastes</u>

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Quality control analysis is performed on each waste stream to determine compatibility, reactivity, and ignitability as described in the Waste Analysis Plan. This testing provides the facility with an effective program to prevent receiving or processing reactive or incompatible waste. Records of the analyses will be maintained at the facility. If incompatible wastes are received they will not be commingled in the same container or tank, nor will they be placed in unwashed containers that previously held an incompatible waste or material. The facility precautions for ignitable waste are described above. Precautions and limitations on the management of characteristic corrosive wastes (D002) and reactive wastes (D003) are described in Section 3.2 of the Waste Analysis Plan.

The facility requires the use of "Hot Work" permits for activities such as welding, cutting, or similar spark producing operations within the facility. A combustible gas/oxygen monitor is used in conjunction with these activities in order to ensure that there are no gases or vapors in the work area that are above 10% of the appropriate lower explosive limits for that compound. Any work to be performed in a confined space requires the pre-testing of the space with a combustible gas/oxygen monitor and the use of SCBA or supplied air equipment.

All equipment, such as tanks, where an ignitable mixture may be present are bonded or connected to a ground system in order to dissipate hazardous accumulations of static electricity. The bond or ground is physically applied or is inherently present by nature of the installation.

5.4.3. Management Of Ignitable Wastes In Containers

The procedures for unloading and storing hazardous wastes are described in Section 5.3.4.1. Ventilation of the container storage buildings is provided to meet the requirements of NFPA 30, Section 5-3.3 in order to preclude vapor buildup. The roofs over the container storage areas help to reduce the thermal heat loading.

Safety signs are used to minimize the possibility of an ignition source occurring in the container storage areas. These signs have been outlined in Section 5.1.2.2.

5.4.4. Management Of Incompatible Wastes In Containers

Incompatible wastes will not be commingled in the same container or tank, nor will they be placed in unwashed containers that previously held an incompatible waste or material.

5.4.5. Management Of Ignitable Wastes In Tanks

The procedures for unloading and storing are described in Section 5.3.4.1. Precautions as described in Section 5.4.2 will be taken to ensure that ignitable wastes are properly managed in tanks. The tanks conform to the National Fire Protection Association's (NFPA) 2003 "Flammable and Combustible Liquids Code". Tanks comply with the requirements for the maintenance of protective distances between the waste management area(s) and any public ways, streets, alleys, or an adjoining property line that can be built upon in accordance with NFPA 30. The system

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design and precautions to prevent ignition of ignitable wastes have been previously addressed.

The local Fire Department can provide fire fighting support on short notice, bringing additional equipment and expertise to the facility. See Section 6 of this permit renewal application for details of fire fighting contingencies.

5.4.6. Management Of Incompatible Wastes In Tanks

Waste compatibility is addressed in the Waste Analysis Plan and general precautions to be taken by the facility are described in Section 5.4.2.

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SECTION 5.0

APPENDICES

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- 5-2 GENERAL INSPECTION REQUIREMENTS
- 5-3 WORK ORDER TRACKING LOG
- 5-4 INSPECTION SCHEDULE
- 5-5 DAILY INSPECTION LOG
- 5-6 WEEKLY INSPECTION LOG
- 5-7 MONTHLY INSPECTION LOG
- 5-8 ANNUAL INSPECTION LOG

APPENDIX 5-4 INSPECTION SCHEDULE

Area/Equipment	Specific Item	Types of Problems	Inspection Frequency
Safety and	Industrial absorbent	Low inventory	Weekly
Emergency	Emergency eye wash shower	Proper operation	Weekly
Equipment	Safety glasses	Low inventory	Monthly
	Face shield and visor	Low inventory	Monthly
	Disposable respirator cartridges	Low inventory and expiration	Monthly
	Fire extinguishers	Accessible, charged, inspected	Monthly
	Soft side goggles	Low inventory	Monthly
	Hard hat	Low inventory	Monthly
	Ear protection	Low inventory	Monthly
	Emergency Oxygen	Condition and charged	Monthly
	Eyewash	Low inventory	Monthly
	Gloves	Low inventory	Monthly
	Emergency lighting	Condition and operation	Monthly
	Protective clothing	Low inventory and condition	Monthly
	High Pressure Cleaner	Proper operation	Monthly
	First aid equipment	Low inventory	Monthly
Security Devices	Perimeter Fence	Corrosion, damage to chain-link or barbed wire, breaches	Monthly
	Gates	Corrosion, damage, closure, operation, breaches	Monthly
	Warning Signs	Legibility and presence	Monthly
	Fire Alarm System	Proper Function	Monthly
Container Storage Areas	Evidence of Leaks, Spills, and Precipitation	Leaking containers, spills, and precipitation	Daily
	Container Placement and Stacking	Aisle space, stack height	Weekly
	Container Seals	Open lids or bungs	Weekly ¹
	Container Labels	Complete, accurate, legible, and visible	Weekly ¹
	Container Condition	Corrosion, structural defects, bulging	Weekly ¹
	Pallets Damaged		Weekly ¹
	Foundation and Dikes	Cracks, deterioration, spalling, uneven settlement, erosion, wet spots	Weekly

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Area/Equipment	Specific Item	Types of Problems	Inspection Frequency
Container Storage	Container Inventory	Number and capacity of	Weekly
Areas (cont.)		containers	
Tank Systems and	Evidence of Leaks, Spills and	Leaking containers, spills, and	Daily
Ancillary Equip.	Precipitation	precipitation	
	Foundation and Dikes	Cracks, deterioration, spalling, uneven settlement, erosion, wet spots	Daily
	Tank Structural Supports	Concrete deterioration and cracking, corrosion of pipe supports	Daily
	Pipes, Pumps, Valves, Fittings, Filters	Leaks, corrosion or deterioration	Daily
	Monitoring Equipment and Level Indicators	Proper operation	Daily
	Tank shell, roof, bottom	Corrosion, discoloration, cracks, buckles, bulges	Daily
Tank (External)	Metal Thickness	Corrosion, deterioration, cracking	Annual
	Ladders	Damaged, structural stability	Annual

¹⁾ The interior of freight trailers within the Trailer Staging Area will be inspected weekly. Containers stored in freight trailers for greater than a month will be off-loaded and individually inspected.

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APPENDIX 5-5 DAILY INSPECTION LOG

Inspector Name:	Inspection Date:	Inspection Time:			
DAILY INSPECTION LOG					
ITEM / EQUIPMENT	PROBLEM / OBSERVATION	STATUS √ = acceptable X = not acceptable	NOTE DEFICIENCY and CORRECTIVE / REMEDIAL ACTION & DATE		
Container Storage Areas A, B, D, E, and <mark>F, Trailer Staging Area</mark> and Loading Areas LA-1, LA-2, and Waste Processing Area					
Leaks, Spills, and Precipitation	Presence of leaks, spills, and precipitation				
Hazardous Waste Storage	No Hazardous Waste present outside of permitted storage				
T. 1. C. 4	4 W F 4 4 1 T C A 1 T T L	D 5 D 5 W 1 W 2	NH 1 0 1 E 1 E 2 E 2 E 4 E 5 LE 6		
Tanks Systems and A	Ancillary Equipment TS-1 and TS-2 and Tanks	B-5, B-7, W-1, W-2,	NH-1, O-1, F-1, F-2, F-3, F-4, F-5, and F-6		
Leaks, Spills, and Precipitation	Presence of leaks, spills, and precipitation				
Foundation and Dikes	Cracks, deterioration, spalling, uneven settlement, erosion, wet spots				
Tank Structural Supports	Concrete deterioration and cracking, corrosion of pipe supports				
Pipes, Pumps, Valves, Fittings, Filters	Leaks, corrosion or deterioration				
Monitoring Equipment and Level Indicators	Proper operation				
Tank shell, roof, bottom	Corrosion, discoloration, cracks, buckles, Bulges				

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APPENDIX 5-6 WEEKLY INSPECTION LOG

Inspector Name:	pector Name: Inspection Date:		Inspection Time:		
	WEEKLY INSPE	CTION LOG			
ITEM / EQUIPMENT	PROBLEM / OBSERVATION	STATUS $ \sqrt{\text{= acceptable}} $ $ X = \text{not acceptable} $		EFICIENCY and EDIAL ACTION & DATE	
Conta	iner Storage Areas A, B, D, E, and F <mark>, Trailer S</mark>		ling Areas LA-1, LA-2, ar	ıd	
Leaks, Spills, and Precipitation	Waste Proces Presence of leaks, spills, and precipitation	sing Area		_	
Container Placement & Stacking	Aisle space, stack height				
Container Seals ¹	Open lids or bungs				
Container Labels ¹	Complete, accurate, legible, and visible				
Container Condition ¹	Corrosion, structural defects, bulging				
Pallets ¹	Damaged				
Foundation and Dikes	Cracks, deterioration, spalling, uneven settlement, erosion, wet spots				
	Safety and Emerge	ncy Equipment			
Industrial absorbent	Low inventory				
Emergency eye wash shower	Proper operation				
1) The interior of freight trailers loaded and individually inspectontainer Inventory:	within the Trailer Staging Area will be inspected ected.	weekly. Containers s	tored in freight trailers for g	greater than a month will be off	
220-gal totes	85-gal drums	55	-gal drums	30-gal drums	
15-gal drums	5-gal buckets		bic yard boxes		

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SECTION 7.0 PERSONNEL TRAINING

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7.0 PERSONNEL TRAINING

7.1. Overview And Objectives

Accidents and emergency situations can be avoided, or at least minimized, by having a work force that is trained to perform jobs properly, use proper tools and take adequate precautions. If an accident does occur, the consequences can be lessened through rapid and effective response.

The purpose of the Personnel Training Program is to familiarize employees with the hazards of the wastes received at Allworth, LLC and the operation of the facility, to prevent accidents and to mitigate impacts should an accident occur. Thorough training of facility personnel is recognized as being a fundamental step toward these goals. Consequently, a comprehensive Personnel Training Program, which has been demonstrated to be effective at the facility, has been developed. Improvements to the program will be implemented when appropriate.

The objectives of the Personnel Training Program are:

- 1. To provide each employee with the knowledge necessary to enable him or her to perform the job in a safe and effective manner.
- To ensure that personnel are able to recognize potential hazards and are familiar with procedures and policies designed to mitigate and/or minimize such hazards should they occur.
- 3. To keep personnel familiar with policies and procedures and to implement additional training as regulatory and/or operational changes occur.

The Personnel Training Program consists of a combination of Formal Classroom Training, Onthe-Job Training, demonstrations and drills, and is implemented by qualified site management, and other industry professionals (e.g. Red Cross, local fire department or training organizations).

Training is fundamental to efficient operation of the facility. The Personnel Training Program is designed to provide basic training to all individuals who work with hazardous waste at the facility and to give increasingly specialized training to those individuals performing more complex and/or potentially hazardous tasks as they relate to their job responsibilities. Re-training is administered based upon individual and regulatory needs.

7.2. Training Methodology

7.2.1. Formal Classroom Training

One of the most common and effective methods of personnel training is classroom training. Classroom training, which may include seminars given by off-site industry professionals, is supplemented by audio/visual/lecture presentations. In this manner, management can be assured

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that all required subject matter has been addressed. Site-specific requirements can be emphasized and experts in a particular area may not only present the information but can also be available for feedback and questioning.

7.2.2. <u>On-the-Job Training</u>

Certain subject matter is not suitably addressed or absorbed in a classroom format and is best administered via On-the-Job Training. On-the-Job training provides individualized training pertinent to normal daily operations of the facility. A major advantage of this type of training is "hands-on" experience, with supervision, for specific equipment and processes used at the facility.

On-the-Job Training will be used primarily for orientation purposes for operational and laboratory new hires and transfers. On-the-Job Training will be based upon job duties and will be administered most often by an employee's supervisor, but always by an individual with prior experience in a particular area.

7.2.3. Assurance of Quality Training

Assuring the high quality of training administered at the facility is of great importance and is accomplished through a number of means.

- 1. Safety and/or operations training.
- 2. Interactive discussions with employees to ensure that concepts are thoroughly communicated by the instructor and understood by the employee.
- 3. Daily, weekly and monthly inspections of facility operations to ensure that training has been effective.
- 4. Modifications of training courses or additional training may be provided if inspections indicate a need.

These methods, as well as task specific on-the-job training ensure continued effectiveness and quality of training.

7.3. Outline Of Training Program

A training program must remain flexible in order to respond to changing needs and requirements. A number of typical subjects have been identified which form a basis for training at the facility. Table 7-1 identifies these typical training subjects. The typical training subjects have been divided into two categories: Basic Training and Additional Training. The Basic Training is provided to individuals directly involved with the management of hazardous waste. It provides them with the ground rules for their assigned tasks and performance expectations, as well as basic safety rules and means for responding to accidents, emergencies and alarms. Basic

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Training is updated annually (except new employee orientation). Additional Training is provided to individuals based on an individual's job description and other assigned duties (e.g. Emergency Coordinator for the Contingency Plan) and is updated as needed for remedial purposes and in accordance with various regulatory requirements.

7.3.1. Basic Training

Each employee must satisfactorily complete training in the five (5) basic subjects identified in Table 7-1 prior to working unattended. This training will be completed within six (6) months of an employee assignment to the facility. Basic Training is designed to:

- Familiarize the individual with the facility, the hazardous wastes and materials, the limits of permitted waste storage areas and the processes;
- Establish basic rules of conduct and expectations for the individual's job performance;
- Minimize the potential for accidents or injuries, including conditions that may be unique to the facility;
- Ensure that the individual is able to respond properly to emergencies; and
- Familiarize the individual with the appropriate regulatory requirements.

Basic Training (except new employee orientation) is updated no less than annually. Update training is intended for the introduction of new or changing information. Basic Training consists of the following:

7.3.1.1. New Employee Orientation

This orientation is designed to familiarize the new employee with the organization and administrative policies of the facility. Necessary insurance, payroll and taxation forms are also completed at this time.

7.3.1.2. Job Specific Duty Orientation

This orientation is intended to describe in detail what an individual is expected to do. For new employees, the trainer will go over the job description with the individual to ensure they understand what they will be expected to do. For new or unusual tasks, the trainer may go over facility plans (e.g. Inspection Plan, Waste Analysis Plan) or Standard Operating Procedures (e.g. Calibration, Use and Maintenance of Equipment). A mixture of classroom and on-the-job training may be utilized. Appendix 7.1 and Appendix 7.2 lists on-the-job SOPs for the facility and laboratory respectively.

7.3.1.3. Overview Site Specific Safety Procedures

This discussion establishes:

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- a. That every individual is expected to conduct themselves in a safe manner;
- b. The minimum required personal protective equipment for their job assignment;
- c. Restricted areas that may only be entered when wearing prescribed levels of personal protective equipment;
- d. Areas where individuals may eat, drink, smoke and use toilet facilities, and areas where they may not;
- e. The location of telephones, alarms, lists showing the names and phone numbers of Emergency Coordinators and response agencies, and other emergency equipment (e.g. fire extinguishers, eyewash/safety showers);
- f. Requirements for the individual to report all accidents, unusual events and unsafe conditions to their supervisor or to the Emergency Coordinator;
- g. That there are personnel responsible for and procedures in place for the inspection and repair of all safety gear and emergency systems, and that they will receive additional training if they are to perform these tasks;
- h. That there are various plans and procedures intended to minimize the potential for adverse reactions or incidents involving hazardous waste such as the Waste Analysis Plan, and procedures for management of ignitable, reactive and incompatible wastes, and that they will receive additional training if they have additional responsibilities relative to these plans; and
- i. The disciplinary policy of the facility including the safety violation policy and the accident repeater policy.

7.3.1.4. Contingency Plan

All facility personnel are trained to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment, and emergency systems, including responding to the following:

- Fire:
- Explosion;
- Spill of Hazardous Waste or Hazardous Material;
- Severe Weather Conditions; and
- Sounding of Emergency Alarm System.

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As a minimum Contingency Plan training will include the following:

a. Procedures for Using, Inspecting, Repairing, and Replacing Facility Emergency and Monitoring Equipment

Personnel receive instruction in the use of all emergency equipment applicable to their duties including alarms and fire extinguishers. Appropriate personnel will be trained to inspect the facility emergency and monitoring equipment in their work area to mitigate the effects of equipment failure. Instruction in this area will be in both classroom and on-the-job training.

b. Key Parameters for Waste Feed Cut-off Systems

Material handlers will receive training in the use of pumps and valves that regulate waste flow to tanks as part of the training for tank operators. They will also be trained in procedures used in the event the level of waste in the tank gets too high or an overfill occurs.

c. Communication or Alarm Systems

All facility employees are instructed as to the location and use of communication and alarm systems as part of the Contingency Plan portion of training. Personnel in operational areas of the facility receive additional instruction in the use of communication systems and alarms particular to their respective areas.

d. Response to Fires or Explosions

All personnel involved in hazardous waste management at the facility receive basic instruction in fire and explosion prevention and response, including the use of facility fire fighting equipment.

e. Response to Release of Hazardous Waste to the Environment

All personnel involved in hazardous waste management at the facility receive basic instruction in spill and release prevention and response. Emergency response training will be conducted in accordance with the facility Contingency Plan.

f. Shutdown of Operation

The primary responsibility for shutdown of operations lies with plant managers and supervisors. All personnel with operational responsibilities are instructed in the proper procedures for planned and unplanned shutdown of operations. This training is provided as part of the job specific training programs.

7.3.1.5. Regulatory Requirements

It is important for everyone to appreciate and understand the regulatory environment in which the facility operates. This section presents an overview of the Resource Conservation and Recovery Act and other applicable regulations (e.g. Hazardous Material Transportation Act, Hazardous and Solid Waste Amendments of 1984, Occupational Safety and Health Act, Clean Water Act, Clean Air Act) and is most often a classroom discussion which includes:

- a. Basic requirements for the regulated community (generators, transporters and treatment/storage/disposal facilities); and
- b. The cradle-to-grave concept of the manifest.

7.3.2. Additional Training

Additional training (see subject listing on Table 7-1 and Appendix 7-3) is provided to individuals based on the requirements of their job. As stated previously, the Core Training subjects are felt to be the basis for which personnel may operate the facility safely and efficiently. Additional specialized subject matter may be administered as the need or opportunity arises.

7.3.3. Annual Refresher Course

Continuing training is provided at least annually for all facility employees involved in hazardous waste management. It may include both classroom and on-the-job training. It may include the course topics presented in the initial training discussed in Sections 7.3.1 and additional training discussed in Section 7.3.2 of this plan. The classroom training segment includes operational training meetings, formal classroom training, safety meetings, and review of training topics and standard operating procedures.

Topics for this training will include as a minimum:

- Changes in types or quantities of wastes accepted, and processing or storage mechanisms.
- Changes or revisions to permit conditions, emergency coordinators and general operations.
- Any experience requiring the implementation of the Contingency Plan, notification requirements, etc.

7.4. <u>Training Instructors</u>

The Safety Health & Compliance Department (SH&C) is responsible for directing the training of facility personnel in hazardous waste management and health & safety procedures. These individuals are highly qualified to design and implement the personnel training programs due to his/her knowledge about all aspects of the facility operations, OSHA and environmental

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regulations. SH&C is specifically trained in proper hazardous waste management procedures. Responsibility for portions of the program may be delegated to other qualified individuals including other company personnel as well as outside sources. In all cases, SH&C must approve all elements of the program used to fulfill the requirements for environmental, health & safety and hazardous waste management training.

7.5. **Documents And Records**

Documents and records that will be maintained at the facility include the following information:

- Job title for each position at the facility related to hazardous waste management;
- A roster of employees and their job titles (updated as required);
- A written job description for each job title;
- A written description of the type and amount of both introductory and continuing training given;
- Records documenting training; and
- Documentation that annual review training is held.

All of the training documentation for current personnel will be kept at the facility during its active life. Training records on former employees will be kept for at least three years from the date the employee last worked at the facility. Personnel training records may be transferred with the employee when transfers occur within the same company.

7.6. Relevance Of Training To Job Position

The training program has been designed to tailor course requirements to the subject areas and levels of detail appropriate for each job title. The size and nature of operations require a great deal of cross training. A person with one job title may at times perform the functions of another job title. In summary, all personnel involved with hazardous waste management receive training related to personal safety, the chemistry of hazardous wastes and associated health effects, contingency plans including emergency evacuation, hazardous waste regulations overview, identification of the limits of permitted hazardous waste storage areas and their right regarding knowing the chemical hazards associated with materials at the facility. Appendix 7.3 summarizes company compliance requirements based on position and job responsibilities.

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Table 7-1 Typical Training Subjects

Basic Training *

- 1. New Employee Orientation
- 2. Job Specific Duty Orientation
- 3. Overview Site Safety Procedures
- 4. Individual Contingency Plan Responsibilities
- 5. Regulatory Requirements
- 6. Permit Requirements including limits of permitted hazardous waste storage areas

Additional Training **

- 7. Hazard Communication
- 8. Personal Protective Equipment
- 9. Respiratory Protection
- 10. The Use and Maintenance of Fire Protective Equipment
- 11. First Aid
- 12. Cardio-Pulmonary Resuscitation (CPR)
- 13. Heat/Cold Stress Management
- 14. Hearing Conservation
- 15. Fork Lift Training
- 16. Basic Chemical Concepts
- 17. Basic Toxicological Principles
- 18. Laboratory/QC Safety
- 19. Confined Space Entry
- 20. Lock-Out/Tag-Out Procedures
- 21. Hot Work Procedures
- 22. Grounding and Bonding Safety
- 23. Safe Drum Handling
- 24. Placards, Labels and Marks
- * All employees receive Basic Training within six months of assignment to the facility and prior to working alone. Training subjects 2 through 5 are updated annually.
- ** Additional Training is provided on a need-to-know basis and is updated as required.

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SECTION 7.0

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8.0 CLOSURE PLAN AND FINANCIAL REQUIREMENTS

8.1. <u>Introduction</u>

This plan identifies all the steps necessary to partially close the Allworth, LLC facility at any point during its operating life and to completely close the facility at the end of that life. A Post-Closure Plan is not required because this is not a disposal facility and all wastes will be removed during closure. This Closure Plan addresses the closure procedures for storage tank systems and container storage areas.

A copy of this Closure Plan and all revisions to it will be kept at the facility until certification of closure completeness has been submitted and accepted by the Alabama Department of Environmental Management (ADEM). Any modifications to the existing equipment, structures, or procedures related to the management of hazardous waste may result in the facility revising this Closure Plan accordingly.

8.2. Closure Performance Standard

This Closure Plan will minimize the need for further maintenance and control, minimize, or eliminate, to the extent necessary to protect human health and the environment, post-closure escape of hazardous waste, hazardous constituents, leachate, contaminated run-off, or hazardous decomposition products to the ground or surface waters or to the atmosphere. This plan is designed to meet the requirements for closure of container storage units [ADEM Admin. Code Rule 335-14-5-.09(9)] and tank storage units [ADEM Admin. Code Rule 335-14-5-.10(8)]. All closure activities will be done in accordance with the conditions stipulated in this plan.

8.3. Partial Closure And Final Closure Activities

Partial closure activities will be conducted according to this plan in the case that one or more units require closure prior to final facility closure. The procedures for final closure, including waste removal, cleanup and decontamination activities are described in the following sections of this Closure Plan.

8.4. Maximum Waste Inventory

The following shows the maximum inventory of wastes in storage at any given time during the operating life of the facility.

Containers:	Storage Area "A"	344	55-gallon container equivalents
	Storage Area "B"	360	55-gallon container equivalents
	Storage Area "D"	336	55-gallon container equivalents
	Storage Area "E"	5	6,000 gallon roll-offs
	Storage Area "F"	24	55-gallon container equivalents

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Trailer Staging Area	8	8,000 gallon bulk trailers,
		approximately 1,164 55-gallon
		container equivalents

Total Storage in Containers	152,540	gallons
Tanks:		
Tank B-5	18,000	gallons
Tank B-7	18,000	gallons
Tank W-1	6,000	gallons
Tank W-2	6,000	gallons
Tank NH-1	6,000	gallons
Tank O-1	4,100	gallons
Tank F-1	6,000	gallons
Tank F-2	6,000	gallons
Tank F-3	6,000	gallons
Tank F-4	6,000	gallons
Tank F-5	6,000	gallons
Tank F-6	6,000	gallons
Total Storage in Tanks	94,100	gallons

8.5. Inventory Removal And Disposal

8.5.1. Container Storage

All wastes will be shipped off site to an authorized Treatment Storage and Disposal Facility (TSDF). Where amenable solids will be bulked/consolidated into roll offs and liquids bulked/consolidated into facility tanks and/or cargo tanks. Loose pack, lab pack, and pharmaceutical wastes are received only in container quantities and will be shipped off site as received. Photochemical waste will be shipped offsite in bulk. Empty containers will be shipped to a container reconditioning/disposal facility. The facility will comply with all applicable generator requirements for the off-site shipments.

Appendix 8-2 presents the costs for treatment and disposal of containers by container storage area and waste types. This information is also presented for the bulk waste in tanks systems TS-1 and TS-2.

8.5.2. Tank Storage

All material in each of the tanks will be loaded onto bulk tankers for shipment off-site to an authorized TSDF. Most of the material will be suitable for supplemental fuel and will be shipped to cement kilns. Any material not suitable for usage as fuel will be shipped to an authorized

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TSDF.

8.6. Decontamination Procedures

Following the removal of all stored hazardous waste, the container storage areas, the roll-off bulking area(s), and the tank systems will be decontaminated. This involves the removal of all residues and verifying that no hazardous constituents remain at levels of concern.

8.6.1. Container Storage

The following sections address decontamination and verification procedures for the container storage Areas A, B, D, E and F, the Trailer Staging Area and loading areas LA-1 and LA-2. Processing and staging areas are considered part of container storage Area A. The Solids Bulking Area is considered part of container storage Area B. Container storage Areas A, B, D, E and F and the Trailer Staging Area are described in detail in Section 4.0, Process Information.

8.6.1.1. Container Storage Decontamination

The container storage containment areas will be cleaned using a high-pressure hot water/detergent wash followed by a rinse. The wash water will consist of water from the industrial water supply in addition to an appropriate detergent. If it is determined that a detergent wash is not appropriate, another wash method such as, but not limited to, steam cleaning or abrasive cleaning will be utilized. The wash water will be sprayed over the areas until no visible waste residuals remain. All spent wash water will be retained within the units prior to being pumped into tanks, bulk tankers, or drums for shipment off-site to an authorized TSDF. Spent wash water may be treated as non-hazardous if confirmed through sampling and analysis.

8.6.1.2. Verifying Decontamination

Decontamination will be confirmed through the use of wipe tests. Sufficient sampling locations will be selected throughout the storage areas to verify decontamination has been achieved. Locations will be selected in areas potentially or visibly impacted by past management practices. There will be approximately five samples taken in container storage Areas A, B, D and E, and at least one sample taken from the floor of the trench in Area B. Three samples will be collected from the Trailer Staging Area. One sample will be taken in container storage Area F, and three samples will be taken at each loading area LA-1 and LA-2. The samples will be analyzed for the hazardous constituents listed in Appendix VII of ADEM Admin. Code Rule 335-14-2 for waste codes F001 through F005 and Toxicity Characteristic Metals (D004 through D011), which are the most prevalent materials managed at the facility.

The results will be compared to background samples taken from Facility areas unaffected by hazardous waste. Container storage areas will be considered decontaminated if the results do not show a significant increase over background. If the testing discloses that waste remains, the procedures described in Sections 8.6.1.1 and 8.6.1.2 may be repeated. Decontaminated container

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storage areas may be left in place. Areas not considered decontaminated may be shipped off-site to an authorized TSDF.

8.6.1.3. Soil Sampling

No contamination of underlying soils is anticipated due to the design and maintenance of the containment structure. Any cracks or gaps in the containment will become evident during the decontamination procedures. If on examination any cracks or gaps are discovered, procedures for verifying decontamination (above) will be used to determine if hazardous waste or constituents have migrated through the device. If it is determined that migration has occurred, the Department will be notified and the plan will be modified in accordance with the ADEM Admin. Code Rule 335-14-5-.07(3)(c)2.(iii).

8.6.2. Tank Storage

The following sections will address decontamination and verification procedures for tank systems (includes tanks, associated ancillary equipment, and secondary containment systems). Decontamination and verification of the bulk tanker load/unload pad has been addressed in Section 8.6.1. The tank systems are described in detail in Section 4, Process Information.

8.6.2.1. Tank and Ancillary Equipment Decontamination

Tanks and ancillary equipment (pumps, piping, valves, etc.) will be flushed with appropriate compatible cleaning solutions to reduce any liquid, solid, or clinging residues. The flush material and resulting residues may either be pumped to other tanks for further use or reuse or onto bulk tankers or drums for shipment off-site to an authorized TSDF.

After flushing of the tanks and ancillary equipment the tanks will be entered, following established site procedures for confined space entry, and inspected. Any visible residue remaining will be removed by scraping and washing with a high-pressure water/detergent wash. Wash water rinsate and resulting residuals may either be pumped to other tanks for further use or reuse or bulk tankers for shipment off-site to an authorized TSDF. Spent wash water may be treated as non-hazardous if confirmed through sampling and analysis.

The ancillary equipment will then be detached from the tanks and dismantled. The interior of the equipment will be inspected and cleaned as required using high-pressure water\detergent wash and rinse, steam cleaning, or abrasive techniques. Wash water rinsate and resulting residuals will be contained and may either be pumped to other tanks, bulk tankers, or drums for shipment off-site to an approved TSDF. Spent wash water may be treated as non-hazardous if confirmed through sampling and analysis.

8.6.2.2. Tank and Ancillary Equipment Decontamination Verification

Decontamination of each tank will be confirmed using final rinsate sampling. The samples will be analyzed for the hazardous constituents listed in Appendix VII of ADEM Admin. Code Rule

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335-14-2 for waste codes F001 through F005 and Toxicity Characteristic Metals (D004 through D011), which are the most prevalent materials managed at the facility. The results will be compared to background samples taken from facility areas unaffected by hazardous waste. Tanks will be considered decontaminated if the results do not show a significant increase over background. If the testing indicates that hazardous waste remains, the procedures described in 8.6.2.1 will be repeated. Decontaminated tanks may be left in place. Tanks not considered decontaminated may be shipped off-site to an authorized TSDF.

Decontamination of the ancillary equipment will be determined using final rinsate sampling when surface areas are not accessible. The samples will be analyzed for the hazardous constituents listed in Appendix VII of ADEM Admin. Code Rule 335-14-2 for waste codes F001 through F005 and Toxicity Characteristic Metals (D004 through D011), which are the most prevalent materials managed at the facility. The results will be compared to background samples taken from facility areas unaffected by hazardous waste. Ancillary equipment will be considered decontaminated if the results do not show a significant increase over background. If the testing indicates that hazardous waste remains, the procedures described in 8.6.2.1 may be repeated. Decontaminated ancillary equipment may be left in place. Ancillary equipment not considered decontaminated may be shipped off-site to an authorized TSDF.

8.6.2.3. Secondary Containment Decontamination

The tank secondary containment structures will be cleaned using a high-pressure hot water/detergent wash followed by a rinse. The wash water will consist of water from the industrial water supply in addition to an appropriate detergent. If it is determined that a detergent wash is not appropriate, another wash method such as, but not limited to, steam cleaning or abrasive cleaning will be utilized. The wash water will be sprayed over the containment structure until no visible waste residuals remain. All spent wash water will be retained within the containment structure prior to being pumped into tanks or bulk tankers for shipment off-site to an authorized TSDF. Spent wash water may be treated as non-hazardous if confirmed through sampling and analysis.

8.6.2.4. Verifying Containment Decontamination

Decontamination will be confirmed through the use of wipe tests. Sufficient sampling locations will be selected throughout the containment systems to verify decontamination has been achieved. Sample locations will include sumps and areas potentially or visibly impacted by past management practices. There will be approximately one sample taken per every four tanks. The samples will be analyzed for the hazardous constituents in Appendix VII of ADEM Admin. Code Rule 335-14-2 for waste codes F001 through F005 and Toxicity Characteristic Metals (D004 through D011), which are the most prevalent materials managed at the facility. The results will be compared to background samples taken from facility areas unaffected by hazardous waste. Tank containment areas will be considered decontaminated if the results do not show a

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significant increase over background. If the testing discloses that waste remains, the procedures described in Sections 8.6.2.3 may be repeated. Decontaminated areas may be left in place. Areas not considered decontaminated may be shipped off-site to an authorized TSDF.

8.6.2.5. Soil Sampling

No contamination of underlying soils is anticipated due to the design and maintenance of the containment structures. Any cracks or gaps in the containment will become evident during the decontamination procedures. If on examination any cracks or gaps are discovered, decontamination verification procedures in Section 8.6.2.4 will be used to determine if migration of hazardous waste or constituents have occurred. If results indicate that migration has occurred, the Department will be notified and the Closure Plan will be modified in accordance with ADEM Admin. Code Rule 335-14-5-.07(3)(c)2.(iii).

8.6.2.6. Sampling and Analysis

Throughout the closure period sample collection methods, chain of custody procedures, field sampling, QA/QC procedures, and analytical tests methods will conform to SW-846 methods or other EPA approved methods as applicable.

8.7. Closure Equipment

All equipment and tools used during the closure procedures will be decontaminated using the procedures provided in 8.6.2.1. Verification of decontamination will be done following the procedures provided in 8.6.2.2. Some of the equipment may be disposed as hazardous waste rather than attempting any decontamination.

8.8. Closure Certification

Pursuant to ADEM Admin. Code Rule 335-14-5-.07(6) within 60 days of completion of closure of each hazardous waste unit, and within 60 days of the completion of final closure, the facility will submit to the Director, a certification that the hazardous waste management unit or facility, as applicable, has been closed in accordance with the specifications in the approved closure plan. The certification will be signed by the owner or operator and an independent professional engineer. Documentation supporting the registered professional engineer's certification will be furnished upon request by ADEM.

8.9. Closure Schedule

The facility anticipates that all wastes will be removed within 90 days from the receipt of the final volume of waste at the unit or facility. All closure activities will be completed within 180 days from receipt of the final volume of waste at the unit or facility. The anticipated closure schedule is shown in Appendix 8-1. The table starts with the first day of closure activities. The schedule assumes that many different operations may be carried out simultaneously during

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closure of the entire facility. Therefore, the time required to close a single unit will be virtually the same as for a facility closure.

8.10. Notification Of Partial And Final Closure

The facility will notify the ADEM at least 45 days prior to the date closure is expected to begin. The expected date to begin closure will be no later than 30 days after the date on which the unit receives the final volume of hazardous waste or, if there is a reasonable possibility that the unit will receive additional hazardous waste, no later than one year after the date on which the unit received the most recent volume of hazardous waste.

8.11. Closure Cost Estimate

The closure cost estimate is detailed Appendix 8-2 and Appendix 8-3. The worse case for container disposal is considered by assuming that all containers will contain solids. The estimate will be kept on file at the facility. It will be revised whenever a change in the facility or closure plan affects the cost of closure. It will be adjusted annually to reflect changes in closure cost brought about by inflation. The US Department of Commerce Annual Implicit Price Deflator for Gross National Product will be used to make this adjustment.

8.12. Financial Assurance For Closure

Financial assurance for closure is established with Surety Bond and Standby Trust Agreement in accordance with the requirements of the ADEM Admin. Code Rule 335-14-5-.08(4)(c). The Penal Sum of the Surety Bond/Standby Trust Agreement reflects the current closure cost for the permitted units at the facility. The Penal Sum will be adjusted annually for inflation. Current documentation is included in the Appendix 8-4.

8.13. <u>Liability Insurance</u>

Liability coverage is maintained for sudden accidental occurrences in the amount of at least \$1 million per occurrence with an annual aggregate of at least \$2 million, exclusive of legal defense costs. A signed duplicate original of the Hazardous Waste Certificate of Liability Insurance has been submitted to ADEM and a copy included in the Appendix 8-5.

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SECTION 8.0

APPENDICES

8-1	CLOSURE	SCHEDUL	Æ
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- 8-2 CLOSURE COST ESTIMATES
- 8-3 CLOSURE COST DOCUMENTATION
- 8-4 FINANCIAL ASSURANCE FOR CLOSURE
- 8-5 LIABILITY INSURANCE

SUMMARY	
Activity	Cost (\$)
1. Removal of Waste (containers)	\$9,800
2. Removal of Tank Waste and Tank System Decontamination	\$77,100
3. Removal of Soil	\$0
4. Backfill	\$0
5. Decontamination of Surface Areas	\$55,720
6. Sampling and Analysis	\$59,100
7. Transportation	\$64,055
8. Treatment and Disposal	\$369,132
9. Subtotal of Closure Costs (Add lines 1 through 8)	\$634,907
Engineering Expenses (~10% of closure costs, excluding certification of closure (Line 9 x	0.10) \$63,491
11. Certification of Closure	\$4,400
12. Subtotal (Add lines 9, 10, and 11)	\$702,798
Contingency Allowance (~20% of Subtotal - Line 12 x 0.20)	\$140,560
ΓΟΤΑL COST OF CLOSURE 2016 COST (Add lines 12 and 13)	
Inflation Factor: Q4 2016 to Q4 2017 (x1.019)	
Inflation Factor: 2017 to 2018 (x1.0226)	
flation Factor: 2018 to 2019 (x1.0128)	\$11,249
OTAL COST OF CLOSURE 2020	\$890,052

Notes:

¹⁾ Costs are based on 2016 dollars using unit rates as presented in the Part B Application. Unit quantities were adjusted for the addition of the Trailer Staging Area.

INVENTORY (Worksheet CS-2)

.A CS-A Volume of waste [344 containers x 55 gallons]	18,920 gal
B CS-B Volume of waste [360 containers x 55 gallons]	19,800 gal
.C CS-D Volume of waste [336 containers x 55 gallons]	18,480 gal
.D CS-E Volume of waste [5 30 yard/6000 gallon roll off boxes]	30,000 gal
E CS-F Volume of waste [24 containers x 55 gallons]	1,320 gal
F LA-1 and LA-2 Volume of waste [no waste storage]	0 gal
.G TS-1 Volume of waste [6 Tanks of varying capacity]	58,100 gal
.H TS-2 Volume of waste [6 tanks each with 6,000 gallon capacity]	36,000 gal
. I Volume of Decontamination Waste Generated [480 55 gallon containers]	26,400 gal
. J Volume of Trailer Staging Area [1,164 containers x 55 gallons]	64,020 gal
2. Surface Area of Secondary Containment System Pad	
.A CS-A Surface Area of Containment	1,754 ft2
.B CS-B Surface Area of Containment	2,326 ft2
.C CS-D Surface Area of Containment	1,234 ft2
D.D CS-E Surface Area of Containment	2,282 ft2
E CS-F Surface Area of Containment	198 ft2
.F LA-1 and LA-2 Surface Area of Containment	4,512 ft2
G TS-1 Surface Area of Containment	2,788 ft2
.H TS-2 Surface Area of Containment	506 ft2
J LUWA Room Area of Containment	947 ft2 882 ft2
	10,500 ft2
J.J Trailer Staging Area Area of Containment	
Total Ar	27,929 ft2
s. Surface Area of RCRA Building Walls	3,000 ft2
. Volume of Piping System [3" diameter piping]	1,200 fee
. Surface Area of Other Structures	N/A
. Volume of Other Structures	N/A
Volume of Contaminated Soil to be Removed	N/A
LINE 1: REMOVAL OF WASTE (Container storage areas)	
Maximum valuma of wasta to be removed	58 520 gal
. Maximum volume of waste to be removed Number of containers to be removed (Line 1 ÷ 55)	
Number of containers to be removed (Line $1 \div 55$)	1,064
. Number of containers to be removed (Line 1 ÷ 55) Level of PPE assumed for activity	
Number of containers to be removed (Line $1 \div 55$)	D Level
 Number of containers to be removed (Line 1 ÷ 55) Level of PPE assumed for activity Labor and equipment [see "rates"] 	1,064 D Level \$9,800

LINE 3: DECONTAMINATION OF SURFACE AREAS BY STEAM CLEANING/PRESSURE WASHING

Area of unit to be decontaminated
 Level of PPE assumed for activity
 Labor and equipment cost
 Total Cost of Decontamination by Steam Cleaning/Pressure Washing (See rate tab)
 \$55,720
 \$55,720

INE 6: SAMPLING AND ANALYSIS

1. Random Surface Sampling and Decontamination Rinsate Sampling See rate tab \$3,200 \$55,900 2. Cost of Sample Analysis \$59,100

Total Cost of Sampling and Analysis

LINE 7: TRANSPORTATION OF WASTE

1. Transportation of Waste In Drums N/A 1,064 Drums 1.A Number of drums of waste \$1,484 \$/truck 1.B Cost to transport one truckload of 55-gallon drums [see "rates"] 1.C Number of truckloads (Line 1.A ÷ 90 - round up to whole number) 20 trucks \$29,680 Note 1 1.D Costs to transport waste in drums (Line 1.B x Line 1.C) \$28,230 2. Transportation of Bulk Liquids

3. Transportation of Bulk Waste \$6,145 \$64,055

Total Cost to Transport Waste

Notes:

1) Added transport of 8 trailers in Trailer Staging Area

2) There was an error in the summing of Lines 1.D, 2 and 3 in the 2016 estimate.

LINE 8 TREATMENT AND DISPOSAL SUMMARY SHEET

Activity Cost (\$) 1. Treatment and Disposal of Waste (below) \$346,443 \$ \$22,690 \$ 2. Transportation and Disposal of Decontamination Fluids (below) **Total Cost of Treatment and Disposal \$369,132** \$

TREATMENT AND DISPOSAL OF WASTES

1. TREATMENT AND DISPOSAL OF WASTE 1 [Flammable/Fuels]	
1.A Volume of waste in yd 3 [520 containers: = 520 x 55 x 0.004951]	142 yd 3
1.B Number of pounds per yd 3	1,685.8 lb/yd 3
1.C Amount of waste in pounds (Line 1.A x Line 1.B)	238,707 lbs
1.D Amount of waste in tons (Line 1.C ÷ 2,000)	119 tons
1.E Treatment and disposal cost per ton [see "rates"]	113 per ton
1.F Cost to treat and dispose of Waste 1 (Line 1.D x Line 1.E)	\$13.487 \$

2. TREATMENT AND DISPOSAL OF WASTE 2 [Toxic]

2. TREATMENT AND DISTOSALE OF WASTE 2 [TOME]	
2.A Volume of waste in yd 3 [418 containers: = 418 x 55 x 0.004951]	114 yd 3
2.B Number of pounds per yd 3	1,685.8 lb/yd 3
2.C Amount of waste in pounds (Line 2.A x Line 2.B)	191,884 lbs
2.D Amount of waste in tons (Line 2.C ÷ 2,000)	96 tons
2.E Treatment and disposal cost per ton [see "rates"]	1,313 per ton
2.F Cost to treat and dispose of Waste 1 (Line 2.D x Line 2.E)	\$125,972 \$

TREATMENT AND DISPOSAL OF WASTE 2 [Corrosivel

5 TREATMENT AND DISPOSAL OF WASTE 2 [Corrosive]	
3.A Volume of waste in yd 3 [128 containers: = 129 x 55 x 0.004951]	35 yd 3
3.B Number of pounds per yd 3	1,685.80 lb/yd 3
3.C Amount of waste in pounds (Line 3.A x Line 3.B)	58,759 lbs
3.D Amount of waste in tons (Line 3.C \div 2,000)	29 tons
3.E Treatment and disposal cost per ton [see "rates"]	515 per ton
3.F Cost to treat and dispose of Waste 1 (Line 3.D x Line 3.E)	\$15,130 \$

4 TREATMENT AND DISPOSAL OF WASTE 4 [Non-hazardous]

4.A Volume of waste in yd 3 [544 containers: = 544 x 55 x 0.004951]	148 yd 3
4.B Number of pounds per yd 3	1,685.80 lb/yd 3
4.C Amount of waste in pounds (Line 4.A x Line 4.B)	249,724 lbs
4.D Amount of waste in tons (Line 4.C ÷ 2,000)	125 tons
4.E Treatment and disposal cost per ton [see "rates"]	170 per ton
4.F Cost to treat and dispose of Waste 1 (Line 4.D x Line 4.E)	\$21.227 \$

5 TREATMENT AND DISPOSAL OF WASTE 5 [Loose Packs]	
5.A Volume of waste in yd 3 [396 containers: = 397 x 55 x 0.004951]	108 yd 3
5.B Number of pounds per yd 3	1,685.80 lb/yd 3
5.C Amount of waste in pounds (Line 5.A x Line 5.B)	181,785 lbs
5.D Amount of waste in tons (Line 5.C \div 2,000)	91 tons
5.E Treatment and disposal cost per ton [see "rates"]	555 per ton
5.F Cost to treat and dispose of Waste 1 (Line 5.D x Line 5.E)	\$50,445 \$
6 TREATMENT AND DISPOSAL OF WASTE 6 [Haz Pharm]	
6.A Volume of waste in yd 3 [7 containers: $= 7 \times 55 \times 0.004951$]	2 yd 3
6.B Number of pounds per yd 3	1,685.80 lb/yd 3
6.C Amount of waste in pounds (Line 6.A x Line 6.B)	3,213 lbs
6.D Amount of waste in tons (Line 6.C ÷ 2,000)	2 tons
6.E Treatment and disposal cost per ton [see "rates"]	1,317 per ton
6.F Cost to treat and dispose of Waste 1 (Line 6.D x Line 6.E)	\$2,116 \$
A THE ATMENT AND DISPOSAL OF WASTE A DIVINING IN	
7 TREATMENT AND DISPOSAL OF WASTE 7 [Non-Haz Pharm]	12 12
7.A Volume of waste in yd 3 [45 containers: = $45 \times 55 \times 0.004951$]	12 yd 3
7.B Number of pounds per yd 3	1,685.80 lb/yd 3
7.C Amount of waste in pounds (Line 7.A x Line 7.B)	20,657 lbs
7.D Amount of waste in tons (Line 7.C \div 2,000)	10 tons
7.E Treatment and disposal cost per ton [see "rates"]	189 per ton
7.F Cost to treat and dispose of Waste 1 (Line 7.D x Line 7.E)	\$1,952 \$
8 TREATMENT AND DISPOSAL OF WASTE 8 [Lab Packs - Flammable solids/liquids]	
8.A Volume of waste in yd 3 [26 containers: = 26 x 55 x 0.004951]	7 yd 3
8.B Number of pounds per yd 3	1,685.80 lb/yd 3
8.C Amount of waste in pounds (Line 8.A x Line 8.B)	11,935 lbs
8.D Amount of waste in tons (Line 8.C ÷ 2,000)	6 tons
8.E Treatment and disposal cost per ton [see "rates"]	\$2,700 per ton
8.F Cost to treat and dispose of Waste 1 (Line 8.D x Line 8.E)	\$16,113 \$
9 TREATMENT AND DISPOSAL OF WASTE 9 [Lab Packs - Flammable Gas]	
,	15 v.4 2
9.A Volume of waste in yd 3 [55 containers: = 55 x 55 x 0.004951]	15 yd 3
9.B Number of pounds per yd 3	1,685.80 lb/yd 3
9.C Amount of waste in pounds (Line 9.A x Line 9.B)	25,248 lbs
9.D Amount of waste in tons (Line 9.C ÷ 2,000)	13 tons
9.E Treatment and disposal cost per ton [see "rates"]	\$553 per ton
9.F Cost to treat and dispose of Waste 1 (Line 9.D x Line 9.E)	\$6,981 \$
10 TREATMENT AND DISPOSAL OF WASTE 10 [Lab Packs - Spont. Combustible/Organic Perioxide/Reactive]	
10.A Volume of waste in yd 3 [26 containers: $= 26 \times 55 \times 0.004951$]	7 yd 3
10.B Number of pounds per yd 3	1,685.80 lb/yd 3
10.C Amount of waste in pounds (Line 10.A x Line 10.B)	11,935 lbs
10.D Amount of waste in tons (Line $10.\text{C} \div 2,000$)	6 tons
10.E Treatment and disposal cost per ton [see "rates"]	\$4,400 per ton
10.F Cost to treat and dispose of Waste 1 (Line 10.D x Line 10.E)	\$26,258 \$
10.1 Cost to treat and dispose of waste 1 (Ellie 10.D x Ellie 10.E)	\$20,236 \$
11 TREATMENT AND DISPOSAL OF WASTE 11 [Lab Packs - Oxidizer]	
11.A Volume of waste in yd 3 [21 containers: = 21 x 55 x 0.004951]	6 yd 3
11.B Number of pounds per yd 3	1,685.80 lb/yd 3
11.C Amount of waste in pounds (Line 11.A x Line 11.B)	9,640 lbs
11.D Amount of waste in tons (Line 11.C ÷ 2,000)	5 tons
11.E Treatment and disposal cost per ton [see "rates"]	\$1,784 per ton
11.F Cost to treat and dispose of Waste 1 (Line 11.D x Line 11.E)	\$8,599 \$
12 TREATMENT AND DISPOSAL OF WASTE 12 [Lab Packs - Toxic]	
12.A Volume of waste in yd 3 [21 containers: = 21 x 55 x 0.004951]	6 yd 3
12.B Number of pounds per yd 3	1,685.80 lb/yd 3
12.C Amount of waste in pounds (Line 12.A x Line 12.B)	9,640 lbs
12.D Amount of waste in tons (Line 12.C ÷ 2,000)	5 tons
12.E Treatment and disposal cost per ton [see "rates"]	\$2,900 per ton
12.F Cost to treat and dispose of Waste 1 (Line 12.D x Line 12.E)	\$13,978 \$

13.A Volume of waste in yd 3 [21 containers: = 21 x 55 x 0.004951]	6 yd 3
13.B Number of pounds per yd 3	1,685.80 lb/yd 3
13.C Amount of waste in pounds (Line 13.A x Line 13.B)	9,640 lbs
13.D Amount of waste in tons (Line 13.C ÷ 2,000)	5 tons
13.E Treatment and disposal cost per ton [see "rates"]	\$476 per ton
13.F Cost to treat and dispose of Waste 1 (Line 13.D x Line 13.E)	\$2,294 \$
14 TREATMENT AND DISPOSAL OF WASTE 14 [Bulk Liquids from TS-1 and TS-2]	
14.A Volume of waste in Tank Systems	94,100 gallons
14.B Tons of waste in tank systems	376.4 tons
14.E Treatment and disposal cost per ton [see "rates"]	\$51 per ton
14.F Cost to treat and dispose of Waste 1 (Line 14.B x Line 14.E)	\$19,196
15 TREATMENT AND DISPOSAL OF WASTE 15 [Bulk Solids from CS-E]	
15.A Volume of waste in yd 3 [5 30 yard boxes]	150 yd 3
15.B Number of pounds per yd 3	1,685.80 lb/yd 3
15.C Amount of waste in pounds (Line 13.A x Line 13.B)	252,870 lbs
15.D Amount of waste in tons (Line 13.C ÷ 2,000)	126 tons
15.E Treatment and disposal cost per ton [see "rates"]	\$180 per ton
15.F Cost to treat and dispose of Waste 1 (Line 15.D x Line 15.E)	\$22,695 \$
Total Cost of Treatment and Disposal	\$346,443 \$

TRANSPORTATION AND DISPOSAL OF DECONTAMINATION FLUIDS

1. Volume of decontamination fluid generated 26,950 gallons 2. Level of PPE assumed for activity D level 3. Labor and equipment cost per work hour [see "rates"] Included in Decontamination Quote \$ \$15,362 4. Cost to dispose decontamination fluids \$ \$7,328 5. Transportation costs for decontamination fluids \$22,690 \$ **Total Cost Transport and Dispose of Decontamination Fluid in Bulk**

INE 11: CERTIFICATION OF CLOSURE

1. Number of units requiring certification of closure

2. Cost of certification of closure per unit [see "rates"] \$4,400 \$ **Total Cost of Certification of Closure** \$4,400 \$

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UNIT RATES

RATE FOR REMOVAL OF WASTES FROM TANKS & ANCILLARY PIPING, FOR FLUSHING TANKS & ANCILLARY PIPING and FOR DECONTAMINATION OF TANKS, **ANCILLARY PIPING & CONTAINMENT AREAS** Rate Location Tank ID Notes: \$8,900 TS-1 B-5 Quote from Action Resources for waste removal and decontamination of tanks and tank systems and \$5,800 TS-1 W-1 \$5,800 TS-1 W-2 \$5,800 TS-1 NH-1 \$4,900 TS-1 O-1 \$6,850 TS-2 F-1 TS-2 \$6,850 F-2 \$6,850 TS-2 F-3 TS-2 F-4 \$6,850 TS-2 F-5 \$6,850 \$6,850 TS-2 F-6 \$4,800 1200 linear feet of piping RATE FOR SAMPLE COLLECTION \$3200 Labor & Equipment: Rate quote from Action Resources RATE FOR SAMPLE ANALYSIS **\$190** Volatile Organics Analysis 31 Wipe Samples, 24 Aqueous Samples, 10 QC (6 Wipe, 4 Aqueous ~ 20%) \$385 Semi - Volatile Organics Analysis 65 Total Samples \$285 RCRA Metals Analysis **\$860** Total cost per sample \$55,900 Total Cost of Analysis AMOUNT OF DECONTAMINATION RINSATE GENERATED 10 55 Gallon drums per tank Estimate provided by Action Resources Quote 55 Gallon drums per containment area 10 490 55 Gallon drums of rinsate generated LABOR AND WORK RATE FOR REMOVAL OF CONTAINERS FROM STORAGE AREA \$9,800 Labor & Equipment: Quote from Action Resources for labor and equipment for loading of containers LABOR AND WORK RATE FOR DECONTAMINATION OF CONTAINMENT AREAS Container Storage Area A \$2800 Container Storage Area B \$3400 \$1850 Container Storage Area D \$3120 Container Storage Area C \$950 Container Storage Area E \$3400 LA-1 \$3400 LA-2 Waste processing Area/Dock \$1100 Tank System 1 \$2750 \$1400 Tank System 2 \$1800 LUWA Room Calculated using average cost per square feet for containment areas (\$25,970 for 17,429 ft2 = \$1.50 per square feet) presented in the 2016 \$14000 3000 ft2 of Building Walls Total cost of surface decontamination CERTIFICATION OF CLOSURE Rate of \$3,640 per unit in 2005\$ inflated to 2010\$ by multiplier of 1.1. Represents Costpro default rate. \$4004 Rate per unit (e.g. tank system) **DISPOSAL & TRANSPORTATION COSTS BULK FUEL A.1** Disposal Notes Lonestar - Cape Girardeau MO\$0.015/lb = \$30.00/ton + \$1/ton other fees \$31.00 Geocycle - Holly Hill SC\$0.025/lb = \$50.00/ton + \$1/ton other fees\$51.00 \$36.00 AVERAGE **A.1** Disposal Per 6000 gals Transporter Notes \$0.26 (\$1581.75/6000) Logistics Management ResourceTo Lonestar - Cape Girardeau MO

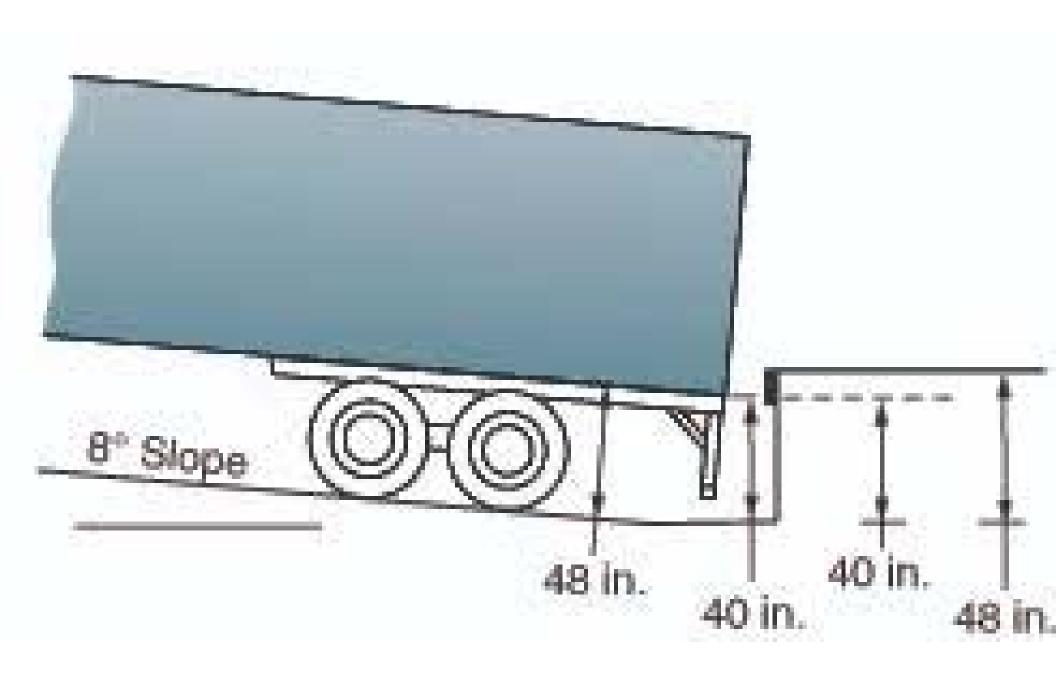
(\$2220.20/6000)Logistics Management Resource To Cadence - Foreman AR

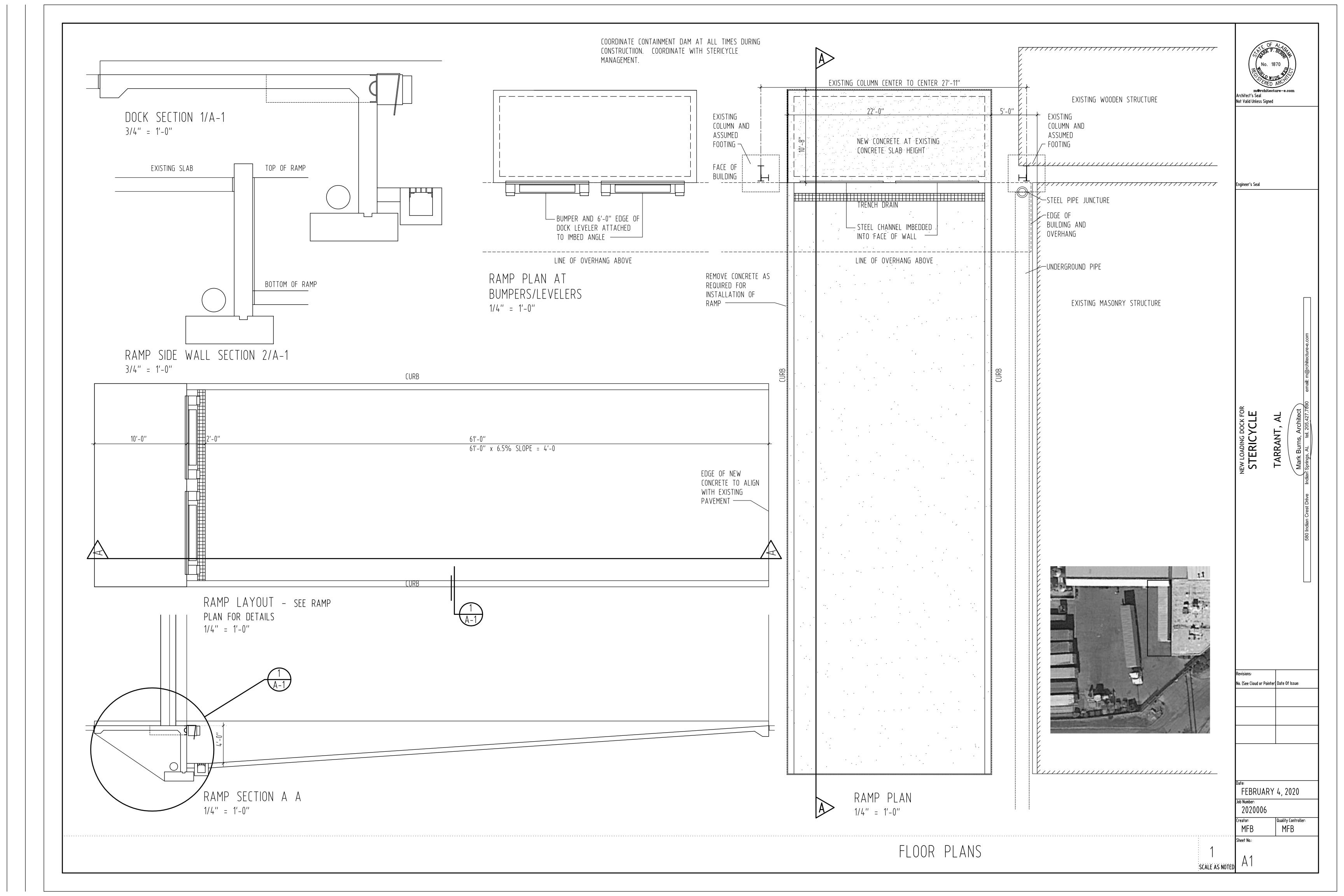
(\$1533/6000)Logistics Management Resources (LTo Geocycle - Holly Hill SC

\$0.26

\$0.30 AVERAGE

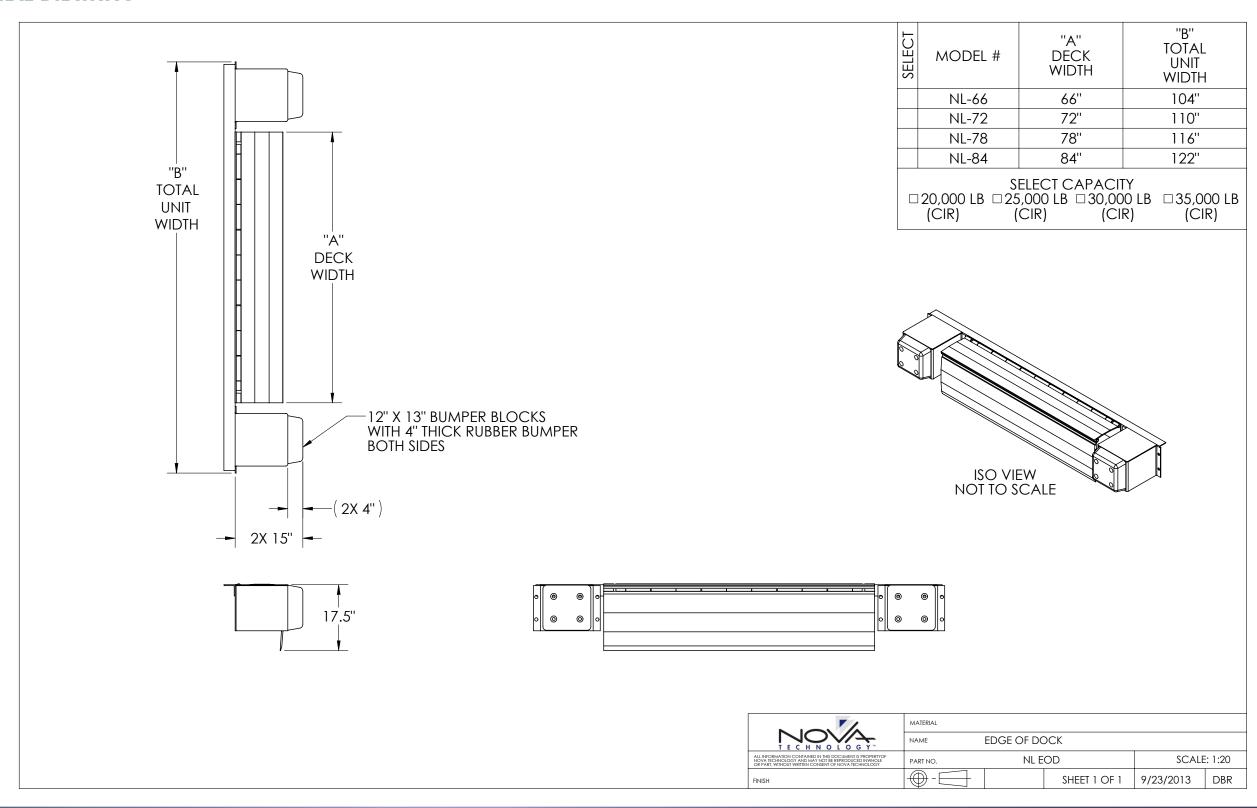
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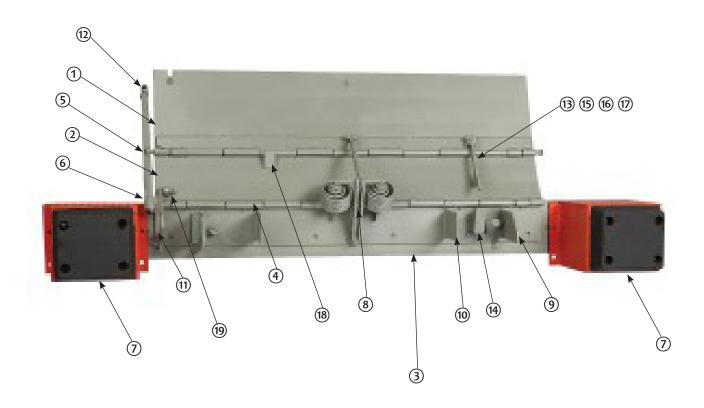


NOVA MECHANICAL EDGE-OF-DOCK LEVELER

ARCHITECTURAL DRAWING



NOVA MECHANICAL EDGE-OF-DOCK LEVELER



- 1 LIP PLATE & HINGE ASSEMBLY
- 2 CENTER PLATE & HINGE ASSEMBLY
- 3 BASE PLATE & HINGE ASSEMBLY
- 4 HINGE PIN
- 5 RIVET BUTTON
- 6 RIVET FLAT
- 7 HEAVY-DUTY BUMPER BLOCKS AND RUBBER MOLDED BUMPERS
- 8 SPRING LINKAGE ASSEMBLY
- 9 X-GUSSET
- 10 SECONDARY GUSSETS
- 11 ROLLER ARM ASSEMBLY
- 12 HANDLE ASSEMBLY
- 13 EXTEND LINK ARM
- SEMBLY 14 EXTEND LINK ARM STOP
 - 15 PIVOT BLOCK
 - 16 SHOULDER BOLT
 - 17 LOCKNUT
 - 18 LIP STOP
 - 19 HANDLE HOLDER

STANDARD FEATURES

- Dual-extension spring lift mechanism
- Heavy-duty self-storing steel lever with EZ grip handle
- Roller-bearing lift mechanism for easy lifting
- Cold-rolled steel hinge pins for added strength and long life
- High-strength steel safety tread plate, minimum 55,000 PSI yield strength
- Grease fittings
- Milled lip edge for smooth tire rollover
- Four steel gussets for added strength and extended life
- Full width distribution bar for extra durability
- Heavy-duty bumper block assemblies with Tuf-Cord 4-inch 1014 rubber molded bumpers
- Bumper projection—15 inches

OPTIONAL FEATURES

- Low-profile design (flat center plate)
- 17-inch lip (for refrigerated trailers with rear
- Tapered lip (tapered at sides)
- Recessed installation packages for mini-pits
- ☐ Torsion spring
- Dock edge anchoring channel 10 inches length (highly recommended for new construction)
- 3-inch run off guards

