

PRELIMINARY DETERMINATION

PERMIT MINOR MODIFICATION

Solid Waste Disposal Authority of the Cities of Muscle Shoals,
Sheffield, and Tuscumbia, Alabama
P.O. Box 740328
Tuscumbia, AL 35674

Cherokee Industrial Landfill
Permit No. 17-10

April 21, 2025

The Solid Waste Disposal Authority of the Cities of Muscle Shoals, Sheffield, and Tuscumbia, Alabama submitted to the Alabama Department of Environmental Management an application to modify the permit for Cherokee Industrial Landfill (Permit No. 17-10). The modification would be for the purpose of installing a new leachate treatment system to treat leachate generated at the Cherokee Industrial Landfill. The facility will maintain the option to ship leachate off-site for treatment during emergency events if necessary, and the treatment system will not impact any solid waste disposal operations or the existing leachate collection system. All other permit conditions shall remain unchanged.

The Land Division has determined that the minor permit modification application complies with the requirements of ADEM's Administrative Code Division 13 regulations.

Technical Contact:

Dr. Dontavious Sippial
Solid Waste Engineering Section
Land Division
(334) 270-5651



SOLID WASTE DISPOSAL FACILITY PERMIT

PERMITTEE: Solid Waste Disposal Authority of the Cities of Muscle Shoals, Sheffield, and Tuscumbia, Alabama

FACILITY NAME: Cherokee Industrial Landfill

FACILITY LOCATION: Section 2, Township 4 South, Range 13 West in Colbert County, Alabama. The total permitted area is approximately 161.77 acres with approximately 64.44 acres permitted for disposal operations.

PERMIT NUMBER: 17-10

PERMIT TYPE: Industrial Landfill

WASTE APPROVED FOR DISPOSAL: Nonhazardous industrial wastes, nonhazardous industrial sludge, construction and demolition wastes, rubbish as defined by ADEM Admin. Code 335-13-1-.03, asbestos, and tires.

APPROVED WASTE VOLUME: Maximum Average Daily Volume of 1000 tons per day

APPROVED SERVICE AREA: States of Alabama, Mississippi, Tennessee, and Georgia

In accordance with and subject to the provisions of the Solid Wastes & Recyclable Materials Management Act, as amended, Code of Alabama 1975, § 22-27-1 to 22-27-27 ("SWRMMA"), the Alabama Environmental Management Act, as amended, Code of Alabama 1975, § 22-22A-1 to 22-22A-15, and rules and regulations adopted thereunder, and subject further to the conditions set forth in this permit, the Permittee is hereby authorized to dispose of the above-described solid wastes at the above-described facility location.

ISSUANCE DATE: October 30, 2020

EFFECTIVE DATE: October 30, 2020

MODIFICATION DATE: XXXXXXXX, 2025

EXPIRATION DATE: October 29, 2030

**ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
SOLID WASTE PERMIT**

Permittee: Solid Waste Disposal Authority of the Cities of Muscle Shoals, Sheffield, and
Tuscumbia, Alabama
P.O. Box 740328
Tuscumbia, AL 35674

Landfill Name: Cherokee Industrial Landfill

Landfill Location: Section 2, Township 4 South, Range 13 West in Colbert County, Alabama

Permit Number: 17-10

Landfill Type: Industrial

Pursuant to the Solid Wastes & Recyclable Materials Management Act, Code of Alabama 1975, §§22-27-1, *et seq.*, as amended (the “Act”), and attendant regulations promulgated there under by the Alabama Department of Environmental Management (ADEM), this permit is issued to the Solid Waste Disposal Authority of the Cities of Muscle Shoals, Sheffield, and Tuscumbia, Alabama (hereinafter called the Permittee), to operate a solid waste disposal facility, known as the Cherokee Industrial Landfill.

The Permittee must comply with all terms and conditions of this permit. This permit consists of the conditions set forth herein (including those in any attachments), and the applicable regulations contained in 335-13-1 through 335-13-16 of the ADEM Administrative Code (hereinafter referred to as the "ADEM Admin. Code" or as “335-13”). Rules cited are set forth in this document for the purpose of Permittee reference. Any rule that is cited incorrectly in this document does not constitute grounds for noncompliance on the part of the Permittee. Applicable ADEM Admin. Codes are those that are in effect on the date of issuance of this permit or any revisions approved after permit issuance.

This permit is based on the information submitted to ADEM on March 1, 2018 for permit modification, on December 27, 2019 for permit renewal, and on November 14, 2024 for permit modification, as amended, and is known as the Permit Application (hereby incorporated by reference and hereinafter referred to as the Application). Any inaccuracies found in this information could lead to the termination or modification of this permit and potential enforcement action. The Permittee must inform ADEM of any deviation from or changes in the information in the Application that would affect the Permittee's ability to comply with the applicable ADEM Admin. Code or permit conditions.

This permit is effective as of **October 30, 2020**, and as modified on **XXXXXXX, 2025**, and shall remain in effect until **October 29, 2030**, unless suspended or revoked.

Alabama Department of Environmental Management

Date Signed

SECTION I. STANDARD CONDITIONS.

- A. Effect of Permit. The Permittee is allowed to dispose of nonhazardous solid waste in accordance with the conditions of this permit and 335-13. Issuance of this permit does not convey property rights of any sort or any exclusive privilege, nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of state or local laws or regulations. Except for actions brought under the Act, compliance with the conditions of this permit shall be deemed to be compliance with applicable requirements in effect as of the date of issuance of this permit and any future revisions.
- B. Permit Actions. This permit may be suspended, revoked or modified for cause. The filing of a request for a permit modification or the notification of planned changes or anticipated noncompliance on the part of the Permittee, and the suspension or revocation does not stay the applicability or enforceability of any permit condition.
- C. 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.
- D. Definitions. For the purpose of this permit, terms used herein shall have the same meaning as those in 335-13, unless this permit specifically provides otherwise; where terms are not otherwise defined, the meaning associated with such terms shall be as defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term.
1. "EPA" for purposes of this permit means the United States Environmental Protection Agency.
 2. "Permit Application" for the purposes of this permit, means all permit application forms, design plans, operational plans, closure plans, technical data, reports, specifications, plats, geological and hydrological reports, and other materials which are submitted to ADEM in pursuit of a solid waste disposal permit.
- E. Duties and Requirements.
1. Duty to Comply. The Permittee must comply with all conditions of this permit except to the extent and for the duration such noncompliance is authorized by a variance granted by ADEM. Any permit noncompliance, other than noncompliance authorized by a variance, constitutes a violation of the Act and is grounds for enforcement action, permit suspension, revocation, modification, and/or denial of a permit renewal application.
 2. Duty to Reapply. 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 renewal application must be submitted to ADEM at least 180 days before this permit expires.
 3. Permit Expiration. This permit and all conditions therein will remain in effect beyond the permit's expiration date if the Permittee has submitted a timely, complete application as required by Section I.,E.,2., and, through no fault of the Permittee, ADEM has not made a final decision regarding the renewal application.
 4. 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 to maintain compliance with the conditions of this permit.
 5. 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.

6. Proper Operation and Maintenance. The Permittee shall at all times properly operate and maintain all facilities and systems of control (and related appurtenances) that are installed or used by the Permittee to achieve compliance with the conditions of this permit.
7. Duty to Provide Information. If requested, the Permittee shall furnish to ADEM, within a reasonable time, any information that ADEM may reasonably need to determine whether cause exists for denying, suspending, revoking, or modifying this permit, or to determine compliance with this permit. If requested, the Permittee shall also furnish ADEM with copies of records kept as a requirement of this permit.
8. Inspection and Entry. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the employees of ADEM or their authorized representative to:
 - a. Enter at reasonable times the Permittee's premises where the 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.
 - d. Sample or monitor, at reasonable times, any substances or parameters at any location for the purposes of assuring permit compliance or as otherwise authorized by the Act.
9. Monitoring, Corrective Actions, and Records.
 - a. Samples and measurements taken for the purpose of monitoring or corrective action shall be representative of the monitored activity. The methods used to obtain representative samples to be analyzed must be the appropriate method from 335-13-4 or the methods as specified in the Application attached hereto and incorporated by reference. Laboratory methods must be those specified in Standard Methods for the Examination of Water and Wastewater (American Public Health Association, latest edition), Methods for Chemical Analysis of Water and Wastes (EPA-600/4-79-020), Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (EPA Publication SW-846, latest edition), other appropriate EPA methods, or as specified in the Application. All field tests must be conducted using approved EPA test kits and procedures.
 - b. The Permittee shall retain records, at the location specified in Section I.,I., of all monitoring, or corrective action information, including all calibration and maintenance records, copies of all reports and records required by this permit, and records of all data used to complete the application for this permit for a period of at least three years from the date of the sample, measurement, report or record or for periods elsewhere specified in this permit. These periods may be extended by the request of ADEM at any time and are automatically extended during the course of any unresolved enforcement action regarding this facility.
 - c. Records of monitoring and corrective action information shall include.
 - i. The exact place, date, and time of sampling or measurement.
 - ii. The individual(s) and company who performed the sampling or measurements.
 - iii. The date(s) analyses were performed.
 - iv. The individual(s) and company who performed the analyses.
 - v. The analytical techniques or methods used.

- vi. The results of such analyses.
- d. The Permittee shall submit all monitoring and corrective action results at the interval specified elsewhere in this permit.
- 10. Reporting Planned Changes. The Permittee shall notify ADEM, in the form of a request for permit modification, at least 90 days prior to any change in the permitted service area, increase in the waste received, or change in the design or operating procedure as described in this permit, including any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- 11. Transfer of Permit. This permit may be transferred to a new owner or operator. All requests for transfer of permits shall be in writing and shall be submitted on forms provided by ADEM. Before transferring ownership or operation of the facility during its operating life, the Permittee shall notify the new owner or operator in writing of the requirements of this permit.
- 12. Certification of Construction. The Permittee may not commence disposal of waste in any new cell or phase until the Permittee has submitted to ADEM, by certified mail or hand delivery, a letter signed by both the Permittee and a professional engineer stating that the facility has been constructed in compliance with the permit. ADEM must inspect the constructed cells or phases before the owner or operator can commence waste disposal unless the Permittee is notified that ADEM will waive the inspection.
- 13. Compliance Schedules. Reports of compliance or noncompliance with or any progress reports on interim and final requirements contained in any compliance schedule required and approved by ADEM shall be submitted no later than 14 days following each schedule date.
- 14. Other Noncompliance. The Permittee shall report all instances of noncompliance with the permit at the time monitoring reports are submitted.
- 15. Other Information. If the Permittee becomes aware that information required by the Application was not submitted or was incorrect in the Application or in any report to ADEM, the Permittee shall promptly submit such facts or information. In addition, upon request, the Permittee shall furnish to ADEM, within a reasonable time, information related to compliance with the permit.
- F. Design and Operation of Facility. The Permittee shall maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or nonsudden release of contaminants (including leachate and explosive gases) to air, soil, groundwater, or surface water, which could threaten human health or the environment.
- G. Inspection Requirements.
 - 1. The Permittee shall comply with all requirements of 335-13.
 - 2. The Permittee shall conduct random inspections of incoming loads.
 - 3. Records of all inspections shall be included in the operating record.
- H. Recordkeeping and Reporting.
 - 1. The Permittee shall maintain a written operating record at the location specified in Section I.,I. The operating record shall include:
 - a. Documentation of inspection and maintenance activities.
 - b. Daily Volume reports.

- c. Personnel training documents and records.
 - d. Solid/Hazardous Waste Determination Forms for Industrial Wastes, and associated ADEM disposal approval correspondence for industrial waste and special waste.
 - e. Groundwater monitoring records.
 - f. Explosive gas monitoring records.
 - g. Surface water and leachate monitoring records. Monitoring is subject to applicable conditions of Section VI. of the permit.
 - h. Copies of this Permit and the Application.
 - i. Copies of all variances granted by ADEM, including copies of all approvals of special operating conditions.
2. Quarterly Volume Report. Beginning with the effective date of this permit, the Permittee shall submit, within thirty (30) days after the end of each calendar quarter, a report summarizing the daily waste receipts for the previous (just ended) quarter. Copies of the quarterly reports shall be maintained in the operating record.
3. Monitoring and Corrective Action Reports. The Permittee shall submit reports on all monitoring and corrective activities conducted pursuant to the requirements of this permit, including, but not limited to, groundwater, surface water, explosive gas and leachate monitoring. The groundwater monitoring shall be conducted in March and September of each year, or as directed by ADEM, and the reports shall be submitted at least semi-annually, or as directed by ADEM. The reports should contain all monitoring results and conclusions from samples and measurements conducted during the sampling period. Explosive gas monitoring must be submitted on a yearly basis, and the reports should be submitted to ADEM and placed in the operating record within 30 days of the monitoring event. Copies of the groundwater and explosive gas monitoring reports shall be maintained in the operating record.
4. Availability, Retention, and Disposition of Records.
- a. All records, including plans, required under this permit or 335-13 must be furnished upon request, and made available at reasonable times for inspection by any officer, employee, or representative of ADEM.
 - b. All records, including plans, required under this permit or 335-13 shall be retained by the Permittee for a period of at least three years. The retention period for all records is extended automatically during the course of any unresolved enforcement action regarding the facility, or as requested by ADEM.
 - c. A copy of records of waste disposal locations and quantities must be submitted to ADEM and local land authority upon closure of the facility.
- I. Documents to be Maintained by the Permittee. The Permittee shall maintain, at the **Cherokee Industrial Landfill** office the following documents and amendments, revisions and modifications to these documents until an engineer certifies closure of the permitted landfill.
- 1. Operating record.
 - 2. Closure Plan.
- J. Mailing Location. All reports, notifications, or other submissions which are required by this permit should be sent via signed mail (i.e. certified mail, express mail delivery service, etc.) or hand delivered to:

1. Mailing Address.
Chief, Solid Waste Branch, Land Division
Alabama Department of Environmental Management
P.O. Box 301463
Montgomery, AL 36130-1463
 2. Physical Address.
Chief, Solid Waste Branch, Land Division
Alabama Department of Environmental Management
1400 Coliseum Blvd.
Montgomery, Alabama 36110-2400
- K. Signatory Requirement. All applications, reports or information required by this permit, or otherwise submitted to ADEM, shall be signed and certified by the owner as follows:
1. If an individual, by the applicant.
 2. If a city, county, or other municipality or governmental entity, by the ranking elected official, or by a duly authorized representative of that person.
 3. If a corporation, organization, or other legal entity, by a principal executive officer, of at least the level of Vice President, or by a duly authorized representative of that person.
- L. Confidential Information. The Permittee may claim information submitted as confidential pursuant to ADEM Admin. Code 335-1-1-.06.
- M. State Laws and Regulations. Nothing in this permit shall be construed to preclude the initiation of any legal action or to relieve the Permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation.

SECTION II. GENERAL OPERATING CONDITIONS.

- A. Operation of Facility. The Permittee shall operate and maintain the disposal facility consistent with the Application, this permit, and 335-13.
- B. Open Burning. The Permittee shall not allow open burning without prior written approval from ADEM and other appropriate agencies. A burn request should be submitted in writing to ADEM outlining why that burn request should be granted. This request should include, but not be limited to, specifically what areas will be utilized, types of waste to be burned, the projected starting and completion dates for the project, and the projected days and hours of operation. The approval, if granted, shall be included in the operating record.
- C. Prevention of Unauthorized Disposal. The Permittee shall follow the approved procedures for the detecting and preventing the disposal of free liquids, regulated hazardous waste, PCB's, and medical waste at the facility.
- D. Unauthorized Discharge. The Permittee shall operate the disposal facility in such a manner that there will be no water pollution or unauthorized discharge. Any discharge from the disposal facility or practice thereof may require a National Pollutant Discharge Elimination System permit under the Alabama Water Pollution Control Act.
- E. Industrial Waste Disposal. The Permittee shall dispose of industrial waste as required by 335-13-4-.21(1)(c), and as specified in the Application.

- F. Boundary Markers. The Permittee shall ensure that the facility is identified with a sufficient number of permanent boundary markers that are at least visible from one marker to the next.
- G. Certified Operator. The Permittee shall be required to have an operator certified by the Department on-site during hours of operation, in accordance with the requirements of ADEM Admin. Code 335-13-12.

SECTION III. SPECIFIC REQUIREMENTS FOR INDUSTRIAL WASTE LANDFILLS.

- A. Waste Identification and Management.
 - 1. Subject to the terms of this permit, the Permittee may accept for disposal the nonhazardous solid wastes listed in III.B. Disposal of any other wastes is prohibited, except waste granted a temporary or one time waiver by the Director.
 - 2. The total permitted area for the Cherokee Industrial Landfill is approximately 161.77 acres with approximately 64.44 acres permitted for disposal operations. The landfill is divided into two disposal areas. Phase I consists of approximately 44.10 acres of clay lined cells and Phase II consists of approximately 20.34 acres of synthetically lined cells.
 - 3. The maximum average daily volume of waste disposed at the facility, as contained in the permit application, shall not exceed 1000 tons/day. Should the average daily volume exceed this value by 20% or 100 tons/day, whichever is less, for two (2) consecutive quarters the permittee shall be required to modify the permit in accordance with 335-13-4-.23(2)(f). An increase in maximum average daily volume shall not be approved by ADEM unless the permittee has received local approval for the increased maximum average daily volume. The average daily volume shall be computed as specified by 335-13-4-.23(2)(f).
- B. Waste Streams. The Permittee may accept for disposal nonhazardous industrial wastes, nonhazardous industrial sludge, construction and demolition wastes, rubbish as defined by ADEM Rule 335-13-1-.03, asbestos, and tires.
- C. Service Area. The Permittee is allowed to receive waste for disposal from the States of Alabama, Mississippi, Tennessee, and Georgia.
- D. Waste Placement, Compaction, and Cover. The Permittee has been granted a variance from ADEM Rule 335-13-4-.22(1)(b) requiring the working face to be confined to as small an area as possible. The Permittee has been approved to operate two working faces at the landfill. One working face will be utilized for the Phase I disposal area. The other working face will be utilized for the Phase II disposal area. Both working faces must be confined to as small an area as possible (See Section VIII.,2.). All waste shall be spread in layers two feet or less in thickness and thoroughly compacted with adequate landfill equipment prior to placing additional layers of waste or placing cover. A minimum of six inches of compacted earth or other alternative cover material approved by the Department shall be added at the conclusion of each week's of operation. The Permittee has been approved to use a maximum of 200 tons per day of non-hazardous industrial "Paper" solid waste stream (or RSFC) known as "SCA Paper Sludge" as an alternate cover. The Permittee shall be required to cover the active cell with six inches of earthen cover at the conclusion of each month's activities. (See Section VIII.1.)
- E. Phase I Liner Requirements. The Permittee shall be required to install a two feet soil liner with a soil permeability of 1×10^{-7} cm/sec.
- F. Phase II Liner Requirements. The Permittee shall be required to install from top to bottom: 12 inch drainage layer with a permeability of 1×10^{-3} cm/sec, double sided geocomposite drainage layer, 60 mil HDPE textured liner, and 12 inch compacted clay layer with a permeability 1×10^{-5} cm/sec.

- G. Security. The Permittee shall provide artificial and/or natural barriers, which prevent entry of unauthorized vehicular traffic to the facility.
- H. All Weather Access Roads. The Permittee shall provide an all-weather access road to the dumping face that is wide enough to allow passage of collection vehicles.
- I. Adverse Weather Disposal. The Permittee shall provide for disposal activities in adverse weather conditions.
- J. Personnel. The Permittee shall maintain adequate personnel to ensure continued and smooth operation of the facility.
- K. Environmental Monitoring and Treatment Structures. The Permittee shall provide protection and proper maintenance of environmental monitoring and treatment structures.
- L. Vector Control. The Permittee shall provide for vector control as required by ADEM Admin. Code 335-13.
- M. Bulk or Noncontainerized Liquid Waste. The Permittee shall not dispose of bulk or noncontainerized liquid waste, or containers capable of holding liquids, unless the conditions of 335-13-4-.23(1)(j) are met.
- N. Empty Containers. Empty containers larger than 10 gallons in size must be rendered unsuitable for holding liquids prior to disposal in the landfill unless otherwise approved by ADEM.
- O. Other Requirements. ADEM may enhance or reduce any requirements for operating and maintaining the landfill as deemed necessary by the Land Division.
- P. Other Permits. The Permittee shall operate the landfill according to this and any other applicable permits.
- Q. Scavenging and Salvaging Operations. The Permittee shall prevent scavenging and salvaging operations, except as part of a controlled recycling effort. Any recycling operation must be in accordance with plans submitted and approved by ADEM.
- R. Signs. If the landfill is available to the public or commercial haulers, the Permittee shall provide a sign outlining instructions for use of the site. The sign shall be posted and have the information required by 335-13-4-.23(1)(f).
- S. Litter Control. The Permittee shall control litter.
- T. Fire Control. The Permittee shall provide fire control measures.

SECTION IV. GROUNDWATER MONITORING REQUIREMENTS.

- A. The Permittee shall install and/or maintain a groundwater monitoring system, as specified below.
 - 1. The permittee shall maintain the groundwater monitoring wells and piezometers identified in Table 1 at the locations specified in the Application, and any other groundwater monitoring wells which are added during the active life and the post closure care period.
 - 2. The Permittee shall maintain groundwater monitoring well **MW-1, MW-2, and MW-3** as the background groundwater monitoring wells for the entire facility.
 - 3. **The Permittee shall evaluate the groundwater data (statistical analysis) as described in the permit application and ADEM Rule 335-13-4-.27. The Permittee has been approved for inter-well statistics.**

4. The Permittee shall install and maintain additional groundwater monitoring wells as necessary to assess changes in the rate and extent of a plume of contamination or as otherwise deemed necessary to maintain compliance with the 335-13.
5. Prior to installing additional groundwater monitoring wells, the Permittee shall submit a report to ADEM with a permit modification request specifying the design, location and installation of additional monitoring wells. This report shall be submitted within ninety (90) days prior to the installation which, at a minimum, shall include.
 - a. Well construction techniques including proposed casing depths, proposed total depth, and proposed screened interval of well(s);
 - b. Well development method(s);
 - c. A complete analysis of well construction materials;
 - d. A schedule of implementation for construction; and
 - e. Provisions for determining the lithologic characteristics, hydraulic conductivity and grain-size distribution for the applicable aquifer unit(s) at the location of the new well(s).

B. Groundwater Monitoring Requirements.

1. The Permittee shall determine the groundwater surface elevation at each monitoring well and piezometer identified in Table 1 each time the well or piezometer is sampled and at least semi-annually throughout the active life and post-closure care period.
2. The Permittee shall determine the groundwater flow rate and direction in the first zone of saturation at least annually or each time groundwater is sampled and submit as required by 335-13.
3. Prior to the initial receipt of waste at the facility, the Permittee shall sample, and analyze for the parameters listed in Appendix I of 335-13-4-.27, in all monitoring wells identified in Section IV.A.2. to establish background water quality and/or as directed by 335-13-4-.27(2)(j) and 335-13-4-.27(2)(a)(1). The records and results of this sampling and analysis activity shall be submitted to ADEM, within sixty (60) days of the date of sampling.
4. The Permittee shall sample, and analyze all monitoring wells identified in Table 1 for the parameters listed in Appendix I of 335-13-4-.27(3), on a semi-annual basis throughout the active life of the facility and the post-closure care period in accordance with 335-13-4-.27(3). Sampling shall be conducted during March and September of each year, beginning with the effective date of this permit.
5. In addition to the requirements of Sections IV., B.1., B.2., B.3. and B.4., the Permittee shall record water levels, mean sea level elevation measuring point, depth to water, and the results of field tests for pH and specific conductance at the time of sampling for each well.

C. 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 Section IV.A. to provide a reliable indication of the quality of the groundwater.

1. Samples shall be collected, preserved, and shipped (when shipped off-site for analysis) in accordance with the procedures specified in the Application or Division 13 Regulations.
2. Samples shall be analyzed according to the procedures specified in the Application, Standard Methods for the Examination of Water and Wastewater (American Public Health Association, latest edition), Methods for Chemical Analysis of Water and Wastes (EPA-600/4-79-020), Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (EPA Publication SW-846, latest edition), or

other appropriate methods approved by this Department. All field tests must be conducted using approved EPA test kits and procedures.

3. Samples shall be tracked and controlled using the chain-of-custody and QA/QC procedures specified of the Application.

D. Recordkeeping and Reporting Requirements.

1. Recording of Results. For each sample and/or measurement taken pursuant to the requirements of this permit, the Permittee shall record the information required by Section I.E.9.c.
2. Recordkeeping. Records and results of all groundwater monitoring, sampling, and analysis activities conducted pursuant to the requirements of this permit shall be included in the operating record required by Section I.I.1.

- E. Permit Modification. If the Permittee or ADEM determines that the groundwater monitoring system no longer satisfies the requirements of 335-13-4-.14 or Section IV.A. of this permit, the Permittee must, within 90 days, submit an application for a permit modification to make necessary and/or appropriate changes to the system.

TABLE 1
GROUNDWATER MONITORING WELLS

Monitoring Well Number	Top of Casing (feet msl)	Part Monitoring
UPGRADIENT/BACKGROUND MONITORING WELL		
MW-1	486.09	Entire Landfill
MW-2	523.91	Entire Landfill
MW-3	501.07	Entire Landfill
DOWNGRADIANT MONITORING WELLS		
MW-4	485.92	Entire Landfill
MW-5	485.17	Entire Landfill
MW-6	498.34	Entire Landfill

SECTION V. GAS MONITORING REQUIREMENTS

The permittee must install and maintain an explosive gas monitoring system in accordance with ADEM Administrative Code, Division 13.

SECTION VI. LEACHATE AND SURFACE WATER MANAGEMENT REQUIREMENTS

The Permittee must collect and dispose of the leachate that is generated at the facility. The Permittee shall install a leachate collection system designed to maintain less than 12 inches (30 cm) depth of leachate over the liner. Prior to initial disposal, the permittee shall provide the Department with a letter from the receiving publicly or privately owned treatment works, approving the acceptance of the leachate. Discharges to publicly or privately owned treatment works may be subject to the requirements of the ADEM Water Division's State Indirect Discharge (SID) Program. The permittee shall construct and maintain run-on and

run-off control structures. Surface water discharges from drainage control structures shall be permitted through the ADEM Water Division's National Pollutant Discharge Elimination System (NPDES) Program.

The Permittee has been approved to treat leachate generated at the Cherokee Industrial Landfill as described in the permit modification application dated November 14, 2024. The sludge generated through this treatment shall be profiled through the Department's Solid Waste Determination process and disposed of in a permitted landfill. In the event that the leachate cannot be processed through the on-site treatment system, it shall be disposed of at an off-site treatment system or stored on-site in portable temporary storage containers for a maximum of 90 days. The Permittee shall notify the Department when leachate is being stored on-site in portable temporary storage containers. The notification shall provide the start and end date of when leachate will be stored on site and the reason. (See Section VIII.4.)

SECTION VII. CLOSURE AND POST-CLOSURE REQUIREMENTS

The Permittee shall close the landfill and perform post-closure care of the landfill in accordance with Division 13.

- A. Phase I Final Cover. The Permittee shall grade final soil cover such that surface water does not pond over the permitted area as specified in the Application. The final cover system shall consist from top to bottom: 6 inch erosion layer and 18 inch compacted clay layer. The Permittee has been granted a variance from ADEM Rule 335-13-4-.20(2)(c)2. requiring that the maximum final grade of the cover system shall not exceed 4 to 1. The Permittee has been approved to construct 3 to 1 final slopes. (See Section VIII. 3.)
- B. Phase II Final Cover. The Permittee shall grade final soil cover such that surface water does not pond over the permitted area as specified in the Application. The Permittee shall be required to construct the final cover system over the entire Phase II disposal area as described in the Application. The final cover system shall consist of from top to bottom: 6 inch erosion layer, 18 drainage layer, double sided geocomposite drainage layer, 40 mil LDPE textured liner, and 12 inch compacted clay layer with a permeability 1×10^{-5} cm/sec. The Permittee has been granted a variance from ADEM Rule 335-13-4-.20(2)(c)2. requiring that the maximum final grade of the cover system shall not exceed 4 to 1. The Permittee has been approved to construct 3 to 1 final slopes. (See Section VIII.3.)
- C. Vegetative Cover. The Permittee shall establish a vegetative or other appropriate cover within 90 days after completion of final grading requirements in the Application. Preparation of a vegetative cover shall include, but not be limited to, the placement of seed, fertilizer, mulch, and water.
- D. Notice of Intent. The Permittee shall place in the operating record and notify the Department of their intent to close the landfill prior to beginning closure.
- E. Completion of Closure Activities. The Permittee must complete closure activities of each landfill unit in accordance with the Closure Plan within 180 days of the last known receipt of waste.
- F. Certification of Closure. Following closure of each unit, the Permittee must submit to the Department a certification, signed by an engineer, verifying the closure has been completed according to the Closure Plan.
- G. Post-Closure Care Period. Post-closure care activities shall be conducted after closure of each unit throughout the life of this permit and continuing for a period of thirty (30) years following closure of the facility. The Department may shorten or extend the post-closure care period applicable to the solid waste disposal facility. The Permittee shall reapply in order to fulfill the post-closure care requirements of this permit.
- H. Post-Closure Maintenance. The Permittee shall provide post closure maintenance of the facility to include regularly scheduled inspections. This shall include maintenance of the cover, vegetation, monitoring devices and pollution control equipment and correction of other deficiencies that may be observed by ADEM. Monitoring requirements shall continue throughout the post closure period as determined by the Department unless all waste is removed and no unpermitted discharge to waters of the State have occurred.

- I. Post-Closure Use of Property. The Permittee shall ensure that post closure use of the property never be allowed to disturb the integrity of the final cover, liner, or any other component of the containment system. This shall preclude the growing of deep-rooted vegetation on the closed area.
- J. Certification of Post-Closure. Following post-closure of each unit, the Permittee must submit to the Department a certification, signed by an engineer, verifying the post-closure has been completed according to the Post-Closure Plan.
- K. Notice in Deed to Property. The Permittee shall record a notation onto the land deed containing the property utilized for disposal within 90 days after permit expiration, revocation or when closure requirements are achieved as determined by the Department as stated in the Application. This notation shall state that the land has been used as a solid waste disposal facility, the name of the Permittee, type of disposal activity, location of the disposal facility and beginning and closure dates of the disposal activity.
- L. Recording Instrument. The Permittee shall submit a certified copy of the recording instrument to the Department within 120 days after permit expiration, revocation, or as directed by the Department as described in the Application.
- M. Removal of Waste. If the Permittee, or any other person(s), wishes to remove waste, waste residues, or any liner or contaminated soils, the owner must request and receive prior approval from the Department.

SECTION VIII. VARIANCES and SPECIAL CONDITIONS

- 1. The Permittee has been approved to use a maximum of 200 tons per day of non-hazardous industrial “Paper” solid waste stream (or RSFC) known as “SCA Paper Sludge” as an alternate cover. The Permittee shall be required to cover the active cell with six inches of earthen cover at the conclusion of each month’s activities. (See Section III. D.)
- 2. The Permittee has been granted a variance from ADEM Rule 335-13-4-.22(1)(b) requiring the working face to be confined to as small an area as possible. The Permittee has been approved to operate two working faces at the landfill. One working face will be utilized for the Phase I disposal area. The other working face will be utilized for the Phase II disposal area. Both working faces must be confined to as small an area as possible. (See Section III.D.)
- 3. The Permittee has been granted a variance from ADEM Rule 335-13-4-.20(2)(c)2. requiring that the maximum final grade of the cover system shall not exceed 4 to 1. The Permittee has been approved to construct 3 to 1 final slopes. (See Section VII. A. and B.)
- 4. The Permittee has been approved to treat leachate generated at the Cherokee Industrial Landfill as described in the permit modification application dated November 14, 2024. The sludge generated through this treatment shall be profiled through the Department’s Solid Waste Determination process and disposed of in a permitted landfill. In the event that the leachate cannot be processed through the on-site treatment system, it shall be disposed of at an off-site treatment system or stored on-site in portable temporary storage containers for a maximum of 90 days. The Permittee shall notify the Department when leachate is being stored on-site in portable temporary storage containers. The notification shall provide the start and end date of when leachate will be stored on site and the reason. (See Section VI.)

Any variance granted by the Department may be terminated by the Department whenever the Department finds, after notice and opportunity for hearing, that the petitioner is in violation of any requirement, condition, schedule, limitation or any other provision of the variance, or that operation under the variance does not meet the minimum requirements established by state and federal laws and regulations or is unreasonably threatening the public health.

**PERMIT
APPLICATION**



P.O. BOX 3241
FLORENCE, AL 35630
256.284.2043
SEE-ENV.COM

November 14, 2024

Alabama Department of Environmental Management
Solid Waste Branch
P.O. Box 301463
Montgomery, Alabama 36130-1463
Attn: Mr. Jonathon Crosby

Reference: **Minor Permit Modification Request for On-Site Treatment of Leachate
Cherokee Industrial Landfill
Cherokee, AL
Permit No. 17-10**

Dear Mr. Crosby:

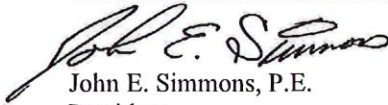
Solid Waste Disposal Authority of the Cities of Muscle Shoals, Sheffield, and Tuscumbia (SWDA) would like to request a minor permit modification to allow the facility to treat leachate on-site. The facility has already received an Individual NPDES permit, AL0084464, from the department to discharge the treated leachate. Originally, the facility had planned to install the treatment system on an adjoining property owned by SWDA but not permitted as part of its solid waste permit. In the final stages of the facility design, it was determined that moving the system on-site would provide significant operational advantages and construction cost savings.

The treatment system will include biologic treatment in moving bed biological reactor with secondary clarification. The proposed location of the treatment system will be an approximate 1200 sft area adjacent to the existing leachate storage tank. The treated leachate discharge line will be on the eastern side of the permitted disposal area and will discharge into Tannery Branch in accordance with the facility's NPDES permit. The facility will still maintain the option to ship leachate off-site for treatment during emergency events if necessary. The treatment system will not impact the any solid waste disposal operations or the existing leachate collection system. A flow diagram and location drawing of the treatment system and leachate discharge line is attached.

Based on our previous discussions, the fact that the leachate treatment is an auxiliary operation to the solid waste disposal operations, and it does not substantially alter the permit conditions, we believe this modification represents a minor permit modification. A receipt for the electronic submission of the \$1,460 for the minor permit modification fee is attached.

The installation of the proposed leachate treatment system will be scheduled as soon as practical upon your approval. If you have any questions or need any additional information, please feel free to call our office at (256) 443-8319.

Respectfully Submitted,
Southern Environmental Engineering Inc



John E. Simmons, P.E.
President

Cc: Mike Lockart, SWDA

SOLID WASTE APPLICATION

PERMIT APPLICATION
SOLID WASTE DISPOSAL FACILITY
ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
(Submit in Triplicate)

1. Facility type: Municipal Solid Waste Landfill (MSWLF)
 Industrial Landfill (ILF)
 Construction and Demolition Landfill (C/DLF)
 CCR Landfill (CCRLF)
 CCR Surface Impoundment (CCRSI)
 Other (explain) _____

2. Facility Name Cherokee Industrial Landfill

3. Applicant/Permittee:

Name: Solid Waste Disposal Authority of the Cities of Muscle Shoals, Sheffield, and Tuscumbia, Alabama

Address: P.O. Box 740328
Tuscumbia, AL 35674

Telephone: 256-370-7200

If applicant/permittee is a Corporation, please list officers:

4. Location: (include county highway map or USGS map)

Township 4S Range 13W
Section 2 County Colbert

5. Land Owner:

Name: Same

Address: _____

Telephone: _____

(Attach copy of agreement from landowner if applicable.)

Solid Waste Permit Application
Page 2

6. Contact Person:

Name Curtis Roberts

Position or Affiliation Landfill Manager

Address: Mailing: PO Box 740328, Tuscumbia, AL 35674
Physical: 1828 Cane Creek Road, Cherokee, AL 35616

Telephone: 256-383-6711

7. Size of Facility: 161.77 Acres Size of Disposal Area(s): 64.4 Acres

8. Identify proposed service area or specific industry that waste will be received from:
All counties contained within the States of Alabama, Georgia, Tennessee, and Mississippi

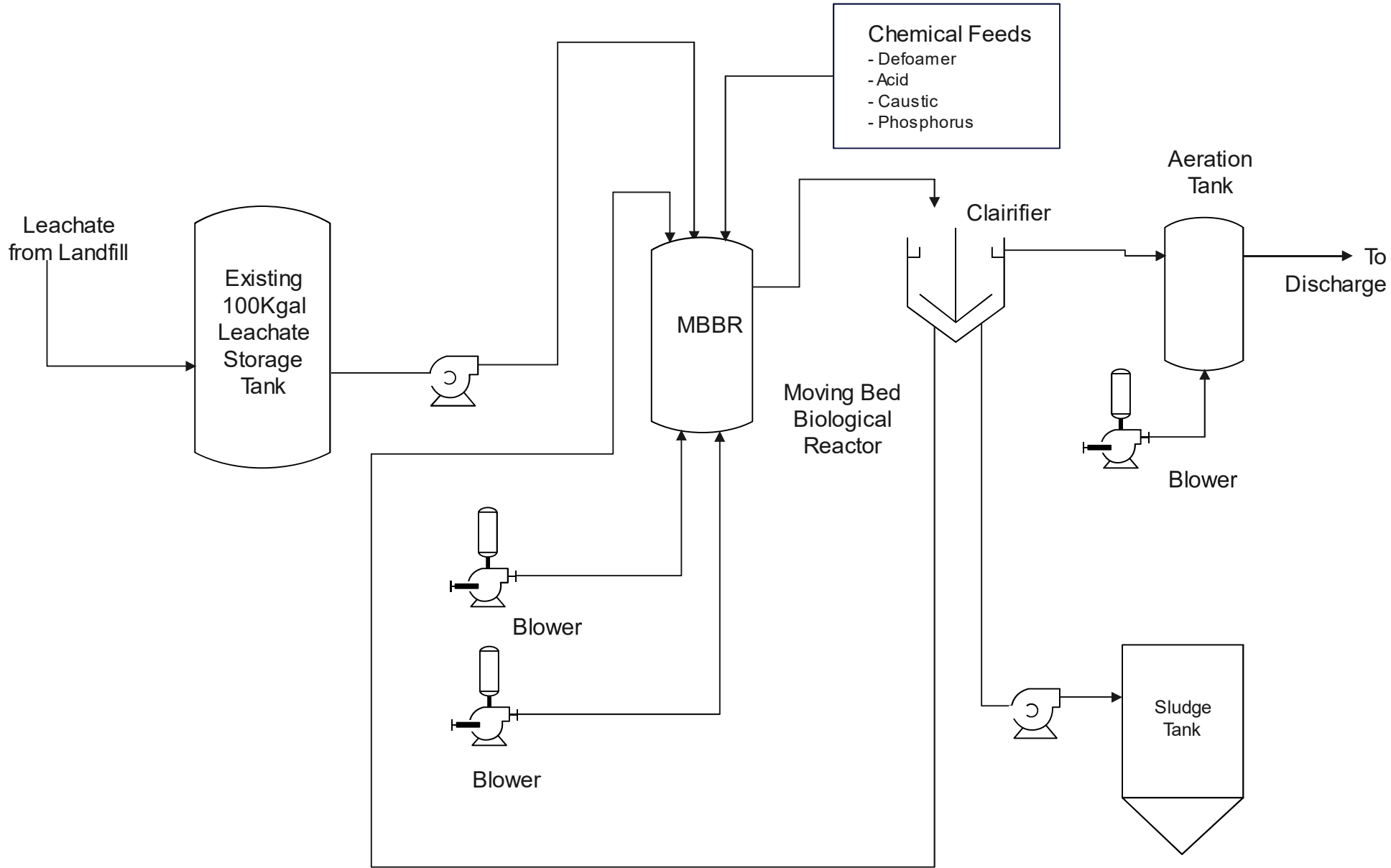
9. Proposed maximum average daily volume to be received at landfill (choose one):
1,000 Tons/Day _____ Cubic Yards/Day

10. List all waste streams to be accepted at the facility (i.e., household solid waste, wood boiler ash, fires, trees, limbs, stumps, etc.):
Non-hazardous industrial waste, approved industrial sludges, construction and demolition wastes, rubbish as defined by Rule 335-13-1-.03, asbestos, and tires.

SIGNATURE (Responsible official of permit applicant):

 TITLE: Chairman of Board of Directors

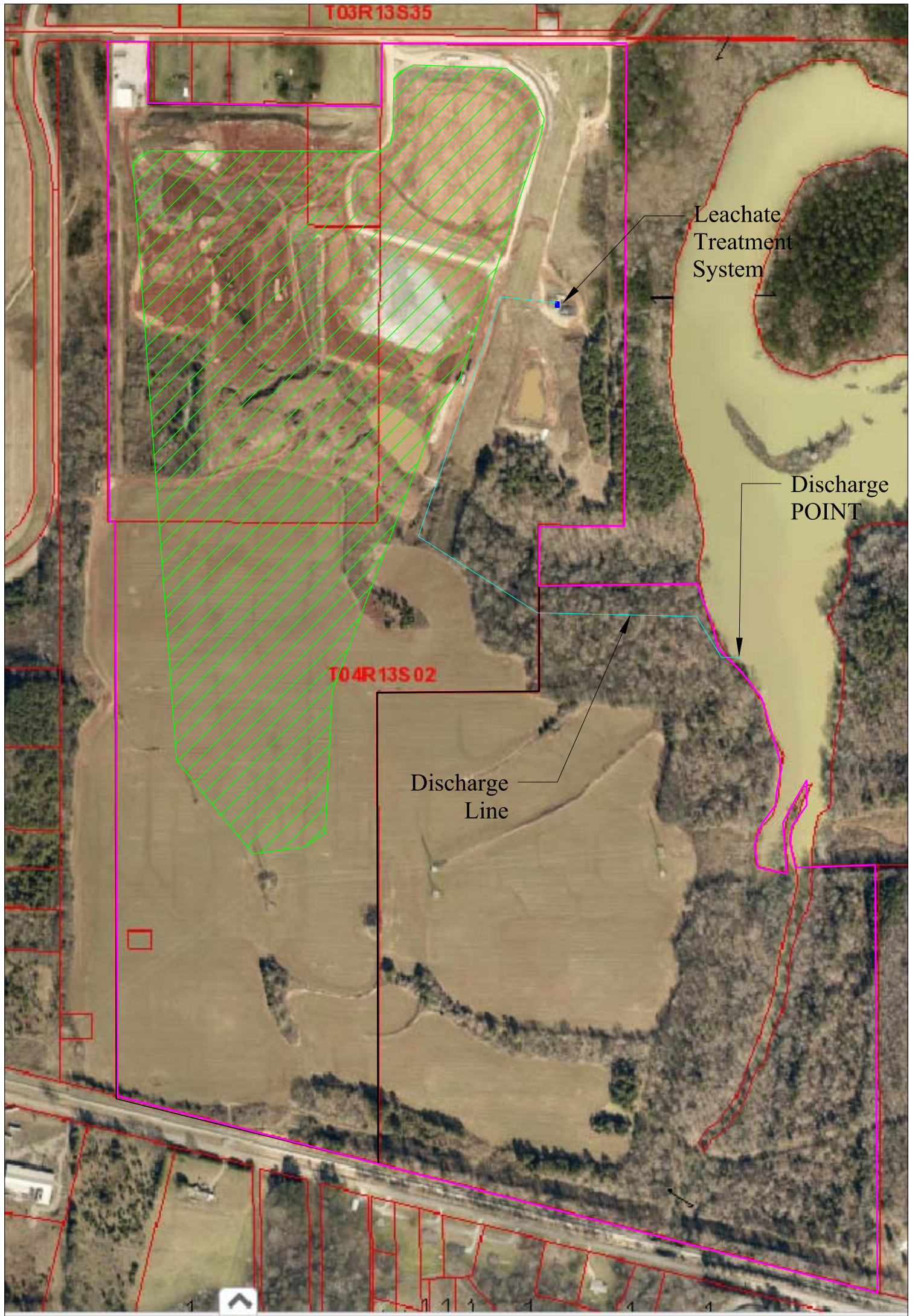
Mike Lockart DATE: 11/14/2024
(please print or type name)



Process Flow Diagram
 Cherokee ILF WWT System
 1750 Cane Creek Rd, Cherokee, AL

Draw n By: J.E.S. | 11/11/2024 | Scale: NTS





Legend

- Landfill Property Boundary
- Landfill Permitted Boundary
- ▨ Permitted Disposal Area

Site Map
Cherokee ILF WWT System
 1750 Cane Creek Rd
 Cherokee, AL 35616

Drawn By: J. Simmons

Project No.: 2024-143

Scale: See Map



ALABAMA
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT



(334) 271-7700 1400 Coliseum Blvd. Montgomery, AL 36110
mailing address: Post Office Box 301463, Montgomery, AL 36130-1463

Receipt Confirmation Page

ADEM requires that when you pay online, you MUST print out the confirmation information and submit it as proof of payment with your permit application or any other correspondence requiring proof of payment.

Payment Summary	
Payment Item	Fee
Online Payment - 11/15/2024 16:34:23	\$1,460.00
Total Fee through Alabama.gov (more info)	\$1,505.80

Receipt Confirmation Number: 20241115000026534

General Invoice Information

Choose the type of payment you are making: 5359-LAND- SOLID WASTE LANDFILL PERMIT

Description of Other Fees: Minor Permit Modification

Additional Information/Fee Description: Minor Permit Modification Fee for Cherokee Industrial Landfill

Number on your ADEM invoice:

Date on your ADEM invoice:

Contact Information

Company/Facility or Individual Name: Cherokee Industrial Landfill

Facility Permit Number (if applicable): 17-10

Company or Facility Phone: 256-710-4958

Contact Person: john eric simmons

Contact Phone: 256-443-8319

Contact email address: jsimmons@see-env.com

Name of an ADEM Program Staff Member (if known): jonathan crosby

Policy Related Questions: 334-271-7700

Application Support: 866-353-3468 or support@alabamainteractive.org

Version 2.1.5

December 5, 2024

Alabama Department of Environmental Management
Solid Waste Branch
P.O. Box 301463
Montgomery, Alabama 36130-1463
Attn: Mr. Jonathon Crosby

Reference: **Minor Permit Modification Additional Information Request
Cherokee Industrial Landfill
Cherokee, AL
Permit No. 17-10**

Dear Mr. Crosby:

We have prepared the following additional information on the wastewater (Leachate) treatment system, per our telephone conversation. I have attached a system layout diagram of the proposed system.

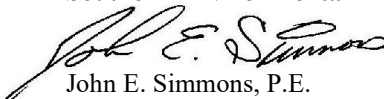
As shown in the drawing the system will be located adjacent to the existing leachate aboveground storage tank (AST). All treatment vessels, pumps, and storage tanks will be located inside concrete secondary containments, which will contain over 110% of the largest tank/vessel. Additionally, the containments for the existing leachate AST and the Moving Bed Biological Reactor (MBBR) will be connected near the top of the containments to provide additional containment capacity to either containment should a release occur. The facility is also installing controls which will automatically shut down the leachate pumps in the landfill cells should the leachate AST reach its overflow capacity. This was part of the original design, but it never functioned properly.

The only part of the system that is not inside the concrete containments is the treatment chemical feed system and the main control panel. This will be housed inside an enclosure building. The chemical feed systems will be located on individual secondary containment systems to prevent comingling of any spilled chemicals.

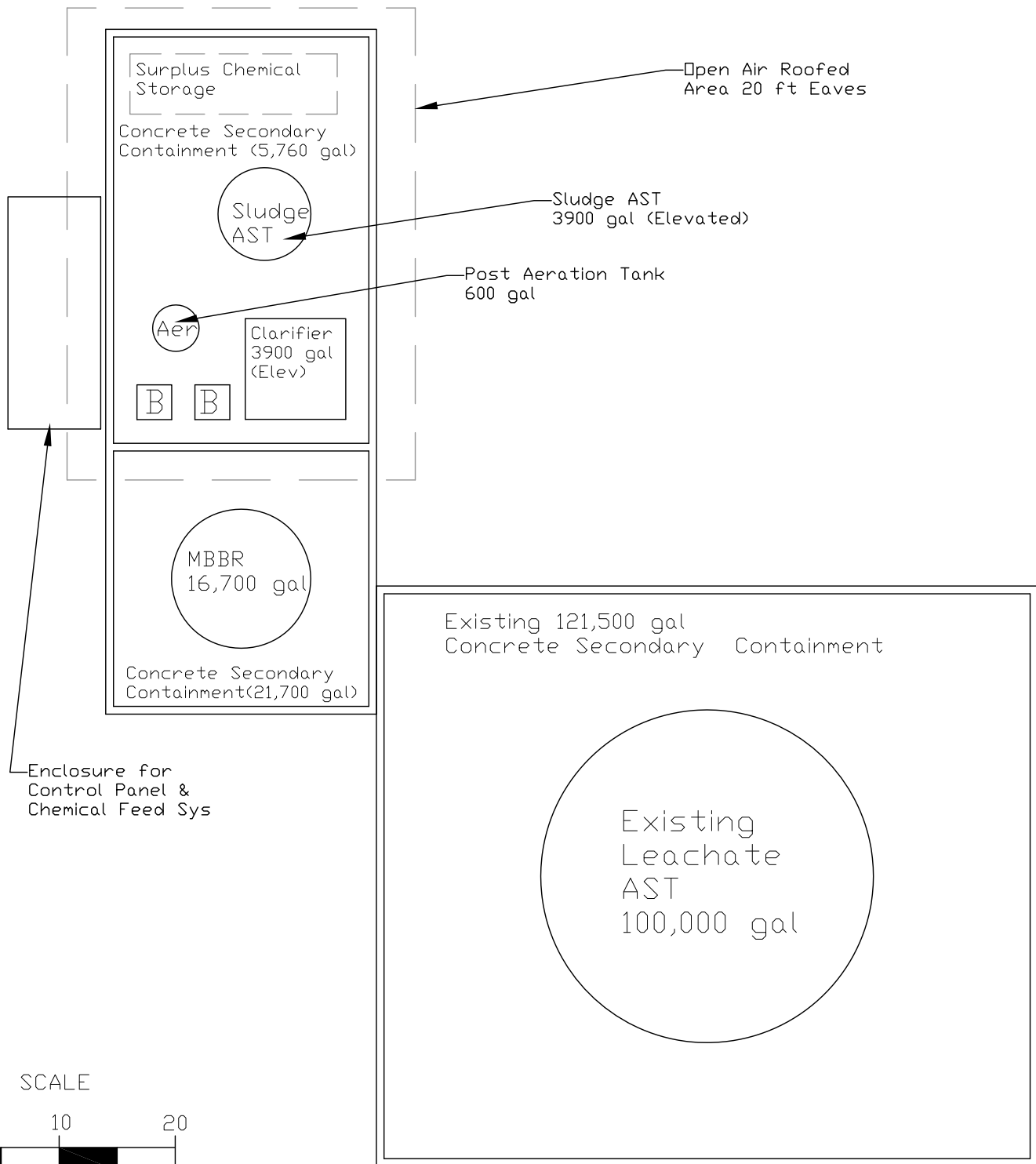
In the event that the above noted secondary containment systems and controls fail, and a release occurs outside the containment. The surrounding area drains to a large stormwater pond where the wastewater could be contained and pumped back to the treatment system or into portable tankage.

The Solid Waste Disposal Authority of the Cities of Muscle Shoals, Sheffield, and Tuscumbia (SWDA) is committed to environmental compliance, and they are eager to proceed with the installation of the proposed leachate treatment system. If you have any questions or need any additional information, please feel free to call our office at (256) 443-8319.

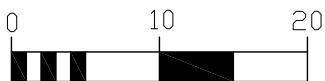
Respectfully Submitted,
Southern Environmental Engineering Inc


John E. Simmons, P.E.
President

Cc: Mike Lockart, SWDA



SCALE



Layout Diagram
Cherokee ILF WWT System
 1750 Cane Creek Rd
 Cherokee, AL 35616

Drawn By: J. Simmons Project No.: 2024-143 Scale: See Map





P.O. BOX 3241
FLORENCE, AL 35630
256.284.2043
SEE-ENV.COM

March 20, 2025

Alabama Department of Environmental Management
Solid Waste Branch
P.O. Box 301463
Montgomery, Alabama 36130-1463
Attn: Mr. Jonathon Crosby

Reference: **Operations Manual/Operations Plan Addendum
Minor Permit Modification
Cherokee Industrial Landfill
Cherokee, AL
Permit No. 17-10**

Dear Mr. Crosby:

We have prepared the following Addendum to the facility's Operations Manual Plan, per our previous telephone conversation. The Addendum effects **Section 4.12 Leachate Transfer and Storage** of the Operations Manual prepared by CDG Engineers on February 23, 2018

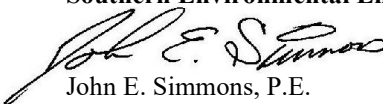
The following operations should be added to the operations described in Section 4.12:

When practical the facility will operate the leachate storage tank at less than 50% capacity. From the leachate storage tank, the leachate will be transferred to the on-site leachate treatment system. This system consists of a Moving Bed Biological Reactor (MBBR), clarifier, aeration tank, sludge tank, and associated pumps, blowers, and instrumentation. The treated leachate will be discharged through the facility's individual NPDES permit. The sludge generated through this treatment will be profiled through the Department's Solid Waste Determination process and disposed of in a permitted landfill. It is assumed that the waste can be disposed of on-site. If the waste is not approved for disposal on-site, it will be properly disposed of in an approved landfill.

In the event that the leachate cannot be processed through the on-site treatment system, it will be disposed of at an off-site treatment system or stored on-site in portable temporary storage containers such as "Frac tanks" until it can be processed. The facility will maintain business relationships with waste haulers, treatment facilities, and equipment rental providers to facilitate these measures in case of an emergency.

The Solid Waste Disposal Authority of the Cities of Muscle Shoals, Sheffield, and Tuscumbia (SWDA) is committed to environmental compliance, and they are eager to with this minor permit modification. If you have any questions or need any additional information, please feel free to call our office at (256) 443-8319. We will get you any additional information as soon as practical.

Respectfully Submitted,
Southern Environmental Engineering Inc



John E. Simmons, P.E.
President

Cc: Mike Lockart, SWDA

Cherokee Industrial Landfill
Adjoining Property Owners

- Shoals Economic Development Authority
20 Hightower PL STE 1, Florence, AL 35630

- Douglas Wayne Byars
POB 659, Sulligent, AL 35586

- Dan T and Jenitha S Burgett
9374 Old Lee HWY, Cherokee, AL 35616

- Charles Lee Hovater
18570 Highway 72, Tuscumbia, AL 35674

- Carolyn R Hovater
13950 Highway 72, Cherokee, AL 35674

- Isabella and Janice Newsom
10545 Old Lee Highway, Tuscumbia, AL 3574

- United States Government
601 1st Federal Bldg, Florence, AL 35630