Edward F. Poolos
Director

Jeffery W. Kitchens
Deputy Director

Alabama Department of Environmental Management
adem.alabama.gov
1400 Coliseum Blvd. 36110-2400 ▪ Post Office Box 301463
Montgomery, Alabama 36130-1463
(334) 271-7700 ▪ FAX (334) 271-7950

Kay Ivey
Governor

AUG 0 6 2025

Michael Shamsie
Design Engineer & Owner
Land Venues, Inc.
201 W. 2nd Avenue, Suite 201
Coal Valley, IL 61240

RE: Draft Permit
NPDES Permit No. AL0084510
Mia Rayne Subdivision WWTP
Madison County, Alabama

Dear Mr. Shamsie:

Transmitted herein is a draft of the referenced permit.

We would appreciate your comments on the permit within **30 days** of the date of this letter. Please direct any comments of a technical or administrative nature to the undersigned.

By copy of this letter and the draft permit, we are also requesting comments within the same time frame from EPA.

Please be aware that Parts I.C.1.c and I.C.2.e of your permit require participation in the Department's Alabama Environmental Permitting and Compliance System (AEPACS) for submittal of DMRs and SSOs upon issuance of this permit unless valid justification as to why you cannot participate is submitted in writing. SSO hotline notifications and hard copy Form 415 SSO reports may be used only with the written approval from the Department. AEPACS allows ADEM to electronically validate and acknowledge receipt of the data. This improves the accuracy of reported compliance data and reduces costs to both the regulated community and ADEM. Please note that all AEPACS users can create the electronic DMRs and SSOs; however, only AEPACS users with certifier permissions will be able to submit the electronic DMRs and SSOs to ADEM.

Please also be aware that Part IV. of your permit requires that you develop, implement, and maintain a Sanitary Sewer Overflow Response Plan.

The Alabama Department of Environmental Management encourages you to voluntarily consider pollution prevention practices and alternatives at your facility. Pollution Prevention may assist you in complying with effluent limitations, and possibly reduce or eliminate monitoring requirements.

If you have questions regarding this permit or monitoring requirements, please contact Sandra Lee at slee@adem.alabama.gov or (334) 274-4223.

Sincerely,

Sandra Lee
Municipal Section
Water Division

Enclosure

cc: Environmental Protection Agency Email
Ms. Elaine Snyder/U.S. Fish and Wildlife Service
Ms. Elizabeth Brown/Alabama Historical Commission
Advisory Council on Historic Preservation
Department of Conservation and Natural Resources

Alabama Department of Environmental Management

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

PERMITTEE: LAND VENUES, INC.
201 W. 2ND AVENUE, SUITE 201
COAL VALLEY, IL 61240

FACILITY LOCATION: MIA RAYNE SUBDIVISION WWTP (0.075 MGD)
10017 WALL TRIANNA HWY
HARVEST, ALABAMA
MADISON COUNTY

PERMIT NUMBER: AL0084510

RECEIVING WATERS: UNNAMED TRIBUTARY TO LIMESTONE CREEK

*In accordance with and subject to the provisions of the Federal Water Pollution Control Act, as amended, 33 U.S.C. §§1251-1388 (the "FWPCA"), the Alabama Water Pollution Control Act, as amended, **Code of Alabama 1975**, §§ 22-22-1 to 22-22-14 (the "AWPCA"), the Alabama Environmental Management Act, as amended, **Code of Alabama 1975**, §§22-22A-1 to 22-22A-17, and rules and regulations adopted thereunder, and subject further to the terms and conditions set forth in this permit, the Permittee is hereby authorized to discharge into the above-named receiving waters.*

ISSUANCE DATE:

EFFECTIVE DATE:

EXPIRATION DATE:

Draft

Alabama Department of Environmental Management

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PART I: DISCHARGE LIMITATIONS, CONDITIONS, AND REQUIREMENTS

A. DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS

1. DSN 001: Treated Domestic Wastewater

During the period beginning on the effective date of this permit and lasting through the expiration date of this permit, the Permittee is authorized to discharge from Outfall 001, which is described more fully in the Permittee's application. Such discharge shall be limited and monitored by the Permittee as specified below:

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Freq See note (1)	Sample Type	Seasonal See note (2)
Oxygen, Dissolved (DO) (00300) Effluent Gross Value	*****	*****	*****	6.0 Minimum Daily	*****	*****	mg/l	Weekly	Grab	Not Seasonal
pH (00400) Effluent Gross Value	*****	*****	*****	6.0 Minimum Daily	*****	8.5 Maximum Daily	S.U.	Weekly	Grab	Not Seasonal
Solids, Total Suspended (00530) Effluent Gross Value	18.6 Monthly Average	28.0 Weekly Average	lbs/day	*****	30.0 Monthly Average	45.0 Weekly Average	mg/l	Weekly	8-Hr Composite	Not Seasonal
Solids, Total Suspended (00530) Raw Sew/Influent	(Report) Monthly Average	(Report) Weekly Average	lbs/day	*****	(Report) Monthly Average	(Report) Weekly Average	mg/l	Weekly	8-Hr Composite	Not Seasonal
Nitrogen, Ammonia Total (As N) (00610) Effluent Gross Value	1.5 Monthly Average	2.2 Weekly Average	lbs/day	*****	2.4 Monthly Average	3.6 Weekly Average	mg/l	Weekly	8-Hr Composite	Not Seasonal
Nitrogen, Kjeldahl Total (As N) (00625) Effluent Gross Value	(Report) Monthly Average	(Report) Weekly Average	lbs/day	*****	(Report) Monthly Average	(Report) Weekly Average	mg/l	Monthly	8-Hr Composite	S
Nitrite Plus Nitrate Total 1 Det. (As N) (00630) Effluent Gross Value	(Report) Monthly Average	(Report) Weekly Average	lbs/day	*****	(Report) Monthly Average	(Report) Weekly Average	mg/l	Monthly	8-Hr Composite	S
Phosphorus, Total (As P) (00665) Effluent Gross Value	(Report) Monthly Average	(Report) Weekly Average	lbs/day	*****	(Report) Monthly Average	(Report) Weekly Average	mg/l	Monthly	8-Hr Composite	S
Flow, In Conduit or Thru Treatment Plant (50050) Effluent Gross Value	(Report) Monthly Average	(Report) Maximum Daily	MGD	*****	*****	*****	*****	Weekly	Instantaneous	Not Seasonal

See Part II.C.1. for Bypass and Part II.C.2. for Upset conditions.

(1) Sample Frequency – See also Part I.B.2

See Permit Requirements for Effluent Toxicity Testing in Part IV.B.

(2) S = Summer (April – October)
W = Winter (November - March)
ECS = E. coli Summer (May - October)
ECW = E. coli Winter (November - April)

(3) See Part IV.C. for Total Residual Chlorine (TRC). Monitoring for TRC is applicable if chlorine is utilized for disinfection purposes. If monitoring is not applicable during the monitoring period, enter "*9" on the monthly DMR.

(4) A measurement of TRC below 0.05 mg/L shall be considered in compliance with the permit limitations above and should be reported as "*B" on the monthly DMR.

DSN 001 (Continued): Treated Domestic Wastewater

During the period beginning on the effective date of this permit and lasting through the expiration date of this permit, the Permittee is authorized to discharge from Outfall 001, which is described more fully in the Permittee's application. Such discharge shall be limited and monitored by the Permittee as specified below:

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Freq See note (1)	Sample Type	Seasonal See note (2)
Chlorine, Total Residual (50060) See notes (3, 4) Effluent Gross Value	*****	*****	*****	*****	0.011 Monthly Average	0.019 Maximum Daily	mg/l	Weekly	Grab	Not Seasonal
E. Coli (51040) Effluent Gross Value	*****	*****	*****	*****	548 Monthly Average	2507 Maximum Daily	col/100mL	Weekly	Grab	ECW
E. Coli (51040) Effluent Gross Value	*****	*****	*****	*****	126 Monthly Average	298 Maximum Daily	col/100mL	Weekly	Grab	ECS
BOD, Carbonaceous 05 Day, 20C (80082) Effluent Gross Value	15.5 Monthly Average	23.3 Weekly Average	lbs/day	*****	25.0 Monthly Average	37.5 Weekly Average	mg/l	Weekly	8-Hr Composite	Not Seasonal
BOD, Carbonaceous 05 Day, 20C (80082) Raw Sew/Influent	(Report) Monthly Average	(Report) Weekly Average	lbs/day	*****	(Report) Monthly Average	(Report) Weekly Average	mg/l	Weekly	8-Hr Composite	Not Seasonal
BOD, Carb-5 Day, 20 Deg C, Percent Remvl (80091) Percent Removal	*****	*****	*****	85.0 Monthly Average Minimum	*****	*****	%	Monthly	Calculated	Not Seasonal
Solids, Suspended Percent Removal (81011) Percent Removal	*****	*****	*****	85.0 Monthly Average Minimum	*****	*****	%	Monthly	Calculated	Not Seasonal

See Part II.C.1. for Bypass and Part II.C.2. for Upset conditions.

(1) Sample Frequency – See also Part I.B.2

See Permit Requirements for Effluent Toxicity Testing in Part IV.B.

(2) S = Summer (April – October)
W = Winter (November - March)
ECS = E. coli Summer (May - October)
ECW = E. coli Winter (November - April)

(3) See Part IV.C. for Total Residual Chlorine (TRC). Monitoring for TRC is applicable if chlorine is utilized for disinfection purposes. If monitoring is not applicable during the monitoring period, enter "*9" on the monthly DMR.

(4) A measurement of TRC below 0.05 mg/L shall be considered in compliance with the permit limitations above and should be reported as "*B" on the monthly DMR.

B. DISCHARGE MONITORING AND RECORD KEEPING REQUIREMENTS

1. Representative Sampling

Sample collection and measurement actions shall be representative of the volume and nature of the monitored discharge and shall be in accordance with the provisions of this permit. The effluent sampling point shall be at the nearest accessible location just prior to discharge and after final treatment, unless otherwise specified in the permit.

2. Measurement Frequency

Measurement frequency requirements found in Provision I.A. shall mean:

a. Seven days per week shall mean daily.

b. Five days per week shall mean any five days of discharge during a calendar weekly period of Sunday through Saturday.

c. Three days per week shall mean any three days of discharge during a calendar week.

d. Two days per week shall mean any two days of discharge during a calendar week

e. One day per week shall mean any day of discharge during a calendar week.

f. Two days per month shall mean any two days of discharge during the month that are no less than seven days apart. However, if discharges occur only during one seven-day period in a month, then two days per month shall mean any two days of discharge during that seven day period.

g. One day per month shall mean any day of discharge during the calendar month.

h. Quarterly shall mean any day of discharge during each calendar quarter.

i. The Permittee may increase the frequency of sampling, listed in Provisions I.B.2.a through I.B.2.h; however, all sampling results are to be reported to the Department.

3. Test Procedures

For the purpose of reporting and compliance, permittees shall use one of the following procedures:

a. For parameters with an EPA established Minimum Level (ML), report the measured value if the analytical result is at or above the ML and report "0" or "*B" for values below the ML. Test procedures for the analysis of pollutants shall conform to 40 CFR Part 136 and guidelines published pursuant to Section 304(h) of the FWPCA, 33 U.S.C. Section 1314(h). If more than one method for analysis of a substance is approved for use, a method having a minimum level lower than the permit limit shall be used. If the minimum level of all methods is higher than the permit limit, the method having the lowest minimum level shall be used and a report of less than the minimum level shall be reported as zero and will constitute compliance, however should EPA approve a method with a lower minimum level during the term of this permit the permittee shall use the newly approved method.

b. For pollutants parameters without an established ML, an interim ML may be utilized. The interim ML shall be calculated as 3.18 times the Method Detection Level (MDL) calculated pursuant to 40 CFR Part 136, Appendix B.

Permittees may develop an effluent matrix-specific ML, where an effluent matrix prevents attainment of the established ML. However, a matrix specific ML shall be based upon proper laboratory method and technique. Matrix-specific MLs must be approved by the Department, and may be developed by the permittee during permit issuance, reissuance, modification, or during compliance schedule.

In either case the measured value should be reported if the analytical result is at or above the ML and "0" or "*B" reported for values below the ML.

c. For parameters without an EPA established ML, interim ML, or matrix-specific ML, a report of less than the detection limit shall constitute compliance if the detection limit of all analytical methods is higher than the permit limit. For the purpose of calculating a monthly average, "0" shall be used for values reported less than the detection limit.

The Minimum Level utilized for procedures a and b above shall be reported on the permittee's DMR. When an EPA approved test procedure for analysis of a pollutant does not exist, the Director shall approve the procedure to be used.

4. **Recording of Results**

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

a. The facility name and location, point source number, date, time and exact place of sampling;

b. The name(s) of person(s) who obtained the samples or measurements;

c. The dates and times the analyses were performed;

d. The name(s) of the person(s) who performed the analyses;

e. The analytical techniques or methods used, including source of method and method number; and

f. The results of all required analyses.

5. Records Retention and Production

a. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by the permit, and records of all data used to complete the above reports or the application for this permit, for a period of at least three years from the date of the sample measurement, report or application. This period may be extended by request of the Director at any time. If litigation or other enforcement action, under the AWPCA and/or the FWPCA, is ongoing which involves any of the above records, the records shall be kept until the litigation is resolved. Upon the written request of the Director or his designee, the permittee shall provide the Director with a copy of any record required to be retained by this paragraph. Copies of these records should not be submitted unless requested.

b. All records required to be kept for a period of three years shall be kept at the permitted facility or an alternate location approved by the Department in writing and shall be available for inspection.

6. **Reduction, Suspension or Termination of Monitoring and/or Reporting**

a. The Director may, with respect to any point source identified in Provision I.A. of this permit, authorize the permittee to reduce, suspend or terminate the monitoring and/or reporting required by this permit upon the submission of a written request for such reduction, suspension or termination by the permittee, supported by sufficient data which demonstrates to the satisfaction of the Director that the discharge from such point source will continuously meet the discharge limitations specified in Provision I.A. of this permit.

b. It remains the responsibility of the permittee to comply with the monitoring and reporting requirements of this permit until written authorization to reduce, suspend or terminate such monitoring and/or reporting is received by the permittee from the Director.

7. **Monitoring Equipment and Instrumentation**

All equipment and instrumentation used to determine compliance with the requirements of this permit shall be installed, maintained, and calibrated in accordance with the manufacturer's instructions or, in the absence of manufacturer's instructions, in accordance with accepted practices. At a minimum, flow measurement devices shall be calibrated at least once every 12 months.

C. DISCHARGE REPORTING REQUIREMENTS

1. **Reporting of Monitoring Requirements**

a. The permittee shall conduct the required monitoring in accordance with the following schedule:

(1) **MONITORING REQUIRED MORE FREQUENTLY THAN MONTHLY AND MONTHLY** shall be conducted during the first full month following the effective date of coverage under this permit and every month thereafter.

(2) **QUARTERLY MONITORING** shall be conducted at least once during each calendar quarter. Calendar quarters are the periods of January through March, April through June, July through September, and October through December. The permittee shall conduct the quarterly monitoring during the first complete calendar quarter following the effective date of this permit and is then required to monitor once during each quarter thereafter. Quarterly monitoring should be reported on the last DMR due for the quarter (i.e., March, June, September and December DMRs).

(3) **SEMIANNUAL MONITORING** shall be conducted at least once during the period of January through June and at least once during the period of July through December. The permittee shall conduct the semiannual monitoring during the first complete calendar semiannual period following the effective date of this permit and is then required to monitor once during each semiannual period thereafter. Semiannual monitoring may be done anytime during the semiannual period, unless restricted elsewhere in this permit, but it should be reported on the last DMR due for the month of the semiannual period (i.e., June and December DMRs).

(4) **ANNUAL MONITORING** shall be conducted at least once during the period of January through December. The permittee shall conduct the annual monitoring during the first complete calendar annual period following the effective date of this permit and is then required to monitor once during each annual period thereafter. Annual monitoring may be done anytime during the year, unless restricted elsewhere in this permit, but it should be reported on the December DMR.

b. The permittee shall submit discharge monitoring reports (DMRs) in accordance with the following schedule:

(1) **REPORTS OF MORE FREQUENTLY THAN MONTHLY AND MONTHLY TESTING** shall be submitted on a monthly basis. The first report is due on the 28th day of the month following the month the permit becomes effective. The reports shall be submitted so that they are received by the Department no later than the 28th day of the month following the reporting period, unless otherwise directed by the Department.

(2) **REPORTS OF QUARTERLY TESTING** shall be submitted on a quarterly basis. The first report is due on the 28th day of the month following the first complete calendar quarter the permit becomes effective. The reports shall be submitted so that they are received by the Department no later than the 28th day of the month following the reporting period, unless otherwise directed by the Department.

(3) **REPORTS OF SEMIANNUAL TESTING** shall be submitted on a semiannual basis. The reports are due on the 28th day of JANUARY and the 28th day of JULY. The reports shall be submitted so that they are received by the Department no later than the 28th day of the month following the reporting period, unless otherwise directed by the Department.

(4) **REPORTS OF ANNUAL TESTING** shall be submitted on an annual basis. Unless specified elsewhere in the permit, the first report is due on the 28th day of JANUARY. The reports shall be submitted so that they are received by the Department no later than the 28th day of the month following the reporting period, unless otherwise directed by the Department.

c. Except as allowed by Provision I.C.1.c.(1) or (2), the permittee shall submit all Discharge Monitoring Reports (DMRs) required by Provision I.C.1.b. electronically.

(1) If the permittee is unable to complete the electronic submittal of DMR data due to technical problems originating with the Department's electronic system (this could include entry/submittal issues with an entire set of DMRs or individual parameters), the permittee is not relieved of their obligation to submit DMR data to the Department by the date specified in Provision I.C.1.b., unless otherwise directed by the Department.

If the Department's electronic system is down on the 28th day of the month in which the DMR is due or is down for an extended period of time, as determined by the Department, when a DMR is required to be submitted, the permittee may submit the data in an alternate manner and format acceptable to the Department. Preapproved alternate acceptable methods include faxing, e-mailing, mailing, or hand-delivery of data such that they are received by the required reporting date. Within five calendar days of the Department's electronic system resuming operation, the permittee shall enter the data into the Department's electronic system, unless an alternate timeframe is approved by the Department. A comment should be included on the electronic DMR submittal verifying the original submittal date (date of the fax, copy of dated e-mail, or hand-delivery stamped date), if applicable.

(2) The permittee may submit a request to the Department for a temporary electronic reporting waiver for DMR submittals. The waiver request should include the permit number; permittee name; facility/site name; facility address; name, address, and contact information for the responsible official or duly authorized representative; a detailed statement regarding the basis for requesting such a waiver; and the duration for which the waiver is requested. Approved electronic reporting waivers are not transferrable.

(3) A permittee with an approved electronic reporting waiver for DMRs may submit hard copy DMRs for the period that the approved electronic reporting waiver request is effective. The permittee shall submit the Department-approved DMR forms to the address listed in Provision I.C.1.e.

(4) If a permittee is allowed to submit a hard copy DMR, the DMR must be legible and bear an original signature. Photo and electronic copies of the signature are not acceptable and shall not satisfy the reporting requirements of this permit.

(5) If the permittee, using approved analytical methods as specified in Provision I.B.2, monitors any discharge from a point source for a limited substance identified in Provision I.A. of this permit more frequently than required by this permit, the results of such monitoring shall be included in the calculation and reporting of values on the DMR and the increased frequency shall be indicated on the DMR.

(6) In the event no discharge from a point source identified in Provision I.A. of this permit and described more fully in the permittee's application occurs during a monitoring period, the permittee shall report "No Discharge" for such period on the appropriate DMR.

d. All reports and forms required to be submitted by this permit, the AWPCA and the Department's Rules and Regulations, shall be electronically signed (or, if allowed by the Department, traditionally signed) by a "responsible official" of the permittee as defined in ADEM Administrative Code Rule 335-6-6-.09 or a "duly authorized representative" of such official as defined in ADEM Administrative Code Rule 335-6-6-.09 and shall bear the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

e. Discharge Monitoring Reports required by this permit, the AWPCA, and the Department's Rules that are being submitted in hard copy shall be addressed to:

Alabama Department of Environmental Management
Office of Water Services, Water Division
Post Office Box 301463
Montgomery, Alabama 36130-1463

Certified and Registered Mail containing Discharge Monitoring Reports shall be addressed to:

Alabama Department of Environmental Management
Office of Water Services, Water Division
1400 Coliseum Boulevard
Montgomery, Alabama 36110-2400

f. All other correspondence and reports required to be submitted by this permit, the AWPCA, and the Department's Rules shall be addressed to:

Alabama Department of Environmental Management
Municipal Section, Water Division
Post Office Box 301463
Montgomery, Alabama 36130-1463

Certified and Registered Mail shall be addressed to:

Alabama Department of Environmental Management
Municipal Section, Water Division
1400 Coliseum Boulevard
Montgomery, Alabama 36110-2400

g. If this permit is a reissuance, then the permittee shall continue to submit DMRs in accordance with the requirements of their previous permit until such time as DMRs are due as discussed in Part I.C.1.b. above.

2. **Noncompliance Notifications and Reports**

a. The Permittee shall notify the Department if, for any reason, the Permittee's discharge:

(1) Does not comply with any daily minimum or maximum discharge limitation for an effluent characteristic specified in Provision I.A. of this permit which is denoted by an "(X)";

(2) Potentially threatens human health or welfare;

(3) Threatens fish or aquatic life;

(4) Causes an in-stream water quality criterion to be exceeded;

(5) Does not comply with an applicable toxic pollutant effluent standard or prohibition established under Section 307(a) of the FWPCA, 33 U.S.C. Section 1317(a);

(6) Contains a quantity of a hazardous substance that may be harmful to public health or welfare under Section 311(b)(4) of the FWPCA, 33 U.S.C. Section 1321(b)(4);

(7) Exceeds any discharge limitation for an effluent parameter listed in Part I.A. as a result of an unanticipated bypass or upset; or

(8) Is an unpermitted direct or indirect discharge of a pollutant to a water of the state. (Note that unpermitted discharges properly reported to the Department under any other requirement are not required to be reported under this provision.)

The Permittee shall orally or electronically provide notification of any of the above occurrences, describing the circumstances and potential effects, to the Director or Designee within 24-hours after the Permittee becomes aware of the occurrence of such discharge. In addition to the oral or electronic notification, the Permittee shall submit a report to the Director or Designee, as provided in Provision I.C.2.c. or I.C.2.e., no later than five days after becoming aware of the occurrence of such discharge or occurrence.

b. If, for any reason, the Permittee's discharge does not comply with any limitation of this permit, then the Permittee shall submit a written report to the Director or Designee, as provided in Provision I.C.2.c below. This report must be submitted with the next Discharge Monitoring Report required to be submitted by Provision I.C.1 of this permit after becoming aware of the occurrence of such noncompliance.

c. Except for notifications and reports of notifiable SSOs which shall be submitted in accordance with the applicable Provisions of this permit, the Permittee shall submit the reports required under Provisions I.C.2.a. and b. to the Director or Designee on ADEM Form 421, available on the Department's website (http://www.adem.state.al.us/DeptForms/Form421.pdf). The completed Form must document the following information:

(1) A description of the discharge and cause of noncompliance;

(2) The period of noncompliance, including exact dates, times, and duration of the noncompliance. If the noncompliance is not corrected by the due date of the written report, then the Permittee shall provide an estimated date by which the noncompliance will be corrected; and

(3) A description of the steps taken by the Permittee and the steps planned to be taken by the Permittee to reduce or eliminate the noncompliant discharge and to prevent its recurrence.

d. Immediate notification

The Permittee shall provide notification to the Director, the public, the county health department, and any other affected entity such as public water systems, as soon as possible upon becoming aware of any notifiable sanitary sewer overflow. Notification to the Director shall be completed utilizing the Department's web-based electronic environmental SSO reporting system in accordance with Provision I.C.2.e.

e. The Department is utilizing an electronic system for notification and submittal of SSO reports. Except as noted below, the Permittee must submit all SSO reports electronically in the Department's electronic system. If requested, waivers from utilization of the electronic system shall be submitted in accordance with ADEM Admin. Code 335-6-1-.04(6). The Department's electronic reporting system shall be utilized unless a written waiver has been granted. A waiver is not effective until receipt of written approval from the Department. Utilization of verbal notifications and hard copy SSO report submittals is allowed only if approved in writing by the Department. The Permittee shall include in the SSO reports the information requested by ADEM Form 415. In addition, the Permittee shall include the latitude and longitude of the SSO in the report except when the SSO is a result of an extreme weather event (e.g., hurricane). To participate in the electronic system for SSO reports, an account may be created at https://aepacs.adem.alabama.gov/nviro/ncore/external/home. If the electronic system is down (i.e., electronic submittal of SSO data cannot be completed due to technical problems originating with the Department's system), the Permittee is not relieved of its obligation to notify the Department or submit SSO reports to the Department by the required submittal date, and the Permittee shall submit the data in an alternate manner and format acceptable to the Department. Preapproved alternate acceptable methods include verbal reports, reports submitted via the SSO hotline, or reports submitted via fax, e-mail, mail, or hand-delivery such that they are

received by the required reporting date. Within five calendar days of the electronic system resuming operation, the Permittee shall enter the data into the electronic system, unless an alternate timeframe is approved by the Department. For any alternate notification, records of the date, time, notification method, and person submitting the notification should be maintained by the Permittee. If a Permittee is allowed to submit SSO reports via an alternate method, the SSO report must be in a format approved by the Department and must be legible.

D. OTHER REPORTING AND NOTIFICATION REQUIREMENTS

1. **Anticipated Noncompliance**

   The permittee shall give the Director written advance notice of any planned changes or other circumstances regarding a facility which may result in noncompliance with permit requirements.

2. **Termination of Discharge**

   The permittee shall notify the Director, in writing, when all discharges from any point source(s) identified in Provision I. A. of this permit have permanently ceased. This notification shall serve as sufficient cause for instituting procedures for modification or termination of the permit.

3. **Updating Information**

   a. The permittee shall inform the Director of any change in the permittee's mailing address or telephone number or in the permittee's designation of a facility contact or office having the authority and responsibility to prevent and abate violations of the AWPCA, the Department's Rules and the terms and conditions of this permit, in writing, no later than ten (10) days after such change. Upon request of the Director or his designee, the permittee shall furnish the Director with an update of any information provided in the permit application.

   b. If 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 Director, it shall promptly submit such facts or information with a written explanation for the mistake and/or omission.

4. **Duty to Provide Information**

   The permittee shall furnish to the Director, within a reasonable time, any information which the Director or his designee may request to determine whether cause exists for modifying, revoking and re-issuing, suspending, or terminating this permit, in whole or in part, or to determine compliance with this permit.

E. SCHEDULE OF COMPLIANCE

1. **Compliance with discharge limits**

   The permittee shall achieve compliance with the discharge limitations specified in Provision I. A. in accordance with the following schedule:

   COMPLIANCE SHALL BE ATTAINED ON THE EFFECTIVE DATE OF THIS PERMIT

2. **Schedule**

   No later than 14 calendar days following a date identified in the above schedule of compliance, the permittee shall submit either a report of progress or, in the case of specific actions being required by identified dates, a written notice of compliance or noncompliance. In the latter case, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

PART II: OTHER REQUIREMENTS, RESPONSIBILITIES, AND DUTIES

A. OPERATIONAL AND MANAGEMENT REQUIREMENTS

1. Facilities Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of the permit. Proper operation and maintenance 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 only when necessary to achieve compliance with the conditions of the permit.

2. Best Management Practices

a. Dilution water shall not be added to achieve compliance with discharge limitations except when the Director or his designee has granted prior written authorization for dilution to meet water quality requirements.

b. The permittee shall prepare, implement, and maintain a Spill Prevention, Control and Countermeasures (SPCC) Plan in accordance with 40 C.F.R. Section 112 if required thereby.

c. The permittee shall prepare, submit for approval and implement a Best Management Practices (BMP) Plan for containment of any or all process liquids or solids, in a manner such that these materials do not present a significant potential for discharge, if so required by the Director or his designee. When submitted and approved, the BMP Plan shall become a part of this permit and all requirements of the BMP Plan shall become requirements of this permit.

3. Certified Operator

The permittee shall not operate any wastewater treatment plant unless the competency of the operator to operate such plant has been duly certified by the Director pursuant to AWPCA, and meets the requirements specified in ADEM Administrative Code, Rule 335-10-1.

B. OTHER RESPONSIBILITIES

1. Duty to Mitigate Adverse Impacts

The permittee shall promptly take all reasonable steps to mitigate and minimize or prevent any adverse impact on human health or the environment resulting from noncompliance with any discharge limitation specified in Provision I. A. of this permit, including such accelerated or additional monitoring of the discharge and/or the receiving waterbody as necessary to determine the nature and impact of the noncomplying discharge.

2. Right of Entry and Inspection

a. The permittee shall allow the Director, or an authorized representative, upon the presentation of proper credentials and other documents as may be required by law to:

(1) Enter upon the permittee's premises where a regulated facility or activity or point source is located or conducted, or where records must be kept under the conditions of the permit;

(2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permits;

(3) Inspect any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under the permit; and

(4) Sample or monitor, for the purposes of assuring permit compliance or as otherwise authorized by the AWPCA, any substances or parameters at any location.

C. BYPASS AND UPSET

1. Bypass

a. Any bypass is prohibited except as provided in b. and c. below:

b. A bypass is not prohibited if:

(1) It does not cause any discharge limitation specified in Provision I. A. of this permit to be exceeded;

(2) It enters the same receiving stream as the permitted outfall; and

(3) It is necessary for essential maintenance of a treatment or control facility or system to assure efficient operation of such facility or system.

c. A bypass is not prohibited and need not meet the discharge limitations specified in Provision I. A. of this permit if:

(1) It is unavoidable to prevent loss of life, personal injury, or severe property damage;

(2) There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime (this condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance); and

(3) The permittee submits a written request for authorization to bypass to the Director at least ten (10) days prior to the anticipated bypass (if possible), the permittee is granted such authorization, and the permittee complies with any conditions imposed by the Director to minimize any adverse impact on human health or the environment resulting from the bypass.

d. The permittee has the burden of establishing that each of the conditions of Provision II. C. 1. b. or c. have been met to qualify for an exception to the general prohibition against bypassing contained in a. and an exemption, where applicable, from the discharge limitations specified in Provision I. A. of this permit.

2. **Upset**

a. A discharge which results from an upset need not meet the discharge limitations specified in Provision I. A. of this permit if:

(1) No later than 24-hours after becoming aware of the occurrence of the upset, the Permittee orally reports the occurrence and circumstances of the upset to the Director or his designee; and

(2) No later than five (5) days after becoming aware of the occurrence of the upset, the Permittee furnishes the Director with evidence, including properly signed, contemporaneous operating logs, or other relevant evidence, demonstrating that:

(i) An upset occurred;

(ii) The Permittee can identify the specific cause(s) of the upset;

(iii) The Permittee's facility was being properly operated at the time of the upset; and

(iv) The Permittee promptly took all reasonable steps to minimize any adverse impact on human health or the environment resulting from the upset.

b. The permittee has the burden of establishing that each of the conditions of Provision II. C. 2. a. of this permit have been met to qualify for an exemption from the discharge limitations specified in Provision I. A. of this permit.

D. DUTY TO COMPLY WITH PERMIT, RULES, AND STATUTES

1. **Duty to Comply**

a. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the AWPCA and the FWPCA and is grounds for enforcement action, permit termination, revocation and reissuance, suspension, modification, or denial of a permit renewal application.

b. The necessity to halt or reduce production or other activities in order to maintain compliance with the conditions of the permit shall not be a defense for a permittee in an enforcement action.

c. The discharge of a pollutant from a source not specifically identified in the permit application for this permit and not specifically included in the description of an outfall in this permit is not authorized and shall constitute noncompliance with this permit.

d. The permittee shall take all reasonable steps, including cessation of production or other activities, to minimize or prevent any violation of this permit or to minimize or prevent any adverse impact of any permit violation.

e. Nothing in this permit shall be construed to preclude or negate the Permittee's responsibility to apply for, obtain, or comply with other Federal, State, or Local Government permits, certifications,or licenses or to preclude from obtaining other federal, state, or local approvals, including those applicable to other ADEM programs and regulations.

2. **Removed Substances**

Solids, sludges, filter backwash, or any other pollutant or other waste removed in the course of treatment or control of wastewaters shall be disposed of in a manner that complies with all applicable Department Rules.

3. **Loss or Failure of Treatment Facilities**

Upon the loss or failure of any treatment facilities, including but not limited to the loss or failure of the primary source of power of the treatment facility, the permittee shall, where necessary to maintain compliance with the discharge limitations specified in Provision I. A. of this permit, or any other terms or conditions of this permit, cease, reduce, or otherwise control production and/or all discharges until treatment is restored. If control of discharge during loss or failure of the primary source of power is to be accomplished by means of alternate power sources, standby generators, or retention of inadequately treated effluent, the permittee must furnish to the Director within six months a certification that such control mechanisms have been installed.

4. **Compliance with Statutes and Rules**

a. This permit has been issued under ADEM Administrative Code, Chapter 335-6-6. All provisions of this chapter, that are applicable to this permit, are hereby made a part of this permit. A copy of this chapter may be obtained for a small charge from the Office of General Counsel, Alabama Department of Environmental Management, 1400 Coliseum Boulevard Montgomery, Alabama 36110-2059.

b. This permit does not authorize the noncompliance with or violation of any Laws of the State of Alabama or the United States of America or any regulations or rules implementing such laws. FWPCA, 33 U.S.C. Section 1319, and Code of Alabama 1975, Section 22-22-14.

E. PERMIT TRANSFER, MODIFICATION, SUSPENSION, REVOCATION, AND REISSUANCE

1. **Duty to Reapply or Notify of Intent to Cease Discharge**

a. If the permittee intends to continue to discharge beyond the expiration date of this permit, the permittee shall file a complete permit application for reissuance of this permit at least 180 days prior to its expiration. If the permittee does not intend to continue discharge beyond the expiration of this permit, the permittee shall submit written notification of this intent which shall be signed by an individual meeting the signatory requirements for a permit application as set forth in ADEM Administrative Code Rule 335-6-6-.09.

b. Failure of the permittee to apply for reissuance at least 180 days prior to permit expiration will void the automatic continuation of the expiring permit provided by ADEM Administrative Code Rule 335-6-6-.06 and should the permit not be reissued for any reason any discharge after expiration of this permit will be an unpermitted discharge.

2. **Change in Discharge**

Prior to any facility expansion, process modification or any significant change in the method of operation of the permittee's treatment works, the permittee shall provide the Director with information concerning the planned expansion, modification or change. The permittee shall apply for a permit modification at least 180 days prior to any facility expansion, process modification, significant change in the method of operation of the permittee's treatment works, or other actions that could result in the discharge of additional pollutants or increase the quantity of a discharged pollutant or could result in an additional discharge point. This condition applies to pollutants that are or that are not subject to discharge limitations in this permit. No new or increased discharge may begin until the Director has authorized it by issuance of a permit modification or a reissued permit.

3. **Transfer of Permit**

This permit may not be transferred or the name of the permittee changed without notice to the Director and subsequent modification or revocation and reissuance of the permit to identify the new permittee and to incorporate any other changes as may be required under the FWPCA or AWPCA. In the case of a change in name, ownership or control of the permittee's premises only, a request for permit modification in a format acceptable to the Director is required at least 30 days prior to the change. In the case of a change in name, ownership, or control of the permittee's premises accompanied by a change or proposed change in effluent characteristics, a complete permit application is required to

be submitted to the Director at least 180 days prior to the change. Whenever the Director is notified of a change in name, ownership, or control, he may decide not to modify the existing permit and require the submission of a new permit application.

4. **Permit Modification and Revocation**

a. This permit may be modified or revoked and reissued, in whole or in part, during its term for cause, including but not limited to, the following:

(1) If cause for termination under Provision II. E. 5. of this permit exists, the Director may choose to revoke and reissue this permit instead of terminating the permit;

(2) If a request to transfer this permit has been received, the Director may decide to revoke and reissue or to modify the permit; or

(3) If modification or revocation and reissuance is requested by the permittee and cause exists, the Director may grant the request.

b. This permit may be modified during its term for cause, including but not limited to, the following:

(1) If cause for termination under Provision II. E. 5. of this permit exists, the Director may choose to modify this permit instead of terminating this permit;

(2) There are material and substantial alterations or additions to the facility or activity generating wastewater which occurred after permit issuance which justify the application of permit conditions that are different or absent in the existing permit;

(3) The Director has received new information that was not available at the time of permit issuance and that would have justified the application of different permit conditions at the time of issuance;

(4) A new or revised requirement(s) of any applicable standard or limitation is promulgated under Sections 301(b)(2)(C), (D), (E), and (F), and 307(a)(2) of the FWPCA;

(5) Errors in calculation of discharge limitations or typographical or clerical errors were made;

(6) To the extent allowed by ADEM Administrative Code, Rule 335-6-6-.17, when the standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or by judicial decision after the permit was issued;

(7) To the extent allowed by ADEM Administrative Code, Rule 335-6-6-.17, permits may be modified to change compliance schedules;

(8) To agree with a granted variance under 30l(c), 30l(g), 30l(h), 30l(k), or 3l6(a) of the FWPCA or for fundamentally different factors;

(9) To incorporate an applicable 307(a) FWPCA toxic effluent standard or prohibition;

(10) When required by the reopener conditions in this permit;

(11) When required under 40 CFR 403.8(e) (compliance schedule for development of pretreatment program);

(12) Upon failure of the state to notify, as required by Section 402(b)(3) of the FWPCA, another state whose waters may be affected by a discharge permitted by this permit;

(13) When required to correct technical mistakes, such as errors in calculation, or mistaken interpretations of law made in determining permit conditions; or

(14) When requested by the permittee and the Director determines that the modification has cause and will not result in a violation of federal or state law, regulations or rules; or

5. **Termination**

This permit may be terminated during its term for cause, including but not limited to, the following:

a. Violation of any term or condition of this permit;

b. The permittee's misrepresentation or failure to disclose fully all relevant facts in the permit application or during the permit issuance process or the permittee's misrepresentation of any relevant facts at any time;

c. Materially false or inaccurate statements or information in the permit application or the permit;

d. A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge;

e. The permittee's discharge threatens human life or welfare or the maintenance of water quality standards;

f. Permanent closure of the facility generating the wastewater permitted to be discharged by this permit or permanent cessation of wastewater discharge;

g. New or revised requirements of any applicable standard or limitation that is promulgated under Sections 301(b)(2)(C), (D), (E), and (F), and 307(a)(2) of the FWPCA that the Director determines cannot be complied with by the permittee.

h. Any other cause allowed by the ADEM Administrative Code, Chapter 335-6-6.

6. **Suspension**

This permit may be suspended during its term for noncompliance until the permittee has taken action(s) necessary to achieve compliance.

7. **Stay**

The filing of a request by the permittee for modification, suspension, or revocation of this permit, in whole or in part, does not stay any permit term or condition.

F. COMPLIANCE WITH TOXIC POLLUTANT STANDARD OR PROHIBITION

If any applicable effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the FWPCA, 33 U.S.C. Section 1317(a), for a toxic pollutant discharged by the permittee and such standard or prohibition is more stringent than any discharge limitation on the pollutant specified in Provision I. A. of this permit, or controls a pollutant not limited in Provision I. A. of this permit, this permit shall be modified to conform to the toxic pollutant effluent standard or prohibition and the permittee shall be notified of such modification. If this permit has not been modified to conform to the toxic pollutant effluent standard or prohibition before the effective date of such standard or prohibition, the permittee shall attain compliance with the requirements of the standard or prohibition within the time period required by the standard or prohibition and shall continue to comply with the standard or prohibition until this permit is modified or reissued.

G. NOTICE TO DIRECTOR OF INDUSTRIAL USERS

1. The permittee shall not allow the introduction of wastewater, other than domestic wastewater, from a new indirect discharger prior to approval and permitting, if applicable, of the discharge by the Department.

2. The permittee shall not allow an existing indirect discharger to increase the quantity or change the character of its wastewater, other than domestic wastewater, prior to approval and permitting, if applicable, of the increased discharge by the Department.

3. The permittee shall report to the Department any adverse impact caused or believed to be caused by an indirect discharger on the treatment process, quality of discharged water or quality of sludge. Such report shall be submitted within seven days of the permittee becoming aware of the adverse impacts.

H. PROHIBITIONS

The permittee shall not allow, and shall take effective enforcement action to prevent and terminate, the introduction of any of the following into its treatment works by industrial users:

1. Pollutants which may create a fire or explosive hazard, including, but not limited to, waste streams with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test methods specified in 40 CFR 261.21;

2. Pollutants which may cause corrosive structural damage to the treatment works, but in no case discharges with a pH lower than 5.0;

3. Solid or viscous pollutants in amounts which may cause obstruction to the flow in sewers, or other interference in the treatment works;

4. Any pollutant, including oxygen demanding pollutants (BOD, etc.) of such volume or strength as to cause interference in the treatment works;

5. Heat in amounts which may inhibit biological activity in the treatment plant resulting in interference but in no case in such quantities that the temperature of the influent, at the treatment plant, exceeds 40 degrees centigrade or 104 degrees Fahrenheit;
6. Pollutants which may result in the presence of toxic gases, vapors, or fumes within the treatment works in a quantity that may cause acute worker health and safety problems;
7. Unless specifically authorized by this permit, any pollutants not generated at the facility for which this permit was issued; or
8. Petroleum oil, biodegradable cutting oil, or products of mineral oil origin in amounts that will cause pass through or interference.

PART III: ADDITIONAL REQUIREMENTS, CONDITIONS, AND LIMITATIONS

A. CIVIL AND CRIMINAL LIABILITY

1. **Tampering**

   Any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained or performed under the permit shall, upon conviction, be subject to penalties as provided by the AWPCA.

2. **False Statements**

   Any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be subject to penalties as provided by the AWPCA.

3. **Permit Enforcement**

   a. Any NPDES permit issued or reissued by the Department is a permit for the purpose of the AWPCA and the FWPCA and as such any terms, conditions, or limitations of the permit are enforceable under state and federal law.

   b. Any person required to have a NPDES permit pursuant to ADEM Administrative Code Chapter 335-6-6 and who discharges pollutants without said permit, who violates the conditions of said permit, who discharges pollutants in a manner not authorized by the permit, or who violates applicable orders of the Department or any applicable rule or standard of the Department, is subject to any one or combination of the following enforcement actions under applicable state statutes:

      (1) An administrative order requiring abatement, compliance, mitigation, cessation, clean-up, and/or penalties;

      (2) An action for damages;

      (3) An action for injunctive relief; or

      (4) An action for penalties.

   c. If the permittee is not in compliance with the conditions of an expiring or expired permit the Director may choose to do any or all of the following provided the permittee has made a timely and complete application for reissuance of the permit:

      (1) Initiate enforcement action based upon the permit which has been continued;

      (2) Issue a notice of intent to deny the permit reissuance. If the permit is denied, the owner or operator would then be required to cease the activities authorized by the continued permit or be subject to enforcement action for operating without a permit;

      (3) Reissue the new permit with appropriate conditions; or

      (4) Take other actions authorized by these rules and AWPCA.

4. **Relief from Liability**

   Except as provided in Provision II. C. 1. (Bypass) and Provision II. C. 2. (Upset), nothing in this permit shall be construed to relieve the permittee of civil or criminal liability under the AWPCA or FWPCA for noncompliance with any term or condition of this permit.

B. OIL AND HAZARDOUS SUBSTANCE LIABILITY

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties to which the permittee is or may be subject under Section 311 of the FWPCA, 33 U.S.C. Section 1321.

C. PROPERTY AND OTHER RIGHTS

This permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to persons or property or invasion of other private rights, or any infringement of federal, state, or local laws or regulations, nor does it authorize or approve the construction of any physical structures or facilities or the undertaking of any work in any waters of the state or of the United States.

D. AVAILABILITY OF REPORTS

Except for data determined to be confidential under Code of Alabama 1975, Section 22-22-9(c), all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department. Effluent data shall not be considered confidential.

E. EXPIRATION OF PERMITS FOR NEW OR INCREASED DISCHARGES

1. If this permit was issued for a new discharger or new source, this permit shall expire eighteen months after the issuance date if construction of the facility has not begun during the eighteen-month period.

2. If this permit was issued or modified to allow the discharge of increased quantities of pollutants to accommodate the modification of an existing facility, and if construction of this modification has not begun during the eighteen month period after issuance of this permit or permit modification, this permit shall be modified to reduce the quantities of pollutants allowed to be discharged to those levels that would have been allowed if the modification of the facility had not been planned.

3. Construction has begun when the owner or operator has:

   a. Begun, or caused to begin as part of a continuous on-site construction program:

      (1) Any placement, assembly, or installation of facilities or equipment; or

      (2) Significant site preparation work including clearing, excavation, or removal of existing buildings, structures, or facilities which are necessary for the placement, assembly, or installation of new source facilities or equipment; or

   b. Entered into a binding contractual obligation for the purpose of placement, assembly, or installation of facilities or equipment which are intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss, and contracts for feasibility, engineering, and design studies do not constitute a contractual obligation under this paragraph.

4. Final plans and specifications for a waste treatment facility at a new source or new discharger, or a modification to an existing waste treatment facility must be submitted to and examined by the Department prior to initiating construction of such treatment facility by the permittee.

5. Upon completion of construction of waste treatment facilities and prior to operation of such facilities, the permittee shall submit to the Department a certification from a registered professional engineer, licensed to practice in the State of Alabama, that the treatment facilities have been built according to plans and specifications submitted to and examined by the Department.

F. COMPLIANCE WITH WATER QUALITY STANDARDS

1. On the basis of the permittee's application, plans, or other available information, the Department has determined that compliance with the terms and conditions of this permit should assure compliance with the applicable water quality standards.

2. Compliance with permit terms and conditions notwithstanding, if the permittee's discharge(s) from point sources identified in Provision I. A. of this permit cause or contribute to a condition in contravention of state water quality standards, the Department may require abatement action to be taken by the permittee in emergency situations or modify the permit pursuant to the Department's Rules, or both.

3. If the Department determines, on the basis of a notice provided pursuant to this permit or any investigation, inspection or sampling, that a modification of this permit is necessary to assure maintenance of water quality standards or compliance with other provisions of the AWPCA or FWPCA, the Department may require such modification and, in cases of emergency, the Director may prohibit the discharge until the permit has been modified.

G. GROUNDWATER

Unless specifically authorized under this permit, this permit does not authorize the discharge of pollutants to groundwater. Should a threat of groundwater contamination occur, the Director may require groundwater monitoring to properly assess the degree of the problem, and the Director may require that the permittee undertake measures to abate any such discharge and/or contamination.

H. DEFINITIONS

1. **Average monthly discharge limitation** - means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month (zero discharge days shall not be included in the number of "daily discharges" measured and a less than detectable test result shall be treated as a concentration of zero if the most sensitive EPA approved method was used).
2. **Average weekly discharge limitation** - means the highest allowable average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week (zero discharge days shall not be included in the number of "daily discharges" measured and a less than detectable test result shall be treated as a concentration of zero if the most sensitive EPA approved method was used).
3. **Arithmetic Mean** – means the summation of the individual values of any set of values divided by the number of individual values.
4. **AWPCA** - means the Alabama Water Pollution Control Act.
5. **BOD** – means the five-day measure of the pollutant parameter biochemical oxygen demand.
6. **Bypass** - means the intentional diversion of waste streams from any portion of a treatment facility.
7. **CBOD** – means the five-day measure of the pollutant parameter carbonaceous biochemical oxygen demand.
8. **Daily discharge** - means the discharge of a pollutant measured during any consecutive 24-hour period in accordance with the sample type and analytical methodology specified by the discharge permit.
9. **Daily maximum** - means the highest value of any individual sample result obtained during a day.
10. **Daily minimum** - means the lowest value of any individual sample result obtained during a day.
11. **Day** - means any consecutive 24-hour period.
12. **Department** - means the Alabama Department of Environmental Management.
13. **Director** - means the Director of the Department.
14. **Discharge** - means "[t]he addition, introduction, leaking, spilling or emitting of any sewage, industrial waste, pollutant or other waste into waters of the state". Code of Alabama 1975, Section 22-22-1(b)(9).
15. **Discharge Monitoring Report (DMR)** - means the form approved by the Director to accomplish reporting requirements of an NPDES permit.
16. **DO** – means dissolved oxygen.
17. **8HC** – means 8-hour composite sample, including any of the following:
    a. The mixing of at least 8 equal volume samples collected at constant time intervals of not more than 1 hour over a period of not less than 8 hours between the hours of 6:00 a.m. and 6:00 p.m. If the sampling period exceeds 8 hours, sampling may be conducted beyond the 6:00 a.m. to 6:00 p.m. period.
    b. A sample continuously collected at a constant rate over period of not less than 8 hours between the hours of 6:00 a.m. and 6:00 p.m. If the sampling period exceeds 8 hours, sampling may be conducted beyond the 6:00 a.m. to 6:00 p.m. period.
18. **EPA** - means the United States Environmental Protection Agency.
19. **FC** – means the pollutant parameter fecal coliform.
20. **Flow** – means the total volume of discharge in a 24-hour period.
21. **FWPCA** - means the Federal Water Pollution Control Act.
22. **Geometric Mean** – means the Nth root of the product of the individual values of any set of values where N is equal to the number of individual values. The geometric mean is equivalent to the antilog of the arithmetic mean of the logarithms of the individual values. For purposes of calculating the geometric mean, values of zero (0) shall be considered one (1).

23. **Grab Sample** – means a single influent or effluent portion which is not a composite sample. The sample(s) shall be collected at the period(s) most representative of the discharge.

24. **Indirect Discharger** – means a nondomestic discharger who discharges pollutants to a publicly owned treatment works or a privately owned treatment facility operated by another person.

25. **Industrial User** – means those industries identified in the Standard Industrial Classification manual, Bureau of the Budget 1967, as amended and supplemented, under the category "Division D – Manufacturing" and such other classes of significant waste producers as, by regulation, the Director deems appropriate.

26. **MGD** – means million gallons per day.

27. **Monthly Average** – means the arithmetic mean of all the composite or grab samples taken for the daily discharges collected in one month period. The monthly average for flow is the arithmetic mean of all flow measurements taken in a one month period.

28. **New Discharger** – means a person, owning or operating any building, structure, facility, or installation:

    a) From which there is or may be a discharge of pollutants;

    b) That did not commence the discharge of pollutants prior to August 13, 1979, and which is not a new source; and

    c) Which has never received a final effective NPDES permit for dischargers at that site.

29. **NH3-N** – means the pollutant parameter ammonia, measured as nitrogen.

30. **Notifiable sanitary sewer overflow** - means an overflow, spill, release or diversion of wastewater from a sanitary sewer system that:

    a) Reaches a surface water of the State; or

    b) May imminently and substantially endanger human health based on potential for public exposure including but not limited to close proximity to public or private water supply wells or in areas where human contact would be likely to occur.

31. **Permit application** - means forms and additional information that is required by ADEM Administrative Code Rule 335-6-6-.08 and applicable permit fees.

32. **Point source** - means "any discernible, confined and discrete conveyance, including but not limited to any pipe, channel, ditch, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, . . . from which pollutants are or may be discharged." Section 502(14) of the FWPCA, 33 U.S.C. Section 1362(14).

33. **Pollutant** - includes for purposes of this permit, but is not limited to, those pollutants specified in Code of Alabama 1975, Section 22-22-1(b)(3) and those effluent characteristics specified in Provision I. A. of this permit.

34. **Privately Owned Treatment Works** – means any devices or system which is used to treat wastes from any facility whose operator is not the operator of the treatment works, and which is not a "POTW".

35. **Publicly Owned Treatment Works (POTW)** – means a wastewater collection and treatment facility owned by the State, municipality, regional entity composed of two or more municipalities, or another entity created by the State or local authority for the purpose of collecting and treating municipal wastewater.

36. **Receiving Stream** – means the "waters" receiving a "discharge" from a "point source".

37. **Severe property damage** - means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

38. **Significant Source** – means a source which discharges 0.025 MGD or more to a POTW or greater than five percent of the treatment work's capacity, or a source which is a primary industry as defined by the U.S. EPA or which discharges a priority or toxic pollutant.

39. **TKN** – means the pollutant parameter Total Kjeldahl Nitrogen.

40. **TON** – means the pollutant parameter Total Organic Nitrogen.

41. **TRC** – means Total Residual Chlorine.

42. **TSS** – means the pollutant parameter Total Suspended Solids.

43. **24HC** – means 24-hour composite sample, including any of the following:

    a) The mixing of at least 8 equal volume samples collected at constant time intervals of not more than 2 hours over a period of 24 hours;

    b) A sample collected over a consecutive 24-hour period using an automatic sampler composite to one sample. As a minimum, samples shall be collected hourly and each shall be no more than one twenty-fourth (1/24) of the total sample volume collected;

    c) A sample collected over a consecutive 24-hour period using an automatic composite sampler composited proportional to flow.

44. **Upset** - means an exceptional incident in which there is an unintentional and temporary noncompliance with technology-based permit discharge limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

45. **Waters** - means "[a]ll waters of any river, stream, watercourse, pond, lake, coastal, ground or surface water, wholly or partially within the state, natural or artificial. This does not include waters which are entirely confined and retained completely upon the property of a single individual, partnership or corporation unless such waters are used in interstate commerce." Code of Alabama 1975, Section 22-22-1(b)(2). Waters "include all navigable waters" as defined in Section 502(7) of the FWPCA, 22 U.S.C. Section 1362(7), which are within the State of Alabama.

46. **Week** - means the period beginning at twelve midnight Saturday and ending at twelve midnight the following Saturday.

47. **Weekly (7-day and calendar week) Average** – is the arithmetic mean of all samples collected during a consecutive 7-day period or calendar week, whichever is applicable. The calendar week is defined as beginning on Sunday and ending on Saturday. Weekly averages shall be calculated for all calendar weeks with Saturdays in the month. If a calendar week overlaps two months (i.e., the Sunday is in one month and the Saturday in the following month), the weekly average calculated for the calendar week shall be included in the data for the month that contains the Saturday.

I. 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.

PART IV: SPECIFIC REQUIREMENTS, CONDITIONS, AND LIMITATIONS

A. SLUDGE MANAGEMENT PRACTICES

1. **Applicability**

   a. Provisions of Provision IV.A. apply to a sewage sludge generated or treated in treatment works that is applied to agricultural and non-agricultural land, or that is otherwise distributed, marketed, incinerated, or disposed in landfills or surface disposal sites.

   b. Provisions of Provision IV.A. do not apply to:

   (1) Sewage sludge generated or treated in a privately owned treatment works operated in conjunction with industrial manufacturing and processing facilities and which receive no domestic wastewater.

   (2) Sewage sludge that is stored in surface impoundments located at the treatment works prior to ultimate disposal.

2. **Submitting Information**

   a. If applicable, the Permittee must submit annually with its Municipal Water Pollution Prevention (MWPP) report the following:

   (1) Type of sludge stabilization/digestion method;

   (2) Daily or annual sludge production (dry weight basis);

   (3) Ultimate sludge disposal practice(s).

   b. The Permittee shall provide sludge inventory data to the Director as requested. These data may include, but are not limited to, sludge quantity and quality reported in Provision IV.A.2.a as well as other specific analyses required to comply with State and Federal laws regarding solid and hazardous waste disposal.

   c. The Permittee shall give prior notice to the Director of at least 30 days of any change planned in the Permittee's sludge disposal practices.

3. **Reopener or Modification**

   a. Upon review of information provided by the Permittee as required by Provision IV.A.2. or, based on the results of an on-site inspection, the permit shall be subject to modification to incorporate appropriate requirements.

   b. If an applicable "acceptable management practice" or if a numerical limitation for a pollutant in sewage sludge promulgated under Section 405 of FWPCA is more stringent than the sludge pollutant limit or acceptable management practice in this permit. This permit shall be modified or revoked or reissued to conform to requirements promulgated under Section 405. The Permittee shall comply with the limitations no later than the compliance deadline specified in applicable regulations as required by Section 405 of FWPCA.

B. EFFLUENT TOXICITY TESTING REOPENER

Upon notification under Part II.G. of any newly introduced toxic industrial wastewaters, the Director may reopen the permit to include effluent toxicity limitations and testing requirements.

C. TOTAL RESIDUAL CHLORINE (TRC) REQUIREMENTS

1. If chlorine is not utilized for disinfection purposes, TRC monitoring under Part I of this Permit is not required. If TRC monitoring is not required (conditional monitoring), "*9" should be reported on the DMR forms.

2. Testing for TRC shall be conducted according to either the amperometric titration method or the DPD colorimetric method as specified in Section 408(C) or (E), Standards Methods for the Examination of Water and Wastewater, 18th edition. If the analytical result is less than the detection level or a value otherwise indicated in this permit, the Permittee shall report on the DMR form "*B" or "0". The Permittee shall then be considered to be in compliance with the daily maximum concentration limit for TRC.

3. This permit contains a maximum allowable TRC level in the effluent. The Permittee is responsible for determining the minimum TRC level needed in the chlorine contact chamber to comply with E.coli limits. The effluent shall be dechlorinated if necessary to meet the maximum allowable effluent TRC level.

4. The sample collection point for effluent TRC shall be at a point downstream of the chlorine contact chamber (downstream of dechlorination, if applicable). The exact location is to be approved by the Director.

D. PLANT CLASSIFICATION

The Permittee shall report to the Director within 30 days of the introduction of wastewater into the system, the name, address and operator number of the certified wastewater operator in responsible charge of the facility. Unless specified elsewhere in this permit, this facility shall be classified in accordance with ADEM Admin. Code R. 335-10-1-.03.

E. SANITARY SEWER OVERFLOW RESPONSE PLAN

1. SSO Response Plan

Within 120 days of the effective date of this Permit, the Permittee shall develop a Sanitary Sewer Overflow (SSO) Response Plan to establish timely and effective methods for responding to notifiable sanitary sewer overflows. The SSO Response Plan shall address each of the following:

a. General Information

(1) Approximate population of City/Town, if applicable

(2) Approximate number of customers served by the Permittee

(3) Identification of any subbasins designated by the Permittee, if applicable

(4) Identification of estimated linear feet of sanitary sewers

(5) Number of Pump/Lift Stations in the collection system

b. Responsibility Information

(1) The title(s) and contact information of key position(s) who will coordinate the SSO response, including information for a backup coordinator in the event that the primary SSO coordinator is unavailable. The SSO coordinator is the person responsible for assessing the SSO and initiating a series of response actions based on the type, severity, and destination of the SSO, except for routine SSOs for which the coordinator may pre-approve written procedures. Routine SSOs are those for which the corrective action procedures are generally consistent.

(2) The title(s), and contact information of key position(s) who will respond to SSOs, including information for backup responder(s) in the event the primary responder(s) are unavailable (i.e., position(s) who provide notification to the Department, the public, the county health department, and other affected entities such as public water systems; position(s) responsible for organizing crews for response; position(s) responsible for addressing public inquiries)

c. Public Reporting of SSOs

(1) Contact information for the public to report an SSO to the Permittee, during both normal and outside of normal business hours (e.g., telephone number, website, email address, etc.)

(2) Information requested from the person reporting an SSO to assist the Permittee in identifying the SSO (e.g., date, time, location, contact information)

(3) Procedures for communication of the SSO report to the appropriate positions for follow-up investigation and response, if necessary

d. Procedures to immediately notify the Department, the county health department, and other affected entities (such as public water systems) upon becoming aware of notifiable SSOs

e. Public Notification Methods for SSOs

(1) A listing of methods that are feasible, as determined by the Permittee, for public notifications (e.g., flyers distributed to nearby residents; signs posted at the location of the SSO, where the SSO enters a water of the state, and/or at a central public location; signs posted at fishing piers, boat launches, parks, swimming waterbodies, etc.; website and/or social media notifications; local print or radio and broadcast media notifications; "opt in" email, text message, or automated phone message notifications)

(a) If signage is a feasible method for public notification, procedures for use and removal of signage (e.g., availability and maintenance of signs, appropriate duration of postings)

(2) Minimum information to be included in public notifications (e.g., identification that an SSO has occurred, date, duration if known, estimated volume if known, location of the SSO by street address or other appropriate method, initial destination of the SSO)

(3) Procedures developed by the Permittee for determining the appropriate public notification method(s) based upon the potential for public exposure to health risks associated with the SSO

f. Date of the SSO Response Plan, dates of all modifications and/or reviews, the title and signature of the reviewer(s) for each date and the signature of the responsible official or the appropriate designee.

2. SSO Response Plan Implementation

Except as otherwise required by this Permit, the Permittee shall fully implement the SSO Response Plan as soon as practicable, but no later than 180 days after the effective date of this Permit.

3. Department Review of the SSO Response Plan

a. When requested by the Director or his designee, the Permittee shall make the SSO Response Plan available for review by the Department.

b. Upon review, the Director or his designee may notify the Permittee that the SSO Response Plan is deficient and require modification of the Plan.

c. Within thirty days of receipt of notification, or an alternate timeframe as approved by the Department, the Permittee shall modify any SSO Response Plan deficiency identified by the Director or his designee and shall certify to the Department that the modification has been made.

4. SSO Response Plan Administrative Procedures

a. The Permittee shall maintain a copy of the SSO Response Plan at the permitted facility or an alternate location approved by the Department in writing and shall make it available for inspection by the Department.

b. The Permittee shall make a copy of the SSO Response Plan available to the public upon written request within 30 days of such request. The Permittee may redact information which may present security issues, such as location of public water supplies, identification of specific details of vulnerabilities, employee information, etc.

c. The Permittee shall provide training for any personnel required to implement the SSO Response Plan and shall retain at the facility documentation of such training. This documentation shall be available for inspection by the Department. Training shall be provided for existing personnel prior to the date by which implementation of the SSO Response Plan is required and for new personnel as soon as possible. Should significant revisions be made to the SSO Response Plan, training regarding the revisions shall be conducted as soon as possible.

d. The Permittee shall complete a review and evaluation of the SSO Response Plan at least once every three years. Documentation of the SSO Response Plan review and evaluation shall be signed and dated by the responsible official or the appropriate designee as part of the SSO Response Plan.

F. NUTRIENT EVALUATION PLAN (NEP)

1. Initiation of Discharge

The permittee shall notify the Department, in writing, within 30 days of initiation of discharge from the 0.075 MGD design capacity treatment system.

2. Initial Report

Within 180 days from initial discharge from the 0.075 MGD design capacity treatment system, the Permittee shall submit to the Department a Nutrient Evaluation Plan (NEP) prepared by an Alabama Registered Professional Engineer. The initial report shall, at a minimum, include:

a. A plan for a treatment process performance assessment of the nutrient removal capability of the permitted treatment system. This plan should include a proposed timeline for the performance assessment and the proposed monitoring locations that will allow for the calculation of the percent removal of nutrients (TP, TKN, NO3+NO2) for the treatment process.

b. Should the Director or his designee notify the Permittee that the NEP Initial Report requires modification, the Permittee shall submit a modified report within thirty days of receipt of notification, or an alternate timeframe as approved by the Department.

3. Annual Status Reports

If at least one year has passed since the due date of the Initial Report, the Permittee shall submit an annual NEP Status Report by January 31st and each subsequent January 31st during the treatment process assessment period. The NEP Status Report(s) should document the assessment for the previous calendar year including:

a. Documentation of nutrient removal rates for the previous calendar year

b. Monitoring locations within the treatment system

c. Nutrient monitoring results for the previous calendar year and

d. An analysis of all nutrient monitoring results (i.e., trend analysis, if adequate data are available)

NPDES PERMIT RATIONALE

NPDES Permit No: **AL0084510** Date: April 25, 2025

Permit Applicant: Land Venues, Inc.
201 W. 2nd Avenue, Suite 201
Coal Valley, IL 61240

Location: **Mia Rayne Subdivision WWTP**
10017 Wall Trianna Hwy
Harvest, AL 35773

Draft Permit is: Initial Issuance: X
Reissuance due to expiration:
Modification of existing permit:
Revocation and Reissuance:

Basis for Limitations: Water Quality Model: DO, $CBOD_5$, NH_3N
Reissuance with no modification: NA
Instream calculation at 7Q10: 100%
Toxicity based: TRC, NH_3N
Secondary Treatment Levels: TSS, TSS Percent Removal, $CBOD_5$ Percent Removal
Other (described below): pH, E. Coli

Design Flow (MGD): 0.075 MGD

Major: No

Description of Discharge:

Feature ID	Description	Receiving Water	Waterbody Use Classification	303(d)	TMDL
001	Treated Domestic Wastewater	UT to Limestone Creek	Fish and Wildlife (F&W)	No	No

Discussion: This permit is an initial issuance.

The pH limits for Outfall 0011 were developed to be consistent with the water-use classification of the receiving stream. The daily maximum pH limit is 8.5 s.u. and the daily minimum limit is 6.0 s.u. The monitoring frequency will be weekly. Flow will be monitored instantaneously, once per week.

The discharge limits for Five Day Carbonaceous Biochemical Oxygen Demand ($CBOD_5$), Ammonia as Nitrogen (NH_3N), and Dissolved Oxygen (DO) for Outfall 0011 were developed by the Municipal Permitting Section based on a Waste Load Allocation (WLA) model developed by ADEM's Water Quality Division on April 25, 2025. The $CBOD_5$ and NH_3N monthly average limits are 25.0 mg/l and 2.4 mg/l, respectively. DO will have a daily minimum limitation of 6.0 mg/l. The monitoring frequencies for these parameters will be weekly. A minimum percent removal of 85.0 percent is imposed for $CBOD_5$ in accordance with 40 CFR Part 133.102 that will be calculated monthly.

The monthly average Total Suspended Solids (TSS) limit is established at 30.0 mg/l in accordance with 40 CFR 133.102. The monitoring frequency will be weekly. A minimum percent removal of 85.0 percent is imposed for TSS in accordance with 40 CFR 133.102 that will be calculated monthly.

The imposed E. coli limits were determined based on the water-use classification of the receiving stream. Since the unnamed tributary to Limestone Creek is classified as Fish & Wildlife, the limits for May – October are 126 col/100ml (monthly average) and 298 col/100ml (daily maximum), while the limits for November – April are 548 col/100ml (monthly average) and 2507 col/100ml (daily maximum). The monitoring frequency will be weekly.

The Municipal Section, in consultation with the Department's Water Quality Branch, conducted a narrative RPA regarding the nutrient contributions expected from the treatment facility. This facility's application indicates that the discharge is not in close proximity to the downstream nutrient impaired segment of the Tennessee River (Wheeler Lake). The Department is including permit conditions requiring the calculation of nutrient removal efficiencies. The Department is also including monthly monitoring for the nutrient parameters of Total Kjeldahl Nitrogen (TKN), Nitrite plus Nitrate as Nitrogen (NO2 + NO3 -N) and Total Phosphorus (TP) during the summer season (April – October) to assist in the development of the Wheeler Lake watershed TMDL.

The Total Residual Chlorine (TRC) limits are based on calculations to ensure that acute and chronic toxic concentrations of TRC in the receiving stream are not exceeded. The TRC limits are 0.019 mg/L (daily maximum) and 0.011 mg/L (monthly average). A measurement of TRC below 0.05 mg/L shall be considered in compliance with the permit limitations above and should be reported as "*B" on the monthly DMR. The monitoring frequency will be weekly. Monitoring for TRC is only applicable if chlorine is utilized for disinfection purposes.

No toxicity testing is required because there are no significant industrial discharges to the plant and because this is a minor facility.

The receiving stream is an unnamed tributary to Limestone Creek, a Tier II waterbody. The stream is not on the current 303(d) list for impaired waterbodies. There are no approved TMDLs for this waterbody.

ADEM Administrative Rule 335-6-10-.12 requires applicants for new or expanded discharges to Tier II waters demonstrate that the proposed discharge is necessary for important economic or social development in the area in which the waters are located. The application submitted by the facility is for a new or expanded discharge to a Tier II stream, so the applicant is required to demonstrate that the discharge is necessary for economic and social development. The Antidegradation Rationale is attached.

Prepared by: Sandra Lee

ANTIDEGRADATION RATIONALE

Permit Number: AL0084510
Facility Name: Mia Rayne Subdivision WWTP
Receiving water: Limestone Creek
Stream Category: Tier 2 as defined by ADEM Admin. Code 335-6-10-.12
Discharge Description: Municipal Wastewater

The following preliminary determination was prepared in accordance with ADEM Admin. Code 335-6-10-.12 (7) (c):

The Department has reviewed the information submitted by applicant in accordance with ADEM Admin. Code 335-6-10-.12 (9). The applicant has demonstrated that there are no technically viable treatment options in its alternatives analysis that would completely eliminate a direct discharge.

The permit applicant has indicated that the following economic and/or social benefits will result from this project:

- The new decentralized WWTP will eliminate this adverse impact on the environment that would typically be associated with individual septic systems.
- The employment will increase from having an employee operating the WWTP by performing daily checks, making adjustments as required, performing maintenance, and collecting samples periodically as required by the permit.
- The WWTP will generate $7,500 - $15,000 annually in state and local taxes.
- The WWTP will provide enhanced treatment of domestic wastewater versus typical septic systems.
- The WWTP will provide sanitary sewer service for this rural subdivision thereby providing economic benefit by increased property values. The new WWTP will provide social benefit by substantially reducing the adverse impact on the environment.

The Department has determined that the discharge proposed by the permit applicant is necessary for important economic and social development in the area of the outfall location in the receiving water.

Prepared By: Dustin Stokes
Date: 4/14/2025

Waste Load Allocation Summary

REQUEST INFORMATION

Request Number: 4043

From:	Sandy Lee	In Branch/Section	Municipal		
Date Submitted	2/3/2025	Date Required	3/5/2025	FUND Code	605
Date Permit application received by NPDES program	1/30/2025				
Receiving Waterbody	Unnamed Tributary to Limestone Creek				
Previous Stream Name					
Facility Name	Mia Rayne Subdivision WWTP	(Name of Discharger-WQ will use to file)			
		Previous Discharger Name			
River Basin	Tennessee	Outfall Latitude	34.919907	(decimal degrees)	
*County	Madison	Outfall Longitude	-86.746337	(decimal degrees)	
Permit Number	AL0084510	Permit Type	New Discharge and Permit		
		Permit Status	Proposed		
		Type of Discharger	MUNICIPAL		

Do other discharges exist that may impact the model? ☑ Yes ☐ No

If yes, impacting dischargers names.	Love Branch Road WWTP, Madelyn Place Subdivision WWTP, Limestone Correctional Facility, Hunters Crossing WWTP, Magnolia Springs WWTP	Impacting dischargers permit numbers.	AL0084465,AL0084509, AL0048461,AL0055158, AL0072435

Existing Discharge Design Flow		MGD	Note: The flow rates given should be those requested for modeling.
Proposed Discharge Design Flow	0.075	MGD	

Comments Included ☑ Yes ☐ No

Information Verified By: JJM

Year File Was Created: 2025

Response ID Number: 2050

Lat/Long Method: GPS

12 Digit HUC Code	060300020701		
Use Classification	F&W		
Site Visit Completed?	☑ Yes ☐ No	Date of Site Visit	3/31/2025
Waterbody Impaired?	☐ Yes ☑ No	Date of WLA Response	6/9/2025
Antidegradation	☑ Yes ☐ No	Approved TMDL?	☐ Yes ☑ No
Waterbody Tier Level	Tier II		
Use Support Category	3	Approval Date of TMDL	

Waste Load Allocation Information

Modeled Reach Length	33.1	Miles	Date of Allocation	6/9/2025	
Name of Model Used	SWQM		Allocation Type	Annual	
Model Completed by	James Mooney		Type of Model Used	Desk-top	
Allocation Developed by	Water Quality Branch				

Waste Load Allocation Summary

Annual Effluent Limits

Qw	0.075	MGD
CBOD5	25	mg/L
NH3-N	2.4	mg/L
TKN		
D.O.	6	mg/L

Conventional Parameters				Other Parameters			
Qw	MGD	Qw	MGD	Qw	MGD	Qw	MGD
Season		Season		Season		Season	
From		From		From		From	
Through		Through		Through		Through	
CBOD5		CBOD5		TP		TP	
NH3-N		NH3-N		TN		TN	
TKN		TKN		TSS		TSS	
D.O.		D.O.					

"Monitor Only" Parameters for Effluent:

Parameter	Frequency	Parameter	Frequency
TP	Monthly(Apr-Oct)		
TKN	Monthly(Apr-Oct)		
NO2+NO3-N	Monthly(Apr-Oct)		

Water Quality Characteristics Immediately Upstream of Discharge

Parameter	Summer		Winter	
CBODu	2	mg/l		mg/l
NH3-N	0.11	mg/l		mg/l
Temperature	28	°C		°C
pH	7	su		su

Hydrology at Discharge Location

Drainage Area Qualifier: Exact

			Method Used to Calculate
Drainage Area	0.33	sq mi	
Stream 7Q10	0	cfs	<5.0 sq mi - Bingham Equation
Stream 1Q10	0	cfs	<5.0 sq mi - Bingham Equation
Stream 7Q2	0	cfs	<5.0 sq mi - Bingham Equation
Annual Average	0.76	cfs	ADEM Estimate w/USGS Gage Data

Comments and/or Notations: The previously proposed effluent flowrate for Mia Rayne Subdivision WWTP of 0.0747 MGD (WLA request #4043) was revised on 6/4/2025 to 0.075 MGD. The effuent limitations from the WLA completed on 4/25/2025 are still applicable at revised flowrate of 0.075 MGD.

TOXICITY AND DISINFECTION RATIONALE

Facility Name:	**Mia Rayne Subdivision WWTP**	
NPDES Permit Number:	**AL0084510**	
Receiving Stream:	**Unnamed tributary to Limestone Creek**	
Facility Design Flow (Q_w):	**0.075 MGD**	
Receiving Stream $7Q_{10}$:	**0.000 cfs**	
Receiving Stream $1Q_{10}$:	**0.000 cfs**	**(Estimated at 0.75 * 7Q10)**
Winter Headwater Flow (WHF):	**0.00 cfs**	
Summer Temperature for CCC:	**28 deg. Celsius**	
Winter Temperature for CCC:	**0 deg. Celsius**	
Headwater Background NH_3-N Level:	**0.11 mg/l**	
Receiving Stream pH:	**7.0 s.u.**	
Headwater Background FC Level (summer):	**N./A.**	**(Only applicable for facilities with diffusers.)**
(winter):	**N./A.**	

The Stream Dilution Ration (SDR) is calculated using the 7Q10 for all stream classifications.

$$\text{Stream Dilution Ration (SDR)} = \frac{Qw}{7Q10 + Qw} = \textbf{100.00\%}$$

AMMONIA TOXICITY LIMITATIONS

Toxicity-based ammonia limits are calculated in accordance with the *Ammonia Toxicity Protocol* and the *General Guidance for Writing Water Quality Based Toxicity Permits.*

If the Limiting Dilution is less than 1%, the waterbody is considered stream-dominated and the CMC applies.
If the Limiting Dilution is greater than 1%, the waterbody is considered effluent-dominated and the CCC applies.

$$\text{Limiting Dilution} = \frac{Q_w}{7Q_{10} + Q_w}$$

= **100.00%** **Effluent-Dominated, CCC Applies**

Criterion Maximum Concentration (CMC): $CMC=0.411/(1+10^{(7.204-pH)}) + 58.4/(1+10^{(pH-7.204)})$

Criterion Continuous Concentration (CCC): $CCC=[0.0577/(1+10^{(7.688-pH)}) + 2.487/(1+10^{(pH-7.688)})] * Min[2.85,1.45*10^{(0.028*(25-T))}]$

	CMC	CCC
Allowable Summer Instream NH_3-N:	**36.09 mg/l**	**2.48 mg/l**
Allowable Winter Instream NH_3-N:	**36.09 mg/l**	**5.91 mg/l**

$$\text{Summer } NH_3\text{-N Toxicity Limit} = \frac{[(\text{Allowable Instream } NH_3\text{-N}) * (7Q_{10} + Q_w)] - [(\text{Headwater } NH_3\text{-N}) * (7Q_{10})]}{Q_w}$$

= **2.5 mg/l NH3-N at 7Q10**

$$\text{Winter } NH_3\text{-N Toxicity Limit} = \frac{[(\text{Allowable Instream } NH_3\text{-N}) * (WHF + Q_w)] - [(\text{Headwater } NH_3\text{-N}) * (WHF)]}{Q_w}$$

= **N./A.**

The ammonia limits established in the permit will be the lesser of the DO-based ammonia limit (from the wasteload allocation model) or the toxicity limits calculated above.

	DO-based NH3-N limit	Toxicity-based NH3-N limit
Summer	**2.40 mg/l NH3-N**	**2.40 mg/l NH3-N**
Winter	**N./A.**	**N./A.**

Summer: The toxicity-based limit of 2.40 mg/l NH3-N applies.
Winter limits are not applicable.

TOXICITY TESTING REQUIREMENTS (REFERENCE: MUNICIPAL BRANCH TOXICITY PERMITTING STRATEGY)

The following factors trigger toxicity testing requirements:

1. Facility design flow is equal to or greater than 1.0 MGD (major facility).
2. There are significant industrial contributors (SID permits).

Acute toxicity testing is specified for A&I receiving streams, or for stream dilution ratios of 1% or less.
Chronic toxicity testing is specified for all other situations requiring toxicity testing.

This is a minor facility (Qw < 1.0 MGD) with no SID permits. No toxicity testing is required.

$$\text{Instream Waste Concentration (IWC)} = \frac{Qw}{7Q10 + Qw} = \mathbf{100.00\%}$$

Note: This number will be rounded up for toxicity testing purposes.

DISINFECTION REQUIREMENTS

Bacteria limits are required, and will be the water quality limit for the receiving stream, except where diffusers are used the limit may be adjusted for the dilution provided by the diffuser.

See the attached Disinfection Guidance for applicable stream standards.

(Non-coastal limits apply)
Applicable Stream Classification: **Fish & Wildlife**
Disinfection Type: **Chlorination**
Limit calculation method: **Limits based on meeting stream standards at the point of discharge.**

	Stream Standard (colonies/100ml)	Effluent Limit (colonies/100ml)
E. Coli (applies to Non-coastal and Shellfish Harvesting Coastal)		
Monthly limit as monthly average (November through April):	548	**548**
Monthly limit as monthly aveage (May through October):	126	**126**
Daily Max (November through April):	2507	**2507**
Daily Max (May through October):	298	**298**
Enterococci (applies to Coastal)		
Monthly limit as geometric mean (October through May):	Not applicable	**Not applicable**
Monthly limit as geometric mean (June through September):	Not applicable	**Not applicable**
Daily Max (October through May):	Not applicable	**Not applicable**
Daily Max (June through September):	Not applicable	**Not applicable**

MAXIMUM ALLOWABLE CHLORINATION LIMITS

Toxicity-based chlorine limits are calculated in accordance with the General Guidance for Writing Water Quality Based Toxicity Permits.

Chlorine has been shown to be acutely toxic at 0.019 mg/l and chronically toxic at 0.011 mg/l.

Maximum allowable TRC in effluent:	0.011 mg/l (chronic)	(0.011)/(SDR)
Maximum allowable TRC in effluent:	0.019 mg/l (acute)	(0.019)/(SDR)

NOTE: A maximum chlorine limit will be imposed such that the instream concentration will not exceed acutely toxic concentrations in A & I streams and chronically toxic concentrations in all other streams, but may not exceed 1.0 mg/l.

Prepared By: Sandra Lee Date: 4/25/2025

January 26th, 2025

Ms. Emily Anderson, Chief
Municipal Section
ADEM-Water Division
1400 Coliseum Boulevard
Montgomery, Alabama 36110

Re: **Mia Rayne Subdivision – WWTP Permit Application & Modeling**
0 Wall Triana, Toney, Madison County, AL
Landmark Engineering Group Project #01-22-1675

Ms. Emily

I hereby submit the ADEM Form 188 & EPA Form 3510-2a and referenced attachments for the NPDES discharge permit application for Mia Rayne subdivision decentralized Extended Aeration WWTP.

I have also included the Permit Application fee of $4,290 and the Modeling Fee fo $4,855 as required. In addition, I have included a set of preliminary WWTP plant plans for your reference.

If you have any concerns or questions, please contact me at (309) 755.3400, extension 1200, mobile phone @ (309) 269.6350 or by email at mike.shamsie@landgroup.biz .

Respectfully Submitted,

ALABAMA LICENSED No. 37430 PROFESSIONAL ENGINEER MICHAEL R. SHAMSIE

Michael Shamsie, PE, CFM, CPESC
Alabama PE Registration #37430, Expiration 12/31/2025
Landmark Engineering Group, Inc
6700 Tower Circle, Suite 330
Franklin, TN 37067
Office (309) 755.3400 Mobile (309) 269.6350

LANCE R. LEFLEUR
DIRECTOR

KAY IVEY
GOVERNOR

Alabama Department of Environmental Management
adem.alabama.gov
1400 Coliseum Blvd. 36110-2400 ■ Post Office Box 301463
Montgomery, Alabama 36130-1463
(334) 271-7700 ■ FAX (334) 271-7950

January 25, 2024

MICHAEL SHAMSIE
LAND VENUES, INC.
6700 TOWER CIR STE 330
SUITE 330
FRANKLIN, TN 37067

Dear Mr. Shamsie:

Based on your Notice of Intent (NOI), coverage under the **Construction Stormwater General NPDES Permit** is granted.

Construction Stormwater General NPDES Permit - INITIAL ISSUANCE	
NPDES Permit No.: **ALR10C4UH**	NOI Received Date: **January 17, 2024**
Permit Effective Date: **January 25, 2024**	Permit Expiration Date: **March 31, 2026**
Site/Project: **Mia Rayne Sub (Madison County)**	

Coverage under this permit does not authorize the discharge of any pollutant or wastewater that is not specifically identified in the permit and by the Notice of Intent.

You are responsible for compliance with all provisions of the permit including, but not limited to, the performance of required inspections and/or monitoring, and the preparation and implementation of a Construction Best Management Practices Plan (CBMPP) required by the permit.

The Alabama Department of Environmental Management encourages you to exercise pollution prevention practices and alternatives at your facility. Pollution prevention will assist you in complying with permit requirements.

Prior to commencing land disturbance activities, the Department encourages you to view the video "Most Common Compliance Issues at Construction Sites" on the ADEM webpage at https://www.youtube.com/watch?v=xG-SIIJ2Mgc.

A copy of the General NPDES Permit under which coverage of your discharges has been granted is enclosed. If you have any questions concerning this permit, please contact Tamara Crutchley by email at tamara.crutchley@adem.alabama.gov or by phone at (334) 271-7762.

Sincerely,

Jeffery W. Kitchens

Jeffery W. Kitchens, Chief
Water Division

Birmingham Branch
110 Vulcan Road
Birmingham, AL 35209-4702
(205) 942-6168
(205) 941-1603 (FAX)

Decatur Branch
2715 Sandlin Road, S.W.
Decatur, AL 35603-1333
(256) 353-1713
(256) 340-9359 (FAX)

Mobile Branch
2204 Perimeter Road
Mobile, AL 36615-1131
(251) 450-3400
(251) 479-2593 (FAX)

Mobile-Coastal
3664 Dauphin Street, Suite B
Mobile, AL 36608-1211
(251) 304-1176
(251) 304-1189 (FAX)

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (ADEM)
NPDES INDIVIDUAL PERMIT APPLICATION
SUPPLEMENTARY INFORMATION FOR PUBLICLY-OWNED TREATMENT WORKS (POTW), OTHER TREATMENT WORKS TREATING DOMESTIC SEWAGE (TWTDS), AND PUBLIC WATER SUPPLY TREATMENT PLANTS

Instructions: This form should be used to submit the required supplementary information for an application for an NPDES individual permit for Publicly Owned Treatment Works (POTW) and other Treatment Works Treating Domestic Sewage (TWTDS). The completed application should be submitted to ADEM in duplicate. If insufficient space is available to address any item, please continue on an attached sheet of paper. Please mark "N/A" in the appropriate box when an item is not applicable to the applicant. **Please type or print legibly in blue or black ink.** Mail the completed application to:

ADEM-Water Division
Municipal Section
P O Box 301463
Montgomery, AL 36130-1463

PURPOSE OF THIS APPLICATION

- ■ Initial Permit Application for New Facility*
- ☐ Initial Permit Application for Existing Facility*
- ☐ Modification of Existing Permit
- ☐ Reissuance of Existing Permit
- ☐ Revocation & Reissuance of Existing Permit

* *An application for participation in the ADEM's Electronic Environmental (E2) Reporting must be submitted to allow permittee to electronically submit reports as required.*

SECTION A – GENERAL INFORMATION

1. Facility Name: Mia Rayne Subdivision WWTP Facility County: Madison

   a. Operator Name: Land Venues, Inc.

   b. Is the operator identified in A.1.a, the owner of the facility? ☒ Yes ☐ No

   If No, provide the following information:

   Operator Name: _____

   Operator Address (Street or PO Box): _____

   City: _____ _____ Zip: _____

   Phone Number: _____ Email Address: _____

   Operator Status:

   ☐ Public-federal ☐ Public-state ☐ Public-other (please specify): _____

   ☒ Private ☐ Other (please specify): _____

   Describe the operator's scope of responsibility for the facility:

   Daily WWTP operation, maintenance and effluent sampling, completion and submittal of DMRs, coordination with Lab on sampling and testing

   c. Name of Permittee* if different than Operator: Land Venues, Inc.

   **Permittee will be responsible for compliance with the conditions of the permit*

2. NPDES Permit Number: AL _____ (Not applicable if initial permit application)

3. Facility Location (Front Gate): Latitude: 34° 54' 21.49"N Longitude: 86° 44' 54.96"W

4. Responsible Official (as described on last page of this application):

   Name and Title: Michael Shamsie, PE Design Engineer & Owner

   Address: 201 W. 2nd Avenue, Suite 201

   City: Coal Valley State: Illinois Zip: 61240

   Phone Number: 309.269.6350 Email Address: mike.shamsie@landgroup.biz

5. Designated Facility/DMR Contact:

Name: Michael Shamsie, PE Title: Owner

Phone Number: 309.269.6350 Email Address: mike.shamsie@landgroup.biz

6. Designated Emergency Contact:

Name: Michael Shamsie, PE Title: Owner

Phone Number: 309.269.6350 Email Address: mike.shamsie@landgroup.biz

7. Please complete this section if the Applicant's business entity is a Proprietorship or Limited Liability Company (LLC) with a responsible official not listed in A.4.

Name: _____ Title: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone Number: _____ Email Address: _____

8. Identify all Administrative Complaints, Notices of Violation, Directives, or Administrative Orders, Consent Decrees, or Litigation concerning water pollution or other permit violations, if any against the Applicant within the State of Alabama in the past five years (attach additional sheets if necessary):

Facility Name	Permit Number	Type of Action	Date of Action

SECTION B – WASTEWATER DISCHARGE INFORMATION

1. Attach a process flow schematic of the treatment process, including the size of each unit operation and sample collection locations.

2. Do you share an outfall with another facility? ☐ Yes ☒ No (If no, continue to B.3)

For each shared outfall, provide the following:

Applicant's Outfall No.	Name of Other Permittee/Facility	NPDES Permit No.	Where is sample collected by Applicant?

3. Do you have, or plan to have, automatic sampling equipment or continuous wastewater flow metering equipment at this facility?

Current:	Flow Metering	☐ Yes	☒ No	☐ N/A
	Sampling Equipment	☐ Yes	☒ No	☐ N/A
Planned:	Flow Metering	☒ Yes	☐ No	☐ N/A
	Sampling Equipment	☐ Yes	☒ No	☐ N/A

If so, please attach a schematic diagram of the sewer system indicating the present or future location of this equipment and describe the equipment below:

Hour meters on pumps @ WWTP Flow Eq Chambers recording flow into WWTP

4. Are any wastewater collection or treatment modifications or expansions planned during the next three years that could alter wastewater volumes or characteristics (Note: Permit Modification may be required)? ☐ Yes ☒ No

If Yes, briefly describe these changes and any potential or anticipated effects on the wastewater quality and quantity: (Attach additional sheets if needed.)

SECTION C – WASTE STORAGE AND DISPOSAL INFORMATION

Describe the location of all sites used for the storage of solids or liquids that have any potential for accidental discharge to a water of the state, either directly or indirectly via storm sewer, municipal sewer, municipal wastewater treatment plants, or other collection or distribution systems that are located at or operated by the subject existing or proposed NPDES- permitted facility. Indicate the location of any potential release areas and provide a map or detailed narrative description of the areas of concern as an attachment to this application:

Description of Waste	Description of Storage Location
Contained within WWTP, Periodic removal of solids and liquids from	No potential for release to environment
sludge holding chamber by Vac Truck for off-site disposal	Removal of accummulated sludge and inert material from sludge holding
	chamber by Vac Truck to permitted disposal facility

***Indicate any wastes disposed at an off-site treatment facility and any wastes that are disposed on-site**

SECTION D – INDUSTRIAL INDIRECT DISCHARGE CONTRIBUTORS

1. List the existing and proposed industrial source wastewater contributions to the municipal wastewater treatment system (Attach other sheets if necessary)

Company Name	Description of Industrial Wastewater	Existing or Proposed	Flow (MGD)	Subject to SID Permit?
	No Industrial waste			☐ Yes ☐ No
				☐ Yes ☐ No
				☐ Yes ☐ No
				☐ Yes ☐ No
				☐ Yes ☐ No
				☐ Yes ☐ No
				☐ Yes ☐ No
				☐ Yes ☐ No
				☐ Yes ☐ No

2. Are industrial wastewater contributions regulated via a locally approved sewer use ordinance? ☐ Yes ☐ No

If yes, please attach a copy of the ordinance.

SECTION E – COASTAL ZONE INFORMATION

Is the discharge(s) located within the 10-foot elevation contour and within the limits of Mobile or Baldwin County? ☐ Yes ☒ No

If yes, complete items E.1 – E.12 below:

		Yes	No
1.	Does the project require new construction?	☒	☐
2.	Will the project be a source of new air emissions?	☐	☒
3.	Does the project involve dredging and/or filling of a wetland area or water way?	☐	☒
	If Yes, has the Corps of Engineers (COE) permit been received?	☐	☐
	COE Project No. _____		
4.	Does the project involve wetlands and/or submersed grassbeds?	☐	☒
5.	Are oyster reefs located near the project site?	☐	☒
	If Yes, include a map showing project and discharge location with respect to oyster reefs		
6.	Does the project involve the site developement, construction and operation of an energy facility as defined in ADEM Admin. Code r. 335-8-1-.02(bb)?	☐	☒
7.	Does the project involve mitigation of shoreline or coastal area erosion?	☐	☒
8.	Does the project involve construction on beaches or dune areas?	☐	☒
9.	Will the project interfere with public access to coastal waters?	☐	☒
10.	Does the project lie within the 100-year floodplain?	☐	☒
11.	Does the project involve the registration, sale, use, or application of pesticides?	☐	☒
12.	Does the project propose or require construction of a new well or to alter an existing groundwater well to pump more than 50 gallons per day (GPD)?	☐	☒
	If yes, has the applicable permit for groundwater recovery or for groundwater well installation been obtained?	☐	☐

SECTION F – ANTI-DEGRADATION EVALUATION

In accordance with 40 CFR §131.12 and the ADEM Admin. Code r. 335-6-10-.04 for anti-degradation, the following information must be provided, if applicable. It is the applicant's responsibility to demonstrate the social and economic importance of the proposed activity. If further information is required to make this demonstration, attach additional sheets to the application.

1. Is this a new or increased discharge that began after April 3, 1991? ■ Yes ☐ No
   If yes, complete F.2 below. If no, go to Section G.

2. Has an Anti-Degradation Analysis been previously conducted and submitted to the Department for the new or increased discharge referenced in F.1? ☐ Yes ■ No

   If yes, do not complete this section.

   If no and the discharge is to a Tier II waterbody as defined in ADEM Admin. Code r. 335-6-10-.12(4), complete F.2.A – F.2.F below, ADEM Form 311-Alternatives Analysis, and either ADEM Form 312 or ADEM Form 313- Calculation of Total Annualized Project Costs (Public-Sector or Private-Sector Projects, whichever is applicable). ADEM Form 312 or ADEM Form 313, whichever is applicable, must be provided for **each** treatment discharge alternative considered technically viable. ADEM forms can be found on the Department's website at http://adem.alabama.gov/DeptForms/.

   Information required for new or increased discharges to high quality waters:

   A. What environmental or public health problem will the discharger be correcting?

   The new decentralized WWTP will eliminate this adverse impact on the environment that would be typically associated with individual septic systems.

B. How much will the discharger be increasing employment (at its existing facility or as the result of locating a new facility)?

1 employee, licensed operator to perform daily checks of the WWTP operation, make adjustments as required and perform maintenance. Collect samples periodically as required by permit and provide to Lab for testing.

C. How much reduction in employment will the discharger be avoiding?

None

D. How much additional state or local taxes will the discharger be paying?

Estimated $7,500 - $15,000 annually

E. What public service to the community will the discharger be providing?

The wastewater treatment plant will provide sanitary sewer treatment for the proposed subdivision. WWTP will provide an enhanced treatment of domestic wastewater versus typical septic systems and produce an effluent quality with BOD5 @ 5 mg/l, TSS @ 7.5 mg/l, Nh3 @ 2 mg/l and DO @ 10 mg/l.

F. What economic or social benefit will the discharger be providing to the community?

The WWTP will provide sanitary sewer service for this rural subdivision thereby providing economic benefit by increased property values. The new WWTP will provide social benefit by susbstantialy reducing the adverse impact on the environment.

SECTION G – EPA Application Forms

All Applicants must submit certain EPA permit application forms. More than one application form may be required from a POTW or other TWTDS depending on the number and types of discharges or outfalls. The EPA application forms are found on the Department's website at http://adem.alabama.gov/programs/water/waterforms.cnt. The EPA application forms must be submitted in duplicate as follows:

1. Applicants for new or existing discharges of sanitary wastewater from Publicly-Owned Treatment Works (POTW) and Other Treatment Works Treating Domestic Sewage (TWTDS) must submit Form 2A. If the facility design capacity is equal to or greater than 1 MGD, Form 2F is also required.
2. Applicants for new or existing land application of sanitary wastewater must submit Form 2A and Form 2F. – Form 2A Submitted
3. Applicants for new and existing discharges of process wastewater from water treatment facilities (i.e. public water supply treatment plants) must submit Form 1 and Form 2C.
4. Applicants that generate sewage sludge, derive a material from sewage sludge, or dispose of sewage sludge must submit Part 2 of Form 2S.

SECTION H– ENGINEERING REPORT/BMP PLAN REQUIREMENTS

See ADEM 335-6-6-.08(i) & (j).

SECTION I– RECEIVING WATERS

Outfall No.	Receiving Water(s)	303(d) Segment?	Included in TMDL?*
01	Local Drainage way flowing to Limestone Creek	☐ Yes ■ No	☐ Yes ■ No
		☐ Yes ☐ No	☐ Yes ☐ No
		☐ Yes ☐ No	☐ Yes ☐ No

*If a TMDL Compliance Schedule is requested, the following should be attached as supporting documentation:

(1) Justification for the requested Compliance Schedule (e.g. time for design and installation of control equipment, etc.);

(2) Monitoring results for the pollutant(s) of concern which have not previously been submitted to the Department (sample collection dates, analytical results (mass and concentration), methods utilized, MDL/ML, etc. should be submitted as available);

(3) Requested interim limitations, if applicable;

(4) Date of final compliance with the TMDL limitations; and,

(5) Any other additional information available to support requested compliance schedule.

SECTION J – APPLICATION CERTIFICATION

The information contained in this form must be certified by a responsible official as defined in ADEM Administrative Code r. 335-6-6-.09 "signatories to permit applications and reports" (see below).

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations."

Signature of Responsible Official: _____ Date Signed: ~~January 26th 2025~~ April 5th 2025

Name: Michael Shamsie, PE Title: Design Engineer / Owner

If the Responsible Official signing this application is not identified in Section A.4 or A.7, provide the following information:

Mailing Address: 201 W 2nd Avenue, Suite 201

City: Coal Valley State: Illinois Zip: 61240

Phone Number: 309.269.6350 Email Address: mike.shamsie@landgroup.biz

335-6-6-.09 SIGNATORIES TO PERMIT APPLICATIONS AND REPORTS.

(1) The application for an NPDES permit shall be signed by a responsible official, as indicated below:

(a) In the case of a corporation, by a principal executive officer of at least the level of vice president, or a manager assigned or delegated in accordance with corporate procedures, with such delegation submitted in writing if required by the Department, who is responsible for manufacturing, production, or operating facilities and is authorized to make management decisions which govern the operation of the regulated facility;

(b) In the case of a partnership, by a general partner;

(c) In the case of a sole proprietorship, by the proprietor; or

(d) In the case of a municipal, state, federal, or other public entity, by either a principal executive officer, or ranking elected official.

Attachment 1 to Supplementary Form
ADEM Form 311

Alternatives Analysis

Applicant/Project: Mia Rayne Subdivision

All new or expanded discharges (except discharges eligible for coverage under general permits) covered by the NPDES permitting program are subject to the provisions of ADEM's antidegradation policy. Applicants for such discharges to Tier 2 waters are required to demonstrate " . . . that the proposed discharge is necessary for important economic or social development." As a part of this demonstration, the applicant must complete an evaluation of the discharge alternatives listed below, including a calculation of the total annualized project costs for each technically feasible alternative (using ADEM Form 312 for public-sector projects and ADEM Form 313 for private-sector projects). Alternatives with total annualized project costs that are less than 110% of the total annualized project costs for the Tier 2 discharge proposal are considered viable alternatives.

Alternative	Viable	Non-Viable	Comment
1 Land Application		X	No land available
2 Pretreatment/Discharge to POTW		X	None available
3 Relocation of Discharge		X	Location is best based on grades *
4 Reuse/Recycle	X	X	Reuse is viable based, but there is no area within the site to have a storage basin Cost Analysis Provided
5 Process/Treatment Alternatives	X		Extended aeration WWTP is the best alternative for a quality effluent
6 On-site/Sub-surface Disposal		X	No soil area large enough on site to accomplish such Cost analysis Provided for off-site
(other project-specific alternatives considered by the applicant; attach additional sheets if necessary)			
7 Biolere, Orenco AXmax, Saber		X	More costly, lower effluent quality
8			
9			

Pursuant to ADEM Administrative Code Rule 335-6-3-.04, I certify on behalf of the applicant that I have completed an evaluation of the discharge alternatives identified above, and reached the conclusions indicated.

Signature: _____ *(Professional Engineer)*

Date: April 5th 2025 / Revised June 9th 2025 Revised Aug 4th 2025

(Supporting documentation to be attached, referenced, or otherwise handled as appropriate.)

ADEM Form 311 3/02

*EVALUATED AN ALTERNATE ROUTING TO SUB WWTP APPROX 1 MILE AWAY, COST OF FORCE MAIN + LIFT STATION WAS AN ADDITIONAL $ 400,000, TOO EXPENSIVE OTHER LOTS WITHIN DEVELOPMENT NOT FEASIBLE DUE TO NEGATIVE IMPACT TO LOTS AND BUILDABLE AREA.

Calculation of Total Annualized Project Costs for Private-Sector Projects

Reuse/Recycle – 10 day capacity within a CONSTRUCTED WETLAND, OPEN SPACE LAWN IRRIGATION SYSTEM

Capital Costs to be Financed (Supplied by applicant)	$ 2,700,000 (1)
Interest rate for Financing (Expressed as a decimal)	0.060 (i)
Time Period of Financing (Assume 10 years*)	10 years (n)
Annualization Factor = $\frac{i}{(1+i)^{10} - 1} + i$	0.135867958 (2)
Annualized Capital Cost [Calculate: (1) x (2)]	$ 366,843.50 (3)
Annual Cost of Operation and Maintenance (including but not limited to monitoring, inspection, permitting fees, waste disposal charges, repair, administration and replacement)**	$ 25,000.00 (4)
Total Annual Cost of Pollution Control Project [(3) + (4)]	$ 391,843.50 (5)

* While actual payback schedules may differ across projects and companies, assume equal annual payments over a 10-year period for consistency in comparing projects.

** For recurring costs that occur less frequently than once a year, pro rate the cost over the relevant number of years (e.g., for pumps replaced once every three years, include one-third of the cost in each year).

#01-22-1675

Reuse / Recycle

Land for Constructed Wetland 10 Ac =	250,000
Constructed Wetland 5 Acres =	
25,000 cy 2-3' deep @ 5^{00}	125,000
Haul off excess 20,000 cy @ ·	500,000
Lift station - effluent 50 gpm	50,000
Forcemain to Const Wetland (CW)	25,000
Filtering system w/ CW for irrigation	25,000
Open Space irrigation system	100,000

Watering Open Space 5 acres @ 0.25/week (3"/week)
= 407,500 gal - more than 2 weeks worth of Water
75000 gpd 20.67 @ 7 = 351,750 g/week

Extended Aeration WWTP	1,375,000
Nano O_2 oxygen diffusion	250,000
	2,700,000

Annual Pollution Control Cost $391,843^{50}

[signature] 8/1/25

RECEIVED
AUG 04 2025
MUNICIPAL SECTION

Calculation of Total Annualized Project Costs
for Private-Sector Projects

On-site Subsurface Disposal — Drip Fields on 12 Acres

Capital Costs to be Financed (Supplied by applicant)	$ 2,300,000	(1)
Interest rate for Financing (Expressed as a decimal)	0.060	(i)
Time Period of Financing (Assume 10 years*)	10 years	(n)
Annualization Factor = $\frac{i}{(1+i)^{10} - 1} + i$	0.135867958	(2)
Annualized Capital Cost [Calculate: (1) x (2)]	$ 312,496.00	(3)
Annual Cost of Operation and Maintenance (including but not limited to monitoring, inspection, permitting fees, waste disposal charges, repair, administration and replacement)**	$ 25,000.00	(4)
Total Annual Cost of Pollution Control Project [(3) + (4)]	$ 337,496.00	(5)

8/4/2025

* While actual payback schedules may differ across projects and companies, assume equal annual payments over a 10-year period for consistency in comparing projects.

** For recurring costs that occur less frequently than once a year, pro rate the cost over the relevant number of years (e.g., for pumps replaced once every three years, include one-third of the cost in each year).

#01-22-1675

- On-site / Sub surface Disposal

- Land Required for Surface Disposal	12 Acres	$ 300,000
166 Homes typical 14 Homes / Ac depending soil analysis ≈ 12 Acre		
- 12 Acres of Soil Disposal) Orig clerigation installed @ 4' centers, max RUN @ 400'		$ 400,000 —
- Dosing Tank, Control Bldg, Arkal Filters, pumps, control Panel, etc		$ 150,000
- Fence around Soil Drip Fields @ 3,000' @ 20/LF		60,000
- Extended Aeration WWTP		1,275,000
- Misc items		15,000
		2,300,000

Total Cost $ 2,300,000 —

Annual Pollution Control Cost $ 337,496.00

8/4/2025

Landmark *Engineering Group, Inc.*

April 30th, 2025

Ms. Sandra Lee
Municipal Section
ADEM-Water Division
1400 Coliseum Boulevard
Montgomery, Alabama 36110

Re: **Mia Rayne Subdivision – WWTP ADEM Form 311 Supplement**
0 Wall Triana, Toney, Madison County, AL
Landmark Engineering Group Project #01-22-1675

Ms. Sandra

This following information is being submitted as a supplement to ADEM Form 311

POTW Harvest Monrovia Burwell Road WWTP
I had discussions with Harvest Monrovia engineers. The subject WWTP is at capacity, and they are several years away from completing a plant expansion. The POTW is approximately 8 miles from Mia Rayne subdivision, which would be very costly to run a force main over 40,000'.

POTW Harvest Monrovia Love Branch WWTP
I had discussions with Harvest Monrovia engineers. The subject WWTP is not built yet and is projected to be built and completed by the end of 2026. The POTW is approximately 8 miles from Mia Rayne subdivision which would be very costly to run a force main over 30,000'.

Private OSDS WWTP
The subject private WWTP is approximately 11.5 miles from Mia Rayne subdivision, which would be very expensive and not feasible to run a force main over 60,000'.

If you have any concerns or questions, please contact me at (309) 755.3400, extension 1200, mobile phone @ (309) 269.6350 or by email at mike.shamsie@landgroup.biz .

Respectfully Submitted,

RECEIVED
APR 30 2025
MUNICIPAL SECTION

Michael Shamsie, PE, CFM, CPESC
Alabama PE Registration #37430, Expiration 12/31/2025

Landmark Engineering Group, Inc
6700 Tower Circle, Suite 330
Franklin, TN 37067
Office (309) 755.3400 Mobile (309) 269.6350

Calculation of Total Annualized Project Costs
for Private-Sector Projects

Mia Bayne Sub, Foley, AL
Extended Aeration Cost Analysis

Capital Costs to be Financed (Supplied by applicant)	$ 1,375,000 (1)
Interest rate for Financing (Expressed as a decimal)	0.6 (i)
Time Period of Financing (Assume 10 years*)	10 years (n)
Annualization Factor = $\frac{i}{(1+i)^{10} - 1} + i$	0.135867958 (2)
Annualized Capital Cost [Calculate: (1) x (2)]	$ 186,818 (3)
Annual Cost of Operation and Maintenance (including but not limited to monitoring, inspection, permitting fees, waste disposal charges, repair, administration and replacement)**	$ 18,000 (4)
Total Annual Cost of Pollution Control Project [(3) + (4)]	$ 204,818 (5)

4/7/25

* While actual payback schedules may differ across projects and companies, assume equal annual payments over a 10-year period for consistency in comparing projects.

** For recurring costs that occur less frequently than once a year, pro rate the cost over the relevant number of years (e.g., for pumps replaced once every three years, include one-third of the cost in each year).

Calculation of Total Annualized Project Costs
for Private-Sector Projects

Mia Bayne Sub, Toney, AL
Bioclere AQUA-Point, COST Analysis

Capital Costs to be Financed (Supplied by applicant)	$ 2,250,000 (1)
Interest rate for Financing (Expressed as a decimal)	0.6 (i)
Time Period of Financing (Assume 10 years*)	10 years (n)
Annualization Factor = $\frac{i}{(1+i)^{10} - 1} + i$	0.135867958 (2)
Annualized Capital Cost [Calculate: (1) x (2)]	$ 305,703 (3)
Annual Cost of Operation and Maintenance (including but not limited to monitoring, inspection, permitting fees, waste disposal charges, repair, administration and replacement)**	$ 18,000 (4)
Total Annual Cost of Pollution Control Project [(3) + (4)]	$ 323,703 (5)

4/4/25

* While actual payback schedules may differ across projects and companies, assume equal annual payments over a 10-year period for consistency in comparing projects.

** For recurring costs that occur less frequently than once a year, pro rate the cost over the relevant number of years (e.g., for pumps replaced once every three years, include one-third of the cost in each year).

Calculation of Total Annualized Project Costs
for Private-Sector Projects

Mia Bayne Sub, Toney, AL
Opened Avian AX-MAX Cost Analysis

Capital Costs to be Financed (Supplied by applicant)	$ 1,650,000 (1)
Interest rate for Financing (Expressed as a decimal)	0.6 (i)
Time Period of Financing (Assume 10 years*)	10 years (n)
Annualization Factor = $\frac{i}{(1+i)^{10} - 1} + i$	0.135867958 (2)
Annualized Capital Cost [Calculate: (1) x (2)]	$ 224,182 (3)
Annual Cost of Operation and Maintenance (including but not limited to monitoring, inspection, permitting fees, waste disposal charges, repair, administration and replacement)**	$ 18,000 (4)
Total Annual Cost of Pollution Control Project [(3) + (4)]	$ 242,182 (5)

4/7/25

* While actual payback schedules may differ across projects and companies, assume equal annual payments over a 10-year period for consistency in comparing projects.

** For recurring costs that occur less frequently than once a year, pro rate the cost over the relevant number of years (e.g., for pumps replaced once every three years, include one-third of the cost in each year).

Calculation of Total Annualized Project Costs
for Private-Sector Projects

Mia Bayne Sub, Toney, AL
SABR Cost Analysis

Capital Costs to be Financed (Supplied by applicant)	$ 2,000,000 (1)
Interest rate for Financing (Expressed as a decimal)	0.6 (i)
Time Period of Financing (Assume 10 years*)	10 years (n)
Annualization Factor = $\frac{i}{(1+i)^{10} - 1} + i$	0.135867958 (2)
Annualized Capital Cost [Calculate: (1) x (2)]	$ 271,736 (3)
Annual Cost of Operation and Maintenance (including but not limited to monitoring, inspection, permitting fees, waste disposal charges, repair, administration and replacement)**	$ 18,000 (4)
Total Annual Cost of Pollution Control Project [(3) + (4)]	$ 289,736 (5)

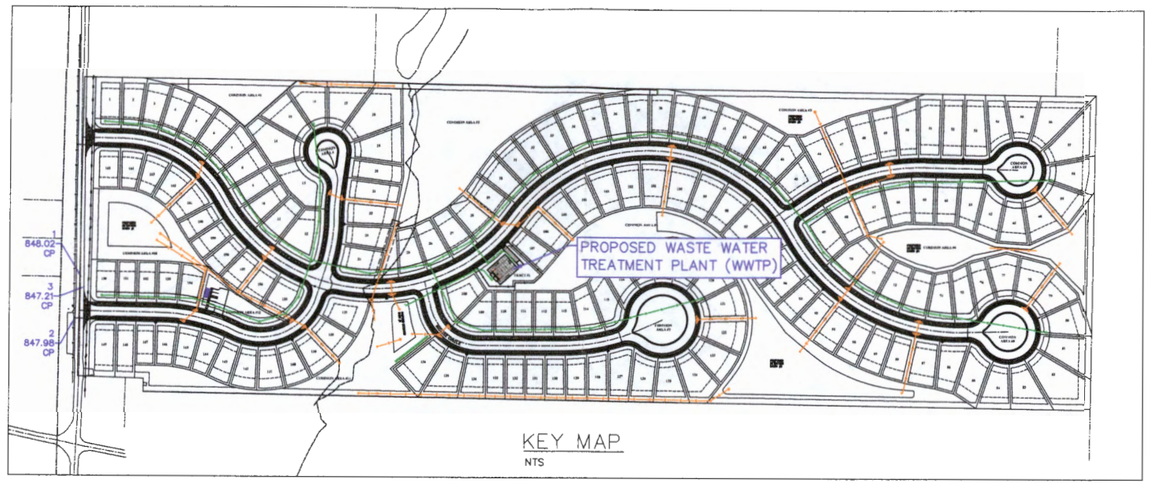
* While actual payback schedules may differ across projects and companies, assume equal annual payments over a 10-year period for consistency in comparing projects.

** For recurring costs that occur less frequently than once a year, pro rate the cost over the relevant number of years (e.g., for pumps replaced once every three years, include one-third of the cost in each year).

ADEM Form 313 8/02

WASTE WATER TREATMENT PLANT PLANS
FOR
MIA RAYNE SUBDIVISION
10017 WALL TRIANA HWY, MADISON COUNTY, ALABAMA

"CALL ALABAMA ONE CALL
BEFORE YOU DIG"
(205) 252-4444 OR 811



KEY MAP
NTS

SHEET INDEX

WWTP CONSTRUCTION SEQUENCE

1. EROSION & SEDIMENT CONTROL DEVICES AND SILT FENCES SHALL BE INSTALLED PRIOR TO ANY SITE DISTURBANCE.
2. CONTROL CONTRACTOR SHALL PROTECT ALL THE EXISTING INFRASTRUCTURE TO INSURE COMPLETE OPERATION OF THE EXISTING WWTP DURING CONSTRUCTION OF THE NEW WWTP.
3. CONTRACTOR SHALL ISOLATE THE SOUTHWEST CORNER OF THE LAGOON, DEWATER IT AND REMOVE ALL SLUDGE AND UNSUITABLE MATERIAL.
4. CONTRACTOR SHALL FURNISH, TRANSPORT AND PLACE SUITABLE EARTH MATERIAL TO ELEVATE SOUTHWEST CORNER TO GRADE.
5. CONTRACTOR SHALL PLACE ALL FILL MATERIAL IN 6 TO 9 LIFTS AND COMPACT TO 95% STANDARD PROCTOR.
6. ONCE ALL FILL MATERIAL IS PLACED IN SOUTHWEST CORNER AND GEOTECH CERTIFIES FILL PLACEMENT, CONTRACTOR SHALL INSTALL NEW WWTP.
7. CONTRACTOR SHALL COMPLETE ALL WORK TO RENDER NEW WWTP OPERABLE.
8. THE EXISTING FORCE MAIN FROM THE LIFT STATION AND BACKUP PUMP STATION SHALL BE TEMPORARILY ROUTE ALONG SOUTH SIDE ABOVE GRADE TO NEW WWTP.
9. THE EXISTING DISCHARGE LINE SHALL BE CONNECTED TO NEW WWTP.
10. NEW WWTP SHALL BE PUT IN SERVICE AND THE EXISTING LAGOON WILL BE OUT OF SERVICE.
11. CONTRACTOR SHALL DEWATER THE LAGOON AND REMOVE ALL SLUDGE AND UNSUITABLE MATERIAL.
12. CONTRACTOR SHALL FURNISH, TRANSPORT AND PLACE SUITABLE EARTH MATERIAL TO ELEVATE EXISTING LAGOON AREA TO GRADE PER PLAN.
13. UPON COMPLETION OF LAGOON GRADING, CONTRACTOR SHALL INSTALL NEW FORCE AMINS FROM LIFT STATION AND BACKUP PUMP STATION TO NEW WWTP.
14. TEMPORARY FORCE MAINS SHALL REMOVED AND DISPOSED OF IN ACCORDANCE WITH LOCAL AND STATE REGULATIONS.
15. ALL DISTURBED AREAS OF THE SITE SHALL BE FULLY RESTORED AND VEGETATED IN ACCORDANCE WITH LA DEQ REQUIREMENTS.
16. ONCE THE DISTURBED AREAS REACH 75% VEGETATION, SILT FENCES AND EROSION CONTROL DEVICES SHALL BE REMOVED AND DISPOSED OF.

LEGEND

- PROPERTY LINE
- –730– EXISTING CONTOUR
- 730 PROPOSED CONTOUR
- EXISTING LOT LINE/R.O.W.
- EXISTING BITUMINOUS PAVEMENT
- EXISTING CURB AND GUTTER
- PROPOSED EASEMENT
- PROPOSED BUILDING SETBACK
- PROPOSED CURB AND GUTTER
- W EXISTING WATERMAIN
- EXISTING FIRE HYDRANT
- EXISTING WATER VALVE
- PW PROPOSED WATER LINE
- PROPOSED FIRE HYDRANT
- PROPOSED CURB BOX
- PROPOSED TV&S
- EXISTING STORM INLET
- PROPOSED SINGLE WING INLET
- PROPOSED DOUBLE WING INLET
- PROPOSED STORM INLET
- PROPOSED STORM MANHOLE
- PROPOSED FLARED END SECTION (FES)
- PROPOSED STORM SEWER
- PROPOSED UNDERDRAIN
- EXISTING SANITARY MANHOLE
- EXISTING SANITARY SEWER
- PROPOSED SANITARY MANHOLE
- PROPOSED SANITARY SEWER
- FM PROPOSED FORCEMAIN
- TEL EXISTING TELEPHONE LINE
- EXISTING TELEPHONE PEDESTAL
- EXISTING TELEPHONE PEDESTAL
- EXISTING FIBER OPTIC BOX
- UE EXISTING UNDERGROUND ELECTRIC LINE
- FO EXISITNG UNDERGROUND MEDIA/ FIBER OPTICS LINE
- GAS EXISTING GAS LINE
- EXISTING POWER POLE
- EXISTING LIGHT POLE
- U & D UTILITY AND DRAINAGE
- MBL MINIMUM BUILDING LINE

SITE INFORMATION:
10059 WALL TRIANA HWY
DEED BOOK 2022
PG, 59089
PIN #05-08-28-0-000-040.000

SITE BENCHMARK

CP #1
N1609634.6520
E381837.5330
ELEV. = 848.02 NAVD 1988

CP #2
N1609542.2080
E381817.8110
ELEV. = 847.98 NAVD 1988

CP #3
N1609622.8720'
E381847.6550
ELEV. = 847.21 NAVD 1988

ALL REFERENCES TO DOT IMPLIES ALDOT THROUGHOUT THE PLAN SET.

PROJECT TEAM

CLIENT: LAND VENUES, INC.
6700 TOWER CIRCLE, STE. 330
FRANKLIN, TN 37067

CONTACT: MR. JIM HYBEN
PHONE: (615) 260-3163

ENGINEER: Landmark ENGINEERING GROUP
201 W. 2ND AVENUE, STE 201
COAL VALLEY, IL 61240

CONTACT: MR. MICHAEL SHAMSIE, P.E.
PHONE: (309) 755-3400

SURVEYOR: GARVER, LLC.
5125 RESEARCH DRIVE NW
HUNTSVILLE, AL 35805

CONTACT: MR. LOYD CARPENTER
PHONE: (256) 534-5512

DUTY TO INDEMNIFY

THE CONTRACTOR SHALL DEFEND, INDEMNIFY, KEEP AND SAVE HARMLESS OWNER, ENGINEER, COUNTY AND THEIR RESPECTIVE BOARD MEMBERS, REPRESENTATIVES, AGENTS, AND EMPLOYEES, IN BOTH INDIVIDUAL AND OFFICIAL CAPACITIES, AGAINST ALL SUITS, CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES, CAUSED BY GROWING OUT OF, OR INCIDENTAL TO, THE PERFORMANCE OF THE WORK UNDER THE CONTRACT BY THE CONTRACTOR OR ITS SUBCONTRACTORS TO THE FULL EXTENT AS ALLOWED BY THE LAWS OF THE STATE OF ALABAMA AND NOT BEYOND ANY EXTEND WHICH WOULD RENDER THESE PROVISIONS VOID OR UNENFORCEABLE. THIS OBLIGATION INCLUDES BUT IS NOT LIMITED TO: THE ALABAMA LAWS REGARDING STRUCTURAL WORK, AND REGARDING THE PROTECTION OF ADJACENT LANDOWNERS IN THE EVENT OF ANY SUCH INJURY (INCLUDING DEATH) OR LOSS OR DAMAGE, OR ADHERENCES TO SWPP PLAN & NPDES PERMIT, CLAIMS THEREFORE, THE CONTRACTOR SHALL GIVE PROMPT NOTICE TO THE OWNER.

PROJECT DATA

SITE IMPROVEMENT PLANS CONSISTING OF NEW LOTS, STREET, UTILITIES , WWTP AND RELATED SITE IMPROVEMENTS

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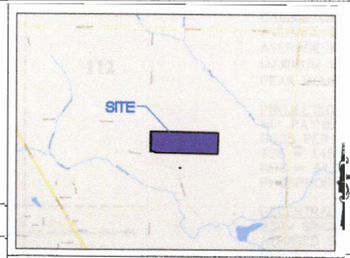
LOCATION REQUESTS SHOULD BE MADE TO THE PUBLIC WORKS DEPARTMENT FOR WATER, SANITARY AND STORM SEWERS.

ANY REVISIONS TO THE APPROVED ENGINEERING PLANS MUST BE REVIEWED AND APPROVED BY THE GOVERNING AGENCIES, OWNER, AND THE ENGINEER OF RECORD BEFORE ANY WORK IS PERFORMED REGARDING THE REVISED ITEMS.

PROJECT LOCATION



APPROVED FOR CONSTRUCTION

COUNTY ENGINEER — DATE
MADISON COUNTY, AL

ALABAMA
MICHAEL R. SHAMSIE
No 37430
PROFESSIONAL
ENGINEER

I HEREBY CERTIFY THAT THESE PLANS AND SPECIFICATIONS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION, AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF ALABAMA.

1/27/2025
DATE

MICHAEL R. SHAMSIE, P.E.
AL. REG. #37430-E
EXP. DATE 12/31/2025
IF SEAL AND/OR SIGNATURE IS NOT A CONTRASTING COLOR, THIS DOCUMENT IS NOT AN ORIGINAL.

ALL SHEET COVERED BY SEAL

REVISIONS

NO.	DESCRIPTION	DATE

Landmark
ENGINEERING GROUP
201 W. 2ND AVENUE, SUITE 201
COAL VALLEY, IL 61240
(309) 755-3400 FAX (309) 755-6572
CIVIL ENGINEERING AND LAND PLANNING
ALABAMA DESIGN FIRM REGISTRATION NUMBER CA-5815-E

COVER SHEET
MIA RAYNE SUBDIVISION
MADISON COUNTY, ALABAMA

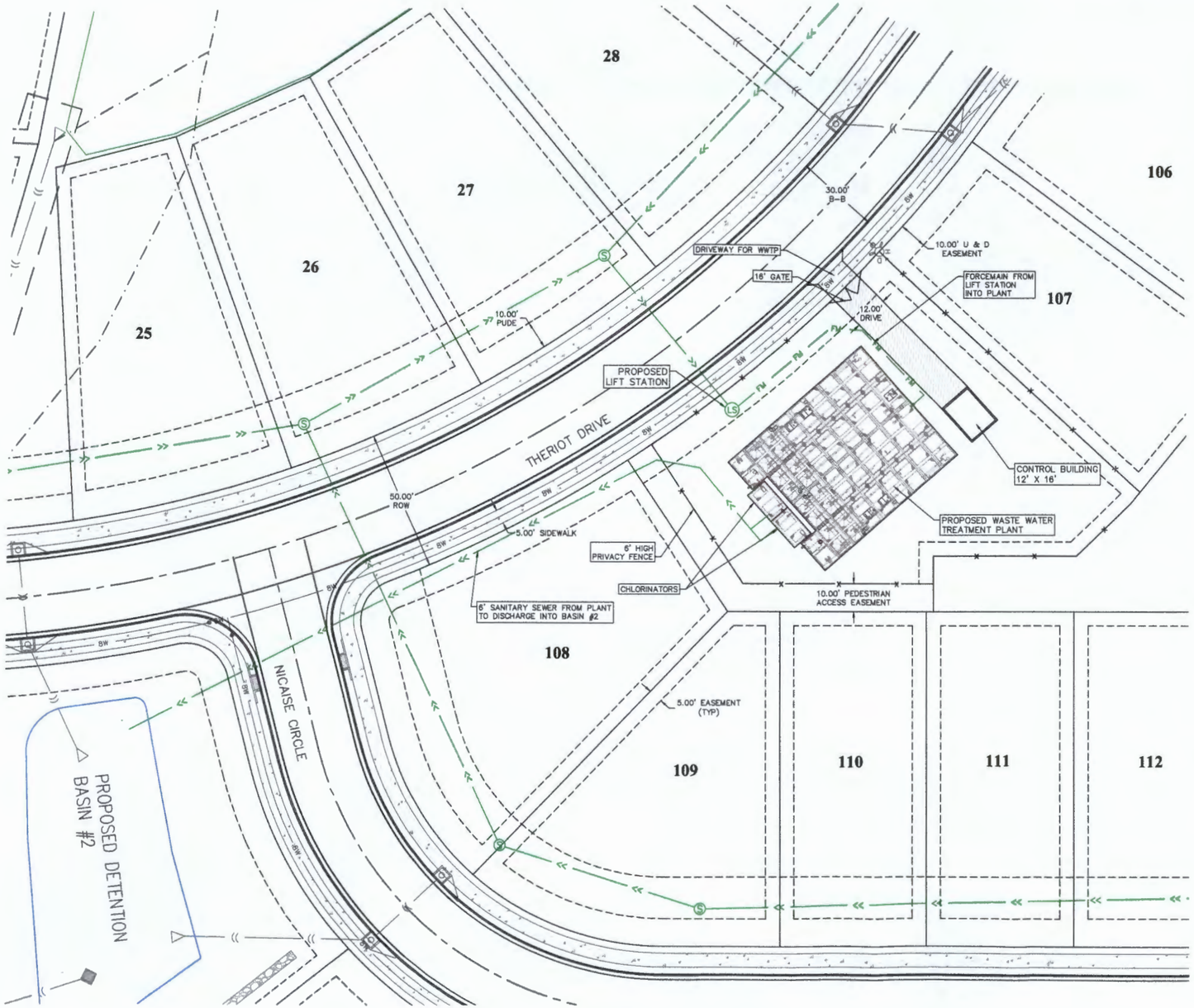
DATE: 1/27/2025
DRAWN BY: HLG
DESIGNED BY: MRS
CHECKED BY: MRS

1

01-22-1675

WASTE WATER TREATMENT PLANT SITE PLAN

"CALL ALABAMA ONE CALL
BEFORE YOU DIG"
(205) 252-4444 OR 811



GRAPHIC SCALE 1" = 20'
0 10 20 40

75,000 GPD DECENTRALIZED WASTEWATER TREATMENT PLANT
WWTP SIZED FOR 166 SINGLE FAMILY HOME DEVELOPMENT
WWTP VOLUME MAY BE REVISED UPON AL DEM WASTE LOAD ALLOCATION FLOW VOLUMES
166 SINGLE FAMILY @ 450 GPD/HOME = 74,700 GPD

PROJECTED DESIGN FLOWS OF 75,000 GPD WWTP
AVERAGE DRY WEATHER (ADW) FLOW VOLUME = 28,000 GPD
AVERAGE WET WEATHER (AWW) FLOW VOLUME = 70,000 GPD
MAXIMUM WET WEATHER (MWW) FLOW VOLUME = 73,500 GPD
PEAK HOURLY WET WEATHER (PHWW) FLOW VOLUME = 147,000 GPD

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MIA RAYNE POPULATION = 581
BOD5 PER DAY = 128 POUNDS PER DAY
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NH3 = 51.2 POUNDS PER DAY
PHOSPHOROUS = 25.6 POUNDS PER DAY

DECENTRALIZED WASTEWATER TREATMENT PLANT DESIGN DATA
230V SINGLE PHASE, 60 HZ POWER SOURCE
AERATED SLUDGE HOLDING TANKS WITH INDEPENDENT SIMPLEX BLOWER
ROTARY POSITIVE BLOWER TO BE USED FOR FLOW EQUALIZATION CHAMBERS
ALL BLOWERS TO BE WITHIN STAINLESS STEEL DOGHOUSE HOUSING
CHLORINE CONTACT CHAMBER WITH CHLORINATOR
DISCHARGE TO EXISTING DRAINAGE WAY PER NPDES PERMIT

SANITARY SEWER MANHOLE
8" SANITARY SEWER
PROPOSED 6" FORCEMAIN

EXISTING AND PROPOSED CONTOURS
TURNED OFF FOR PLAN CLARITY

ALABAMA LICENSED No. 37430 PROFESSIONAL ENGINEER MICHAEL R. SHAMBLE

NO.	REVISIONS DESCRIPTION	DATE

Landmark
ENGINEERING GROUP
201 W. 2ND AVENUE, SUITE 201 COAL VALLEY, IL 61240
(309) 755-3400 FAX (309) 755-3552
CIVIL ENGINEERING AND LAND PLANNING
ALABAMA DESIGN FIRM REGISTRATION NUMBER CA-5515-E

WASTE WATER TREATMENT PLANT SITE PLAN

MIA RAYNE SUBDIVISION
MADISON COUNTY, ALABAMA

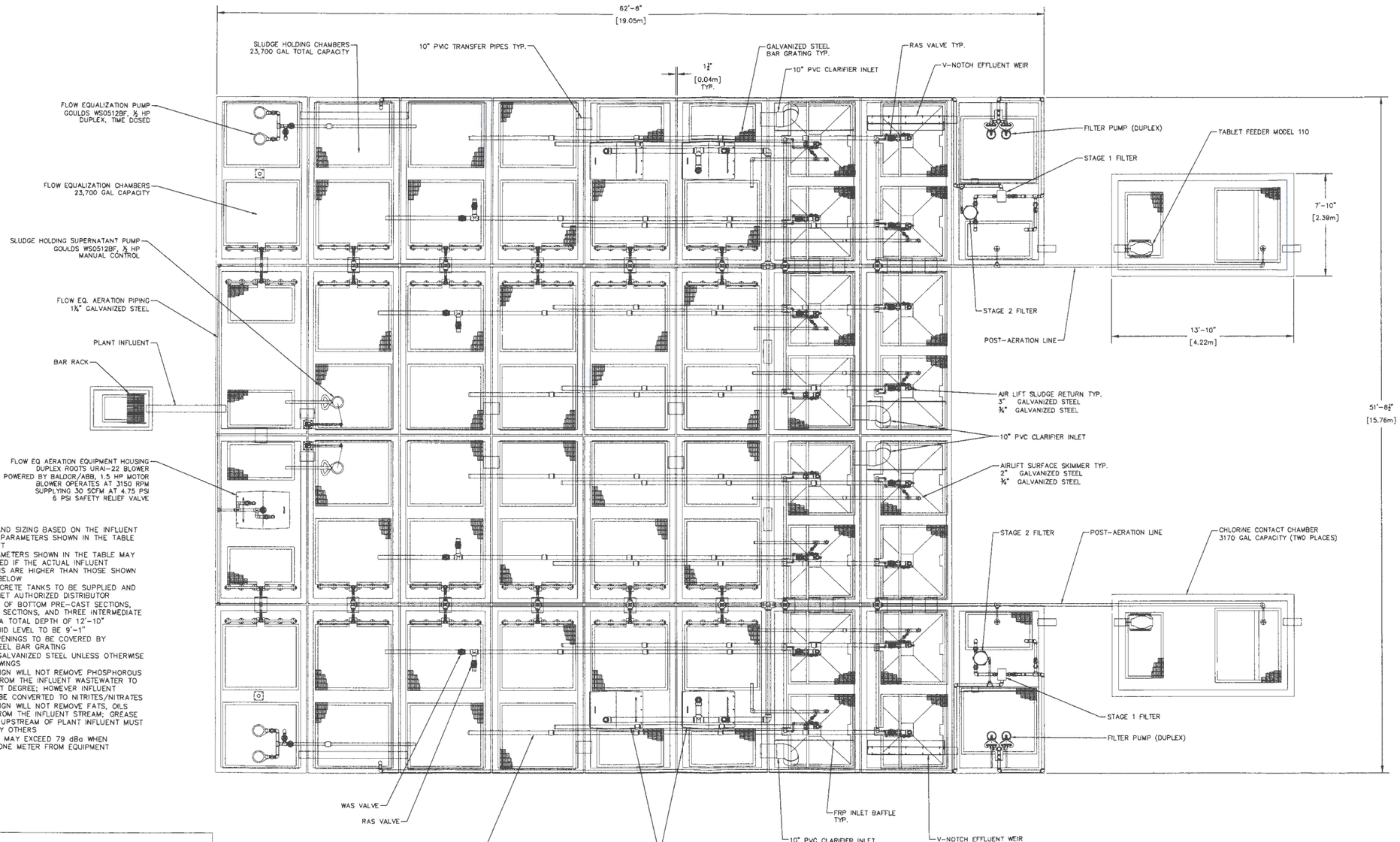
DATE: 1/27/2025
DRAWN BY: HLG
DESIGNED BY: MRS
CHECKED BY: MRS

2

01-22-1675

WASTE WATER TREATMENT PLANT

"CALL ALABAMA ONE CALL
BEFORE YOU DIG"
(205) 252-4444 OR 811



NOTES:
1) WWTP DESIGN AND SIZING BASED ON THE INFLUENT AND EFFLUENT PARAMETERS SHOWN IN THE TABLE AT BOTTOM LEFT
2) EFFLUENT PARAMETERS SHOWN IN THE TABLE MAY NOT BE ACHIEVED IF THE ACTUAL INFLUENT CONCENTRATIONS ARE HIGHER THAN THOSE SHOWN IN THE TABLE BELOW
3) PRE-CAST CONCRETE TANKS TO BE SUPPLIED AND INSTALLED BY JET AUTHORIZED DISTRIBUTOR
4) TANKS CONSIST OF BOTTOM PRE-CAST SECTIONS, TOP PRE-CAST SECTIONS, AND THREE INTERMEDIATE SECTIONS FOR A TOTAL DEPTH OF 12'-10"
5) OPERATING LIQUID LEVEL TO BE 9'-1"
6) ALL ACCESS OPENINGS TO BE COVERED BY GALVANIZED STEEL BAR GRATING
7) ALL PIPING IS GALVANIZED STEEL UNLESS OTHERWISE NOTED ON DRAWINGS
8) THIS WWTP DESIGN WILL NOT REMOVE PHOSPHOROUS OR NITROGEN FROM THE INFLUENT WASTEWATER TO ANY SIGNIFICANT DEGREE; HOWEVER INFLUENT AMMONIA WILL BE CONVERTED TO NITRITES/NITRATES
9) THIS WWTP DESIGN WILL NOT REMOVE FATS, OILS AND GREASE FROM THE INFLUENT STREAM; GREASE TRAP LOCATED UPSTREAM OF PLANT INFLUENT MUST BE PROVIDED BY OTHERS
10) BLOWER NOISE MAY EXCEED 79 dBa WHEN MEASURED AT ONE METER FROM EQUIPMENT

PROJECT: LMTECH 75000GPD			
ELECTRIC: SINGLE PHASE	60 HZ	230 VOLT	
RATED FLOW: 75,000GPD	284 M3PD		
	INFLUENT QUALITY	PROJECTED EFFLUENT	UNIT
TOTAL SUSPENDED SOLIDS(TSS)	200	15	mg/L
FATS, OILS, GREASE(FOG)	--	--	mg/L
BIOCHEMICAL OXYGEN DEMAND(BOD)	200	10	mg/L
CBOD	--	--	mg/L
TOTAL PHOSPHORUS	--	--	mg/L
TOTAL NITROGEN	--	--	mg/L
TOTAL KJELDAHL NITROGEN(TKN)	35	--	mg/L
NITROGEN-AMMONIA(NH3-N)	--	2	mg/L
DISSOLVED OXYGEN RESIDUAL		5	mg/L

ALABAMA LICENSED
No 37430
PROFESSIONAL
ENGINEER
MICHAEL R. STAMBLER

Jet® Wastewater Treatment Solutions
Founded on Innovation, Anchored by Service®

DRAWN BY: K.S	DATE: 3/13/24
APPROVED BY:	DATE:
MATERIAL:	
TITLE: LMTECH 75,000 GPD	SCALE: NONE
USED ON: MIA RAYNE SUBDIVISION	SIZE: D
	UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES DECIMAL ± .005 FRACTIONAL ± 1/64 DEGREE ± 1°
PROPRIETARY PROPERTY - THIS DRAWING IS THE PROPERTY OF JET INC. AND MAY NOT BE REPRODUCED, COPIED OR USED WITHOUT WRITTEN PERMISSION.	DRAWING NUMBER: JCP-240312-41 REV: -

REVISIONS

NO.	DESCRIPTION	DATE

Landmark
ENGINEERING GROUP
201 W. 2ND AVENUE, SUITE 201 COAL VALLEY, IL 61240
(309) 755-3400 FAX (309) 755-5522
CIVIL ENGINEERING AND LAND PLANNING
ALABAMA DESIGN FIRM REGISTRATION NUMBER CA-5615-E

WASTE WATER TREATMENT PLANT DETAIL
MIA RAYNE SUBDIVISION
MADISON COUNTY, ALABAMA

DATE: 1/27/2025
DRAWN BY: HLG
DESIGNED BY: MRS
CHECKED BY: MRS

3

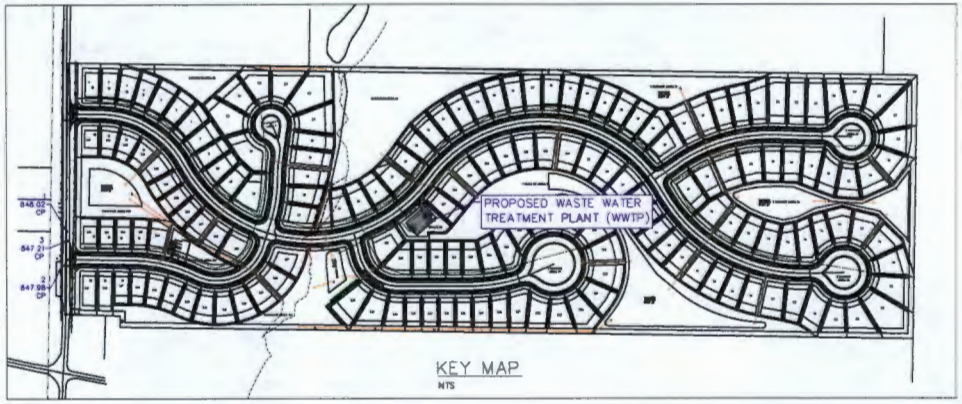
01-22-1675

WASTE WATER TREATMENT PLANT PLANS
FOR
MIA RAYNE SUBDIVISION
10017 WALL TRIANA HWY, MADISON COUNTY, ALABAMA

"CALL ALABAMA ONE CALL
BEFORE YOU DIG"
(205) 252-4444 OR 811

RECEIVED
JUN 04 2025
MUNICIPAL SECTION

SHEET INDEX



KEY MAP
NTS

WWTP CONSTRUCTION SEQUENCE

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PROJECT TEAM

CLIENT: LAND VENUES, INC.
6700 TOWER CIRCLE, STE. 330
FRANKLIN, TN 37067

CONTACT: MR. JIM HYDEN
PHONE: (615) 250-9193

ENGINEER: Landmark ENGINEERING GROUP
201 W. 2ND AVENUE, STE 201
COAL VALLEY, IL 61240

CONTACT: MR. MICHAEL SHAMSIE, P.E.
PHONE: (309) 755-0400

SURVEYOR: GARVER, LLC.
8925 RESEARCH DRIVE NW
HUNTSVILLE, AL 35805

CONTACT: MR. LOYD CARPENTER
PHONE: (256) 534-5512

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PROJECT LOCATION

APPROVED FOR CONSTRUCTION

COUNTY ENGINEER — DATE
MADISON COUNTY, AL

ALABAMA LICENSED PROFESSIONAL ENGINEER — No. 37430 — MICHAEL R. SHAMSIE

I HEREBY CERTIFY THAT THESE PLANS AND SPECIFICATIONS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION, AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF ALABAMA.

MICHAEL R. SHAMSIE, P.E. — DATE 6/4/2025
AL. REG. #37430-E — ALL SHEET COVERED BY SEAL
EXP. DATE 12/31/2025
IF SEAL AND/OR SIGNATURE IS NOT A CONTRASTING COLOR, THIS DOCUMENT IS NOT AN ORIGINAL.

REVISIONS

NO.	DESCRIPTION	DATE

Landmark ENGINEERING GROUP
201 W. 2ND AVENUE, SUITE 201
COAL VALLEY, IL 61240
(309) 755-0400 FAX (309) 799-6962
CIVIL ENGINEERING AND LAND PLANNING

COVER SHEET
MIA RAYNE SUBDIVISION
MADISON COUNTY, ALABAMA

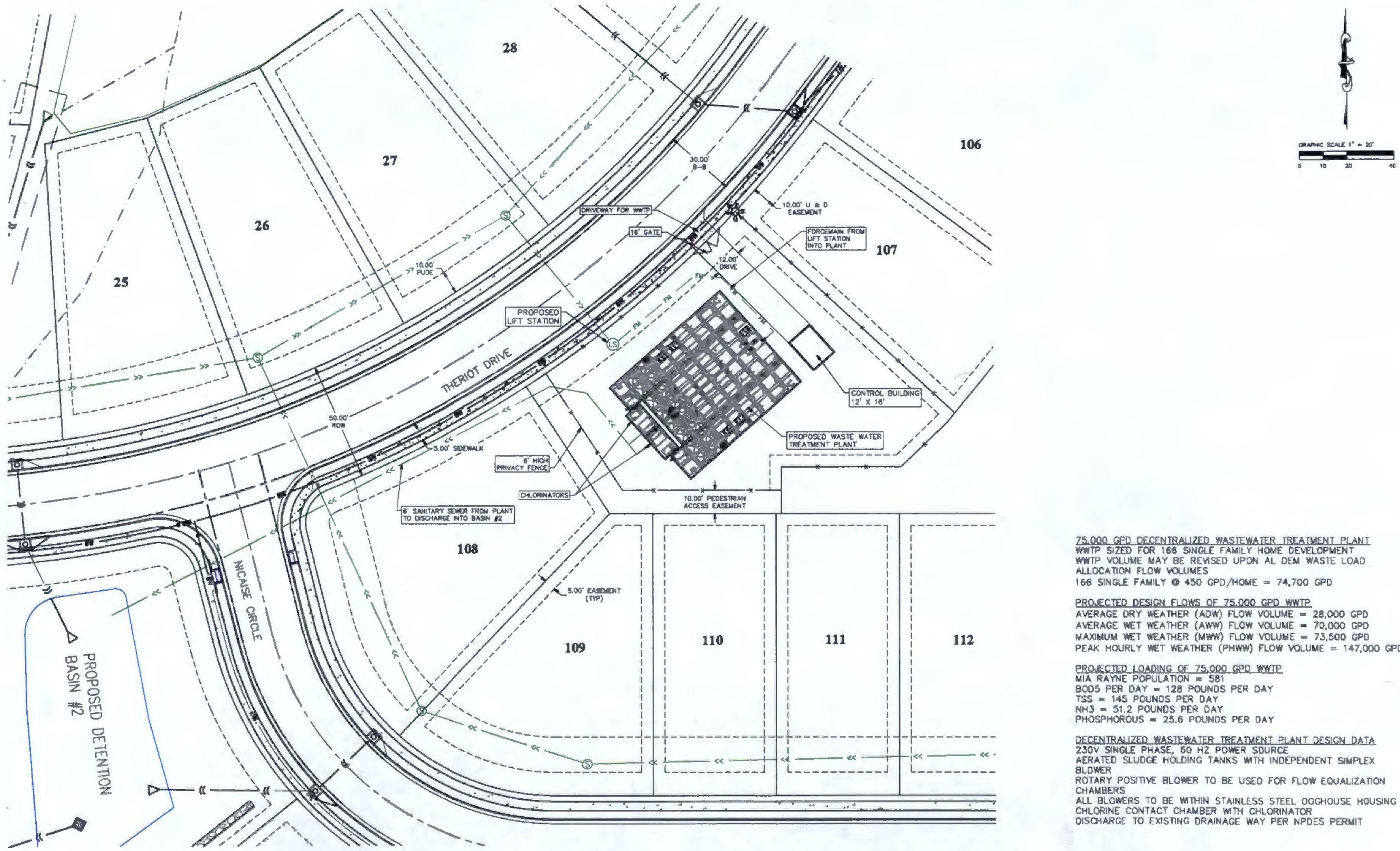
DATE: 6/4/2025
DRAWN BY: MJE
DESIGNED BY: MRS
CHECKED BY: MRS

1

01-22-1675

WASTE WATER TREATMENT PLANT SITE PLAN

"CALL ALABAMA ONE CALL
BEFORE YOU DIG"
(205) 252-4444 OR 811



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CHLORINE CONTACT CHAMBER WITH CHLORINATOR
DISCHARGE TO EXISTING DRAINAGE WAY PER NPDES PERMIT

Legend:
- (S) SANITARY SEWER MANHOLE
- —»— 8" SANITARY SEWER
- —FM— PROPOSED 6" FORCEMAIN

EXISTING AND PROPOSED CONTOURS TURNED OFF FOR PLAN CLARITY

REVISIONS		
NO.	DESCRIPTION	DATE

Landmark ENGINEERING GROUP
CIVIL ENGINEERING AND LAND PLANNING

WASTE WATER TREATMENT PLANT SITE PLAN
MIA RAYNE SUBDIVISION
MADISON COUNTY, ALABAMA

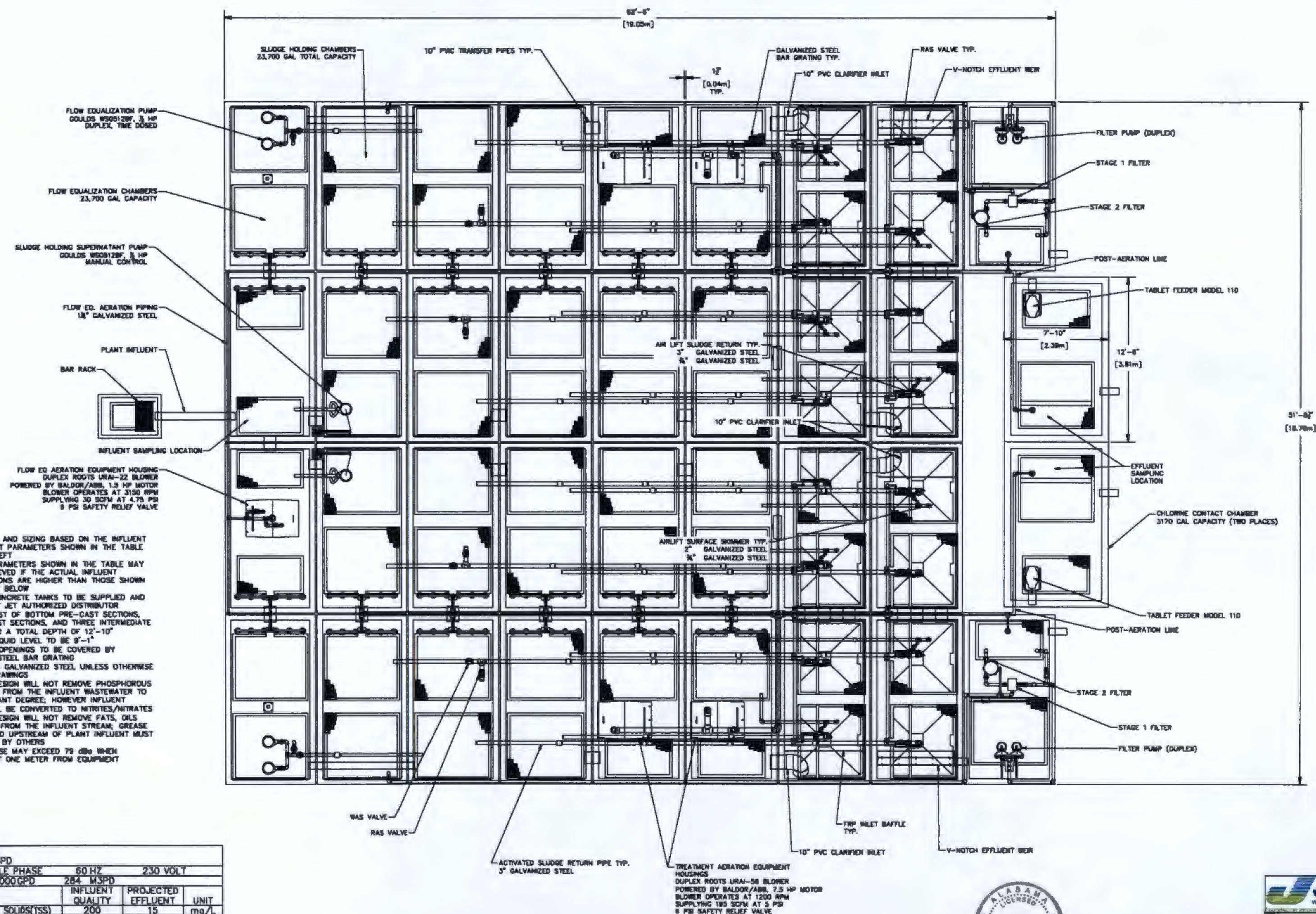
DATE: 6/4/2025
DRAWN BY: HLG
DESIGNED BY: MRS
CHECKED BY: MRS

2

01-22-1675

WASTE WATER TREATMENT PLANT

"CALL ALABAMA ONE CALL
BEFORE YOU DIG"
(205) 252-4444 OR 811



NOTES:
1) WWTP DESIGN AND SIZING BASED ON THE INFLUENT AND EFFLUENT PARAMETERS SHOWN IN THE TABLE AT BOTTOM LEFT
2) EFFLUENT PARAMETERS SHOWN IN THE TABLE MAY NOT BE ACHIEVED IF THE ACTUAL INFLUENT CONCENTRATIONS ARE HIGHER THAN THOSE SHOWN IN THE TABLE BELOW
3) PRE-CAST CONCRETE TANKS TO BE SUPPLIED AND INSTALLED BY JET AUTHORIZED DISTRIBUTOR
4) TANKS CONSIST OF BOTTOM PRE-CAST SECTIONS, TOP PRE-CAST SECTIONS, AND THREE INTERMEDIATE SECTIONS FOR A TOTAL DEPTH OF 12'-10"
5) OPERATING LIQUID LEVEL TO BE 9'-1"
6) ALL ACCESS OPENINGS TO BE COVERED BY GALVANIZED STEEL BAR GRATING
7) ALL PIPING IS GALVANIZED STEEL UNLESS OTHERWISE NOTED ON DRAWINGS
8) THIS WWTP DESIGN WILL NOT REMOVE PHOSPHOROUS OR NITROGEN FROM THE INFLUENT WASTEWATER TO ANY SIGNIFICANT DEGREE; HOWEVER INFLUENT AMMONIA WILL BE CONVERTED TO NITRITES/NITRATES
9) THIS WWTP DESIGN WILL NOT REMOVE FATS, OILS AND GREASE FROM THE INFLUENT STREAM; GREASE TRAP LOCATED UPSTREAM OF PLANT INFLUENT MUST BE PROVIDED BY OTHERS
10) BLOWER NOISE MAY EXCEED 79 dBa WHEN MEASURED AT ONE METER FROM EQUIPMENT

PROJECT: LMTECH 75000GPD
ELECTRIC: SINGLE PHASE 60 HZ 230 VOLT
RATED FLOW: 75,000GPD 284 M3PD

	INFLUENT QUALITY	PROJECTED EFFLUENT	UNIT
TOTAL SUSPENDED SOLIDS(TSS)	200	15	mg/L
FATS, OILS, GREASE(FOG)	---	---	mg/L
BIOCHEMICAL OXYGEN DEMAND(BOD)	200	10	mg/L
CBOD	---	---	mg/L
TOTAL PHOSPHORUS	---	---	mg/L
TOTAL NITROGEN	---	---	mg/L
TOTAL KJELDAHL NITROGEN(TKN)	35	---	mg/L
NITROGEN-AMMONIA(NH3-N)	---	2	mg/L
DISSOLVED OXYGEN RESIDUAL		5	mg/L

Jet
TITLE: LMTECH 75,000 GPD
USED ON: MIA RAYNE SUBDIVISION
DRAWING NUMBER: JCP-240312-41

Landmark ENGINEERING GROUP
CIVIL ENGINEERING AND LAND PLANNING

REVISIONS: NO. | DESCRIPTION | DATE

WASTE WATER TREATMENT PLANT DETAIL

MIA RAYNE SUBDIVISION
MADISON COUNTY, ALABAMA

DATE: 7/22/2025
DRAWN BY: HLG
DESIGNED BY: MRS
CHECKED BY: MRS

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01-22-1675

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EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number

Form Approved 03/05/19
OMB No. 2040-0004

TABLE B. EFFLUENT PARAMETERS FOR ALL POTWS WITH A FLOW EQUAL TO OR GREATER THAN 0.1 MGD

Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method[1]	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
Ammonia (as N)	Estimated 20	mg/l	Estimated 30	mg/l			☐ ML ☐ MDL
Chlorine (total residual, TRC)[2]	Estimated 2.0	mg/l	Estimated 2.0	mg/l			☐ ML ☐ MDL
Dissolved oxygen	Estimated 20	mg/l	Estimated 10	mg/l			☐ ML ☐ MDL
Nitrate/nitrite							☐ ML ☐ MDL
Kjeldahl nitrogen	Estimated 30	mg/l	Estimated 30	mg/l			☐ ML ☐ MDL
Oil and grease							☐ ML ☐ MDL
Phosphorus	Estimated 5	mg/l	Estimated 3	mg/l			☐ ML ☐ MDL
Total dissolved solids							☐ ML ☐ MDL

[1] Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR chapter I, subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

[2] Facilities that do not use chlorine for disinfection, do not use chlorine elsewhere in the treatment process, and have no reasonable potential to discharge chlorine in their effluent are not required to report data for chlorine.

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EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number

Form Approved 03/05/19
OMB No. 2040-0004

TABLE C. EFFLUENT PARAMETERS FOR SELECTED POTWS

Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method[1]	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
Metals, Cyanide, and Total Phenols							
Hardness (as $CaCO_3$)							☐ ML ☐ MDL
Antimony, total recoverable							☐ ML ☐ MDL
Arsenic, total recoverable							☐ ML ☐ MDL
Beryllium, total recoverable							☐ ML ☐ MDL
Cadmium, total recoverable							☐ ML ☐ MDL
Chromium, total recoverable							☐ ML ☐ MDL
Copper, total recoverable							☐ ML ☐ MDL
Lead, total recoverable							☐ ML ☐ MDL
Mercury, total recoverable							☐ ML ☐ MDL
Nickel, total recoverable							☐ ML ☐ MDL
Selenium, total recoverable							☐ ML ☐ MDL
Silver, total recoverable							☐ ML ☐ MDL
Thallium, total recoverable							☐ ML ☐ MDL
Zinc, total recoverable							☐ ML ☐ MDL
Cyanide							☐ ML ☐ MDL
Total phenolic compounds							☐ ML ☐ MDL
Volatile Organic Compounds							
Acrolein							☐ ML ☐ MDL
Acrylonitrile							☐ ML ☐ MDL
Benzene							☐ ML ☐ MDL
Bromoform							☐ ML ☐ MDL

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number

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TABLE C. EFFLUENT PARAMETERS FOR SELECTED POTWS

Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method[1]	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
Carbon tetrachloride							☐ ML ☐ MDL
Chlorobenzene							☐ ML ☐ MDL
Chlorodibromomethane							☐ ML ☐ MDL
Chloroethane							☐ ML ☐ MDL
2-chloroethylvinyl ether							☐ ML ☐ MDL
Chloroform							☐ ML ☐ MDL
Dichlorobromomethane							☐ ML ☐ MDL
1,1-dichloroethane							☐ ML ☐ MDL
1,2-dichloroethane							☐ ML ☐ MDL
trans-1,2-dichloroethylene							☐ ML ☐ MDL
1,1-dichloroethylene							☐ ML ☐ MDL
1,2-dichloropropane							☐ ML ☐ MDL
1,3-dichloropropylene							☐ ML ☐ MDL
Ethylbenzene							☐ ML ☐ MDL
Methyl bromide							☐ ML ☐ MDL
Methyl chloride							☐ ML ☐ MDL
Methylene chloride							☐ ML ☐ MDL
1,1,2,2-tetrachloroethane							☐ ML ☐ MDL
Tetrachloroethylene							☐ ML ☐ MDL
Toluene							☐ ML ☐ MDL
1,1,1-trichloroethane							☐ ML ☐ MDL
1,1,2-trichloroethane							☐ ML ☐ MDL

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number

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TABLE C. EFFLUENT PARAMETERS FOR SELECTED POTWS

Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method[1]	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
Trichloroethylene							☐ ML ☐ MDL
Vinyl chloride							☐ ML ☐ MDL
Acid-Extractable Compounds							
p-chloro-m-cresol							☐ ML ☐ MDL
2-chlorophenol							☐ ML ☐ MDL
2,4-dichlorophenol							☐ ML ☐ MDL
2,4-dimethylphenol							☐ ML ☐ MDL
4,6-dinitro-o-cresol							☐ ML ☐ MDL
2,4-dinitrophenol							☐ ML ☐ MDL
2-nitrophenol							☐ ML ☐ MDL
4-nitrophenol							☐ ML ☐ MDL
Pentachlorophenol							☐ ML ☐ MDL
Phenol							☐ ML ☐ MDL
2,4,6-trichlorophenol							☐ ML ☐ MDL
Base-Neutral Compounds							
Acenaphthene							☐ ML ☐ MDL
Acenaphthylene							☐ ML ☐ MDL
Anthracene							☐ ML ☐ MDL
Benzidine							☐ ML ☐ MDL
Benzo(a)anthracene							☐ ML ☐ MDL
Benzo(a)pyrene							☐ ML ☐ MDL
3,4-benzofluoranthene							☐ ML ☐ MDL

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number

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TABLE C. EFFLUENT PARAMETERS FOR SELECTED POTWS

Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method[1]	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
Benzo(ghi)perylene							☐ ML ☐ MDL
Benzo(k)fluoranthene							☐ ML ☐ MDL
Bis (2-chloroethoxy) methane							☐ ML ☐ MDL
Bis (2-chloroethyl) ether							☐ ML ☐ MDL
Bis (2-chloroisopropyl) ether							☐ ML ☐ MDL
Bis (2-ethylhexyl) phthalate							☐ ML ☐ MDL
4-bromophenyl phenyl ether							☐ ML ☐ MDL
Butyl benzyl phthalate							☐ ML ☐ MDL
2-chloronaphthalene							☐ ML ☐ MDL
4-chlorophenyl phenyl ether							☐ ML ☐ MDL
Chrysene							☐ ML ☐ MDL
di-n-butyl phthalate							☐ ML ☐ MDL
di-n-octyl phthalate							☐ ML ☐ MDL
Dibenzo(a,h)anthracene							☐ ML ☐ MDL
1,2-dichlorobenzene							☐ ML ☐ MDL
1,3-dichlorobenzene							☐ ML ☐ MDL
1,4-dichlorobenzene							☐ ML ☐ MDL
3,3-dichlorobenzidine							☐ ML ☐ MDL
Diethyl phthalate							☐ ML ☐ MDL
Dimethyl phthalate							☐ ML ☐ MDL
2,4-dinitrotoluene							☐ ML ☐ MDL
2,6-dinitrotoluene							☐ ML ☐ MDL

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number

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TABLE C. EFFLUENT PARAMETERS FOR SELECTED POTWS

Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method[1]	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
1,2-diphenylhydrazine							☐ ML ☐ MDL
Fluoranthene							☐ ML ☐ MDL
Fluorene							☐ ML ☐ MDL
Hexachlorobenzene							☐ ML ☐ MDL
Hexachlorobutadiene							☐ ML ☐ MDL
Hexachlorocyclo-pentadiene							☐ ML ☐ MDL
Hexachloroethane							☐ ML ☐ MDL
Indeno(1,2,3-cd)pyrene							☐ ML ☐ MDL
Isophorone							☐ ML ☐ MDL
Naphthalene							☐ ML ☐ MDL
Nitrobenzene							☐ ML ☐ MDL
N-nitrosodi-n-propylamine							☐ ML ☐ MDL
N-nitrosodimethylamine							☐ ML ☐ MDL
N-nitrosodiphenylamine							☐ ML ☐ MDL
Phenanthrene							☐ ML ☐ MDL
Pyrene							☐ ML ☐ MDL
1,2,4-trichlorobenzene							☐ ML ☐ MDL

[1] Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR Chapter I, Subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number

Form Approved 03/05/19
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TABLE D. ADDITIONAL POLLUTANTS AS REQUIRED BY NPDES PERMITTING AUTHORITY

Pollutant (list)	Maximum Daily Discharge		Average Daily Discharge			Analytical Method[1]	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
☐ No additional sampling is required by NPDES permitting authority.							
							☐ ML ☐ MDL
							☐ ML ☐ MDL
							☐ ML ☐ MDL
							☐ ML ☐ MDL
							☐ ML ☐ MDL
							☐ ML ☐ MDL
							☐ ML ☐ MDL
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							☐ ML ☐ MDL
							☐ ML ☐ MDL
							☐ ML ☐ MDL
							☐ ML ☐ MDL
							☐ ML ☐ MDL

[1] Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR chapter I, subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number

Form Approved 03/05/19
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TABLE E. EFFLUENT MONITORING FOR WHOLE EFFLUENT TOXICITY

The table provides response space for one whole effluent toxicity sample. Copy the table to report additional test results.

	Test Number ____	Test Number ____	Test Number ____
Test Information			
Test species			
Age at initiation of test			
Outfall number			
Date sample collected			
Date test started			
Duration			
Toxicity Test Methods			
Test method number			
Manual title			
Edition number and year of publication			
Page number(s)			
Sample Type			
Check one:	☐ Grab ☐ 24-hour composite	☐ Grab ☐ 24-hour composite	☐ Grab ☐ 24-hour composite
Sample Location			
Check one:	☐ Before Disinfection ☐ After Disinfection ☐ After Dechlorination	☐ Before Disinfection ☐ After Disinfection ☐ After Dechlorination	☐ Before disinfection ☐ After disinfection ☐ After dechlorination
Point in Treatment Process			
Describe the point in the treatment process at which the sample was collected for each test.			
Toxicity Type			
Indicate for each test whether the test was performed to asses acute or chronic toxicity, or both. (Check one response.)	☐ Acute ☐ Chronic ☐ Both	☐ Acute ☐ Chronic ☐ Both	☐ Acute ☐ Chronic ☐ Both

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number

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TABLE E. EFFLUENT MONITORING FOR WHOLE EFFLUENT TOXICITY

The table provides response space for one whole effluent toxicity sample. Copy the table to report additional test results.

	Test Number ____		Test Number ____		Test Number ____	
Test Type						
Indicate the type of test performed. (Check one response.)	☐ Static ☐ Static-renewal ☐ Flow-through		☐ Static ☐ Static-renewal ☐ Flow-through		☐ Static ☐ Static-renewal ☐ Flow-through	
Source of Dilution Water						
Indicate the source of dilution water. (Check one response.)	☐ Laboratory water ☐ Receiving water		☐ Laboratory water ☐ Receiving water		☐ Laboratory water ☐ Receiving water	
If laboratory water, specify type.						
If receiving water, specify source.						
Type of Dilution Water						
Indicate the type of dilution water. If salt water, specify "natural" or type of artificial sea salts or brine used.	☐ Fresh water ☐ Salt water (specify)		☐ Fresh water ☐ Salt water (specify)		☐ Fresh water ☐ Salt water (specify)	
Percentage Effluent Used						
Specify the percentage effluent used for all concentrations in the test series.						
Parameters Tested						
Check the parameters tested.	☐ pH ☐ Salinity ☐ Temperature	☐ Ammonia ☐ Dissolved oxygen	☐ pH ☐ Salinity ☐ Temperature	☐ Ammonia ☐ Dissolved oxygen	☐ pH ☐ Salinity ☐ Temperature	☐ Ammonia ☐ Dissolved oxygen
Acute Test Results						
Percent survival in 100% effluent		%		%		%
LC_{50}						
95% confidence interval		%		%		%
Control percent survival		%		%		%

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number

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TABLE E. EFFLUENT MONITORING FOR WHOLE EFFLUENT TOXICITY

The table provides response space for one whole effluent toxicity sample. Copy the table to report additional test results.

	Test Number ____		Test Number ____		Test Number ____	
Acute Test Results Continued						
Other (describe)						
Chronic Test Results						
NOEC	%		%		%	
IC_{25}	%		%		%	
Control percent survival	%		%		%	
Other (describe)						
Quality Control/Quality Assurance						
Is reference toxicant data available?	☐ Yes	☐ No	☐ Yes	☐ No	☐ Yes	☐ No
Was reference toxicant test within acceptable bounds?	☐ Yes	☐ No	☐ Yes	☐ No	☐ Yes	☐ No
What date was reference toxicant test run (MM/DD/YYYY)?						
Other (describe)						

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EPA Identification Number	NPDES Permit Number	Facility Name

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OMB No. 2040-0004

TABLE F. INDUSTRIAL DISCHARGE INFORMATION

Response space is provided for three SIUs. Copy the table to report information for additional SIUs.

	SIU ____	SIU ____	SIU ____
Name of SIU			
Mailing address (street or P.O. box)			
City, state, and ZIP code			
Description of all industrial processes that affect or contribute to the discharge.			
List the principal products and raw materials that affect or contribute to the SIU's discharge.			
Indicate the average daily volume of wastewater discharged by the SIU.	gpd	gpd	gpd
How much of the average daily volume is attributable to process flow?	gpd	gpd	gpd
How much of the average daily volume is attributable to non-process flow?	gpd	gpd	gpd
Is the SIU subject to local limits?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Is the SIU subject to categorical standards?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No

EPA Identification Number	NPDES Permit Number	Facility Name

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TABLE F. INDUSTRIAL DISCHARGE INFORMATION

Response space is provided for three SIUs. Copy the table to report information for additional SIUs.

	SIU ____	SIU ____	SIU ____
Under what categories and subcategories is the SIU subject?			
Has the POTW experienced problems (e.g., upsets, pass-through interferences) in the past 4.5 years that are attributable to the SIU?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
If yes, describe.			

Click to go back to the beginning of Form

EPA Identification Number	NPDES Permit Number	Facility Name	OMB No. 2040-0004 Expires 07/31/2026

Form 2S NPDES | EPA

U.S Environmental Protection Agency
Application for NPDES Permit for Sewage Sludge Management
NEW AND EXISTING TREATMENT WORKS TREATING DOMESTIC SEWAGE

PRELIMINARY INFORMATION

Does your facility currently have an effective NPDES permit or have you been directed by your NPDES permitting authority to submit a full Form 2S permit application?

☐ Yes ➔ Complete Part 2 of application package (begins p. 7). ☑ No ➔ Complete Part 1 of application package (below).

Part 1 — LIMITED BACKGROUND INFORMATION (40 CFR 122.21(c)(2)(ii))

Complete this part only if you are a "sludge-only" facility (i.e., a facility that does not currently have, and is not applying for, an NPDES permit for a direct discharge to a surface body of water).

PART 1, SECTION 1. FACILITY INFORMATION (40 CFR 122.21(C)(2)(II)(A))

Facility Information

1.1

Facility name: Mia Rayne Subdivision WWTP			
Mailing address (street or P.O. box): 201 W. 2nd Avenue, Suite 201			
City or town: Coal Valley		State: IL	ZIP code: 61240
Contact name (first and last): Michael Shamsie	Title: Owner	Phone number: (309) 269-6355	Email address: mike.shamsie@landgroup.bi
Location address (street, route number, or other specific identifier): 0 Wall Triana Hwy			☐ Same as mailing address
City or town: Toney		State: AL	ZIP code: 35773

1.2 **Ownership Status**

☐ Public—federal ☐ Public—state ☐ Other public (specify)_____

☑ Private ☐ Other (specify) _____

PART 1, SECTION 2. APPLICANT INFORMATION (40 CFR 122.21(C)(2)(II)(B))

Applicant Information

2.1 **Is applicant different from entity listed under Item 1.1 above?**

☑ Yes ☐ No ➔ SKIP to Item 2.3 (Part 1, Section 2).

2.2

Applicant name: Land Venues, Inc			
Applicant address (street or P.O. box): 201 W. 2nd Avenue, Suite 201			
City or town: Coal Valley		State: IL	ZIP code: 61240
Contact name (first and last): Michael Shamsie	Title: Owner	Phone number: (309) 269-6350	Email address: mike.shamsie@landgroup.b

2.3 Is the applicant the facility's owner, operator, or both? (Check only one response.)

☐ Owner ☐ Operator ☑ Both

2.4 To which entity should the NPDES permitting authority send correspondence? (Check only one response.)

☐ Facility ☐ Applicant ☑ Facility and applicant (they are one and the same)

PART 1, SECTION 3. SEWAGE SLUDGE AMOUNT (40 CFR 122.21(C)(2)(II)(D))

Sewage Sludge Amount

3.1 Provide the total dry metric tons per the latest 365-day period of sewage sludge generated, treated, used, and disposed of:

Practice	Dry Metric Tons per 365-Day Period
Amount generated at the facility	0
Amount treated at the facility	0
Amount used (i.e., received from offsite) at the facility	0
Amount disposed of at the facility	0

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APR 11 2025
MUNICIPAL SECTION

EPA Identification Number	NPDES Permit Number	Facility Name	OMB No. 2040-0004 Expires 07/31/2026

PART 1, SECTION 4. POLLUTANT CONCENTRATIONS (40 CFR 122.21(C)(2)(II)(E))

Pollutant Concentrations

4.1 Using the table below or a separate attachment, provide existing sewage sludge monitoring data for the pollutants for which limits in sewage sludge have been established in 40 CFR 503 for your facility's expected use or disposal practices. If available, base data on three or more samples taken at least one month apart and no more than 4.5 years old.

☐ Check here if you have provided a separate attachment with this information.

Pollutant	Concentration (mg/kg dry weight)	Analytical Method	Detection Level for Analysis
Arsenic			
Cadmium			
Chromium			
Copper			
Lead			
Mercury			
Molybdenum			
Nickel			
Selenium			
Zinc			
Other (specify) _____			
Other (specify) _____			
Other (specify) _____			
Other (specify) _____			
Other (specify) _____			
Other (specify) _____			
Other (specify) _____			
Other (specify) _____			
Other (specify) _____			

EPA Identification Number	NPDES Permit Number	Facility Name	OMB No. 2040-0004 Expires 07/31/2026

PART 1, SECTION 5. TREATMENT PROVIDED AT YOUR FACILITY (40 CFR 122.21(C)(2)(II)(C))

Treatment Provided at Your Facility

5.1 For each sewage sludge use or disposal practice, indicate the amount of sewage sludge used or disposed of, the applicable pathogen class and reduction alternative, and the applicable vector attraction reduction option. Attach additional pages, as necessary.

Use or Disposal Practice (check one)	Amount (dry metric tons)	Pathogen Class and Reduction Alternative	Vector Attraction Reduction Option
☐ Land application of bulk sewage ☐ Land application of biosolids (bulk) ☐ Land application of biosolids (bags) ☑ Disposal in a landfill ☐ Surface disposal ☐ Incineration		☑ Not applicable ☐ Class A, Alternative 1 ☐ Class A, Alternative 2 ☐ Class A, Alternative 3 ☐ Class A, Alternative 4 ☐ Class A, Alternative 5 ☐ Class A, Alternative 6 ☐ Class B, Alternative 1 ☐ Class B, Alternative 2 ☐ Class B, Alternative 3 ☐ Class B, Alternative 4 ☐ Domestic septage, pH adjustment	☑ Not applicable ☐ Option 1 ☐ Option 2 ☐ Option 3 ☐ Option 4 ☐ Option 5 ☐ Option 6 ☐ Option 7 ☐ Option 8 ☐ Option 9 ☐ Option 10 ☐ Option 11

5.2 For each of the use and disposal practices specified in Item 5.1, identify the treatment process(es) used at your facility to reduce pathogens in sewage sludge or reduce the vector attraction properties of sewage sludge. (Check all that apply.)

- ☐ Preliminary operations (e.g., sludge grinding and degritting)
- ☐ Stabilization
- ☐ Composting
- ☐ Disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization)
- ☐ Heat drying
- ☐ Methane or biogas capture and recovery
- ☐ Thickening (concentration)
- ☑ Anaerobic digestion
- ☐ Conditioning
- ☑ Dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons)
- ☐ Thermal reduction
- ☑ Other (specify) _____

PART 1, SECTION 6. SEWAGE SLUDGE SENT TO OTHER FACILITIES (40 CFR 122.21(C)(2)(II)(C))

Sewage Sludge Sent to Other Facilities

6.1 Does the sewage sludge from your facility meet the ceiling concentrations in Table 1 of 40 CFR 503.13, the pollutant concentrations in Table 3 of 40 CFR 503.13, Class A pathogen reduction requirements at 40 CFR 503.32(a), *and* one of the vector attraction reduction requirements at 40 CFR 503.33(b)(1)–(8)?

☑ Yes ➔ SKIP to Part 1, Section 8 (Certification). ☐ No

6.2 Is sewage sludge from your facility provided to another facility for treatment, distribution, use, or disposal?

☐ Yes ☐ No ➔ SKIP to Part 1, Section 7.

6.3

Receiving facility name			
Mailing address (street or P.O. box)			
City or town		State	ZIP code
Contact name (first and last)	Title	Phone number	Email address

6.4 Which activities does the receiving facility provide? (Check all that apply.)

- ☐ Treatment or blending
- ☐ Land application
- ☐ Incineration
- ☐ Composting
- ☐ Sale or give-away in bag or other container
- ☐ Surface disposal
- ☐ Other (describe)

EPA Identification Number	NPDES Permit Number	Facility Name	OMB No. 2040-0004 Expires 07/31/2026

PART 1, SECTION 7. USE AND DISPOSAL SITES (40 CFR 122.21(C)(2)(II)(C))

Use and Disposal Sites

Provide the following information for each site on which sewage sludge from this facility is used or disposed of.

☐ Check here if you have provided separate attachments with this information.

7.1

Site name or number			
Mailing address (street or P.O. box)			
City or town		State	ZIP code
Contact name (first and last)	Title	Phone number	Email address
Location address (street, route number, or other specific identifier)			☐ Same as mailing address
City or town		State	ZIP code
County		County code	☐ Not available

7.2 Site type (check all that apply)

☐ Agricultural	☐ Lawn or home garden	☐ Forest
☐ Surface disposal	☐ Public contact	☐ Incineration
☐ Reclamation	☐ Municipal solid waste landfill	☐ Other (describe)

PART 1, SECTION 8. CHECKLIST AND CERTIFICATION STATEMENT (40 CFR 122.22(A) AND (D))

Checklist and Certification Statement

8.1 In Column 1 below, mark the sections of Form 2S, Part 1, that you have completed and are submitting with your application. For each section, specify in Column 2 any attachments that you are enclosing to alert the permitting authority. Note that not all applicants are required to provide attachments.

Column 1	Column 2
☑ Section 1: Facility Information	☐ w/ attachments
☑ Section 2: Applicant Information	☐ w/ attachments
☑ Section 3: Sewage Sludge Amount	☐ w/ attachments
☐ Section 4: Pollutant Concentrations	☐ w/ attachments
☑ Section 5: Treatment Provided at Your Facility	☐ w/ attachments
☑ Section 6: Sewage Sludge Sent to Other Facilities	☐ w/ attachments
☐ Section 7: Use and Disposal Sites	☐ w/ attachments
☑ Section 8: Checklist and Certification Statement	

EPA Identification Number	NPDES Permit Number	Facility Name	OMB No. 2040-0004 Expires 07/31/2026

Checklist and Certification Statement Continued

8.2 Provide the following certification. (See instructions to determine the appropriate person to submit the application.)

Certification Statement

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name (print or type first and last name)	Official title	Phone number
Michael Shamsie	Owner	(309) 269-6350

Signature	Date signed
Michael Shamsie	04/05/2025

PART 1 APPLICANTS STOP HERE.

Submit completed application package to your NPDES permitting authority.

This page intentionally left blank.

EPA Identification Number	NPDES Permit Number	Facility Name	OMB No. 2040-0004 Expires 07/31/2026

PART 2 — **PERMIT APPLICATION INFORMATION (40 CFR 122.21(q))**

Complete this part if you have an effective NPDES permit or have been directed by the NPDES permitting authority to submit a full permit application. In other words, complete this part if your facility has, or is applying for, an NPDES permit.
Part 2 is divided into five sections. Section 1 pertains to all applicants. The applicability of Sections 2 to 5 depends on your facility's sewage sludge use or disposal practices. See the instructions to determine which sections you are required to complete.

PART 2, SECTION 1. GENERAL INFORMATION (40 CFR 122.21(Q)(1–7) AND (Q)(13))

All Part 2 applicants must complete this section.

General Information

Facility Information

1.1 Facility name
Mia Rayne Subdivision WWTP

Mailing address (street or P.O. box)
201 W 2nd Avenue, Suite 201

City or town	State	ZIP code	Phone number
Coal Valley	Illinois	61240	(309) 269-6350

Contact name (first and last)	Title	Email address
Michael Shamsie, PE	Owner	mike.shamsie@landgroup.biz

Location address (street, route number, or other specific identifier) ☐ Same as mailing address
0 Wall Triana

City or town	State	ZIP code
Toney	AL	

1.2 Is this facility a Class I sludge management facility?
☐ Yes ☒ No

1.3 **Facility Design Flow Rate** [redacted] 0.075 million gallons per day (mgd)

1.4 **Total Population Served** 580

1.5 **Ownership Status**
☐ Public—federal ☐ Public—state ☐ Other public (specify) _____
☒ Private ☐ Other (specify) _____

Applicant Information

1.6 Is applicant different from entity listed under Item 1.1 above?
☑ Yes ☐ No → SKIP to Item 1.8 (Part 2, Section 1).

1.7 Applicant name
Land Venues, Inc

Applicant mailing address (street or P.O. box)
201 W 2nd Avenue, Suite 201

City or town	State	ZIP code
Coal Valley	Illinois	61240

Contact name (first and last)	Title	Phone number	Email address
Michael Shamsie	Owner	309.269.6350	mike.shamsie@landgroup.biz

1.8 Is the applicant the facility's owner, operator, or both? (Check only one response.)
☐ Operator ☐ Owner ☑ Both

1.9 To which entity should the NPDES permitting authority send correspondence? (Check only one response.)
☐ Facility ☑ Applicant ☐ Facility and applicant (they are one and the same)

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JUN 04 2025
MUNICIPAL SECTION

General Information Continued

Permit Information

1.10 Facility's NPDES permit number

☐ Check here if you do not have an NPDES permit but are otherwise required to submit Part 2 of Form 2S.

NPDES Permit Number

1.11 Indicate all other federal, state, and local permits or construction approvals received or applied for that regulate this facility's sewage sludge management practices below.

☐ Check here if you have provided a separate attachment with this information.

Existing Environment Permits (check all that apply and print or type the corresponding permit number for each)

☐ RCRA (hazardous wastes) _____	☐ Nonattainment program (CAA) _____	☐ NESHAPs (CAA) _____
☐ PSD (air emissions) _____	☐ Dredge or fill (CWA Section 404) _____	☐ Other (specify) _____
☐ Ocean dumping (MPRSA) _____	☐ UIC (underground injection of fluids) _____	_____

Indian Country

1.12 Does any generation, treatment, storage, application to land, or disposal of sewage sludge from this facility occur in Indian Country?

☐ Yes ☑ No ➔ SKIP to Item 1.14 (Part 2, Section 1) below.

1.13 Provide a description of the generation, treatment, storage, land application, or disposal of sewage sludge that occurs.

Topographic Map

1.14 Have you attached a topographic map containing all required information to this application? (See instructions for specific requirements.)

☑ Yes

Line Drawing

1.15 Have you attached a line drawing and/or a narrative description that identifies all sewage sludge practices that will be employed during the term of the permit containing all the required information to this application? (See instructions for specific requirements.)

☑ Yes

Contractor Information

1.16 Do contractors have any operational or maintenance responsibilities related to sewage sludge generation, treatment, use, or disposal at the facility?

☐ Yes ☑ No ➔ SKIP to Item 1.18 (Part 2, Section 1) below.

1.17 Provide the following information for each contractor.

☐ Check here if you have attached additional sheets to the application package.

	Contractor 1	Contractor 2	Contractor 3
Contractor company name			
Mailing address (street or P.O. box)			
City, state, and ZIP code			
Contact name (first and last)			
Telephone number			
Email address			

General Information Continued

1.17 cont.		Contractor 1	Contractor 2	Contractor 3
	Responsibilities of contractor			

Pollutant Concentrations

Using the table below or a separate attachment, provide sewage sludge monitoring data for the pollutants for which limits in sewage sludge have been established in 40 CFR 503 for this facility's expected use or disposal practices. All data must be based on three or more samples taken at least one month apart and must be no more than 4.5 years old.

☐ Check here if you have attached additional sheets to the application package.

1.18

Pollutant	Average Monthly Concentration (mg/kg dry weight)	Analytical Method	Detection Level
Arsenic			
Cadmium			
Chromium			
Copper			
Lead			
Mercury			
Molybdenum			
Nickel			
Selenium			
Zinc			

Checklist and Certification Statement

1.19 In Column 1 below, mark the sections of Form 2S, Part 2, that you have completed and are submitting with your application. For each section, specify in Column 2 any attachments that you are enclosing. Note that not all applicants are required to complete all sections or provide attachments. See Exhibit 2S–2 in the Instructions.

Column 1	Column 2
☑ Section 1 (General Information)	☑ w/ attachments
☑ Section 2 (Generation of Sewage Sludge or Preparation of a Material Derived from Sewage Sludge)	☐ w/ attachments
☐ Section 3 (Land Application of Bulk Sewage Sludge)	☐ w/ attachments
☐ Section 4 (Surface Disposal)	☐ w/ attachments
☐ Section 5 (Incineration)	☐ w/ attachments

1.20 Provide the following certification. (See instructions to determine the appropriate person to sign the application.)

Certification Statement

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name (print or type first and last name)	Official title
Michael Shamsie	Owner
Signature *Michael Shamsie*	Date signed April 11th 2025
Telephone number	[redacted]

Upon the request of the NPDES permitting authority, you must submit any other information the authority deems necessary to assess sewage sludge use or disposal practices at your facility and identify appropriate permitting requirements.

EPA Identification Number	NPDES Permit Number	Facility Name	OMB No 2040-0004 Expires 07/31/2026

PART 2, SECTION 2. GENERATION OF SEWAGE SLUDGE OR PREPARATION OF A MATERIAL DERIVED FROM SEWAGE SLUDGE (40 CFR 122.21(Q)(8) THROUGH (12))

Generation of Sewage Sludge or Preparation of a Material Derived from Sewage Sludge

2.1 Does your facility generate sewage sludge or derive a material from sewage sludge?

☑ Yes ☐ No ➔ SKIP to Part 2, Section 3

Amount Generated Onsite

2.2 Total dry metric tons per 365-day period generated at your facility. Estimated @ 2 TONS

Amount Received from Offsite Facility

2.3 Does your facility receive sewage sludge from another facility for treatment use or disposal?

☐ Yes ☑ No ➔ SKIP to Item 2.8 (Part 2, Section 2) below.

2.4 Indicate the total number of facilities from which you receive sewage sludge for treatment, use, or disposal:

Provide the following information for each of the facilities from which you receive sewage sludge.

☐ Check here if you have attached additional sheets to the application package.

2.5

Name of facility			
Mailing address (street or P.O. box)			
City or town		State	ZIP code
Contact name (first and last)	Title	Phone number	Email address
Location address (street, route number, or other specific identifier)			☐ Same as mailing address
City or town		State	ZIP code
County		County code	☐ Not available

2.6 Indicate the amount of sewage sludge received, the applicable pathogen class and reduction alternative, and the applicable vector reduction option provided at the offsite facility.

Amount (dry metric tons)		Vector Attraction Reduction Option
	☐ Not applicable ☐ Class A, Alternative 1 ☐ Class A, Alternative 2 ☐ Class A, Alternative 3 ☐ Class A, Alternative 4 ☐ Class A, Alternative 5 ☐ Class A, Alternative 6 ☐ Class B, Alternative 1 ☐ Class B, Alternative 2 ☐ Class B, Alternative 3 ☐ Class B, Alternative 4 ☐ Domestic septage, pH adjustment	☐ Not applicable ☐ Option 1 ☐ Option 2 ☐ Option 3 ☐ Option 4 ☐ Option 5 ☐ Option 6 ☐ Option 7 ☐ Option 8 ☐ Option 9 ☐ Option 10 ☐ Option 11

2.7 Identify the treatment process(es) that are known to occur at the offsite facility, including blending activities and treatment to reduce pathogens or vector attraction properties. (Check all that apply.)

☐ Preliminary operations (e.g., sludge grinding and degritting)
☐ Thickening (concentration)
☐ Stabilization
☐ Anaerobic digestion
☐ Composting
☐ Conditioning
☐ Disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization)
☐ Dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons)
☐ Heat drying
☐ Thermal reduction
☐ Methane or biogas capture and recovery
☐ Other (specify) _____

Generation of Sewage Sludge or Preparation of a Material Derived from Sewage Sludge Continued

2.8 For each sewage sludge use or disposal practice, indicate the applicable pathogen class and reduction alternative and the applicable vector attraction reduction option provided at your facility. Attach additional pages, as necessary.

Use or Disposal Practice (check one)	Pathogen Class and Reduction Alternative	Vector Attraction Reduction Option
☐ Land application of bulk sewage ☐ Land application of biosolids (bulk) ☐ Land application of biosolids (bags) ☑ Disposal in a landfill ☐ Surface disposal ☐ Incineration	☑ Not applicable ☐ Class A, Alternative 1 ☐ Class A, Alternative 2 ☐ Class A, Alternative 3 ☐ Class A, Alternative 4 ☐ Class A, Alternative 5 ☐ Class A, Alternative 6 ☐ Class B, Alternative 1 ☐ Class B, Alternative 2 ☐ Class B, Alternative 3 ☐ Class B, Alternative 4 ☐ Domestic septage, pH adjustment	☑ Not applicable ☐ Option 1 ☐ Option 2 ☐ Option 3 ☐ Option 4 ☐ Option 5 ☐ Option 6 ☐ Option 7 ☐ Option 8 ☐ Option 9 ☐ Option 10 ☐ Option 11

2.9 Identify the treatment process(es) used at your facility to reduce pathogens in sewage sludge or reduce the vector attraction properties of sewage sludge? (Check all that apply.)

- ☐ Preliminary operations (e.g., sludge grinding and degritting)
- ☐ Thickening (concentration)
- ☐ Stabilization
- ☑ Anaerobic digestion
- ☐ Composting
- ☐ Conditioning
- ☑ Disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization)
- ☑ Dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons)
- ☐ Heat drying
- ☐ Thermal reduction
- ☐ Methane or biogas capture and recovery

2.10 Describe any other sewage sludge treatment or blending activities not identified in Items 2.8 and 2.9 (Part 2, Section 2) above.

☐ Check here if you have attached the description to the application package.

Preparation of Sewage Sludge Meeting Ceiling and Pollutant Concentrations, Class A Pathogen Requirements, and One of Vector Attraction Reduction Options 1 to 8

2.11 Does the sewage sludge from your facility meet the ceiling concentrations in Table 1 of 40 CFR 503.13, the pollutant concentrations in Table 3 of 40 CFR 503.13, Class A pathogen reduction requirements at 40 CFR 503.32(a), and one of the vector attraction reduction requirements at 40 CFR 503.33(b)(1)–(8) and is it land applied?

☐ Yes ☒ No ➔ SKIP to Item 2.14 (Part 2, Section 2) below.

2.12 Total dry metric tons per 365-day period of sewage sludge subject to this subsection that is applied to the land: Estimated 2 tons

2.13 Is sewage sludge subject to this subsection placed in bags or other containers for sale or give-away for application to the land?

☐ Yes ☑ No

☑ Check here once you have completed Items 2.11 to 2.13, then ➔ SKIP to Item 2.32 (Part 2, Section 2) below.

EPA Identification Number	NPDES Permit Number	Facility Name	OMB No. 2040-0004 Expires 07/31/2026

Generation of Sewage Sludge or Preparation of a Material Derived from Sewage Sludge Continued

Sale or Give-Away in a Bag or Other Container for Application to the Land

2.14 Do you place sewage sludge in a bag or other container for sale or give-away for land application?

☐ Yes ☑ No ➔ SKIP to Item 2.17 (Part 2, Section 2) below.

2.15 Total dry metric tons per 365-day period of sewage sludge placed in a bag or other container at your facility for sale or give-away for application to the land: 0

2.16 Attach a copy of all labels or notices that accompany the sewage sludge being sold or given away in a bag or other container for application to the land.

☐ Check here to indicate that you have attached all labels or notices to this application package.

☐ Check here once you have completed Items 2.14 to 2.16, then ➔ SKIP to Part 2, Section 2, Item 2.32.

Shipment Offsite for Treatment or Blending

2.17 Does another facility provide treatment or blending of your facility's sewage sludge? (This question does not pertain to dewatered sludge sent directly to a land application or surface disposal site.)

☐ Yes ☑ No ➔ SKIP to Item 2.27 (Part 2, Section 2) below.

2.18 Indicate the total number of facilities that provide treatment or blending of your facility's sewage sludge. Provide the information in Items 2.19 to 2.26 (Part 2, Section 2) below for each facility.

☐ Check here if you have attached additional sheets to the application package.

2.19 Name of receiving facility

Mailing address (street or P.O. box)

City or town		State	ZIP code
Contact name (first and last)	Title	Phone number	Email address

Location address (street, route number, or other specific identifier) ☐ Same as mailing address

City or town	State	ZIP code

2.20 Total dry metric tons per 365-day period of sewage sludge provided to receiving facility:

2.21 Does the receiving facility provide additional treatment to reduce pathogens in sewage sludge from your facility or reduce the vector attraction properties of sewage sludge from your facility?

☐ Yes ☐ No ➔ SKIP to Item 2.24 (Part 2, Section 2) below.

2.22 Indicate the pathogen class and reduction alternative and the vector attraction reduction option met for the sewage sludge at the receiving facility.

Pathogen Class and Reduction Alternative	Vector Attraction Reduction Option
☐ Not applicable	☐ Not applicable
☐ Class A, Alternative 1	☐ Option 1
☐ Class A, Alternative 2	☐ Option 2
☐ Class A, Alternative 3	☐ Option 3
☐ Class A, Alternative 4	☐ Option 4
☐ Class A, Alternative 5	☐ Option 5
☐ Class A, Alternative 6	☐ Option 6
☐ Class B, Alternative 1	☐ Option 7
☐ Class B, Alternative 2	☐ Option 8
☐ Class B, Alternative 3	☐ Option 9
☐ Class B, Alternative 4	☐ Option 10
☐ Domestic septage, pH adjustment	☐ Option 11

Generation of Sewage Sludge or Preparation of a Material Derived from Sewage Sludge Continued

2.23 Which treatment process(es) are used at the receiving facility to reduce pathogens in sewage sludge or reduce the vector attraction properties of sewage sludge from your facility? (Check all that apply.)

- ☐ Preliminary operations (e.g., sludge grinding and degritting)
- ☐ Thickening (concentration)
- ☐ Stabilization
- ☐ Anaerobic digestion
- ☐ Composting
- ☐ Conditioning
- ☐ Disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization)
- ☐ Dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons)
- ☐ Heat drying
- ☐ Thermal reduction
- ☐ Methane or biogas capture and recovery
- ☐ Other (specify) _____

2.24 Attach a copy of any information you provide the receiving facility to comply with the "notice and necessary information" requirement of 40 CFR 503.12(g).

☐ Check here to indicate that you have attached material.

2.25 Does the receiving facility place sewage sludge from your facility in a bag or other container for sale or give-away for application to the land?

☐ Yes ☐ No ➔ SKIP to Item 2.32 (Part 2, Section 2) below.

2.26 Attach a copy of all labels or notices that accompany the product being sold or given away.

☐ Check here to indicate that you have attached material.

☐ Check here once you have completed Items 2.17 to 2.26 (Part 2, Section 2), then ➔ SKIP to Item 2.32 (Part 2, Section 2) below.

Land Application of Bulk Sewage Sludge

2.27 Is sewage sludge from your facility applied to the land?

☐ Yes ☑ No ➔ SKIP to Item 2.32 (Part 2, Section 2) below.

2.28 Total dry metric tons per 365-day period of sewage sludge applied to all land application sites: _____

2.29 Did you identify all land application sites in Part 2, Section 3 of this application?

☐ Yes ☐ No ➔ Submit a copy of the land application plan with your application.

2.30 Are any land application sites located in states other than the state where you generate sewage sludge or derive a material from sewage sludge?

☐ Yes ☐ No ➔ SKIP to Item 2.32 (Part 2, Section 2) below.

2.31 Describe how you notify the NPDES permitting authority for the states where the land application sites are located. Attach a copy of the notification.

☐ Check here if you have attached the explanation to the application package.

☐ Check here if you have attached the notification to the application package.

Surface Disposal

2.32 Is sewage sludge from your facility placed on a surface disposal site?

☐ Yes ☑ No ➔ SKIP to Item 2.39 (Part 2, Section 2) below.

2.33 Total dry metric tons of sewage sludge from your facility placed on all surface disposal sites per 365-day period: _____

2.34 Do you own or operate all surface disposal sites to which you send sewage sludge for disposal?

☐ Yes ➔ SKIP to Item 2.39 (Part 2, Section 2) below. ☐ No

2.35 Indicate the total number of surface disposal sites to which you send your sewage sludge. _____

(Provide the information in Items 2.36 to 2.38 of Part 2, Section 2, for each facility.)

☐ Check here if you have attached additional sheets to the application package.

Generation of Sewage Sludge or Preparation of a Material Derived from Sewage Sludge Continued

2.36	Site name or number of surface disposal site you do not own or operate			
	Mailing address (street or P.O. box)			
	City or town		State	ZIP code
	Contact name (first and last)	Title	Phone number	Email address
2.37	Site contact (check all that apply) ☐ Owner ☐ Operator			
2.38	Total dry metric tons of sewage sludge from your facility placed on this surface disposal site per 365-day period:			

Incineration

2.39	Is sewage sludge from your facility fired in a sewage sludge incinerator? ☐ Yes ☑ No ➔ SKIP to Item 2.46 (Part 2, Section 2) below.			
2.40	Total dry metric tons of sewage sludge from your facility fired in all sewage sludge incinerators per 365-day period:			
2.41	Do you own or operate all sewage sludge incinerators in which sewage sludge from your facility is fired? ☐ Yes ➔ SKIP to Item 2.46 (Part 2, Section 2) below. ☐ No			
2.42	Indicate the total number of sewage sludge incinerators that you use but do not own or operate. (Provide the information in Items 2.43 to 2.45 directly below for each facility.) ☐ Check here if you have attached additional sheets to the application package.			
2.43	Incinerator name or number			
	Mailing address (street or P.O. box)			
	City or town		State	ZIP code
	Contact name (first and last)	Title	Phone number	Email address
	Location address (street, route number, or other specific identifier) ☐ Same as mailing address			
	City or town		State	ZIP code
2.44	Contact (check all that apply) ☐ Incinerator owner ☐ Incinerator operator			
2.45	Total dry metric tons of sewage sludge from your facility fired in this sewage sludge incinerator per 365-day period:			

Disposal in a Municipal Solid Waste Landfill

2.46	Is sewage sludge from your facility placed on a municipal solid waste landfill? ☑ Yes ☐ No ➔ SKIP to Part 2, Section 3.			
2.47	Indicate the total number of municipal solid waste landfills used. (Provide the information in Items 2.48 to 2.52 directly below for each facility.) ☐ Check here if you have attached additional sheets to the application package.			1

Generation of Sewage Sludge or Preparation of a Material Derived

2.48	Name of landfill To be Determined			
	Mailing address (street or P.O. box)			
	City or town		State	ZIP code
	Contact name (first and last)	Title	Phone number	Email address

	Location address (street, route number, or other specific identifier) ☐ Same as mailing address		
	County	County code ☐ Not available	
	City or town	State	ZIP code
2.49	Total dry metric tons of sewage sludge from your facility placed in this municipal solid waste landfill per 365-day period:		
2.50	List the numbers of all other federal, state, and local permits that regulate the operation of this municipal solid waste landfill.		

Permit Number	Type of Permit

2.51	Attach information to determine whether the sewage sludge meets applicable requirements for disposal of sewage sludge in a municipal solid waste landfill (e.g., results of paint filter liquids test and TCLP test). ☐ Check here to indicate you have attached the requested information.
2.52	Does the municipal solid waste landfill comply with applicable criteria set forth in 40 CFR 258? ☑ Yes ☐ No

PART 2, SECTION 3 LAND APPLICATION OF BULK SEWAGE SLUDGE (40 CFR 122.21(Q)(9))

Land Application of Bulk Sewage Sludge

3.1 Does your facility apply sewage sludge to land?

☐ Yes ☑ No ➔ SKIP to Part 2, Section 4.

3.2 Do any of the following conditions apply?

- The sewage sludge meets the ceiling concentrations in Table 1 of 40 CFR 503.12, the pollutant concentrations in Table 3 of 40 CFR 503.13, Class A pathogen reduction requirements at 40 CFR 503.32(a), *and* one of the vector attraction reduction requirements at 40 CFR 503.33(b)(1)–(8);
- The sewage sludge is sold or given away in a bag or other container for application to the land; or
- You provide the sewage sludge to another facility for treatment or blending.

☐ Yes ➔ SKIP to Part 2, Section 4. ☐ No

3.3 Complete Section 3 for every site on which the sewage sludge is applied.

☐ Check here if you have attached sheets to the application package for one or more land application sites.

Identification of Land Application Site

3.4 Site name or number

Location address (street, route number, or other specific identifier) ☐ Same as mailing address

County	County code ☐ Not available

City or town	State	ZIP code

Latitude/Longitude of Land Application Site (see instructions)

Latitude	Longitude

Method of Determination

☐ USGS map ☐ Field survey ☐ Other (specify) _____

3.5 Provide a topographic map (or other appropriate map if a topographic map is unavailable) that shows the site location.

☐ Check here to indicate you have attached a topographic map for this site.

Owner Information

3.6 Are you the owner of this land application site?

☐ Yes ➔ SKIP to Item 3.8 (Part 2, Section 3) below. ☐ No

3.7 Owner name

Mailing address (street or P.O. box)

City or town	State	ZIP code

Contact name (first and last)	Title	Phone number	Email address

Applier Information

3.8 Are you the person who applies, or who is responsible for application of, sewage sludge to this land application site?

☐ Yes ➔ SKIP to Item 3.10 (Part 2, Section 3) below. ☐ No

3.9 Applier's name

Mailing address (street or P.O. box)

City or town	State	ZIP code

Contact name (first and last)	Title	Phone number	Email address

EPA Identification Number	NPDES Permit Number	Facility Name	OMB No. 2040-0004 Expires 07/31/2026

Land Application of Bulk Sewage Sludge Continued

Site Type

3.10 Type of land application:

☐ Agricultural land ☐ Forest

☐ Reclamation site ☐ Public contact site

☐ Other (describe)

Crop or Other Vegetation Grown Onsite

3.11 What type of crop or other vegetation is grown on this site?

3.12 What is the nitrogen requirement for this crop or vegetation?

Vector Attraction Reduction

3.13 Are the vector attraction reduction requirements at 40 CFR 503.33(b)(9) and (b)(10) met when sewage sludge is applied to the land application site?

☐ Yes ☐ No ➔ SKIP to Item 3.16 (Part 2, Section 3) below.

3.14 Indicate which vector attraction reduction option is met. (Check only one response.)

☐ Option 9 (injection below land surface) ☐ Option 10 (incorporation into soil within 6 hours)

3.15 Describe any treatment processes used at the land application site to reduce vector attraction properties of sewage sludge.

☐ Check here if you have attached your description to the application package.

Cumulative Loadings and Remaining Allotments

3.16 Is the sewage sludge applied to this site since July 20, 1993, subject to the cumulative pollutant loading rates (CPLRs) in 40 CFR 503.13(b)(2)?

☐ Yes ☐ No ➔ SKIP to Part 2, Section 4.

3.17 Have you contacted the NPDES permitting authority in the state where the bulk sewage sludge subject to CPLRs will be applied to ascertain whether bulk sewage sludge subject to CPLRs has been applied to this site on or since July 20, 1993?

☐ Yes ☐ No ➔ Sewage sludge subject to CPLRs may not be applied to this site. SKIP to Part 2, Section 4.

3.18 Provide the following information about your NPDES permitting authority:

NPDES permitting authority name	
Contact person	
Telephone number	
Email address	

3.19 Based on your inquiry, has bulk sewage sludge subject to CPLRs been applied to this site since July 20, 1993?

☐ Yes ☐ No ➔ SKIP to Part 2, Section 4.

3.20 Provide the following information for every facility other than yours that is sending, or has sent, bulk sewage sludge subject to CPLRs to this site since July 20, 1993. If more than one such facility sends sewage sludge to this site, attach additional pages as necessary.

☐ Check here to indicate that additional pages are attached.

Facility name			
Mailing address (street or P.O. box)			
City or town		State	ZIP code
Contact name (first and last)	Title	Phone number	Email address

EPA Identification Number	NPDES Permit Number	Facility Name	OMB No. 2040-0004 Expires 07/31/2026

PART 2, SECTION 4 SURFACE DISPOSAL (40 CFR 122.21(Q)(10))

Surface Disposal

4.1 Do you own or operate a surface disposal site?

☐ Yes ☑ No ➔ SKIP to Part 2, Section 5.

4.2 Complete all items in Section 4 for each active sewage sludge unit that you own or operate.

☐ Check here to indicate that you have attached material to the application package for one or more active sewage sludge units.

Information on Active Sewage Sludge Units

4.3 Unit name or number

Mailing address (street or P.O. box)

City or town		State	ZIP code
Contact name (first and last)	Title	Phone number	Email address

Location address (street, route number, or other specific identifier) ☐ Same as mailing address

County	County code ☐ Not available	
City or town	State	ZIP code

Latitude/Longitude of Active Sewage Sludge Unit (see instructions)

Latitude	Longitude

Method of Determination

☐ USGS map ☐ Field survey ☐ Other (specify) _____

4.4 Provide a topographic map (or other appropriate map if a topographic map is unavailable) that shows the site location.

☐ Check here to indicate that you have completed and attached a topographic map.

4.5	Total dry metric tons of sewage sludge placed on the active sewage sludge unit per 365-day period:	
4.6	Total dry metric tons of sewage sludge placed on the active sewage sludge unit over the life of the unit:	

4.7 Does the active sewage sludge unit have a liner with a maximum permeability of 1×10^{-7} centimeters per second (cm/sec)?

☐ Yes ☐ No ➔ SKIP to Item 4.9 (Part 2, Section 4) below.

4.8 Describe the liner.

☐ Check here to indicate that you have attached a description to the application package.

4.9 Does the active sewage sludge unit have a leachate collection system?

☐ Yes ☐ No ➔ SKIP to Item 4.11 (Part 2, Section 4) below.

4.10 Describe the leachate collection system and the method used for leachate disposal and provide the numbers of any federal, state, or local permit(s) for leachate disposal.

☐ Check here to indicate that you have attached the description to the application package.

EPA Identification Number	NPDES Permit Number	Facility Name	OMB No. 2040-0004 Expires 07/31/2026

Surface Disposal Continued

4.11	Is the boundary of the active sewage sludge unit less than 150 meters from the property line of the surface disposal site? ☐ Yes ☐ No ➔ SKIP to Item 4.13 (Part 2, Section 4) below.	
4.12	Provide the actual distance in meters:	meters
4.13	Remaining capacity of active sewage sludge unit in dry metric tons:	dry metric tons
4.14	Anticipated closure date for active sewage sludge unit, if known (MM/DD/YYYY):	
4.15	Attach a copy of any closure plan that has been developed for this active sewage sludge unit. ☐ Check here to indicate that you have attached a copy of the closure plan to the application package.	

Sewage Sludge from Other Facilities

4.16	Is sewage sludge sent to this active sewage sludge unit from any facilities other than your facility? ☐ Yes ☐ No ➔ SKIP to Item 4.21 (Part 2, Section 4) below.	
4.17	Indicate the total number of facilities (other than your facility) that send sewage sludge to this active sewage sludge unit. (Complete Items 4.18 to 4.20 directly below for each such facility.) ☐ Check here to indicate that you have attached responses for each facility to the application package.	

4.18 Facility name

Mailing address (street or P.O. box)

City or town		State	ZIP code
Contact name (first and last)	Title	Phone number	Email address

4.19 Indicate the pathogen class and reduction alternative and the vector attraction reduction option met for the sewage sludge before it leaves the other facility.

Pathogen Class and Reduction Alternative	Vector Attraction Reduction Option
☐ Not applicable	☐ Not applicable
☐ Class A, Alternative 1	☐ Option 1
☐ Class A, Alternative 2	☐ Option 2
☐ Class A, Alternative 3	☐ Option 3
☐ Class A, Alternative 4	☐ Option 4
☐ Class A, Alternative 5	☐ Option 5
☐ Class A, Alternative 6	☐ Option 6
☐ Class B, Alternative 1	☐ Option 7
☐ Class B, Alternative 2	☐ Option 8
☐ Class B, Alternative 3	☐ Option 9
☐ Class B, Alternative 4	☐ Option 10
☐ Domestic septage, pH adjustment	☐ Option 11

4.20 Which treatment process(es) are used at the other facility to reduce pathogens in sewage sludge or reduce the vector attraction properties of sewage sludge before it leaves that facility? (Check all that apply.)

☐ Preliminary operations (e.g., sludge grinding and degritting)	☐ Thickening (concentration)
☐ Stabilization	☐ Anaerobic digestion
☐ Composting	☐ Conditioning
☐ Disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization)	☐ Dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons)
☐ Heat drying	☐ Thermal reduction
☐ Methane or biogas capture and recovery	☐ Other (specify) _____

Surface Disposal Continued

Vector Attraction Reduction

4.21 Which vector attraction reduction option, if any, is met when sewage sludge is placed on this active sewage sludge unit?

- ☐ Option 9 (injection below and surface)
- ☐ Option 10 (incorporation into soil within 6 hours)
- ☐ Option 11 (covering active sewage sludge unit daily)
- ☐ None

4.22 Describe any treatment processes used at the active sewage sludge unit to reduce vector attraction properties of sewage sludge.

☐ Check here if you have attached your description to the application package.

Groundwater Monitoring

4.23 Is groundwater monitoring currently conducted at this active sewage sludge unit, or are groundwater monitoring data otherwise available for this active sewage sludge unit?

- ☐ Yes
- ☐ No ➔ SKIP to Item 4.26 (Part 2, Section 4) below.

4.24 Provide a copy of available groundwater monitoring data.

☐ Check here to indicate you have attached the monitoring data.

4.25 Describe the well locations, the approximate depth to groundwater, and the groundwater monitoring procedures used to obtain these data.

☐ Check here if you have attached your description to the application package.

4.26 Has a groundwater monitoring program been prepared for this active sewage sludge unit?

- ☐ Yes
- ☐ No ➔ SKIP to Item 4.28 (Part 2, Section 4) below.

4.27 Submit a copy of the groundwater monitoring program with this permit application.

☐ Check here to indicate you have attached the monitoring program.

4.28 Have you obtained a certification from a qualified groundwater scientist that the aquifer below the active sewage sludge unit has not been contaminated?

- ☐ Yes
- ☐ No ➔ SKIP to Item 4.30 (Part 2, Section 4) below.

4.29 Submit a copy of the certification with this permit application.

☐ Check here to indicate you have attached the certification to the application package.

Site-Specific Limits

4.30 Are you seeking site-specific pollutant limits for the sewage sludge placed on the active sewage sludge unit?

- ☐ Yes
- ☐ No ➔ SKIP to Part 2, Section 5.

4.31 Submit information to support the request for site-specific pollutant limits with this application.

☐ Check here to indicate you have attached the requested information.

EPA Identification Number	NPDES Permit Number	Facility Name	OMB No. 2040-0004 Expires 07/31/2026

PART 2, SECTION 5 INCINERATION (40 CFR 122.21(Q)(11))

Incineration

Incinerator Information

5.1 Do you fire sewage sludge in a sewage sludge incinerator?

☐ Yes ☑ No ➔ SKIP to END.

5.2 Indicate the total number of incinerators used at your facility. (Complete the remainder of Section 5 for each such incinerator.)

☐ Check here to indicate that you have attached information for one or more incinerators.

5.3 Incinerator name or number

Location address (street, route number, or other specific identifier)

County	County code ☐ Not available	
City or town	State	ZIP code

Latitude/Longitude of Incinerator (see instructions)

Latitude	Longitude

Method of Determination

☐ USGS map ☐ Field survey ☐ Other (specify) _____

Amount Fired

5.4 Dry metric tons per 365-day period of sewage sludge fired in the sewage sludge incinerator:

Beryllium NESHAP

5.5 Submit information, test data, and a description of measures taken that demonstrate whether the sewage sludge incinerated is beryllium-containing waste and will continue to remain as such.

☐ Check here to indicate that you have attached this material to the application package.

5.6 Is the sewage sludge fired in this incinerator "beryllium-containing waste" as defined at 40 CFR 61.31?

☐ Yes ☐ No ➔ SKIP to Item 5.8 (Part 2, Section 5) below.

5.7 Submit with this application a complete report of the latest beryllium emission rate testing *and* documentation of ongoing incinerator operating parameters indicating that the NESHAP emission rate limit for beryllium has been and will continue to be met.

☐ Check here to indicate that you have attached this information.

Mercury NESHAP

5.8 Is compliance with the mercury NESHAP being demonstrated via stack testing?

☐ Yes ☐ No ➔ SKIP to Item 5.11 (Part 2, Section 5) below.

5.9 Submit a complete report of stack testing and documentation of ongoing incinerator operating parameters indicating that the incinerator has met and will continue to meet the mercury NESHAP emission rate limit.

☐ Check here to indicate that you have attached this information.

5.10 Provide copies of mercury emission rate tests for the two most recent years in which testing was conducted.

☐ Check here to indicate that you have attached this information.

5.11 Do you demonstrate compliance with the mercury NESHAP by sewage sludge sampling?

☐ Yes ☐ No ➔ SKIP to Item 5.13 (Part 2, Section 5) below.

5.12 Submit a complete report of sewage sludge sampling and documentation of ongoing incinerator operating parameters indicating that the incinerator has met and will continue to meet the mercury NESHAP emission rate limit.

☐ Check here to indicate that you have attached this information.

Incineration Continued

Dispersion Factor

5.13	Dispersion factor in micrograms/cubic meter per gram/second:	
5.14	Name and type of dispersion model:	
5.15	Submit a copy of the modeling results and supporting documentation. ☐ Check here to indicate that you have attached this information.	

Control Efficiency

5.16 Provide the control efficiency, in hundredths, for each of the pollutants listed below.

Pollutant	Control Efficiency, in Hundredths
Arsenic	
Cadmium	
Chromium	
Lead	
Nickel	

5.17	Attach a copy of the results or performance testing and supporting documentation (including testing dates). ☐ Check here to indicate that you have attached this information.	

Risk-Specific Concentration for Chromium

5.18	Provide the risk-specific concentration (RSC) used for chromium in micrograms per cubic meter:	
5.19	Was the RSC determined via Table 2 in 40 CFR 503.43? ☐ Yes ☐ No ➔ SKIP to Item 5.21 (Part 2, Section 5) below.	
5.20	Identify the type of incinerator used as the basis. ☐ Fluidized bed with wet scrubber ☐ Other types with wet scrubber ☐ Fluidized bed with wet scrubber and wet electrostatic precipitator ☐ Other types with wet scrubber and wet electrostatic precipitator	
5.21	Was the RSC determined via Table 6 in 40 CFR 503.43 (site-specific determination)? ☐ Yes ☐ No ➔ SKIP to Item 5.23 (Part 2, Section 5) below.	
5.22	Provide the decimal fraction of hexavalent chromium concentration to total chromium concentration in stack exit gas:	
5.23	Attach the results of incinerator stack tests for hexavalent and total chromium concentrations, including the date(s) of any test(s), with this application. ☐ Check here to indicate that you have attached this information. ☐ Not applicable	

Incinerator Parameters

5.24	Do you monitor total hydrocarbons (THC) in the exit gas of the sewage sludge incinerator? ☐ Yes ☐ No	
5.25	Do you monitor carbon monoxide (CO) in the exit gas of the sewage sludge incinerator? ☐ Yes ☐ No	
5.26	Indicate the type of sewage sludge incinerator.	
5.27	Incinerator stack height in meters:	
5.28	Indicate whether the value submitted in Item 5.27 is (check only one response): ☐ Actual stack height ☐ Creditable stack height	

Incineration Continued

Performance Test Operating Parameters

5.29	Maximum performance test combustion temperature:	
5.30	Performance test sewage sludge feed rate, in dry metric tons/day	

5.31 Indicate whether value submitted in Item 5.30 is (check only one response):

☐ Average use ☐ Maximum design

5.32 Attach supporting documents describing how the feed rate was calculated.

☐ Check here to indicate that you have attached this information.

5.33 Submit information documenting the performance test operating parameters for the air pollution control device(s) used for this sewage sludge incinerator.

☐ Check here to indicate that you have attached this information.

Monitoring Equipment

5.34 List the equipment in place to monitor the listed parameters.

Parameter	Equipment in Place for Monitoring
Total hydrocarbons or carbon monoxide	
Percent oxygen	
Percent moisture	
Combustion temperature	
Other (describe)	

Air Pollution Control Equipment

5.35 List all air pollution control equipment used with this sewage sludge incinerator.

☐ Check here if you have attached the list to the application package for the noted incinerator.

END of PART 2

Submit completed application package to your NPDES permitting authority.

Lee, Sandra

From: Michael Shamsie <mike.shamsie@landgroup.biz>
Sent: Monday, June 9, 2025 10:12 AM
To: Lee, Sandra
Cc: Don Shamsie; Jim Hysen
Subject: Re: Mia Rayne WWTP application
Attachments: Mia Rayne WWTP - ADEM Form 311 (Revised June 9th 2025).pdf

The correct name is **Mia Rayne Subdivision**

The address is **0 Wall Triana**
We are not officially platted yet, addressed will be assigned thereafter.

WWTP discharge is just being routed through the detention basin.
The WWTP effluent discharge is not be retained or stored for re-use.

I did perform a preliminary analysis of relocating the effluent discharge to another subdivision we have one-mile away.
This would have involved a lift station and 5500' of force main.
I did acquire County Engineer's approval for the force main in County ROW.
The cost of such was too expensive relative to the cost of the on-site WWTP.
The additional cost would have been in the range of $400,000.

Any other route through the subdivision would have negative impact on the lots and the buildable area.
This would result in loss of lots due to the easement requirement for the discharge line.

Thank you

Michael Shamsie, PE, CFM, CPESC
President/CEO

Landmark
Engineering Group, Inc.

309-751-4536 (direct)
309-269-6350 (cell)
www.landmark-engineering-group.com
Civil Engineers & Environmental Engineers

From: Michael Shamsie <mike.shamsie@landgroup.biz>
Sent: Friday, June 6, 2025 9:28 AM
To: Lee, Sandra <SLee@adem.alabama.gov>
Subject: Re: Mia Rayne WWTP application

When is this going to end?

It is Mia Rayne Subdivision.
Ok, estimated
There are no other options for discharge

Thank you

Michael Shamsie, PE, CFM, CPESC
President/CEO

Landmark
Engineering Group, Inc.

309-751-4536 (direct)
309-269-6350 (cell)
www.landmark-engineering-group.com
Civil Engineers & Environmental Engineers

From: Lee, Sandra <SLee@adem.alabama.gov>
Sent: Friday, June 6, 2025 9:20 AM
To: Michael Shamsie <mike.shamsie@landgroup.biz>
Subject: RE: Mia Rayne WWTP application

Hello Michael,

On Form 188, page 1, the name of the facility is referred to as Mia Rayne Subdivision and on EPA Form 2A, page 1, the facility name is listed as Mia Rayne Place Subdivision. Please confirm the correct name of this facility and correct the incorrect page. Additionally, on EPA Form 2A, page 13, Table A, since the facility has not been built yet, this data should be NA or specified as being estimated. Also, option three (relocation of discharge) is noted as the preferred option due to grades, if other options for location are feasible, a cost analysis should be done.

Let me know if you have any questions.

Sandra Lee
Municipal Section
Email: slee@adem.alabama.gov
334-274-4223

ADEM

NEW ADEM ELECTRONIC SYSTEM: Alabama Environmental Permitting and Compliance System (AEPACS)

AEPACS is an electronic system that allows facilities to apply for and maintain permits as well as submit other required applications, registrations, and certifications. In addition, the system allows facilities to submit required compliance reports or other information to the Department. For general information about AEPACS, go to: http://adem.alabama.gov/egov/AEPACS.cnt. For NPDES and SID program specific information about AEPACS, go to http://adem.alabama.gov/egov/AEPACSwater.cnt.

If you have questions or need assistance with AEPACS, please contact the ADEM Web Portal/AEPACS Help Desk at ademwebportal@adem.alabama.gov. The email box is monitored Monday through Friday, 7:00 am – 5:00 pm.

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004

Form 2A NPDES | EPA

U.S. Environmental Protection Agency
Application for NPDES Permit to Discharge Wastewater
NEW AND EXISTING PUBLICLY OWNED TREATMENT WORKS

SECTION 1. BASIC APPLICATION INFORMATION FOR ALL APPLICANTS (40 CFR 122.21(j)(1) and (9))

Facility Information

1.1 Facility name
Mia Rayne Place Subdivision WWTP

Mailing address (street or P.O. box)
201 W 2nd Avenue, Suite 201

City or town	State	ZIP code
Coal Valley	Illinois	61240

Contact name (first and last)	Title	Phone number	Email address
Michael Shamsie, PE	Engineer/Owner	309.269.6350	mike.shamsie@landgroup.bi

Location address (street, route number, or other specific identifier) ☐ Same as mailing address
0 Wall Triana

City or town	State	ZIP code
Toney, Madison County	AL	35773

1.2 Is this application for a facility that has yet to commence discharge?
☑ Yes ➔ See instructions on data submission requirements for new dischargers. ☐ No

Applicant Information

1.3 Is applicant different from entity listed under Item 1.1 above?
☐ Yes ☑ No ➔ SKIP to Item 1.4.

Applicant name
Land Venues, Inc. / Michael Shamsie

Applicant address (street or P.O. box)
201 W. 2nd Avenue, Suite 201

City or town	State	ZIP code
Coal Valley	IL	61240

Contact name (first and last)	Title	Phone number	Email address
Michael Shamsie	Manager	309.269.6350	mike.shamsie@landgroup.bi

1.4 Is the applicant the facility's owner, operator, or both? (Check only one response.)
☐ Owner ☐ Operator ☑ Both

1.5 To which entity should the NPDES permitting authority send correspondence? (Check only one response.)
☐ Facility ☐ Applicant ☑ Facility and applicant (they are one and the same)

Existing Environmental Permits

1.6 Indicate below any existing environmental permits. (Check all that apply and print or type the corresponding permit number for each.)

Existing Environmental Permits

☑ NPDES (discharges to surface water) ALR10C4UH	☐ RCRA (hazardous waste)	☐ UIC (underground injection control)
☐ PSD (air emissions)	☐ Nonattainment program (CAA)	☐ NESHAPs (CAA)
☐ Ocean dumping (MPRSA)	☐ Dredge or fill (CWA Section 404)	☐ Other (specify)

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004

Collection System and Population Served

1.7 Provide the collection system information requested below for the treatment works.

Municipality Served	Population Served	Collection System Type (indicate percentage)	Ownership Status
New 165 Single Family Home Development	580	100 % separate sanitary sewer ___ % combined storm and sanitary sewer ☐ Unknown	☑ Own ☑ Maintain ☐ Own ☐ Maintain ☐ Own ☐ Maintain
		___ % separate sanitary sewer ___ % combined storm and sanitary sewer ☐ Unknown	☐ Own ☐ Maintain ☐ Own ☐ Maintain ☐ Own ☐ Maintain
		___ % separate sanitary sewer ___ % combined storm and sanitary sewer ☐ Unknown	☐ Own ☐ Maintain ☐ Own ☐ Maintain ☐ Own ☐ Maintain
		___ % separate sanitary sewer ___ % combined storm and sanitary sewer ☐ Unknown	☐ Own ☐ Maintain ☐ Own ☐ Maintain ☐ Own ☐ Maintain
Total Population Served	580		

	Separate Sanitary Sewer System	Combined Storm and Sanitary Sewer
Total percentage of each type of sewer line (in miles)	100 %	0 %

Indian Country

1.8 **Is the treatment works located in Indian Country?**

☐ Yes ☑ No

1.9 **Does the facility discharge to a receiving water that flows through Indian Country?**

☐ Yes ☑ No

Design and Actual Flow Rates

1.10 **Provide design *and* actual flow rates in the designated spaces.**

Design Flow Rate
0.075 mgd

Annual Average Flow Rates (Actual)		
Two Years Ago	**Last Year**	**This Year**
0.00 mgd	0.00 mgd	0.00[redacted] mgd

Maximum Daily Flow Rates (Actual)		
Two Years Ago	**Last Year**	**This Year**
0.00 mgd	0.00 mgd	0.00 [redacted] mgd

Discharge Points by Type

1.11 Provide the total number of effluent discharge points to waters of the United States by type.

Total Number of Effluent Discharge Points by Type				
Treated Effluent	**Untreated Effluent**	**Combined Sewer Overflows**	**Bypasses**	**Constructed Emergency Overflows**
1	0	0	0	0

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004

Outfalls and Other Discharge or Disposal Methods

Outfalls Other Than to Waters of the United States

1.12 Does the POTW discharge wastewater to basins, ponds, or other surface impoundments that do not have outlets for discharge to waters of the United States?

☐ Yes ☑ No ➔ SKIP to Item 1.14.

1.13 Provide the location of each surface impoundment and associated discharge information in the table below.

Surface Impoundment Location and Discharge Data

Location	Average Daily Volume Discharged to Surface Impoundment	Continuous or Intermittent (check one)
	gpd	☐ Continuous ☐ Intermittent
	gpd	☐ Continuous ☐ Intermittent
	gpd	☐ Continuous ☐ Intermittent

1.14 Is wastewater applied to land?

☐ Yes ☑ No ➔ SKIP to Item 1.16.

1.15 Provide the land application site and discharge data requested below.

Land Application Site and Discharge Data

Location	Size	Average Daily Volume Applied	Continuous or Intermittent (check one)
	acres	gpd	☐ Continuous ☐ Intermittent
	acres	gpd	☐ Continuous ☐ Intermittent
	acres	gpd	☐ Continuous ☐ Intermittent

1.16 Is effluent transported to another facility for treatment prior to discharge?

☐ Yes ☑ No ➔ SKIP to Item 1.21.

1.17 Describe the means by which the effluent is transported (e.g., tank truck, pipe).

1.18 Is the effluent transported by a party other than the applicant?

☐ Yes ☑ No ➔ SKIP to Item 1.20.

1.19 Provide information on the transporter below.

Transporter Data

Entity name	Mailing address (street or P.O. box)	
City or town	State	ZIP code
Contact name (first and last)	Title	
Phone number	Email address	

Outfalls and Other Discharge or Disposal Methods Continued

1.20 In the table below, indicate the name, address, contact information, NPDES number, and average daily flow rate of the receiving facility.

Receiving Facility Data

Facility name Mia Rayne Subdivision WWTP	Mailing address (street or P.O. box) 0 Wall Triana	
City or town Toney	State AL	ZIP code 35773
Contact name (first and last) Michael Shamsie, PE	Title Owner	
Phone number 309.269.6350	Email address mike.shamsie@landgroup.biz	
NPDES number of receiving facility (if any) ☐ None	Average daily flow rate	0.0747 mgd

1.21 Is the wastewater disposed of in a manner other than those already mentioned in Items 1.14 through 1.21 that do not have outlets to waters of the United States (e.g., underground percolation, underground injection)?

☐ Yes ☑ No ➔ SKIP to Item 1.23.

1.22 Provide information in the table below on these other disposal methods.

Information on Other Disposal Methods

Disposal Method Description	Location of Disposal Site	Size of Disposal Site	Annual Average Daily Discharge Volume	Continuous or Intermittent (check one)
		acres	gpd	☐ Continuous ☐ Intermittent
		acres	gpd	☐ Continuous ☐ Intermittent
		acres	gpd	☐ Continuous ☐ Intermittent

Variance Requests

1.23 Do you intend to request or renew one or more of the variances authorized at 40 CFR 122.21(n)? (Check all that apply. Consult with your NPDES permitting authority to determine what information needs to be submitted and when.)

☐ Discharges into marine waters (CWA Section 301(h))

☐ Water quality related effluent limitation (CWA Section 302(b)(2))

☑ Not applicable

Contractor Information

1.24 Are any operational or maintenance aspects (related to wastewater treatment and effluent quality) of the treatment works the responsibility of a contractor?

☐ Yes ☑ No ➔ SKIP to Section 2.

1.25 Provide location and contact information for each contractor in addition to a description of the contractor's operational and maintenance responsibilities.

Contractor Information

	Contractor 1	Contractor 2	Contractor 3
Contractor name (company name)			
Mailing address (street or P.O. box)			
City, state, and ZIP code			
Contact name (first and last)			
Phone number			
Email address			
Operational and maintenance responsibilities of contractor			

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004

SECTION 2. ADDITIONAL INFORMATION (40 CFR 122.21(j)(1) and (2))

Design Flow

Outfalls to Waters of the United States

2.1 Does the treatment works have a design flow greater than or equal to 0.1 mgd?

☐ Yes ☑ No ➔ SKIP to Section 3.

Inflow and Infiltration

2.2 Provide the treatment works' current average daily volume of inflow and infiltration.

Average Daily Volume of Inflow and Infiltration
0.030 gpd

Indicate the steps the facility is taking to minimize inflow and infiltration.

Topographic Map

2.3 Have you attached a topographic map to this application that contains all the required information? (See instructions for specific requirements.)

☑ Yes ☐ No

Flow Diagram

2.4 Have you attached a process flow diagram or schematic to this application that contains all the required information? (See instructions for specific requirements.)

☑ Yes ☐ No

Scheduled Improvements and Schedules of Implementation

2.5 Are improvements to the facility scheduled?

☐ Yes ☑ No ➔ SKIP to Section 3.

Briefly list and describe the scheduled improvements.

1. To be scheduled upon permit issuance
2.
3.
4.

2.6 Provide scheduled or actual dates of completion for improvements.

Scheduled or Actual Dates of Completion for Improvements

Scheduled Improvement (from above)	Affected Outfalls (list outfall number)	Begin Construction (MM/DD/YYYY)	End Construction (MM/DD/YYYY)	Begin Discharge (MM/DD/YYYY)	Attainment of Operational Level (MM/DD/YYYY)
1.	1	7/01/2025	12/31/2026	04/01/2027	09/30/2027
2.					
3.					
4.					

2.7 Have appropriate permits/clearances concerning other federal/state requirements been obtained? Briefly explain your response.

☑ Yes ☐ No ☐ None required or applicable

Explanation:
In process of completing design and obtaining permits, NPDES permit ALR10C4UH

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004

SECTION 3. INFORMATION ON EFFLUENT DISCHARGES (40 CFR 122.21(j)(3) to (5))

Description of Outfalls

3.1 Provide the following information for each outfall. (Attach additional sheets if you have more than three outfalls.)

	Outfall Number 01	Outfall Number ____	Outfall Number ____
State	Alabama		
County	Madison County		
City or town	Toney		
Distance from shore	10 ft.	ft.	ft.
Depth below surface	0 ft.	ft.	ft.
Average daily flow rate	0.075 mgd	mgd	mgd
Latitude	34° 55 ′ 14.01″	° ′ ″	° ′ ″
Longitude	86° 44 ′ 44.24″	° ′ ″	° ′ ″

Seasonal or Periodic Discharge Data

3.2 Do any of the outfalls described under Item 3.1 have seasonal or periodic discharges?

☐ Yes ☑ No ➔ SKIP to Item 3.4.

3.3 If so, provide the following information for each applicable outfall.

	Outfall Number 01	Outfall Number ____	Outfall Number ____
Number of times per year discharge occurs	Conitinuous		
Average duration of each discharge (specify units)	Continuous		
Average flow of each discharge	0.075 mgd	mgd	mgd
Months in which discharge occurs	Jan - Dec		

Diffuser Type

3.4 Are any of the outfalls listed under Item 3.1 equipped with a diffuser?

☐ Yes ☑ No ➔ SKIP to Item 3.6.

3.5 Briefly describe the diffuser type at each applicable outfall.

	Outfall Number ____	Outfall Number ____	Outfall Number ____

Waters of the U.S.

3.6 Does the treatment works discharge or plan to discharge wastewater to waters of the United States from one or more discharge points?

☑ Yes ☐ No ➔ SKIP to Section 6.

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EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004

Receiving Water Description

3.7 Provide the receiving water and related information (if known) for each outfall.

	Outfall Number 1	Outfall Number ____	Outfall Number ____
Receiving water name	Unnamed Tributary		
Name of watershed, river, or stream system	Limestone Creek		
U.S. Soil Conservation Service 14-digit watershed code			
Name of state management/river basin			
U.S. Geological Survey 8-digit hydrologic cataloging unit code			
Critical low flow (acute)	N/A cfs	cfs	cfs
Critical low flow (chronic)	N/A cfs	cfs	cfs
Total hardness at critical low flow	N/A mg/L of $CaCO_3$	mg/L of $CaCO_3$	mg/L of $CaCO_3$

Treatment Description

3.8 Provide the following information describing the treatment provided for discharges from each outfall.

	Outfall Number 01	Outfall Number ____	Outfall Number ____
Highest Level of Treatment (check all that apply per outfall)	☑ Primary ☐ Equivalent to secondary ☑ Secondary ☐ Advanced ☑ Other (specify) Chlorination	☐ Primary ☐ Equivalent to secondary ☐ Secondary ☐ Advanced ☐ Other (specify) ____	☐ Primary ☐ Equivalent to secondary ☐ Secondary ☐ Advanced ☐ Other (specify) ____
Design Removal Rates by Outfall	95		
BOD_5 or $CBOD_5$	97.5 %	%	%
TSS	94.0 %	%	%
Phosphorus	☐ Not applicable %	☐ Not applicable %	☐ Not applicable %
Nitrogen	☐ Not applicable %	☐ Not applicable %	☐ Not applicable %
Other (specify) Ammonia (NH3-N)	☐ Not applicable 90.0 %	☐ Not applicable %	☐ Not applicable %

Treatment Description Continued

3.9 Describe the type of disinfection used for the effluent from each outfall in the table below. If disinfection varies by season, describe below.

Chlorination contact chamber with hypochlorite tablets

	Outfall Number 1	Outfall Number _____	Outfall Number _____
Disinfection type	Chlorination		
Seasons used	All		
Dechlorination used?	☐ Not applicable ☐ Yes ☑ No	☐ Not applicable ☐ Yes ☐ No	☐ Not applicable ☐ Yes ☐ No

Effluent Testing Data

3.10 Have you completed monitoring for all Table A parameters and attached the results to the application package?

☑ Yes ☐ No

3.11 Have you conducted any WET tests during the 4.5 years prior to the date of the application on any of the facility's discharges or on any receiving water near the discharge points?

☐ Yes ☑ No ➔ SKIP to Item 3.13.

3.12 Indicate the number of acute and chronic WET tests conducted since the last permit reissuance of the facility's discharges by outfall number or of the receiving water near the discharge points.

	Outfall Number _____		Outfall Number _____		Outfall Number _____	
	Acute	Chronic	Acute	Chronic	Acute	Chronic
Number of tests of discharge water						
Number of tests of receiving water						

3.13 Does the treatment works have a design flow greater than or equal to 0.1 mgd?

☐ Yes ☑ No ➔ SKIP to Item 3.16.

3.14 Does the POTW use chlorine for disinfection, use chlorine elsewhere in the treatment process, or otherwise have reasonable potential to discharge chlorine in its effluent?

☑ Yes ➔ Complete Table B, including chlorine. ☐ No ➔ Complete Table B, omitting chlorine.

3.15 Have you completed monitoring for all applicable Table B pollutants and attached the results to this application package?

☐ Yes ☑ No

3.16 Does one or more of the following conditions apply?

- The facility has a design flow greater than or equal to 1 mgd.
- The POTW has an approved pretreatment program or is required to develop such a program.
- The NPDES permitting authority has informed the POTW that it must sample for the parameters in Table C, must sample other additional parameters (Table D), or submit the results of WET tests for acute or chronic toxicity for each of its discharge outfalls (Table E).

☐ Yes ➔ Complete Tables C, D, and E as applicable. ☑ No ➔ SKIP to Section 4.

3.17 Have you completed monitoring for all applicable Table C pollutants and attached the results to this application package?

☐ Yes ☑ No

3.18 Have you completed monitoring for all applicable Table D pollutants required by your NPDES permitting authority and attached the results to this application package?

☐ Yes ☑ No additional sampling required by NPDES permitting authority.

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Effluent Testing Data Continued

3.19 Has the POTW conducted either (1) minimum of four quarterly WET tests for one year preceding this permit application or (2) at least four annual WET tests in the past 4.5 years?

☐ Yes ☑ No ➔ Complete tests and Table E and SKIP to Item 3.26.

3.20 Have you previously submitted the results of the above tests to your NPDES permitting authority?

☐ Yes ☑ No ➔ Provide results in Table E and SKIP to Item 3.26.

3.21 Indicate the dates the data were submitted to your NPDES permitting authority and provide a summary of the results.

Date(s) Submitted (MM/DD/YYYY)	Summary of Results

3.22 Regardless of how you provided your WET testing data to the NPDES permitting authority, did any of the tests result in toxicity?

☐ Yes ☐ No ➔ SKIP to Item 3.26.

3.23 Describe the cause(s) of the toxicity:

3.24 Has the treatment works conducted a toxicity reduction evaluation?

☐ Yes ☐ No ➔ SKIP to Item 3.26.

3.25 Provide details of any toxicity reduction evaluations conducted.

3.26 Have you completed Table E for all applicable outfalls and attached the results to the application package?

☐ Yes ☑ Not applicable because previously submitted information to the NPDES permitting authority.

SECTION 4. INDUSTRIAL DISCHARGES AND HAZARDOUS WASTES (40 CFR 122.21(j)(6) and (7))

Industrial Discharges and Hazardous Wastes

4.1 Does the POTW receive discharges from SIUs or NSCIUs?

☐ Yes ☑ No ➔ SKIP to Item 4.7.

4.2 Indicate the number of SIUs and NSCIUs that discharge to the POTW.

Number of SIUs	Number of NSCIUs

4.3 Does the POTW have an approved pretreatment program?

☐ Yes ☐ No

4.4 Have you submitted either of the following to the NPDES permitting authority that contains information substantially identical to that required in Table F: (1) a pretreatment program annual report submitted within one year of the application or (2) a pretreatment program?

☐ Yes ☐ No ➔ SKIP to Item 4.6.

4.5 Identify the title and date of the annual report or pretreatment program referenced in Item 4.4. SKIP to Item 4.7.

4.6 Have you completed and attached Table F to this application package?

☐ Yes ☑ No

Industrial Discharges and Hazardous Wastes Continued

4.7 Does the POTW receive, or has it been notified that it will receive, by truck, rail, or dedicated pipe, any wastes that are regulated as RCRA hazardous wastes pursuant to 40 CFR 261?

☐ Yes ☑ No ➔ SKIP to Item 4.9.

4.8 If yes, provide the following information:

Hazardous Waste Number	Waste Transport Method (check all that apply)	Annual Amount of Waste Received	Units
	☐ Truck ☐ Rail ☐ Dedicated pipe ☐ Other (specify) _____		
	☐ Truck ☐ Rail ☐ Dedicated pipe ☐ Other (specify) _____		
	☐ Truck ☐ Rail ☐ Dedicated pipe ☐ Other (specify) _____		

4.9 Does the POTW receive, or has it been notified that it will receive, wastewaters that originate from remedial activities, including those undertaken pursuant to CERCLA and Sections 3004(7) or 3008(h) of RCRA?

☐ Yes ☑ No ➔ SKIP to Section 5.

4.10 Does the POTW receive (or expect to receive) less than 15 kilograms per month of non-acute hazardous wastes as specified in 40 CFR 261.30(d) and 261.33(e)?

☑ Yes ➔ SKIP to Section 5. ☐ No

4.11 Have you reported the following information in an attachment to this application: identification and description of the site(s) or facility(ies) at which the wastewater originates; the identities of the wastewater's hazardous constituents; and the extent of treatment, if any, the wastewater receives or will receive before entering the POTW?

☐ Yes ☐ No

SECTION 5. COMBINED SEWER OVERFLOWS (40 CFR 122.21(j)(8))

CSO Map and Diagram

5.1 Does the treatment works have a combined sewer system?

☐ Yes ☑ No ➔SKIP to Section 6.

5.2 Have you attached a CSO system map to this application? (See instructions for map requirements.)

☐ Yes ☐ No

5.3 Have you attached a CSO system diagram to this application? (See instructions for diagram requirements.)

☐ Yes ☐ No

CSO Outfall Description

5.4 For each CSO outfall, provide the following information. (Attach additional sheets as necessary.)

	CSO Outfall Number ____	CSO Outfall Number ____	CSO Outfall Number ____
City or town			
State and ZIP code			
County			
Latitude	° ' "	° ' "	° ' "
Longitude	° ' "	° ' "	° ' "
Distance from shore	ft.	ft.	ft.
Depth below surface	ft.	ft.	ft.

CSO Monitoring

5.5 Did the POTW monitor any of the following items in the past year for its CSO outfalls?

	CSO Outfall Number ____	CSO Outfall Number ____	CSO Outfall Number ____
Rainfall	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
CSO flow volume	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
CSO pollutant concentrations	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Receiving water quality	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
CSO frequency	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Number of storm events	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No

CSO Events in Past Year

5.6 Provide the following information for each of your CSO outfalls.

	CSO Outfall Number ____	CSO Outfall Number ____	CSO Outfall Number ____
Number of CSO events in the past year	events	events	events
Average duration per event	hours ☐ Actual or ☐ Estimated	hours ☐ Actual or ☐ Estimated	hours ☐ Actual or ☐ Estimated
Average volume per event	million gallons ☐ Actual or ☐ Estimated	million gallons ☐ Actual or ☐ Estimated	million gallons ☐ Actual or ☐ Estimated
Minimum rainfall causing a CSO event in last year	inches of rainfall ☐ Actual or ☐ Estimated	inches of rainfall ☐ Actual or ☐ Estimated	inches of rainfall ☐ Actual or ☐ Estimated

CSO Receiving Waters

5.7 Provide the information in the table below for each of your CSO outfalls.

	CSO Outfall Number ____	CSO Outfall Number ____	CSO Outfall Number ____
Receiving water name			
Name of watershed/ stream system			
U.S. Soil Conservation Service 14-digit watershed code (if known)	☐ Unknown	☐ Unknown	☐ Unknown
Name of state management/river basin			
U.S. Geological Survey 8-Digit Hydrologic Unit Code (if known)	☐ Unknown	☐ Unknown	☐ Unknown
Description of known water quality impacts on receiving stream by CSO (see instructions for examples)			

SECTION 6. CHECKLIST AND CERTIFICATION STATEMENT (40 CFR 122.22(a) and (d))

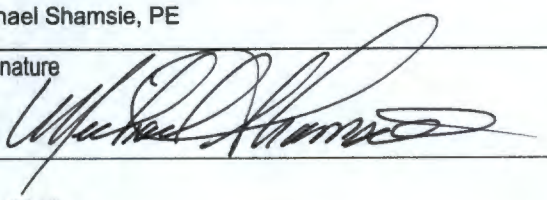
Checklist and Certification Statement

6.1 In Column 1 below, mark the sections of Form 2A that you have completed and are submitting with your application. For each section, specify in Column 2 any attachments that you are enclosing to alert the permitting authority. Note that not all applicants are required to provide attachments.

Column 1	Column 2	
☑ Section 1: Basic Application Information for All Applicants	☐ w/ variance request(s)	☐ w/ additional attachments
☑ Section 2: Additional Information	☑ w/ topographic map ☑ w/ additional attachments	☑ w/ process flow diagram
☑ Section 3: Information on Effluent Discharges	☑ w/ Table A ☑ w/ Table B ☐ w/ Table C	☐ w/ Table D ☐ w/ Table E ☐ w/ additional attachments
☐ Section 4: Industrial Discharges and Hazardous Wastes	☐ w/ SIU and NSCIU attachments ☐ w/ additional attachments	☐ w/ Table F
☐ Section 5: Combined Sewer Overflows	☐ w/ CSO map ☐ w/ CSO system diagram	☐ w/ additional attachments
☑ Section 6: Checklist and Certification Statement	☐ w/ attachments	

6.2 **Certification Statement**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name (print or type first and last name)	Official title
Michael Shamsie, PE	Engineer/Owner
Signature 	Date signed January 26th 2025

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number

Form Approved 03/05/19
OMB No. 2040-0004

TABLE A. EFFLUENT PARAMETERS FOR ALL POTWS

Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method[1]	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
Biochemical oxygen demand ☑ BOD_5 or ☐ $CBOD_5$ (report one)	Estimated 25	mg/l	Estimated 30.0	mg/l			☐ ML ☐ MDL
Fecal coliform	Estimated 125	#/100mL	Estimated 235	#/100mL			☐ ML ☐ MDL
Design flow rate	0.066	MGD	0.066	MGD			
pH (minimum)	6.0						
pH (maximum)	9.0						
Temperature (winter)	11C	Celsius	11C	Celsius			
Temperature (summer)	20C	Celsius	20C	Celsius			
Total suspended solids (TSS)	Estimated 30	mg/l	Estimated 45	mg/l			☐ ML ☐ MDL

[1] Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR chapter I, subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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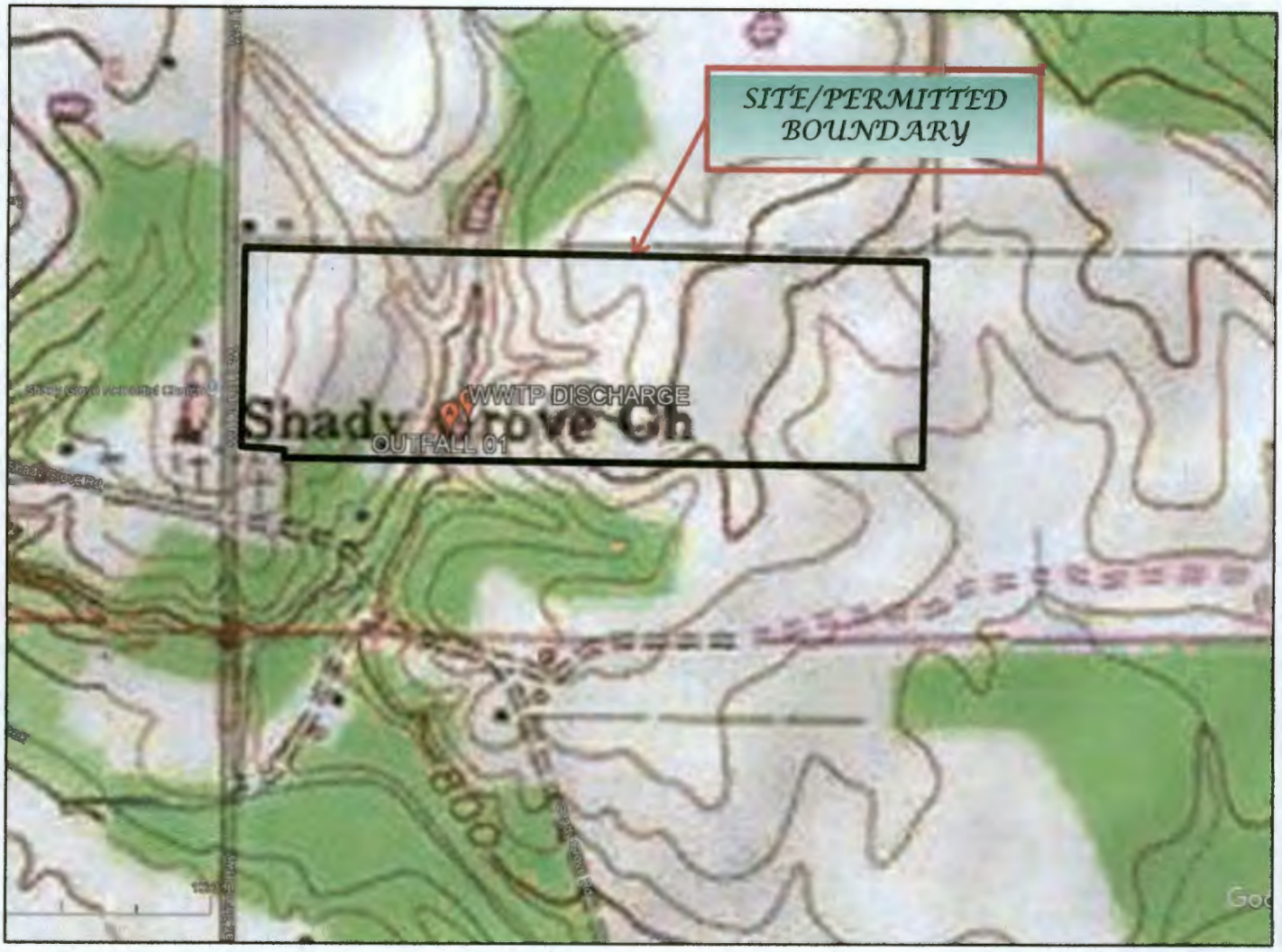


A - Outfall 01 draining into Unnamed Tributary = Latitude N34^0 55' 14.05" Longitude W86^0 44' 44.25"

B – WWTP discharge to detention basin = Latitude N34^0 55' 12.97" Longitude W86^0 44' 45.14"

Receiving water is Limestone Creek

USGS Map for WWTP Discharge

Mia Rayne Subdivision
10017 Wall Trianna Hwy
Harvest, AL

Landmark Engineering Group, Inc.

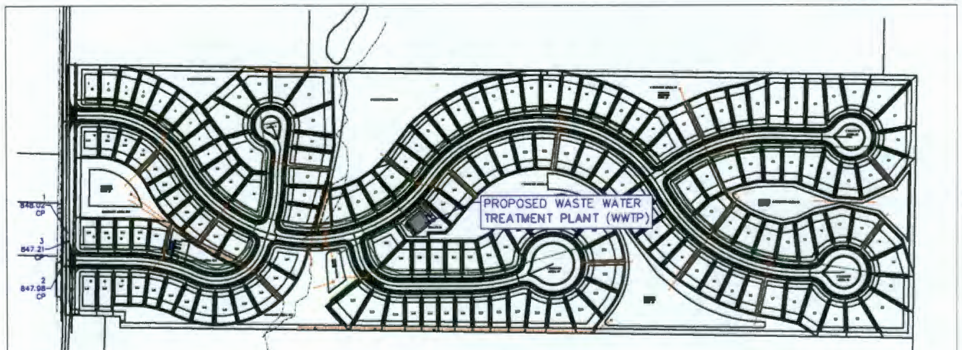
WASTE WATER TREATMENT PLANT PLANS

FOR

MIA RAYNE SUBDIVISION

10017 WALL TRIANA HWY, MADISON COUNTY, ALABAMA

"CALL ALABAMA ONE CALL
BEFORE YOU DIG"
(205) 252-4444 OR 811



KEY MAP
NTS

SHEET INDEX

WWTP CONSTRUCTION SEQUENCE

1. EROSION & SEDIMENT CONTROL DEVICES AND SILT FENCES SHALL BE INSTALLED PRIOR TO ANY SITE DISTURBANCE.
2. CONTROL CONTRACTOR SHALL PROTECT ALL THE EXISTING INFRASTRUCTURE TO INSURE COMPLETE OPERATION OF THE EXISTING WWTP DURING CONSTRUCTION OF THE NEW WWTP.
3. CONTRACTOR SHALL ISOLATE THE SOUTHWEST CORNER OF THE LAGOON, DEWATER IT AND REMOVE ALL SLUDGE AND UNSUITABLE MATERIAL.
4. CONTRACTOR SHALL FURNISH, TRANSPORT AND PLACE SUITABLE EARTH MATERIAL TO ELEVATE SOUTHWEST CORNER TO GRADE.
5. CONTRACTOR SHALL PLACE ALL FILL MATERIAL IN 6" TO 9" LIFTS AND COMPACT TO 95% STANDARD PROCTOR.
6. ONCE ALL FILL MATERIAL IS PLACED IN SOUTHWEST CORNER AND GEOTECH CERTIFIES FILL PLACEMENT, CONTRACTOR SHALL INSTALL NEW WWTP.
7. CONTRACTOR SHALL COMPLETE ALL WORK TO RENDER NEW WWTP OPERABLE.
8. THE EXISTING FORCE MAIN FROM THE LIFT STATION AND BACKUP PUMP STATION SHALL BE TEMPORARILY ROUTE ALONG SOUTH SIDE ABOVE GRADE TO NEW WWTP.
9. THE EXISTING DISCHARGE LINE SHALL BE CONNECTED TO NEW WWTP.
10. NEW WWTP SHALL BE PUT IN SERVICE AND THE EXISTING LAGOON WILL BE OUT OF SERVICE.
11. CONTRACTOR SHALL DEWATER THE LAGOON AND REMOVE ALL SLUDGE AND UNSUITABLE MATERIAL.
12. CONTRACTOR SHALL FURNISH, TRANSPORT AND PLACE SUITABLE EARTH MATERIAL TO ELEVATE EXISTING LAGOON AREA TO GRADE PER PLAN.
13. UPON COMPLETION OF LAGOON GRADING, CONTRACTOR SHALL INSTALL NEW FORCE AMINS FROM LIFT STATION AND BACKUP PUMP STATION TO NEW WWTP.
14. TEMPORARY FORCE MAINS SHALL REMOVED AND DISPOSED OF IN ACCORDANCE WITH LOCAL AND STATE REGULATIONS.
15. ALL DISTURBED AREAS OF THE SITE SHALL BE FULLY RESTORED AND VEGETATED IN ACCORDANCE WITH LA DEQ REQUIREMENTS.
16. ONCE THE DISTURBED AREAS REACH 75% VEGETATION, SILT FENCES AND EROSION CONTROL DEVICES SHALL BE REMOVED AND DISPOSED OF.

ALL REFERENCES TO DOT IMPLIES ALDOT THROUGHOUT THE PLAN SET.

LEGEND

Symbol	Description
	PROPERTY LINE
730	EXISTING CONTOUR
730	PROPOSED CONTOUR
	EXISTING LOT LINE/R.O.W.
	EXISTING BITUMINOUS PAVEMENT
	EXISTING CURB AND GUTTER
	PROPOSED EASEMENT
	PROPOSED BUILDING SETBACK
	PROPOSED CURB AND GUTTER
	EXISTING WATERMAIN
	EXISTING FIRE HYDRANT
	EXISTING WATER VALVE
	PROPOSED WATER LINE
	PROPOSED FIRE HYDRANT
	PROPOSED CURB BOX
	PROPOSED TV&B
	EXISTING STORM INLET
	PROPOSED SINGLE WING INLET
	PROPOSED DOUBLE WING INLET
	PROPOSED STORM INLET
	PROPOSED STORM MANHOLE
	PROPOSED FLARED END SECTION (FES)
	PROPOSED STORM SEWER
	PROPOSED UNDERDRAIN
	EXISTING SANITARY MANHOLE
	EXISTING SANITARY SEWER
	PROPOSED SANITARY MANHOLE
	PROPOSED SANITARY SEWER
	PROPOSED FORCEMAIN
	EXISTING TELEPHONE LINE
	EXISTING TELEPHONE PEDESTAL
	EXISTING TELEPHONE PEDESTAL
	EXISTING FIBER OPTIC BOX
UE	EXISTING UNDERGROUND ELECTRIC LINE
FO	EXISTING UNDERGROUND MEDIA/ FIBER OPTICS LINE
GAS	EXISTING GAS LINE
	EXISTING POWER POLE
	EXISTING LIGHT POLE
U & D	UTILITY AND DRAINAGE
MBL	MINIMUM BUILDING LINE

SITE INFORMATION:
10059 WALL TRIANA HWY
DEED BOOK 2022
PG. 59089
PIN #05-08-28-0-000-040.000

SITE BENCHMARK

CP #1
N1609634.6520
E381837.5330
ELEV. = 848.02 NAVD 1988

CP #2
N1609542.2080
E381817.8110
ELEV. = 847.98 NAVD 1988

CP #3
N1609822.6720'
E381847.6550
ELEV. = 847.21 NAVD 1988

PROJECT TEAM

CLIENT: LAND VENUES, INC.
6700 TOWER CIRCLE, STE. 330
FRANKLIN, TN 37067

CONTACT: MR. JIM HYSEN
PHONE: (615) 260-3163

ENGINEER: Landmark ENGINEERING GROUP
201 W. 2ND AVENUE, STE 201
COAL VALLEY, IL 61240

CONTACT: MR. MICHAEL SHAMSIE, P.E.
PHONE: (309) 755-3400

SURVEYOR: GARVER, LLC.
5125 RESEARCH DRIVE NW
HUNTSVILLE, AL 35805

CONTACT: MR. LOYD CARPENTER
PHONE: (256) 534-5512

DUTY TO INDEMNIFY

THE CONTRACTOR SHALL DEFEND, INDEMNIFY, KEEP AND SAVE HARMLESS OWNER, ENGINEER, COUNTY AND THEIR RESPECTIVE BOARD MEMBERS, REPRESENTATIVES, AGENTS, AND EMPLOYEES, IN BOTH INDIVIDUAL AND OFFICIAL CAPACITIES, AGAINST ALL SUITS, CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES, CAUSED BY GROWING OUT OF, OR INCIDENTAL TO, THE PERFORMANCE OF THE WORK UNDER THE CONTRACT BY THE CONTRACTOR OR ITS SUBCONTRACTORS TO THE FULL EXTENT AS ALLOWED BY THE LAWS OF THE STATE OF ALABAMA AND NOT BEYOND ANY EXTEND WHICH WOULD RENDER THESE PROVISIONS VOID OR UNENFORCEABLE. THIS OBLIGATION INCLUDES BUT IS NOT LIMITED TO: THE ALABAMA LAWS REGARDING STRUCTURAL WORK. AND REGARDING THE PROTECTION OF ADJACENT LANDOWNERS IN THE EVENT OF ANY SUCH INJURY (INCLUDING DEATH) OR LOSS OR DAMAGE, OR ADHERENCES TO SWPP PLAN & NPDES PERMIT, CLAIMS THEREFORE, THE CONTRACTOR SHALL GIVE PROMPT NOTICE TO THE OWNER.

PROJECT DATA

SITE IMPROVEMENT PLANS CONSISTING OF NEW LOTS, STREET, UTILITIES , WWTP AND RELATED SITE IMPROVEMENTS

UTILITY NOTES

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS CONTRACTOR SHALL ALSO REQUEST THE LOCAL CABLE T.V. COMPANY FOR LOCATION OF THEIR FACILITIES

LOCATION REQUESTS SHOULD BE MADE TO THE PUBLIC WORKS DEPARTMENT FOR WATER, SANITARY AND STORM SEWERS.

ANY REVISIONS TO THE APPROVED ENGINEERING PLANS MUST BE REVIEWED AND APPROVED BY THE GOVERNING AGENCIES, OWNER, AND THE ENGINEER OF RECORD BEFORE ANY WORK IS PERFORMED REGARDING THE REVISED ITEMS.

PROJECT LOCATION

APPROVED FOR CONSTRUCTION

COUNTY ENGINEER DATE
MADISON COUNTY, AL

ALABAMA LICENSED No. 37430 PROFESSIONAL ENGINEER MICHAEL R. SHAMSIE

I HEREBY CERTIFY THAT THESE PLANS AND SPECIFICATIONS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION, AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF ALABAMA.

8/27/2025
MICHAEL R. SHAMSIE, P.E. DATE
AL. REG. #37430-E ALL SHEET COVERED BY SEAL
EXP. DATE 12/31/2025
IF SEAL AND/OR SIGNATURE IS NOT A CONTRASTING COLOR, THIS DOCUMENT IS NOT AN ORIGINAL.

REVISIONS		
NO.	DESCRIPTION	DATE

Landmark
ENGINEERING GROUP
201 W. 2ND AVENUE, SUITE 201 COAL VALLEY, IL 61240
(309) 755-3400 FAX (309) 755-8622
CIVIL ENGINEERING AND LAND PLANNING
ALABAMA DESIGN FIRM REGISTRATION NUMBER CA-5815-E

COVER SHEET
MIA RAYNE SUBDIVISION
MADISON COUNTY, ALABAMA

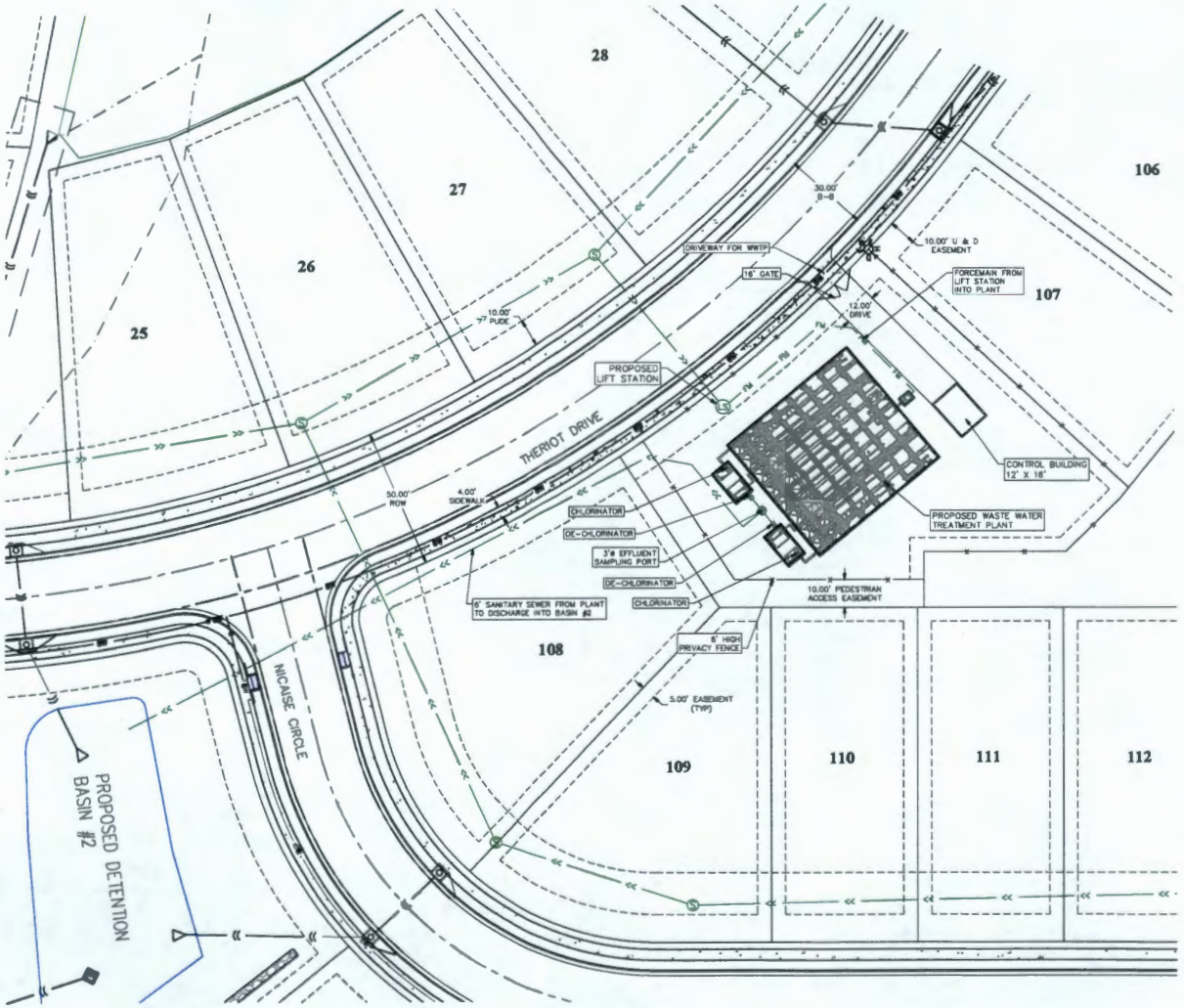
DATE: 8/27/2025
DRAWN BY: HLG
DESIGNED BY: MRS
CHECKED BY: MRS

1

01-22-1675

WASTE WATER TREATMENT PLANT SITE PLAN

"CALL ALABAMA ONE CALL BEFORE YOU DIG"
(205) 252-4444 OR 811



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75,000 GPD DECENTRALIZED WASTEWATER TREATMENT PLANT
WWTP SIZED FOR 166 SINGLE FAMILY HOME DEVELOPMENT
WWTP VOLUME MAY BE REVISED UPON AL DEM WASTE LOAD ALLOCATION FLOW VOLUMES
166 SINGLE FAMILY @ 450 GPD/HOME = 74,700 GPD

PROJECTED DESIGN FLOWS OF 75,000 GPD WWTP
AVERAGE DRY WEATHER (ADW) FLOW VOLUME = 28,000 GPD
AVERAGE WET WEATHER (AWW) FLOW VOLUME = 70,000 GPD
MAXIMUM WET WEATHER (MWW) FLOW VOLUME = 73,500 GPD
PEAK HOURLY WET WEATHER (PHWW) FLOW VOLUME = 147,000 GPD

PROJECTED LOADING OF 75,000 GPD WWTP
MIA RAYNE POPULATION = 581
BOD5 PER DAY = 128 POUNDS PER DAY
TSS = 145 POUNDS PER DAY
NH3 = 51.2 POUNDS PER DAY
PHOSPHORUS = 25.6 POUNDS PER DAY

DECENTRALIZED WASTEWATER TREATMENT PLANT DESIGN DATA
230V SINGLE PHASE, 60 HZ POWER SOURCE
AERATED SLUDGE HOLDING TANKS WITH INDEPENDENT SIMPLEX BLOWER
ROTARY POSITIVE BLOWER TO BE USED FOR FLOW EQUALIZATION CHAMBERS
ALL BLOWERS TO BE WITHIN STAINLESS STEEL DOGHOUSE HOUSING
CHLORINE CONTACT CHAMBER WITH CHLORINATOR
DISCHARGE TO EXISTING DRAINAGE WAY PER NPDES PERMIT

SANITARY SEWER MANHOLE
8" SANITARY SEWER
PROPOSED 6" FORCEMAIN

EXISTING AND PROPOSED CONTOURS TURNED OFF FOR PLAN CLARITY

ALABAMA LICENSED No. 27430 PROFESSIONAL ENGINEER MICHAEL R. SHARP

NO.	REVISIONS DESCRIPTION	DATE

Landmark
ENGINEERING GROUP
CIVIL ENGINEERING AND LAND PLANNING
ALABAMA LICENSE FIRM REGISTRATION NUMBER CA-0026-E

WASTE WATER TREATMENT PLANT SITE PLAN
MIA RAYNE SUBDIVISION
MADISON COUNTY, ALABAMA

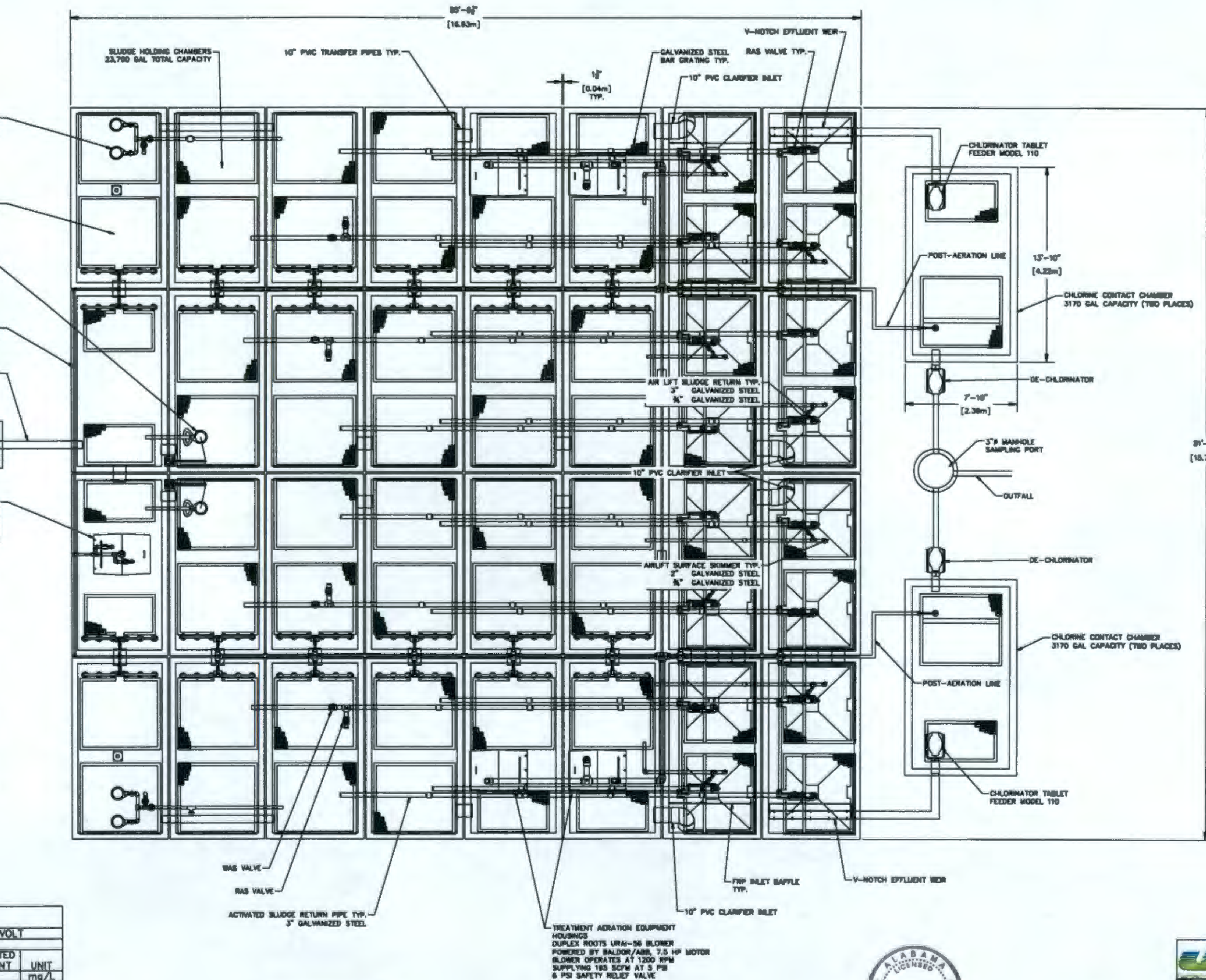
DATE: 8/27/2025
DRAWN BY: MLG
DESIGNED BY: MRS
CHECKED BY: MRS

2

01-22-1675

WASTE WATER TREATMENT PLANT

"CALL ALABAMA ONE CALL
BEFORE YOU DIG"
(205) 252-4444 OR 811



NOTES:
1) WWTP DESIGN AND SIZING BASED ON THE INFLUENT AND EFFLUENT PARAMETERS SHOWN IN THE TABLE AT BOTTOM LEFT
2) EFFLUENT PARAMETERS SHOWN IN THE TABLE MAY NOT BE ACHIEVED IF THE ACTUAL INFLUENT CONCENTRATIONS ARE HIGHER THAN THOSE SHOWN IN THE TABLE BELOW
3) PRE-CAST CONCRETE TANKS TO BE SUPPLIED AND INSTALLED BY JET AUTHORIZED DISTRIBUTOR
4) TANKS CONSIST OF BOTTOM PRE-CAST SECTIONS, TOP PRE-CAST SECTIONS, AND THREE INTERMEDIATE SECTIONS FOR A TOTAL DEPTH OF 12'-10"
5) OPERATING LIQUID LEVEL TO BE 9'-1"
6) ALL ACCESS OPENINGS TO BE COVERED BY GALVANIZED STEEL BAR GRATING
7) ALL PIPING IS GALVANIZED STEEL UNLESS OTHERWISE NOTED ON DRAWINGS
8) THIS WWTP DESIGN WILL NOT REMOVE PHOSPHOROUS OR NITROGEN FROM THE INFLUENT WASTEWATER TO ANY SIGNIFICANT DEGREE; HOWEVER INFLUENT AMMONIA WILL BE CONVERTED TO NITRITES/NITRATES
9) THIS WWTP DESIGN WILL NOT REMOVE FATS, OILS AND GREASE FROM THE INFLUENT STREAM; GREASE TRAP LOCATED UPSTREAM OF PLANT INFLUENT MUST BE PROVIDED BY OTHERS
10) BLOWER NOISE MAY EXCEED 79 dBa WHEN MEASURED AT ONE METER FROM EQUIPMENT

PROJECT: LMTECH 75000GPD
ELECTRIC: SINGLE PHASE 60 HZ 230 VOLT
RATED FLOW: 75,000GPD 284 M3PD

	INFLUENT QUALITY	PROJECTED EFFLUENT	UNIT
TOTAL SUSPENDED SOLIDS(TSS)	200	15	mg/L
FATS, OILS, GREASE(FOG)	--	--	mg/L
BIOCHEMICAL OXYGEN DEMAND(BOD)	200	10	mg/L
CBOD	--	--	mg/L
TOTAL PHOSPHORUS	--	--	mg/L
TOTAL NITROGEN	--	--	mg/L
TOTAL KJELDAHL NITROGEN(TKN)	35	--	mg/L
NITROGEN-AMMONIA(NH3-N)	--	2	mg/L
DISSOLVED OXYGEN RESIDUAL		5	mg/L

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AUG 27 2025
MUNICIPAL SECTION

STATE OF ALABAMA LICENSED No. 37430 PROFESSIONAL ENGINEER MICHAEL R. SHANNIS

Jet Wastewater Treatment Solutions

DRAWN BY: KLS	DATE: 3/13/24
APPROVED BY:	DATE:
MATERIAL:	
SCALE: NONE	SIZE: 0

TITLE: LMTECH 75,000 GPD
USED ON: MIA RAYNE SUBDIVISION
UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES
DECIMAL ± .XX5
FRACTIONAL ± 1/64
DEGREE ± 1°
PROPRIETARY PROPERTY: THIS DRAWING IS THE PROPERTY OF JET INC. AND MAY NOT BE REPRODUCED, COPIED OR USED WITHOUT WRITTEN PERMISSION.
DRAWING NUMBER: JCP-240312-41
REV: -

REVISIONS
NO. | DESCRIPTION | DATE

Landmark
ENGINEERING GROUP
291 W. 2ND AVENUE, SUITE 201 COAL VALLEY, IL 61240
(309) 756-3400 FAX (309) 756-8432
CIVIL ENGINEERING AND LAND PLANNING
ALABAMA DESIGN FIRM REGISTRATION NUMBER CA-0810-E

WASTE WATER TREATMENT PLANT DETAIL
MIA RAYNE SUBDIVISION
MADISON COUNTY, ALABAMA

DATE: 8/27/2025
DRAWN BY: HLG
DESIGNED BY: MRS
CHECKED BY: MRS

3

01-22-1675

WASTE WATER TREATMENT PLANT

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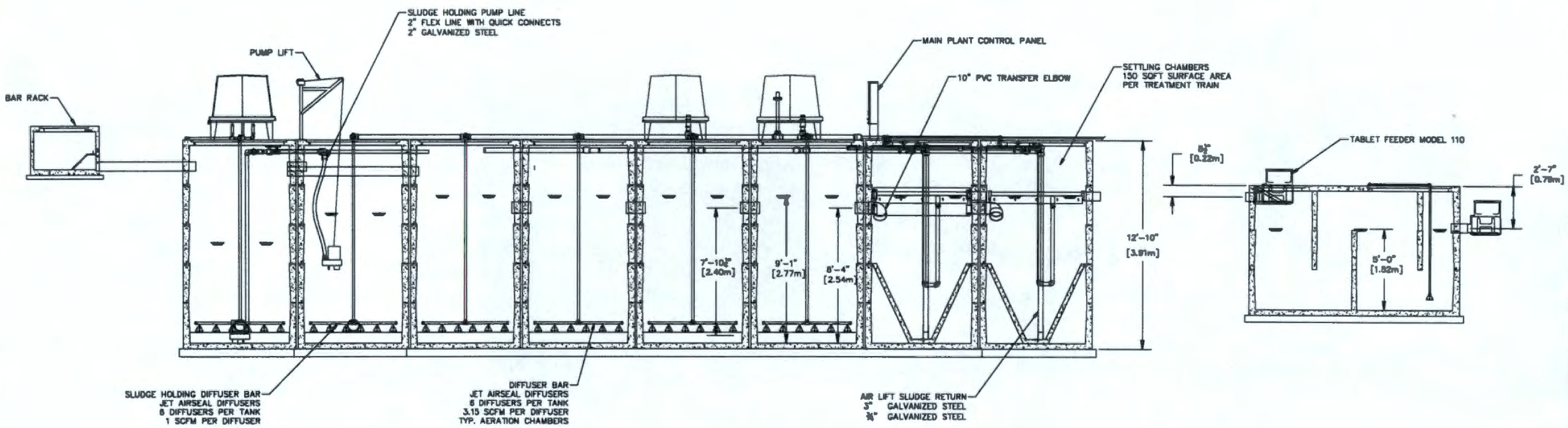
NO.	REVISIONS DESCRIPTION	DATE



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MUNICIPAL SECTION

ALABAMA LICENSED No. 37430 PROFESSIONAL ENGINEER MICHAEL R. SHAMBURGER

Jet® Wastewater Treatment Solutions
Founded on Innovation, Anchored by Service®

TITLE: LMTECH 75,000 GPD	DRAWN BY: KLS	DATE 8/26/25	
	APPROVED BY:	DATE:	
	MATERIAL:		
	SCALE: NONE		SIZE: D
USED ON: MIA RAYNE SUBDIVISION	UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES DECIMAL: ±.005 FRACTIONAL: ±1/64 DEGREE: ±1°		
PROPRIETARY PROPERTY: THIS DRAWING IS THE PROPERTY OF JET INC. AND MAY NOT BE REPRODUCED, COPIED OR USED WITHOUT WRITTEN PERMISSION.	DRAWING NUMBER: JCP-240312-41 SHEET 2 OF 2		REV: 1

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ENGINEERING GROUP
CIVIL ENGINEERING AND LAND PLANNING

WASTE WATER TREATMENT PLANT DETAIL
MIA RAYNE SUBDIVISION
MADISON COUNTY, ALABAMA

DATE: 8/27/2025
DRAWN BY: HLG
DESIGNED BY: MRS
CHECKED BY: MRS

4

01-22-1675