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

MAR 0 5 2019

David Stovall, Partner
Pinnacle Wastewater Services, LLC
120 Bishop Circle, Suite 300
Pelham, AL 35124

RE: Draft Permit
NPDES Permit No. AL0083836
Chelsea Acres Water Reclamation Facility
Shelby County, Alabama

Dear Mr. Stovall:

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 Part I.C.1.c of your permit requires that you apply for participation in the Department's web-based Electronic Environmental (E2) Reporting System Program for submittal of DMRs upon issuance of this permit unless valid justification as to why you cannot participate is submitted in writing. Please also be aware that Part I.C.2.e of your permit requires that you apply for participation in the Department's web-based electronic environmental (E2) reporting system for submittal of **SSOs** within 30 days of coverage under this permit unless valid justification as to why you cannot participate is submitted in writing. After issuance of the permit, SSO hotline notifications and hard copy Form 415 SSO reports may be used only with the written approval from the Department. The E2 Program allows ADEM to electronically validate, acknowledge receipt, and upload data to the state's central wastewater database. This improves the accuracy of reported compliance data and reduces costs to both the regulated community and ADEM. The Permittee Participation Package may be downloaded online at **https://e2.adem.alabama.gov/npdes** or you may obtain a hard copy by submitting a written request or by emailing e2admin@adem.alabama.gov.

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.

Should you have any questions, please contact the undersigned by email at slee@adem.alabama.gov or by phone at (334) 274-4223.

Sincerely,

Sandra Lee
Municipal Section
Water Division

/mfc
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:	PINNACLE WASTEWATER SERVICES, LLC 120 BISHOP CIRCLE, SUITE 300 PELHAM, ALABAMA 35124
FACILITY LOCATION:	CHELSEA ACRES WATER RECLAMATION FACILITY (0.0995 MGD) LIBERTY ROAD CHELSEA, ALABAMA SHELBY COUNTY
PERMIT NUMBER:	AL0083836
RECEIVING WATERS:	LITTLE 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

MUNICIPAL SECTION
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT

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PART I DISCHARGE LIMITATIONS, CONDITIONS, AND REQUIREMENTS

A. DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS

1. Outfall 0011 Discharge Limits - Municipal 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 0011, which is described more fully in the Permittee's application. Such discharge shall be limited and monitored by the Permittee as specified below:

Parameter	Discharge Limitations*							Monitoring Requirements**			
	Monthly Average	Weekly Average	Monthly Average	Weekly Average	Daily Minimum	Daily Maximum	Percent Removal	(1) Sample Location	(2) Sample Type	(3) Measurement Frequency	(4) Seasonal
Oxygen, Dissolved (DO) 00300 1 0 0	*****	*****	*****	*****	6.0 mg/l	*****	*****	E	GRAB	E	*****
pH 00400 1 0 0	*****	*****	*****	*****	6.0 S.U.	8.5 S.U.	*****	E	GRAB	E	*****
Solids, Total Suspended 00530 1 0 0	24.8 lbs/day	37.3 lbs/day	30.0 mg/l	45.0 mg/l	*****	*****	*****	E	COMP-8	E	*****
Solids, Total Suspended 00530 G 0 0	REPORT lbs/day	REPORT lbs/day	REPORT mg/l	REPORT mg/l	*****	*****	*****	I	COMP-8	E	*****
Nitrogen, Ammonia Total (As N) 00610 1 0 0	1.7 lbs/day	2.5 lbs/day	2.0 mg/l	3.0 mg/l	*****	*****	*****	E	COMP-8	E	*****
Nitrogen, Kjeldahl Total (As N) 00625 1 0 0	REPORT lbs/day	REPORT lbs/day	REPORT mg/l	REPORT mg/l	*****	*****	*****	E	COMP-8	G	S
Nitrite Plus Nitrate Total 1 Det. (As N) 00630 1 0 0	REPORT lbs/day	REPORT lbs/day	REPORT mg/l	REPORT mg/l	*****	*****	*****	E	COMP-8	G	S
Phosphorus, Total (As P) 00665 1 0 0	REPORT lbs/day	REPORT lbs/day	REPORT mg/l	REPORT mg/l	*****	*****	*****	E	COMP-8	G	S
Flow, In Conduit or Thru Treatment Plant 50050 1 0 0	REPORT MGD	*****	*****	*****	*****	REPORT MGD	*****	E	INSTAN	E	*****
Chlorine, Total Residual See note (5) (6) 50060 1 0 0	*****	*****	0.011 mg/l	*****	*****	0.019 mg/l	*****	E	GRAB	E	*****

* See Part II.C.1. (Bypass); Part II.C.2. (Upset)

** Monitoring Requirements

(1) Sample Location
I – Influent
E – Effluent
X – End Chlorine Contact Chamber
K - Percent Removal of the Monthly Avg. Influent Concentration from the Monthly Avg. Effluent Concentration.
RS - Receiving Stream
US – Upstream
DS – Downstream
MW – Monitoring Well
SW – Storm Water

(2) Sample Type:
CONTIN - Continuous
INSTAN - Instantaneous
COMP-8 - 8-Hour Composite
COMP24 - 24-Hour Composite
GRAB – Grab
CALCTD - Calculated

(3) Measurement Frequency: See also Part I.B.2.
A - 7 days per week
B - 5 days per week
C - 3 days per week
D - 2 days per week
E - 1 day per week
F - 2 days per month
G - 1 day per month
H - 1 day per quarter
J - Annual
Q - For Effluent Toxicity Testing, see Provision IV.B.

(4) Seasonal Limits:
S = Summer (April – October)
W = Winter (November – March)
ECS = E. coli Summer (May – October)
ECW = E. coli Winter (November – April)

(5) 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" or "NODI=9" (if hard copy) on the monthly DMR.

(6) A measure of TRC below 0.05 mg/L shall be considered in compliance with the permit limitations above and should be reported as "NODI=B" (if hard copy) or *B on the discharge monitoring reports.

2. Outfall 0011 Discharge Limits - Municipal Wastewater (continued)

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 0011, which is described more fully in the Permittee's application. Such discharge shall be limited and monitored by the Permittee as specified below:

Parameter	Discharge Limitations*							Monitoring Requirements**			
	Monthly Average	Weekly Average	Monthly Average	Weekly Average	Daily Minimum	Daily Maximum	Percent Removal	(1) Sample Location	(2) Sample Type	(3) Measurement Frequency	(4) Seasonal
E. Coli 51040 1 0 0	*****	*****	126 col/100mL	*****	*****	298 col/100mL	*****	E	GRAB	E	ECS
E. Coli 51040 1 0 0	*****	*****	548 col/100mL	*****	*****	2507 col/100mL	*****	E	GRAB	E	ECW
BOD, Carbonaceous 05 Day, 20C 80082 1 0 0	3.3 lbs/day	5.0 lbs/day	4.0 mg/l	6.0 mg/l	*****	*****	*****	E	COMP-8	E	*****
BOD, Carbonaceous 05 Day, 20C 80082 G 0 0	REPORT lbs/day	REPORT lbs/day	REPORT mg/l	REPORT mg/l	*****	*****	*****	I	COMP-8	E	*****
BOD, Carb-5 Day, 20 Deg C, Percent Remvl 80091 K 0 0	*****	*****	*****	*****	*****	*****	85.0%	K	CALCTD	G	*****
Solids, Suspended Percent Removal 81011 K 0 0	*****	*****	*****	*****	*****	*****	85.0%	K	CALCTD	G	*****

* See Part II.C.1. (Bypass); Part II.C.2. (Upset)
** Monitoring Requirements

(1) Sample Location
I – Influent
E – Effluent
X – End Chlorine Contact Chamber
K - Percent Removal of the Monthly Avg. Influent Concentration from the Monthly Avg. Effluent Concentration.
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A - 7 days per week
B - 5 days per week
C - 3 days per week
D - 2 days per week
E - 1 day per week
F - 2 days per month
G - 1 day per month
H - 1 day per quarter
J - Annual
Q - For Effluent Toxicity Testing, see Provision IV.B.

(4) Seasonal Limits:
S = Summer (April – October)
W = Winter (November – March)
ECS = E. coli Summer (May – October)
ECW = E. coli Winter (November – April)

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" 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" 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) on the forms approved by the Department and 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 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.

(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. by utilizing the Department's web-based Electronic Environmental (E2) Reporting System.

(1) If the permittee is unable to complete the electronic submittal of DMR data due to technical problems originating with the Department's E2 Reporting 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 E2 Reporting 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 E2 Reporting System resuming operation, the permittee shall enter the data into the E2 Reporting System, unless an alternate timeframe is approved by the Department. An attachment should be included with the E2 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.

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.

(3) 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.

(4) 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.

(5) 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
Environmental Data Section, Permits & Services 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
Environmental Data Section, Permits & Services 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 a web-based electronic environmental (E2) reporting system for notification and submittal of SSO reports. **If the Permittee is not already participating in the E2 Reporting System for SSO reports, the Permittee must apply for participation in the system within 30 days of coverage under this permit unless the Permittee submits in writing valid justification as to why it cannot participate and the Department approves in writing utilization of verbal notifications and hard copy SSO report submittals.** Once the Permittee is enrolled in the E2 Reporting System for SSO reports, the Permittee must utilize the system for notification and submittal of all SSO reports unless otherwise allowed by this permit. The Permittee shall include in the SSO reports the information requested by ADEM Form 415. In addition, the Permittee shall include the latititude 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 E2 Reporting System for SSO reports, the Permittee Participation Package may be downloaded online at **https://e2.adem.alabama.gov/npdes**. If the E2 Reporting 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 E2 Reporting System resuming operation, the Permittee shall enter the data into the E2 Reporting 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 (BMP)

   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 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

   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, for 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, any 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.

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; or

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 direct 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 create a fire or explosion hazard in the treatment works;
2. Pollutants which will cause corrosive structural damage to the treatment works, or dischargers with a pH lower than 5.0 s.u., unless the works are specifically designed to accommodate such discharges;
3. Solid or viscous pollutants in amounts which will cause obstruction of flow in sewers, or other interference with the treatment works;
4. Pollutants, including oxygen demanding pollutants, released in a discharge of such volume or strength as to cause interference in the treatment works;
5. Heat in amounts which will inhibit biological activity in the treatment plant resulting in interference or in such quantities that the temperature of the treatment plant influent exceeds 40°C (104° F) unless the treatment plant is designed to accommodate such heat; and
6. Pollutants in amounts which exceed any applicable pretreatment standard under Section 307 of FWPCA or any approved revisions thereof.

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. From which the discharge of pollutants did not commence 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 – 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; or

    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" or "NODI = 9" (if hard copy) 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 chlorine is not detected prior to actual discharge to the receiving stream using one of these methods (i.e., the analytical result is less than the detection level), the Permittee shall report on the DMR form "*B", "NODI = B" (if hard copy), 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 effective date of this permit, 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.

NPDES PERMIT RATIONALE

NPDES Permit No: **AL0083836** Date: February 22, 2019

Permit Applicant: Pinnacle Wastewater Services, LLC
120 Bishop Circle, Suite 300
Pelham, Alabama 35124

Location: Chelsea Acres Water Reclamation Facility
Liberty Road
Chelsea, Alabama 35043

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

Basis for Limitations: Water Quality Model: DO, NH_3-N, $CBOD_5$
Reissuance with no modification: NA
Instream calculation at 7Q10: 100%
Toxicity based: TRC
Secondary Treatment Levels: TSS, TSS Percent Removal, $CBOD_5$ Percent Removal
Other (described below): pH, E. Coli

Design Flow in Million Gallons per Day: 0.0995

Major: No

Description of Discharge: Outfall Number 001;
Effluent discharge to Little Creek,
which is classified as Fish and Wildlife.

Discussion: This permit is an initial issuance.

The pH limits for Outfall 0011 were developed consistent with the Water-Use designation of the receiving stream and the Municipal Section's Permit Development Rationale. The daily maximum pH limit is 8.5 s.u. and the daily minimum is 6.0 s.u. The monitoring frequency is once per week. Flow will be monitored instantaneously, once per week.

The discharge limits for 5 Day Carbonaceous Biochemical Oxygen Demand ($CBOD_5$), Total 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 performed by the Department's Water Quality Branch on February 13, 2019. The monthly average limits for $CBOD_5$ and NH_3N are 4.0 mg/l and 2.0 mg/l, respectively. The monitoring frequency will be weekly. The daily minimum limitation for DO is 6.0 mg/L, the monitoring frequency will be weekly. A minimum percent removal of 85 percent is imposed for $CBOD_5$ based on 40 CFR 133.102. The percent removal will be calculated once per month.

The monthly average 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 85 percent is imposed for TSS based on 40 CFR 133.102. The percent removal will be calculated once per month.

The imposed E. coli limits were determined based on the water-use classification of the receiving stream. Little Creek is classified as Fish & Wildlife. The imposed E. coli 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.

This permit imposes monthly monitoring for the following nutrient-related parameters during the summer season (April – October): Total Phosphorus (TP), Total Kjeldahl Nitrogen (TKN) and Nitrate plus Nitrite-Nitrogen (NO_2+NO_3-N). Monitoring for these nutrient-related parameters is imposed so that sufficient information will be available regarding the nutrient contribution from this point source, should it be necessary at some later time to impose nutrient limits on this discharge.

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. Monthly average and daily maximum TRC limitations of 0.011 mg/L and 0.019 mg/L, respectively, are being imposed at Outfall 0011. The monitoring frequency will be weekly. A measure of TRC below 0.05 mg/L shall be considered in compliance with the permit limitations above and should be reported as "NODI=B"(if hard copy) or *B on the discharge monitoring reports. Monitoring for TRC is applicable if chlorine is utilized for disinfection purposes. If monitoring is not applicable during the monitoring period, enter "*9" or "NODI=9"(if hard copy) on the monthly DMR.

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

The receiving stream is Little Creek, a Tier I waterbody. The Little Creek is not on the 303(d) list and there are no current TMDLs affecting this waterbody.

ADEM Administrative Rule 335-6-10-.12 requires applicants to 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 not for a new or expanded discharge to a Tier II waterbody, so the applicant is not required to demonstrate that the discharge is necessary for economic and social development.

Prepared by: Sandra Lee

TOXICITY AND DISINFECTION RATIONALE

Facility Name:	**Chelsea Acres Water Reclamation Facility**	
NPDES Permit Number:	**AL0083836**	
Receiving Stream:	**Little Creek**	
Facility Design Flow (Q_w):	**0.0995 MGD**	
Receiving Stream $7Q_{10}$:	**0.000 cfs**	
Receiving Stream $1Q_{10}$:	**0.000 cfs**	
Winter Headwater Flow (WHF):	**0.00 cfs**	
Summer Temperature for CCC:	**30 deg. Celsius**	
Winter Temperature for CCC:	**30 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**	**2.18 mg/l**
Allowable Winter Instream NH_3-N:	**36.09 mg/l**	**2.18 mg/l**

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

= **2.2 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	**2.00 mg/l NH3-N**	**2.20 mg/l NH3-N**
Winter	**N./A.**	**N./A.**

Summer: The DO based limit of 2.00 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: 2/21/2019

Waste Load Allocation Summary

REQUEST INFORMATION

Request Number: 3517

From:	Sandy Lee	In Branch/Section	Municipal		
Date Submitted	11/16/2018	Date Required	12/16/2018	FUND Code	605
Receiving Waterbody	Little Creek	Date Permit application received by NPDES program	10/25/2018		
Previous Stream					
Facility Name	Chelsea Acres Reclamation Facility	(Name of Discharger-WQ will use to file)			
		Previous Discharger Name			
River Basin	Coosa	Outfall Latitude	33.334092	(decimal degrees)	
County	Shelby	Outfall Longitude	-86.603487	(decimal degrees)	
Permit No.	AL0083836	Permit Action	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.	Shelby Ridge WRF	Impacting dischargers permit numbers.	AL0071501

Existing Discharge Design Flow		MGD	Note: The flow rates given should be those requested for modeling.
Proposed Discharge Design Flow	0.0995	MGD	

Comments included ☐ Yes ☑ No

Information Verified By

Year File Was Created

Response ID Number 1670

Lat/Long Method GPS

12 Digit HUC Code	031501070201		
Use Classification	F&W		
Site Visit Completed?	☑ Yes ☐ No	Date of Site Visit	1/15/2019
Waterbody Impaired?	☐ ☑	Date of WLA Response	2/13/2019
Antidegradation	☐ Yes ☑ No	Approved TMDL?	☐ ☑
Waterbody Tier Level	Tier I		
Use Support Category	3	Approval Date of TMDL	

Waste Load Allocation Information

Modeled Reach Length	1.13	Miles	Date of Allocation	2/13/2019	
Name of Model Used	SWQM		Allocation Type	Annual	
Model Completed by	NC		Type of Model Used	Desk-top	
Allocation Developed by	Water Quality Branch				

Waste Load Allocation Summary

Annual Effluent Limits		
	0.0995	MGD
CBOD5	4	mg/L
NH3-N	2	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	30	°C		°C
pH	7	su		su

Hydrology at Discharge Location

Drainage Area Qualifier				Method Used to Calculate
Exact	Drainage Area	7.58	sq mi	
	Stream 7Q10	0	cfs	Bingham Equation
	Stream 1Q10	0	cfs	75%of 7Q10
	Stream 7Q2	0		Bingham Equation
	Annual Average	12.128	cfs	Bingham Equation

Comments and/or Notations

Please print or type in the unshaded areas only. Form Approved. OMB No. 2040-0086.

FORM 1 GENERAL	EPA	U.S. ENVIRONMENTAL PROTECTION AGENCY **GENERAL INFORMATION** *Consolidated Permits Program* *(Read the "General Instructions" before starting.)*	I. EPA I.D. NUMBER

LABEL ITEMS	
I. EPA I.D. NUMBER	PLEASE PLACE LABEL IN THIS SPACE
III. FACILITY NAME	
V. FACILITY MAILING ADDRESS	
VI. FACILITY LOCATION	

RECEIVED OCT 25 2018 IND / MUN BRANCH

GENERAL INSTRUCTIONS

If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in area below. Also, if any of the preprinted data is absent *(the area to the left of the label space lists the information that should appear)*, please provide it in the proper fill-in area(s) below. If the label is complete and correct, you need not complete Items I, III, V, and VI *(except VI-B which must be completed regardless)*. Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.

II. POLLUTANT CHARACTERISTICS

INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of **bold-faced terms**.

SPECIFIC QUESTIONS	YES	NO	FORM ATTACHED	SPECIFIC QUESTIONS	YES	NO	FORM ATTACHED
A. Is this facility a **publicly owned treatment works** which results in a **discharge** to **waters of the U.S.**? (FORM 2A)		X		B. Does or will this facility *(either existing or proposed)* include a **concentrated animal feeding operation** or **aquatic animal production facility** which results in a **discharge** to **waters of the U.S.**? (FORM 2B)		X	
C. Is this a facility which currently results in **discharges** to **waters of the U.S.** other than those described in A or B above? (FORM 2C)		X		D. Is this a proposed facility *(other than those described in A or B above)* which will result in a **discharge** to **waters of the U.S.**? (FORM 2D)	X		X
E. Does or will this facility treat, store, or dispose of **hazardous wastes**? (FORM 3)		X		F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)		X	
G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)		X		H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)		X	
I. Is this facility a proposed **stationary source** which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		X		J. Is this facility a proposed **stationary source** which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an **attainment area**? (FORM 5)		X	

III. NAME OF FACILITY

1 SKIP Chelsea Acres Water Reclamation Facility

IV. FACILITY CONTACT

A. NAME & TITLE *(last, first, & title)*	B. PHONE *(area code & no.)*
2 DAVID STOVALL, PARTNER	(205) 403-9158

V. FACILTY MAILING ADDRESS

A. STREET OR P.O. BOX

3 120 BISHOP CIRCLE, SUITE 300

B. CITY OR TOWN	C. STATE	D. ZIP CODE
4 Pelham	AL	35124

VI. FACILITY LOCATION

A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER

5 LIBERTY ROAD, CHELSEA, AL 35043

B. COUNTY NAME

Shelby County

C. CITY OR TOWN	D. STATE	E. ZIP CODE	F. COUNTY CODE *(if known)*
6 Chelsea	AL	35043	58

CONTINUED FROM THE FRONT

VII. SIC CODES (4-digit, in order of priority)

A. FIRST	B. SECOND
4952 (specify) Sewerage Systems	(specify)

C. THIRD	D. FOURTH
(specify)	(specify)

VIII. OPERATOR INFORMATION

A. NAME: Pinnacle Wastewater Services, LLC - David Stovall Partner

B. Is the name listed in Item VIII-A also the owner? ☑ YES ☐ NO

C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box; if "Other," specify.)

F = FEDERAL
S = STATE
P = PRIVATE
M = PUBLIC (other than federal or state)
O = OTHER (specify)

P (specify)

D. PHONE (area code & no.): A (205) 403-9158

E. STREET OR P.O. BOX: 120 Bishop Circle, Suite 300

F. CITY OR TOWN	G. STATE	H. ZIP CODE	IX. INDIAN LAND
Pelham	AL	35043	Is the facility located on Indian lands? ☐ YES ☑ NO

X. EXISTING ENVIRONMENTAL PERMITS

A. NPDES (Discharges to Surface Water)	D. PSD (Air Emissions from Proposed Sources)
N/A	N/A

B. UIC (Underground Injection of Fluids)	E. OTHER (specify)
N/A	N/A (specify)

C. RCRA (Hazardous Wastes)	E. OTHER (specify)
N/A	N/A (specify)

XI. MAP

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

XII. NATURE OF BUSINESS (provide a brief description)

This will be a new Wastewater Treatment Facility to process and dispose of treated wastewater from residential sources. This facility will include tertiary treatment in order to meet anticipated stringent discharge requirements.

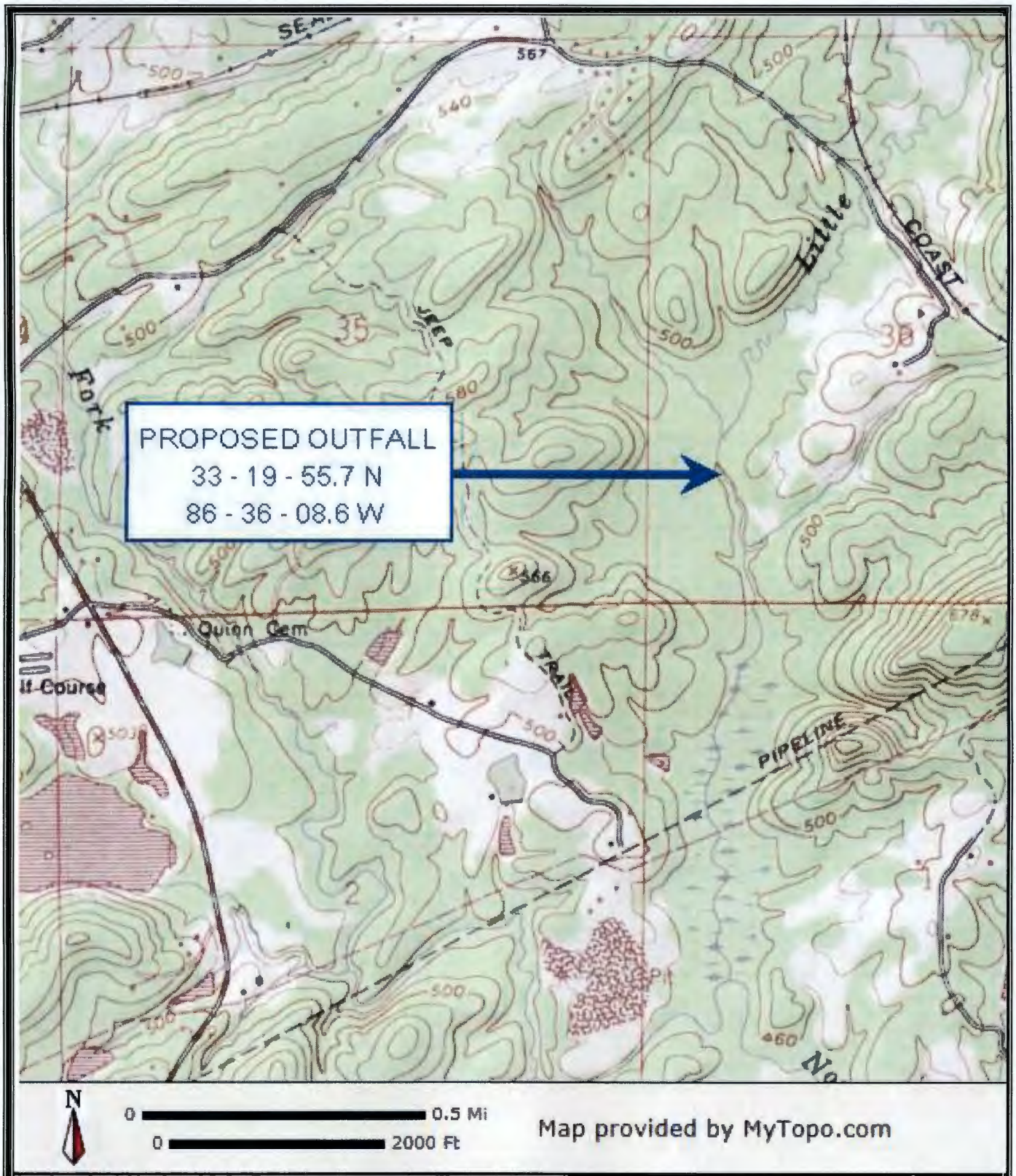
XIII. CERTIFICATION (see instructions)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME & OFFICIAL TITLE (type or print)	B. SIGNATURE	C. DATE SIGNED
David Stovall Partner	David T Stovall	10/22/18

COMMENTS FOR OFFICIAL USE ONLY

C



ENGINEERS OF THE SOUTH, LLC

Subject:
CHELSEA ACRES WATER RECLAMATION FACILITY
Partial Westover Quad Map

FIGURE 1 – USGS Topographic Map
Shelby County, Alabama
Scale as Noted

FACILITY NAME AND PERMIT NUMBER:

Chelsea Acres Water Reclamation Facility

Form Approved 1/14/99
OMB Number 2040-0086

FORM 2A NPDES

NPDES FORM 2A APPLICATION OVERVIEW

APPLICATION OVERVIEW

Form 2A has been developed in a modular format and consists of a "Basic Application Information" packet and a "Supplemental Application Information" packet. The Basic Application Information packet is divided into two parts. All applicants must complete Parts A and C. Applicants with a design flow greater than or equal to 0.1 mgd must also complete Part B. Some applicants must also complete the Supplemental Application Information packet. The following items explain which parts of Form 2A you must complete.

BASIC APPLICATION INFORMATION:

A. **Basic Application Information for all Applicants.** All applicants must complete questions A.1 through A.8. A treatment works that discharges effluent to surface waters of the United States must also answer questions A.9 through A.12.

B. **Additional Application Information for Applicants with a Design Flow ≥ 0.1 mgd.** All treatment works that have design flows greater than or equal to 0.1 million gallons per day must complete questions B.1 through B.6.

C. **Certification.** All applicants must complete Part C (Certification).

SUPPLEMENTAL APPLICATION INFORMATION:

D. **Expanded Effluent Testing Data.** A treatment works that discharges effluent to surface waters of the United States and meets one or more of the following criteria must complete Part D (Expanded Effluent Testing Data):

1. Has a design flow rate greater than or equal to 1mgd,
2. Is required to have a pretreatment program (or has one in place), or
3. Is otherwise required by the permitting authority to provide the information.

E. **Toxicity Testing Data.** A treatment works that meets one or more of the following criteria must complete Part E (Toxicity Testing Data):

1. Has a design flow rate greater than or equal to 1 mgd,
2. Is required to have a pretreatment program (or has one in place), or
3. Is otherwise required by the permitting authority to submit results of toxicity testing.

F. **Industrial User Discharges and RCRA/CERCLA Wastes.** A treatment works that accepts process wastewater from any significant industrial users (SIUs) or receives RCRA or CERCLA wastes must complete Part F (Industrial User Discharges and RCRA/CERCLA Wastes). SIUs are defined as:

1. All industrial users subject to Categorical Pretreatment Standards under 40 Code of Federal Regulations (CFR) 403.6 and 40 CFR Chapter I, Subchapter N (see instructions); and
2. Any other industrial user that:
   a. Discharges an average of 25,000 gallons per day or more of process wastewater to the treatment works (with certain exclusions); or
   b. Contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the treatment plant; or
   c. Is designated as an SIU by the control authority.

G. **Combined Sewer Systems.** A treatment works that has a combined sewer system must complete Part G (Combined Sewer Systems).

ALL APPLICANTS MUST COMPLETE PART C (CERTIFICATION)

FACILITY NAME AND PERMIT NUMBER:

Chelsea Acres Water Reclamation Facility

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BASIC APPLICATION INFORMATION

PART A. BASIC APPLICATION INFORMATION FOR ALL APPLICANTS:

All treatment works must complete questions A.1 through A.8 of this Basic Application Information Packet.

A.1. Facility Information.

Facility Name	**Chelsea Acres Water Reclamation Facility**
Mailing Address	**120 Bishop Circle, Suite 300** **Pelham, AL 35124**
Contact Person	**David Stovall**
Title	**Partner**
Telephone Number	**(205) 403-9158**
Facility Address (not P.O. Box)	**Liberty Road** **Chelsea, Al. 35043**

A.2. Applicant Information. If the applicant is different from the above, provide the following:

Applicant Name	**Pinnacle Wastewater Services, LLC**
Mailing Address	**2025 First Avenue North, Unit 100** **Birmingham, Alabama**
Contact Person	**David Stovall**
Title	**Partner**
Telephone Number	**(205) 403-9158**

Is the applicant the owner or operator (or both) of the treatment works?

☒ owner ☐ operator

Indicate whether correspondence regarding this permit should be directed to the facility or the applicant.

☐ facility ☒ applicant

A.3. Existing Environmental Permits. Provide the permit number of any existing environmental permits that have been issued to the treatment works (include state-issued permits).

NPDES	NA	PSD	
UIC		Other	
RCRA		Other	

A.4. Collection System Information. Provide information on municipalities and areas served by the facility. Provide the name and population of each entity and, if known, provide information on the type of collection system (combined vs. separate) and its ownership (municipal, private, etc.).Name Population Served Type of Collection System Ownership

Chelsea Acres Water Reclamation Facility **Separate**

Total population served Approx. 900

5. Indian Country.

a. Is the treatment works located in Indian Country?
☐ Yes ☒ No

b. Does the treatment works discharge to a receiving water that is either in Indian Country or that is upstream from (and eventually flows through) Indian Country?

☐ Yes ☒ No

A.6. Flow. Indicate the design flow rate of the treatment plant (i.e., the wastewater flow rate that the plant was built to handle). Also provide the average daily flow rate and maximum daily flow rate for each of the last three years. Each year's data must be based on a 12-month time period with the 12th month of "this year" occurring no more than three months prior to this application submittal.

a. Design flow rate **0.0995** mgd

	Two Years Ago	Last Year	This Year
b. Annual average daily flow rate	NA	NA	NA
c. Maximum daily flow rate	NA	NA	NA

A.7. Collection System. Indicate the type(s) of collection system(s) used by the treatment plant. Check all that apply. Also estimate the percent contribution (by miles) of each.

☒ Separate sanitary sewer **100** %

☐ Combined storm and sanitary sewer _____ %

A.8. Discharges and Other Disposal Methods.

a. Does the treatment works discharge effluent to waters of the U.S.? ☒ Yes ☐ No

If yes, list how many of each of the following types of discharge points the treatment works uses:

i. Discharges of treated effluent **1**

ii. Discharges of untreated or partially treated effluent **0**

iii. Combined sewer overflow points **0**

iv. Constructed emergency overflows (prior to the headworks) **0**

v. Other **0**

b. Does the treatment works discharge effluent to basins, ponds, or other surface impoundments that do not have outlets for discharge to waters of the U.S.? ☐ Yes ☒ No

If yes, provide the following for each surface impoundment:

Location:

Annual average daily volume discharge to surface impoundment(s) _mgd

Is discharge ☐ continuous or ☐ intermittent?

c. Does the treatment works land-apply treated wastewater? ☐ Yes ☒ No

If yes, provide the following for each land application site:

Location:

Number of acres:

Annual average daily volume applied to site: mgd

Is land application ☐ continuous or ☐ intermittent?

d. Does the treatment works discharge or transport treated or untreated wastewater to another treatment works? ☐ Yes ☒ No

If yes, describe the mean(s) by which the wastewater from the treatment works is discharged or transported to the other treatment works (e.g., tank truck, pipe).

N/A

If transport is by a party other than the applicant, provide:

Transporter Name _____

Mailing Address _____

_____

Contact Person _____

Title _____

Telephone Number (____) _____

For each treatment works that receives this discharge, provide the following:

Name _____

Mailing Address _____

_____

Contact Person _____

Title _____

Telephone Number (____) _____

If known, provide the NPDES permit number of the treatment works that receives this discharge _____

Provide the average daily flow rate from the treatment works into the receiving facility. _____ mgd

e. Does the treatment works discharge or dispose of its wastewater in a manner not included in A.8. through A.8.d above (e.g., underground percolation, well injection): ☐ Yes ☒ No

If yes, provide the following for each disposal method:

Description of method (including location and size of site(s) if applicable):

_____

Annual daily volume disposed by this method: _____

Is disposal through this method ☐ continuous or ☐ intermittent?

FACILITY NAME AND PERMIT NUMBER:

Chelsea Acres Water Reclamation Facility

Form Approved 1/14/99
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WASTEWATER DISCHARGES:

If you answered "yes" to question A.8.a, complete questions A.9 through A.12 **once for each outfall** (including bypass points) through which effluent is discharged. Do not include information on combined sewer overflows in this section. **If you answered "no" to question A.8.a,** go to Part B, "Additional Application Information for Applicants with a Design Flow Greater than or Equal to 0.1 mgd."

A.9. Description of Outfall.

a. Outfall number: **001 (proposed)**

b. Location:
Chelsea (City or town, if applicable) **35043** (Zip Code)
Shelby (County) **Alabama** (State)
33° 19' 55.7" (Latitude) **86° 36' 8.6"** (Longitude)

c. Distance from shore (if applicable): NA ft.

d. Depth below surface (if applicable): NA ft.

e. Average daily flow rate: 0.0995 mgd

f. Does this outfall have either an intermittent or a periodic discharge? ☐ Yes ☒ No (go to A.9.g.)

If yes, provide the following information:

Number of times per year discharge occurs: _____

Average duration of each discharge: _____

Average flow per discharge: _____ mgd

Months in which discharge occurs: _____

g. Is outfall equipped with a diffuser? ☐ Yes ☒ No

A.10. Description of Receiving Waters.

a. Name of receiving water: **Little Creek**

b. Name of watershed (if known): **YELLOWLEAF CREEK WATERSHED / COOSA RIVER BASIN**

United States Soil Conservation Service 14-digit watershed code (if known): _____

c. Name of State Management/River Basin (if known): _____

United States Geological Survey 8-digit hydrologic cataloging unit code (if known): _____

d. Critical low flow of receiving stream (if applicable)
acute _____ cfs chronic _____ cfs

e. Total hardness of receiving stream at critical low flow (if applicable): _____ mg/l of $CaCO_3$

FACILITY NAME AND PERMIT NUMBER

Chelsea Acres Water Reclamation Facility

Form Approved 1/14/99
OMB Number 2040-0086

A.11. Description of Treatment

a. What levels of treatment are provided? Check all that apply.

☐ Primary ☒ Secondary

☒ Advanced ☒ Other. Describe: tertiary sand filtration and chemical precipitation

b. Indicate the following removal rates (as applicable):

Design BOD5 removal or Design CBOD5 removal	>90	%
Design SS removal	>90	%
Design P removal	>60	%
Design N removal	40	%
Other		%

c. What type of disinfection is used for the effluent from this outfall? If disinfection varies by season, please describe:

Chlorine Tablets

If disinfection is by chlorination is dechlorination used for this outfall? ☒ Yes ☐ No

d. Does the treatment plant have post aeration? ☐ Yes ☒ No

A.12 Effluent Testing Information. All Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analyses not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three samples and must be no more than four and one-half years apart.

Outfall number: **001 (proposed)**

PARAMETER	MAXIMUM DAILY VALUE		AVERAGE DAILY VALUE		
	Value	Units	Value	Units	Number of Samples
pH (Minimum)	N/A	s.u.			
pH (Maximum)	N/A	s.u.			
Flow Rate	N/A	mgd	N/A	mgd	NONE
Temperature (Winter)	N/A				
Temperature (Summer)	N/A				

* For pH please report a minimum and a maximum daily value

POLLUTANT		MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML/MDL
		Conc.	Units	Conc.	Units	Number of Samples		
CONVENTIONAL AND NON CONVENTIONAL COMPOUNDS								
BIOCHEMICAL OXYGEN DEMAND (Report one)	BOD5	N/A						
	CBOD5	N/A						
FECAL COLIFORM								
TOTAL SUSPENDED SOLIDS (TSS)								

END OF PART A.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

BASIC APPLICATION INFORMATION

PART B. ADDITIONAL APPLICATION INFORMATION FOR APPLICANTS WITH A DESIGN FLOW GREATER THAN OR EQUAL TO 0.1 MGD (100,000 gallons per day).

All applicants with a design flow rate ≥ 0.1 mgd must answer questions B.1 through B.6. All others go to Part C (Certification).

B.1. Inflow and Infiltration. **Estimate the average number of gallons per day that flow into the treatment works from inflow and/or infiltration.**

N/A gpd

Briefly explain any steps underway or planned to minimize inflow and infiltration.

The proposed collection system will be low pressure sewer which will minimize I/I potential. All system components will be inspected and tested prior to putting in service.

B.2. Topographic Map. Attach to this application a topographic map of the area extending at least one mile beyond facility property boundaries. This map must show the outline of the facility and the following information. (You may submit more than one map if one map does not show the entire area.)

a. The area surrounding the treatment plant, including all unit processes.

b. The major pipes or other structures through which wastewater enters the treatment works and the pipes or other structures through which treated wastewater is discharged from the treatment plant. Include outfalls from bypass piping, if applicable.

c. Each well where wastewater from the treatment plant is injected underground.

d. Wells, springs, other surface water bodies, and drinking water wells that are: 1) within ¼ mile of the property boundaries of the treatment works, and 2) listed in public record or otherwise known to the applicant.

e. Any areas where the sewage sludge produced by the treatment works is stored, treated, or disposed.

f. If the treatment works receives waste that is classified as hazardous under the Resource Conservation and Recovery Act (RCRA) by truck, rail, or special pipe, show on the map where the hazardous waste enters the treatment works and where it is treated, stored, and/or disposed.

B.3. Process Flow Diagram or Schematic. Provide a diagram showing the processes of the treatment plant, including all bypass piping and all backup power sources or redundancy in the system. Also provide a water balance showing all treatment units, including disinfection (e.g., chlorination and dechlorination). The water balance must show daily average flow rates at influent and discharge points and approximate daily flow rates between treatment units. Include a brief narrative description of the diagram.

B.4. Operation/Maintenance Performed by Contractor(s).

Are any operational or maintenance aspects (related to wastewater treatment and effluent quality) of the treatment works the responsibility of a contractor? ☐ Yes ☒ No

If yes, list the name, address, telephone number, and status of each contractor and describe the contractor's responsibilities (attach additional pages if necessary).

Name: _____

Mailing Address: _____

Telephone Number: _____

Responsibilities of Contractor: _____

B.5. Scheduled improvements and Schedules of Implementation. Provide information on any uncompleted implementation schedule or uncompleted plans for improvements that will affect the wastewater treatment, effluent quality, or design capacity of the treatment works. If the treatment works has several different implementation schedules or is planning several improvements, submit separate responses to question B.5 for each. (If none, go to question B.6.)

a. List the outfall number (assigned in question A.9) for each outfall that is covered by this implementation schedule.

001

b. Indicate whether the planned improvements or implementation schedule are required by local, State, or Federal agencies.

☐ Yes ☒ No

c. If the answer to B.5.b is "Yes," briefly describe, including new maximum daily inflow rate (if applicable).

d. Provide dates imposed by any compliance schedule or any actual dates of completion for the implementation steps listed below, as applicable. For improvements planned independently of local, State, or Federal agencies, indicate planned or actual completion dates, as applicable. Indicate dates as accurately as possible.

Implementation Stage	Schedule MM/DD/YYYY	Actual Completion MM/DD/YYYY
- Begin Construction	02/01/2019	/ /
- End Construction	07/01/2019	/ /
- Begin Discharge	08/01/2019	/ /
- Attain Operational Level	08/21/2019	/ /

e. Have appropriate permits/clearances concerning other Federal/State requirements been obtained? ☐ Yes ☒ No

Describe briefly: General Contractor will obtain site disturbance permit from ADEM

B.6. EFFLUENT TESTING DATA (GREATER THAN 0.1 MGD ONLY).

Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide effluent testing for the following listed parameters and those required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum effluent testing data must be based on at least three pollutant scans, preferably represent several seasons, and must be no more than four and on-half years old.

Outfall Number: _____

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML/MDL
	Conc.	Units	Conc.	Units	Number of Samples		
CONVENTIONAL AND NON CONVENTIONAL COMPOUNDS							
AMMONIA (as N)							
CHLORINE (TOTAL RESIDUAL, TRC)							
DISSOLVED OXYGEN							
TOTAL KJELDAHL NITROGEN (TKN)							
NITRATE PLUS NITRITE NITROGEN							
OIL and GREASE							
PHOSPHORUS (Total)							
TOTAL DISSOLVED SOLIDS (TDS)							
OTHER **CBOD**							

END OF PART B.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

FACILITY NAME AND PERMIT NUMBER:

Chelsea Acres Water Reclamation Facility

Form Approved 1/14/99
OMB Number 2040-0086

BASIC APPLICATION INFORMATION

PART C. CERTIFICATION

All applicants must complete the Certification Section. Refer to instructions to determine who is an officer for the purposes of this certification. All applicants must complete all applicable sections of Form 2A, as explained in the Application Overview. Indicate below which parts of Form 2A you have completed and are submitting. By signing this certification statement, applicants confirm that they have reviewed Form 2A and have completed all sections that apply to the facility for which this application is submitted.

Indicate which parts of Form 2A you have completed and are submitting:

☒ Basic Application Information packet

Supplemental Application Information packet:

☐ Part D (Expanded Effluent Testing Data)

☐ Part E (Toxicity Testing: Biomonitoring Data)

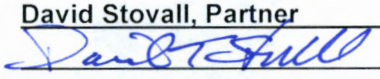
☐ Part F (Industrial User Discharges and RCRA/CERCLA Wastes)

☐ Part G (Combined Sewer Systems)

ALL APPLICANTS MUST COMPLETE 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 the information, the information 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 and official title: David Stovall, Partner

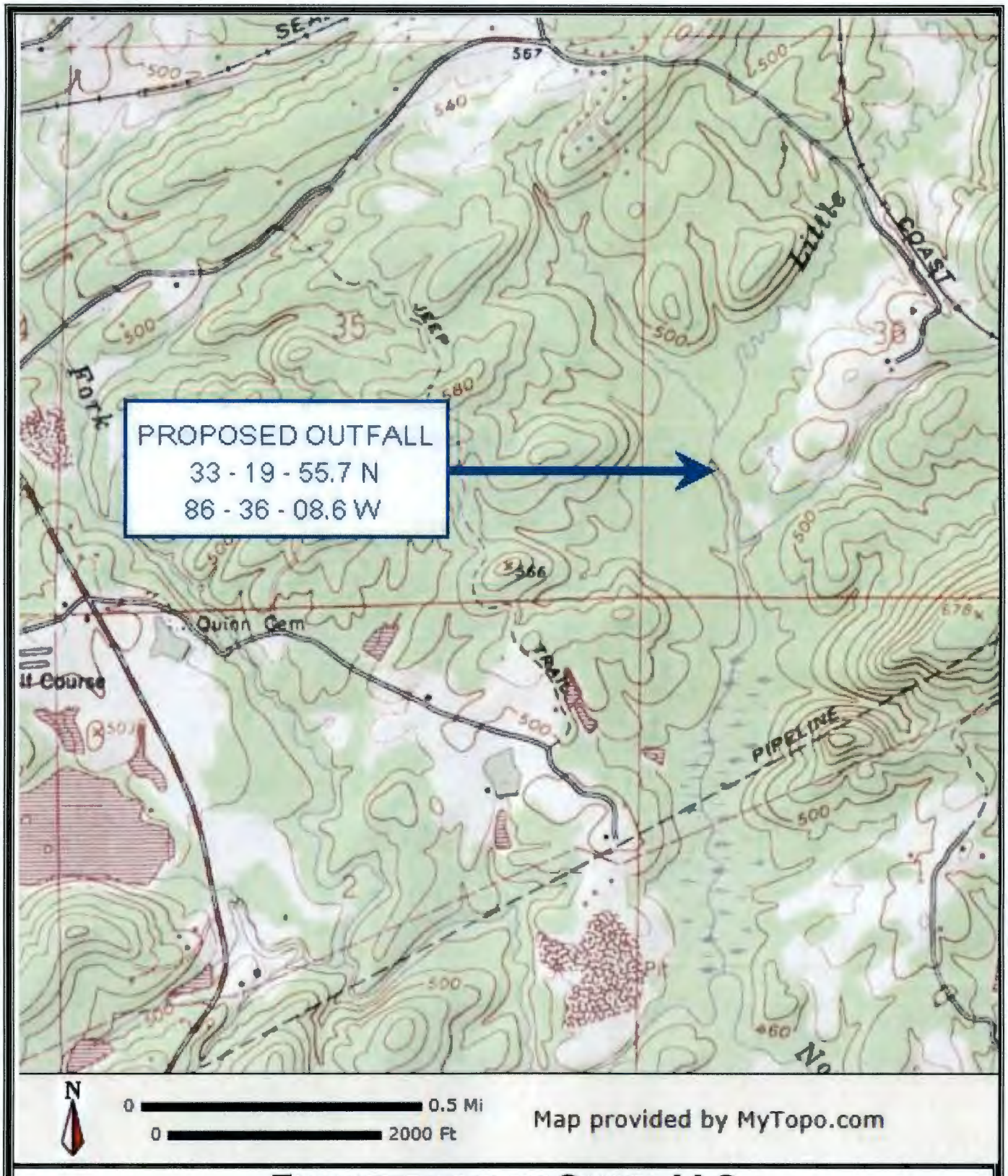
Signature: 

Telephone number: (205) 403-9158

Date signed: 10/22/18

Upon request of the permitting authority, you must submit any other information necessary to assure wastewater treatment practices at the treatment works or identify appropriate permitting requirements.

SEND COMPLETED FORMS TO:



ENGINEERS OF THE SOUTH, LLC

Subject:
CHELSEA ACRES WATER RECLAMATION FACILITY
Partial Westover Quad Map

FIGURE 1 – USGS Topographic Map
Shelby County, Alabama
Scale as Noted

Form Approved. OMB No. 2040-0086. Approval expires 8-31-98.

Please print or type in the unshaded areas only	EPA I.D. NUMBER (*copy from Item 1 of Form 1*)	

Form 2D NPDES

EPA

New Sources and New Dischargers Application for Permit to Discharge Process Wastewater

I. Outfall Location

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

Outfall Number (*list*)	Latitude			Longitude			Receiving Water (*name*)
	Deg.	Min.	Sec.	Deg.	Min.	Sec.	
001	33	19	56	-86	36	9	LITTLE CREEK

RECEIVED
OCT 25 2018
IND / MUN BRANCH

II. Discharge Date (When do you expect to begin discharging?)

08/01/2019

III. Flows, Sources of Pollution, and Treatment Technologies

A. For each outfall, provide a description of: (1) All operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) The average flow contributed by each operation; and (3) The treatment received by the wastewater. Continue on additional sheets if necessary.

Outfall Number	1. Operations Contributing Flow (*List*)	2. Average Flow (*Include Units*)	3. Treatment (*Description or List codes from Table 2D-1*)
001	SANITARY WASTEWATER	99,500 GALLONS PER DAY	1-R, 2-C, 3-A, 3-D, 4-A, 5-A

B. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item III-A. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfalls. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.

C. Except for storm runoff, leaks, or spills, will any of the discharges described in Items III-A be intermittent or seasonal?

☐ YES (*complete the following table*) ☑ NO (*go to Section IV*)

Outfall Number	1. Frequency		2. Flow		
	a. Days Per Week (*specify average*)	b. Months Per Year (*specify average*)	a. Maximum Daily Flow Rate (*in mgd*)	b. Maximum Total Volume (*specify with units*)	c. Duration (*in days*)

IV. Production

If there is an applicable production-based effluent guideline or NSPS, for each outfall list the estimated level of production (projection of actual production level, not design), expressed in the terms and units used in the applicable effluent guideline or NSPS, for each of the first 3 years of operation. If production is likely to vary, you may also submit alternative estimates (attach a separate sheet).

Year	A. Quantity Per Day	B. Units Of Measure	c. Operation, Product, Material, etc. (*specify*)
2016	n/a		
2017	n/a		
2018	n/a		

CONTINUED FROM THE FRONT	EPA I.D. NUMBER (*copy from Item 1 of Form 1*)	Outfall Number
		001

V. Effluent Characteristics

A and B: These items require you to report estimated amounts (*both concentration and mass*) of the pollutants to be discharged from each of your outfalls. Each part of this item addresses a different set of pollutants and should be completed in accordance with the specific instructions for that part. Data for each outfall should be on a separate page. Attach additional sheets of paper if necessary.

General Instructions *(See table 2D-2 for Pollutants)*
Each part of this item requests you to provide an estimated daily maximum and average for certain pollutants and the source of information. Data for all pollutants in Group A, for all outfalls, must be submitted unless waived by the permitting authority. For all outfalls, data for pollutants in Group B should be reported only for pollutants which you believe will be present or are limited directly by an effluent limitations guideline or NSPS or indirectly through limitations on an indicator pollutant.

1. Pollutant	2. Maximum Daily Value *(include units)*	3. Average Daily Value *(include units)*	4. Source *(see instructions)*
Biochemical Oxygen Demand	15 mg/l	10 mg/l	Sanitary Wastewater
Chemical Oxygen Demand	30 mg/l	20 mg/l	Sanitary Wastewater
Total Organic Carbon	15 mg/l	10 mg/l	Sanitary Wastewater
Total Suspended Solids	20 mg/l	10 mg/l	Sanitary Wastewater
Flow	0.0995 MGD	0.085 MGD	Sanitary Wastewater
Ammonia (as N)	4.0 mg/l	2.0 mg/l	Sanitary Wastewater
Temperature (Winter)	13 C	20 C	Sanitary Wastewater
Temperature (Summer)	25 C	20 C	Sanitary Wastewater
pH	8.5	7.0	Sanitary Wastewater
Total Residual Chlorine	0.05 mg/l	0.01 mg/l	Sanitary Wastewater
Fecal Coliform	200col/100ml	200col/100ml	Sanitary Wastewater
Nitrate-Nitrite (as N)	10 mg/l	8 mg/l	Sanitary Wastewater
Phoaphorous (as P), Total	4.0 mg/l	3.0 mg/l	Sanitary Wastewater

CONTINUED FROM THE FRONT	EPA I.D. NUMBER (*copy from Item 1 of Form 1*)	

C. Use the space below to list any of the pollutants listed in Table 2D-3 of the instructions which you know or have reason to believe will be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it will be present.

1. Pollutant	2. Reason for Discharge
N/A	

VI. Engineering Report on Wastewater Treatment

A. If there is any technical evaluation concerning your wastewater treatment, including engineering reports or pilot plant studies, check the appropriate box below.

☐ Report Available ☑ No Report

B. Provide the name and location of any existing plant(s) which, to the best of your knowledge resembles this production facility with respect to production processes, wastewater constituents, or wastewater treatments.

Name	Location
Double Oak Water Reclamation Facility NPDES Permit No. AL0071501	Chelsea, Shelby County, Alabama

EPA I.D. NUMBER (*copy from Item 1 of Form 1*)

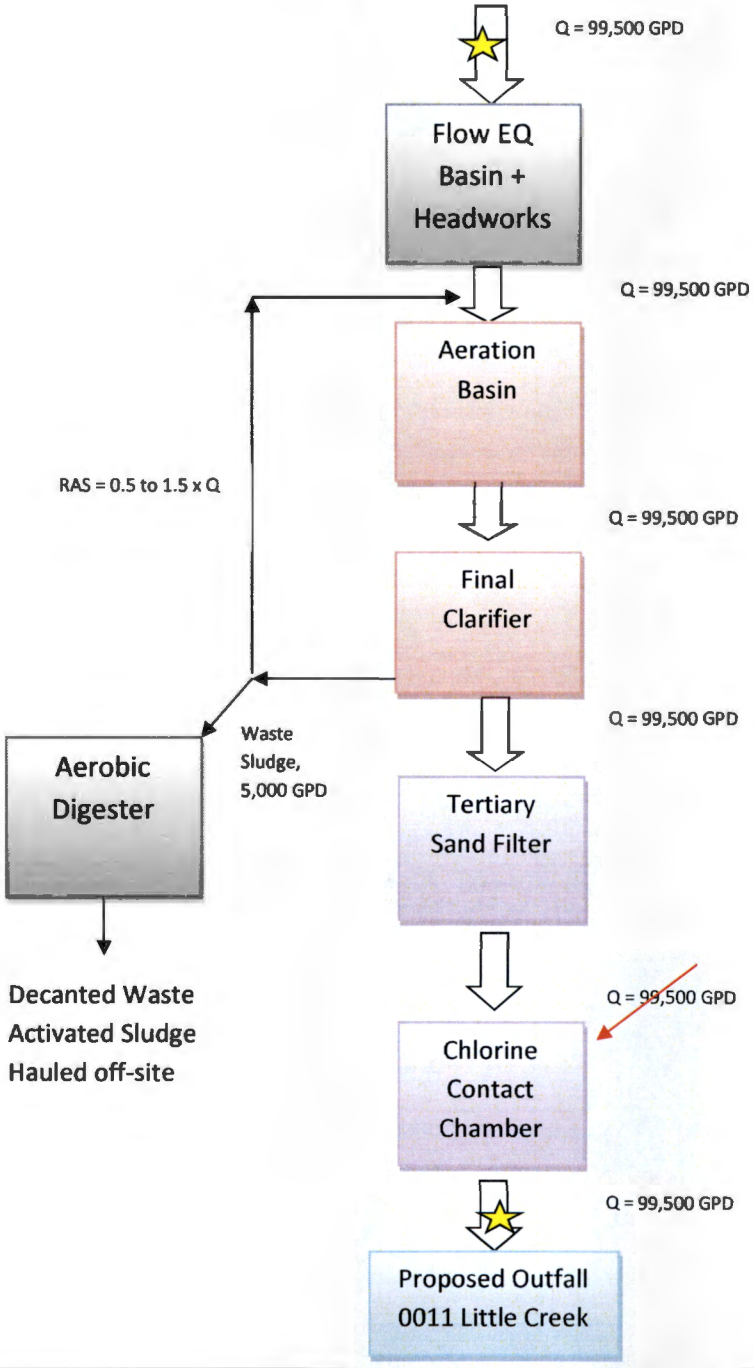
VII. Other Information *(Optional)*

Use the space below to expand upon any of the above questions or to bring to the attention of the reviewer any other information you feel should be considered in establishing permit limitations for the proposed facility. Attach additional sheets if necessary.

VIII. 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 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.

A. Name and Official Title (*type or print*)	B. Phone No.
David Stovall Partner	(205) 403-9158
C. Signature	D. Date Signed
David Stovall	11/22/18



CHELSEA ACRES WRF FLOW SCHEMATIC

CHELSEA ACRES SUBDIVISION

CHEALSEA, SHELBY COUNTY, ALABAMA

LEGEND

- Sample Location
- Flow Direction
- Chemical Addition

SUPPLEMENTARY INFORMATION
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
PERMIT APPLICATION FORM 188- Municipal, Semi-Public & Private Facilities

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
WATER DIVISION – MUNICIPAL PERMIT SECTION
POST OFFICE BOX 301463
MONTGOMERY, ALABAMA 36130-1463

RECEIVED
OCT 25 2018
IND / MUN BRANCH

INSTRUCTIONS: APPLICATIONS SHOULD BE TYPED OR PRINTED IN INK AND SUBMITTED TO THE DEPARTMENT. PLEASE CONTINUE ON AN ATTACHED SHEET OF PAPER IF INSUFFICIENT SPACE IS AVAILABLE TO ADDRESS ANY ITEM BELOW. PLEASE MARK N/A IN THE APPROPRIATE BOX WHEN AN ITEM IS NON-APPLICABLE TO THE APPLICANT.

PURPOSE OF THIS APPLICATION

- [x] 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

SECTION A – GENERAL INFORMATION

1. Facility Name: Chelsea Acres Water Reclamation Facility

   a. Operator Name: Pinnacle Wastewater Services, LLC

   b. Is the operator identified in 1.a, the owner of the facility? Yes [x] No [ ]
   If no, provide name and address of the operator and submit information indicating the operator's scope of responsibility for the facility.

   c. Name of Permitee* if different than Operator:
   **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: (**Attach a map with location marked; street, route no. or other specific identifier**)

   Street: Liberty Road

   City: Chelsea County: Shelby State: Alabama Zip: 35043

   Facility (Front Gate) Location: Latitude (Deg Min Sec): 33deg 19' 59.8" Longitude (Deg. Min Sec): 86deg 36' 11.8"

4. Facility Mailing Address (Street or Post Office Box): 120 Bishop Circle, Suite 300

   City: Pelham County: Shelby State: Alabama Zip: 35124

5. Responsible Official (as described on page 7 of this application):

   Name and Title: David Stovall, Partner

   Address: 120 Bishop Circle, Suite 300

   City: Pelham State: Alabama Zip: 35124

   Phone Number: 205 403-9158

   Email Address: (Optional): stovall@edgalabama.com

6. Designated Facility/DMR Contact:

Name and Title: David Stovall, Partner

Phone Number: 205 403-9158

DMR Email Address (Optional – for receipt of blank DMR Forms): stovall@edgalabama.com

7. Please complete this section if the Applicant's business entity is a Proprietorship or limited liability Corporation with a responsible official not listed in Item 5.

a) Proprietor:

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

8. Permit numbers for Applicant's previously issued NPDES Permits and identification of any other State Environmental Permits presently held by the Applicant within the State of Alabama:

Permit Name	Permit Number	Held by
None		

9. 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
None			

SECTION B – WASTEWATER DISCHARGE INFORMATION

1. List the following historical monthly flow rates recorded for the past five years for each outfall:

Outfall Number	Highest in Last 12 Months MGD	Highest Daily Flow MGD	Average Flow MGD
None			

2. Report E-coli (Freshwater) or Enterococci (Coastal Waters) monitoring results for the past five years for each outfall if available:

Outfall Number	Ecoli or Enterococci	Maximum Daily E-coli / Enterococci Discharge (per 100 ml)	Maximum Monthly Average E-Coli / Enterococci Discharge (per 100 ml)	No. of Analyses	Analytical Method	ML/MDL

3. Attached a process flow schematic of the treatment process, including the size of each unit operation.

4. 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:

A continuous flow meter with daily totalizer will be installed at the effluent end of the WWTP. Automatic samplers will be provided at the influent and effluent ends of the WWTP.

5. 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 ✓

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

We are requesting a permitted flow that will be adequate for the proposed development at full build-out. The projected build-out is projected to occur over a five to ten year period, depending on market conditions.

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
Chlorine Tablets will be used for disinfection	Tablets will be contained within a sealed bucket and stored within a security fence.

Describe the location of any sites used for the ultimate disposal of solid or liquid waste materials or residuals (e.g. sludges) generated by any wastewater treatment system located at the facility.

Description of Waste	Quantity (lbs/day)	Disposal Method*
Waste Activated Sludge	120	Septage Tanker Truck to Municipal WWTP

***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? Y/N
N/A				

2. Are industrial wastewater contributions regulated via a locally approved sewer use ordinance [Y/N]? If so, 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, then complete items A through M below:

	YES	NO
A. Does the project require new construction?	____	____
B. Will the project be a source of new air emissions?	____	____
C. Does the project involve dredging and/or filling of a wetland area or water way?	____	____
Has the Corps of Engineers (COE) permit been issued?	____	____
Corps Project Number _____		
D. Does the project involve wetlands and/or submersed grassbeds?	____	____
E. Are oyster reefs located near the project site? (Include a map showing project and discharge location with respect to oyster reefs)	____	____
F. Does the project involve the site development, construction and operation of an energy facility as defined in ADEM Admin. Code R. 335-8-1-.02(bb)?	____	____
G. Does the project involve mitigation of shoreline or coastal area erosion?	____	____
H. Does the project involve construction on beaches or dunes areas?	____	____
I. Will the project interfere with public access to coastal waters?	____	____
J. Does the project lie within the 100-year floodplain?	____	____
K. Does the project involve the registration, sale, use, or application of pesticides?	____	____
L. 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)?	____	____
M. Has the applicable permit for groundwater recovery or for groundwater well installation been obtained?	____	____

SECTION F – ANTI-DEGRADATION EVALUATION

It is the applicant's responsibility to demonstrate the social and economic importance of the proposed activity, if subject to antidegradation requirements. In accordance with 40 CFR 131.12 and Section 335-6-10-.04 of the Alabama Department of Environmental Management Administrative Code, the following information must be provided, if applicable. 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 question 2 below. If "no", do not complete this section.

2. Has an Anti-Degradation Analysis been previously conducted and submitted to the Department for the new or increased discharge referenced in question 1? Yes [ ] No [✔].

   If "no" and the discharge is to a Tier II waterbody as defined in ADEM Admin. Code r. 335-6-10-.12(4), complete questions A through F below and also ADEM forms 311 and 312 or 313, whichever is applicable, (attached). Form 312 or 313, whichever is applicable, must be provided for each treatment discharge alternative considered technically viable. If "yes", do not complete this section.

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

   A. What environmental or public health problem will the discharger be correcting?
      See Attached
   B. Explain if and to what degree the discharger will be increasing employment as a result of the proposed discharge, either at its existing facility or as the result of the start-up of a related new facility or industry.
      See Attached
   C. Explain if and to what degree the discharge will prevent employment reductions?
      See Attached
   D. Describe any additional state or local taxes that the prospective discharger will be paying.
      See Attached
   E. Describe any public service the discharger will be providing to the community.
      See Attached
   F. Describe the economic or social benefit the discharger will be providing to the community.
      See Attached

SECTION G – EPA Application Forms

All Applicants must submit certain EPA permit application forms. More than one application form may be required from a municipal facility depending on the number and types of discharges or outfalls. The EPA application forms are found on the Department's website at http://www.adem.state.al.us/ and are also listed in Attachment 4.

SECTION H– ENGINEERING REPORT/BMP PLAN REQUIREMENTS

Any Engineering Report or Best Management Practice (BMP) Plans required to be submitted to ADEM by the applicant must be in accordance with ADEM 335-6-6-.08(i) & (j).

SECTION I– RECEIVING WATERS

Receiving Water(s)	303(d) Segment? (Y / N)	Included in TMDL?* (Y / N)
Little Creek	N	N

*If a TMDL Compliance Schedule is requested the following should be attached as supporting documentation:
(1) Justification for the proposed 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 reported 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 the 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 RULE 335-6-6-.09 "SIGNATORY REQUIREMENTS FOR PERMIT APPLICATIONS" (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 RESONSIBLE 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."

"I FURTHER CERTIFY UNDER PENALTY OF LAW THAT THE RESULTS OF ANY ANALYSES REPORTED AS LESS THAN DETECTABLE IN THIS APPLICATION OR IN ATTACHMENTS THERETO WERE PERFORMED USING THE EPA APPROVED TEST METHOD HAVING THE LOWEST DETECTION LIMIT READILY ACHIEVABLE FOR THE SUBSTANCE TESTED."

SIGNATURE OF RESPONSIBLE OFFICIAL: David T Stovall DATE SIGNED: 11/22/18

(TYPE OR PRINT) DAVID T. STOVALL

NAME OF RESPONSIBLE OFFICIAL: David Stovall

OFFICIAL TITLE OF RESPONSIBLE OFFICIAL: Partner

MAILING ADDRESS: 120 Bishop Circle, Suite 300

AREA CODE & PHONE NUMBER: 205 403-9158

SIGNATORY REQUIREMENTS FOR PERMIT APPLICATIONS

Responsible official is defined as follows:

1. 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
2. In the case of a partnership, by a general partner
3. In the case of a sole proprietorship, by the proprietor, or
4. In the case of a municipal, state, federal, or other public facility, by either a principal executive officer, or a ranking elected official.
5. In the case of a private or semi-public facility, the responsible official is either a principal executive officer or the owner of the corporation or other entity.

Attachment 1 to Supplementary Form
ADEM Form 311

Alternatives Analysis

Applicant/Project: _____

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			
2 Pretreatment/Discharge to POTW			
3 Relocation of Discharge			
4 Reuse/Recycle			
5 Process/Treatment Alternatives			
6 On-site/Sub-surface Disposal			
(other project-specific alternatives considered by the applicant; attach additional sheets if necessary)			
7			
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: _____

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

ADEM Form 311 3/02

Attachment 2 to Supplementary Form

Calculation of Total Annualized Project Costs for Public-Sector Projects

A. Capital Costs

Capital Cost of Project $_____

Other One-Time Costs of Project (Please List, if any):

_____ $_____

_____ $_____

_____ $_____

Total Capital Costs (Sum column) $_____ (1)

Portion of Capital Costs to be Paid for with Grant Monies $_____ (2)

Capital Costs to be Financed [Calculate: (1) – (2)] $_____ (3)

Type of Financing (e.g., G.O. bond, revenue bond, bank loan) _____

Interest Rate for Financing (expressed as decimal) _____ (i)

Time Period of Financing (in years) _____ (n)

Annualization Factor = $\frac{i}{(1+i)^n - 1} + i$ _____ (4)

Annualized Capital Cost [Calculate: (3) x (4)] _____ (5)

B. Operating and Maintenance Costs

Annual Costs of Operation and Maintenance (including but not limited to: monitoring, inspection, permitting fees, waste disposal charges, repair, administration and replacement.) (Please list below.)

_____ $_____

_____ $_____

_____ $_____

_____ $_____

Total Annual O & M Costs (Sum column) $_____ (6)

C. Total Annual Cost of Pollution Control Project

Total Annual Cost of Pollution Control Project [(5) + (6)] $_____ (7)

ADEM Form 312 3/02

Attachment 3 to Supplementary Form
ADEM Form 313

Calculation of Total Annualized Project Costs
for Private-Sector Projects

Capital Costs to be Financed (Supplied by applicant)	$	(1)
Interest rate for Financing (Expressed as a decimal)		(i)
Time Period of Financing (Assume 10 years*)	10 years	(n)
Annualization Factor = $\frac{i}{(1+i)^{10}-1} + i$		(2)
Annualized Capital Cost [Calculate: (1) x (2)]	$	(3)
Annual Cost of Operation and Maintenance (including but not limited to monitoring, inspection, permitting fees, waste disposal charges, repair, administration and replacement)**	$	(4)
Total Annual Cost of Pollution Control Project [(3) + (4)]	$	(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 3/02

Attachment 4 to Supplementary Form

NPDES PROGRAM
PERMIT APPLICATION FORMS
ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

TYPE DISCHARGE	ADEM FORMS	EPA FORMS
New or existing once through non-contact cooling water and/or cooling tower blowdown, and/or sanitary wastewater (non-process wastewater only). Note: POTWs and privately owned domestic treatment works should use Form 2A.	Supplemental Information Form 187 – (Industrial) or Form 188 (Municipal)	Forms 1 and 2E
Existing discharges of process wastewater	Supplemental Information Form 187 – (Industrial) or Form 188 (Municipal)	Forms 1 and 2C
New discharges of process wastewater	Supplemental Information Form 187 – (Industrial) or Form 188 (Municipal)	Forms 1 and 2D
New or existing discharges composed entirely of stormwater meeting the EPA definition of stormwater associated with industrial activity	Supplemental Information Form 187 – (Industrial) or Form 188 (Municipal)	Forms 1 and 2F
New or existing discharges composed of stormwater meeting the EPA definition of stormwater associated with industrial activity, and any other non-stormwater discharges.	Supplemental Information Form 187 – (Industrial) or Form 188 (Municipal)	Forms 1 and 2F and, as appropriate, Forms 2E, 2E, 2C, and/or 2D
New or existing Publicly-Owned Treatment Works (POTWs) and Privately-Owned Treatment Works composed of sanitary wastewater	Supplemental Information Form 187 – (Industrial) or Form 188 (Municipal)	Forms 1 and 2A
New or existing land application of process wastewater. Form 2F is required for stormwater runoff from the land application site, if the site is not completely bermed to prevent runoff.	Supplemental Information Form 187 – (Industrial)	Forms 1, 2F, and 2C or 2D, as appropriate
New or existing land application of sanitary wastewater. Form 2F is required for stormwater runoff from the land application site, if the site is not completely bermed to prevent runoff.	Supplemental Information Form 187 – (Industrial) or Form 188 (Municipal)	Forms 1, 2A, and 2F

Testing requirements: Test procedures for all analyses shall conform to 40 CFR Part 136 or an alternate method specifically approved by the Department. If more than one method of analysis is approved, then the method having the lowest detection level shall be used.

CHELSEA ACRES WATER RECLAMATION FACILITY

ADEM FORM 188 ANTI-DEGRADATION EVALUATION

AND

ATTACHMENT 3 TO SUPPLEMENTARY FORM ADEM FORM 313

TABLE OF CONTENTS

1.0 INTRODUCTION

Pinnacle Wastewater Services, LLC is proposing a wastewater treatment facility to serve a proposed 400 lot residential development in Chelsea, Shelby County, just south of Highway 280. The facility will provide domestic wastewater treatment for the proposed Chelsea Acres subdivision. The total build-out is expected to be 400 homes which are scheduled to be completed within the next 5 years.

The development is located near the service area of the private sewer system known as the Shelby Ridge Utility System ("SRUS"), formerly known as the Double Oak Water Reclamation sewer system. The NPDES permit holder for this system is SRUS and is affiliated with SouthWest Water Company (permit no. AL0071501). Currently, the City of Chelsea is pursuing the purchase of the sewer system by use of eminent domain laws and SRUS is adverse to the City's position. The circumstances have created hostilities between the parties and uncertainty regarding the expansion of the sewer system. In addition, the cost to extend the SRUS to serve the proposed development and potential upgrades within the existing SRUS infrastructure to expand capacity to serve this development is cost prohibitive.

The project location is indicated in Figure 1.

Figure 1: Project Vicinity Map*

**from Google Maps copyright 2018 Google*

The Pinnacle Wastewater Services ("Pinnacle") owners are keenly aware of the environmentally sensitive nature of this watershed and are committed to providing a "state

of the art" system capable of meeting the anticipated stringent discharge limits. As part of the preliminary planning process, the design team assessed other alternatives including a community onsite treatment and disposal system. The findings from our review of the alternatives will be summarized in this report along with the estimated costs for each option.

The proposed wastewater treatment system will provide tertiary treatment prior to discharging to Little Creek, a tributary of Yellowleaf Creek which flows into the Coosa River.

The proposed system is designed to provide high quality water suitable for reuse. The proposed system will include treatment using a conventional activated sludge process followed by chemical precipitation, filtration and disinfection.

In accordance with 40 CFR 131.12 and the Alabama Department of Environmental Management Administrative Code, Section 335-6-10-.04 for anti-degradation, the following report for the Chelsea Acres Water Reclamation Facility is hereby submitted to ADEM for comment and approval.

2.0 ANTI-DEGRADATION EVALUATION

A. What environmental or public health problem will the discharger be correcting?
This facility will provide centralized treatment of wastewater for a new residential development in the Chelsea area and eliminate the need for individual septic tanks and disposal fields, which are prone to failure in this area. This system will be engineered to protect the water quality and habitat in and around Little Creek and the Coosa River basin.

B. How much will the discharger be increasing employment (at its existing facility or as the result of locating a new facility)?
This facility will need one part time employee as a certified plant operator and two laborers. The facility will also require the services of others for subsequent maintenance and repair work. Construction of the facility will employ the services of various craftsmen from different trades. In addition, it is estimated that 5 to 10 new jobs will be created in the service area. This is based upon the assumption that approximately one percent (1%) of the population served will be working in the service area.

C. How much reduction in employment will the discharger be avoiding?
Development of this property is contingent on finding a cost effective sewer service option. The contentious battle between the City and the private sewer service provider has caused concern regarding the extension of the sewer system and has resulted in the analysis of other sewer alternatives. Homebuilders and associated laborers in the Chelsea area will be relocated to other development opportunities if the Chelsea Acres development does not move forward.

D. How much additional state or local taxes will the discharger be paying?
The Permittee will pay Corporate Income Tax to the State. Further, there are local building permit fees for each new home and purchase of local business license.

E. What public service to the community will the discharger be providing?
This project will help attract new businesses and improve the quality of life of the local residents. The facility will provide centralized wastewater treatment under highly restrictive discharge requirements. In addition, the developer intends to provide public amenities within the development including a community dog park.

F. What economic or social benefit will the discharger be providing to the community?
This facility will provide sanitary sewerage service and related benefits to this development and will be sized to accommodate the total build-out (approximately 400 homes). This facility would provide the means for additional revenue and taxes for the local economy and greater employment opportunities. More commercial developments will be attracted to the area as the residential community grows.

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3.0 ALTERNATIVES ANALYSIS

Applicant/Project: Chelsea Acres Water Reclamation Facility

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 the 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, to include calculation of 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	See 4.01
2 Pretreatment/Discharge to POTW		X	See 4.02
3 Relocation of Discharge		X	See 4.03
4 Reuse/Recycle		X	See 4.04
5 Process/Treatment Alternatives	X		Activated Sludge, Filters and stream discharge, See 4.05
6 On-site/Sub-surface Disposal		X	See 4.06

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: OCTOBER 5, 2018

ALABAMA REGISTERED NO. 22177 PROFESSIONAL ENGINEER

4.0 ADEM FORM 313

4.01 ALTERNATIVE 1:

EXTENDED AERATION WWTP DISCHARGE TO LAND APPLICATION

Calculation of Total Annualized Project Costs
for Private-Sector Projects

Capital Costs to be Financed (Supplied by applicant)	$ 1, 350,000 (1)
Interest rate for Financing (Expressed as a decimal)	0.06 (i)
Time Period of Financing (Assume 10 years*)	10 years (n)
Annualization Factor = $\frac{i}{(1+i)^{10} - 1} + i$	0.136 (2)
Annualized Capital Cost [Calculate: (1) x (2)]	$ 183,600 (3)
Annual Cost of Operation and Maintenance (including but not limited to monitoring, inspection, permitting fees, waste disposal charges, repair, administration and replacement)**	$ 195,000 (4)
Total Annual Cost of Pollution Control Project [(3) + (4)]	$ 378,600 (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).

4.02 ALTERNATIVE 2:

PRETREATMENT/DISCHARGE TO POTW (CONNECT TO SRUS SEWER SYSTEM)

Calculation of Total Annualized Project Costs for Private-Sector Projects

Capital Costs to be Financed (Supplied by applicant)	$ 2,832,500	(1)
Interest rate for Financing (Expressed as a decimal)	0.06	(i)
Time Period of Financing (Assume 10 years*)	10 years	(n)
Annualization Factor $= \frac{i}{(1+i)^{10} - 1} + i$	0.136	(2)
Annualized Capital Cost [Calculate: (1) x (2)]	$ 385,220	(3)
Annual Cost of Operation and Maintenance (including but not limited to monitoring, inspection, permitting fees, waste disposal charges, repair, administration and replacement)**	$ 65,000	(4)
Total Annual Cost of Pollution Control Project [(3) + (4)]	$ 450,220	(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).

4.03 ALTERNATIVE 3:

RELOCATION OF DISCHARGE (TO YELLOWLEAF CREEK)

Calculation of Total Annualized Project Costs for Private-Sector Projects

Capital Costs to be Financed (Supplied by applicant)	$ 1,550,000	(1)
Interest rate for Financing (Expressed as a decimal)	0.06	(i)
Time Period of Financing (Assume 10 years*)	10 years	(n)
Annualization Factor = $\frac{i}{(1+i)^{10} - 1} + i$	0.136	(2)
Annualized Capital Cost [Calculate: (1) x (2)]	$ 210,800	(3)
Annual Cost of Operation and Maintenance (including but not limited to monitoring, inspection, permitting fees, waste disposal charges, repair, administration and replacement)**	$ 165,000	(4)
Total Annual Cost of Pollution Control Project [(3) + (4)]	$ 375,800	(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).

4.04 ALTERNATIVE 4:

REUSE/RECYCLE (OFF-SITE PUBLIC ACCESS & RESTRICTED ACCESS PROJECT)

Calculation of Total Annualized Project Costs for Private-Sector Projects

Capital Costs to be Financed (Supplied by applicant)	$ 2,200,000	(1)
Interest rate for Financing (Expressed as a decimal)	0.06	(i)
Time Period of Financing (Assume 10 years*)	10 years	(n)
Annualization Factor = $\frac{i}{(1+i)^{10} - 1} + i$	0.136	(2)
Annualized Capital Cost [Calculate: (1) x (2)]	$ 299,200	(3)
Annual Cost of Operation and Maintenance (including but not limited to monitoring, inspection, permitting fees, waste disposal charges, repair, administration and replacement)**	$ 265,000	(4)
Total Annual Cost of Pollution Control Project [(3) + (4)]	$ 564,200	(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).

4.05 ALTERNATIVE 5:

PROCESS/TREATMENT ALTERNATIVES (ADVANCED TREATMENT + SURFACE WATER DISCHARGE TO LITTLE CREEK)

Calculation of Total Annualized Project Costs for Private-Sector Projects

Capital Costs to be Financed (Supplied by applicant)	$ 1,200,000 (1)
Interest rate for Financing (Expressed as a decimal)	0.06 (i)
Time Period of Financing (Assume 10 years*)	10 years (n)
Annualization Factor $= \frac{i}{(1+i)^{10} - 1} + i$	0.136 (2)
Annualized Capital Cost [Calculate: (1) x (2)]	$ 163,200 (3)
Annual Cost of Operation and Maintenance (including but not limited to monitoring, inspection, permitting fees, waste disposal charges, repair, administration and replacement)**	$ 170,000 (4)
Total Annual Cost of Pollution Control Project [(3) + (4)]	$ 333,200 (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).

4.06 ALTERNATIVE 6:

ON-SITE/SUB-SURFACE DISPOSAL (AT SAME SITE AS LAND APPLICATION DISPOSAL)

Calculation of Total Annualized Project Costs for Private-Sector Projects

Capital Costs to be Financed (Supplied by applicant)	$ 2,025,000	(1)
Interest rate for Financing (Expressed as a decimal)	0.06	(i)
Time Period of Financing (Assume 10 years*)	10 years	(n)
Annualization Factor $= \frac{i}{(1+i)^{10} - 1} + i$	0.136	(2)
Annualized Capital Cost [Calculate: (1) x (2)]	$ 275,400	(3)
Annual Cost of Operation and Maintenance (including but not limited to monitoring, inspection, permitting fees, waste disposal charges, repair, administration and replacement)**	$ 195,000	(4)
Total Annual Cost of Pollution Control Project [(3) + (4)]	$ 470,400	(5)

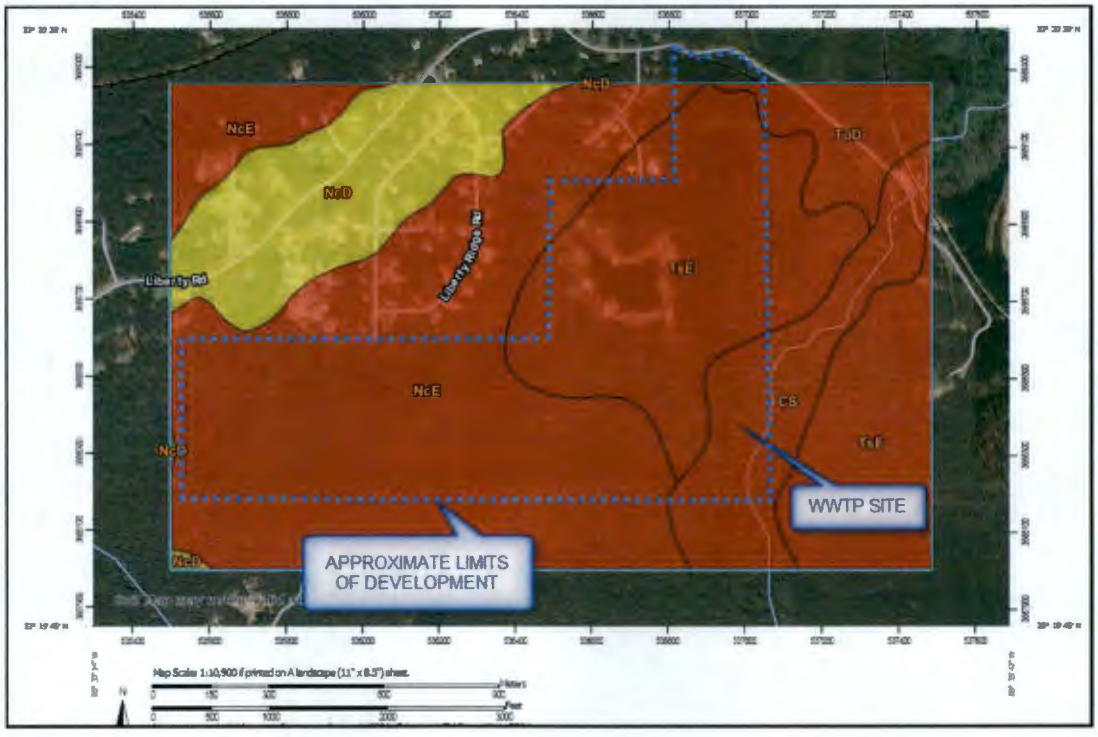
* While actual payback schedules may differ across projects and companies, assume equal annual payments over a 10-year period for consistency in comparing projects.

** 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).

5.0 SUMMARY

The analysis of alternatives was based on several assumptions. We will discuss the methodology and assumptions which went into the cost analysis for each alternative in this section.

Option 4.01 Land Application was considered for this project. The soils in this area were evaluated and primarily consist of the following general classifications (excerpted from the Web Soil Survey of Shelby County, Alabama by the U.S. Department of Agriculture):



The soil survey indicates that 100% of the area of interest is classified as very limited (red shading) for septic tank absorption fields which would be applicable to a land application system. In addition, the areas classified as somewhat limited (yellow shading) are areas located outside of the development boundary that have been previously developed and would not be available for land application. The following describes the predominant soils series in this area in greater detail:

- **Choccolocco Sterrett association, frequently flooded (CS):** The Choccolocco series consists of deep, well drained, moderately permeable soils that formed in loamy and silty fluvial deposits. These soils are on nearly level stream terraces and flood plains. This area is prone to flooding and would not be suitable for land application.

- **Nauvoo-Sunlight complex, 15 to 25 percent slopes (NcE):** The Nauvoo series consists of deep and very deep, well drained, moderately permeable soils that formed in loamy residuum weathered from sandstone or interbedded sandstone and shale. Solum thickness and depth to the Cr horizon is 10 to 20 inches. Much of this area is not suitable due to the slope steepness.

- **Townley-Sunlight complex, 12 to 35 percent slopes (TsE)**: The Townley series consists of moderately deep, well drained, slowly permeable soils on upland ridgetops and side slopes. They formed in clayey residuum weathered from shale or interbedded sandstone and shale. The slopes, depth to bedrock and slow permeability make these soils difficult for use in land application Services.

The review of published soil data indicates the soils are very limited for conventional on-site Services or land application. The Townley and Nauvoo soil series comprised the majority of soil area in the land around the wastewater treatment plant site. There are several obstacles to applying treated wastewater to the soils in this area. Because of these limitations, the land requirements and related associated costs were based on an application rate of 0.1 gallon per day per square foot of disposal area. The corresponding disposal area required for complete build-out (99,500 gallons per day) is approximately 28 acres (excluding the required expansion area and setbacks). The restrictive land application rate required for this alternative results in this option being economically non-viable.

The option of pretreatment and discharge to a POTW (Part 4.02) was included as part of this analysis. The nearest POTW is actually a private system known as the Shelby Ridge Utility System. The nearest accessible connection point is a 4 inch diameter force main located northeast of the Chelsea City Hall. An extension of the force main of roughly one mile would be required to connect to the force main at the City Hall lift station. In addition, there are improvements which will be required within the existing SRUS infrastructure once the development approaches build-out which would be funded by the developer. The improvements include the replacement of the existing 4" force main which runs under an active railroad.

Along with the SRUS extension required to serve the development, "reservation" fees are required to connect to the SRUS and ensure that adequate capacity is available at the wastewater treatment facility. Here is a rough estimate of costs for connection to the Shelby Ridge system:

- Lift Station and force main along Liberty Road and Hwy 47: roughly $700,000 + addition of stand-by pump in future (roughly $65,000)
- "Reservation" fees (currently $4,856.50 for residential): $2,005,735.00

The option of discharging treated wastewater at another location (such as direct discharge to the Yellowleaf Creek) is included as Part 4.03. Because this relocated outfall would still be located within the upper reaches of the Yellowleaf Creek watershed, we have assumed that the effluent quality would need to meet tertiary standards, similar to the limits imposed on the Double Oak Water Reclamation Facility. In addition to the treatment costs, there would be additional costs related to an outfall force main. The cost of this option is

significantly higher than the proposed alternative. Further, the access route to Yellowleaf Creek would require crossing into the Shelby Ridge Utility System service area which could create political obstacles that could cause construction delays and result in additional costs which cannot be quantified at this time.

The option of reuse/recycle (Part 4.04) would require significant storage for both reuse water and "reject" water. The level of treatment required for public access reuse is advanced tertiary and; we assume, would require additional disinfection, an improved metering and control system and substantially more staffing requirements. In addition, an infrastructure for the distribution of the reuse water, a public education campaign, and a means of discharging excess flow during non-growth or wet months are all considerations for this option which have been factored into the anticipated costs.

Alternative 4.05 Process/Treatment Alternatives represents advanced treatment and surface discharge to Little Creek. The treatment scheme suggested for this option is a conventional activated sludge plant followed by advanced chemical precipitation, filtration and disinfection. We assume the effluent quality would need to be equivalent to the minor dischargers that are currently discharging within the Yellowleaf Creek watershed.

The treatment system will be a biological waste treatment plant(s) that consists of seven (7) basic parts:

1. Surge Basin/Flow Equalization
2. Aeration Basins configured for Biological Nutrient Removal
3. Final Clarifiers
4. Chemical Feed Facilities
5. Tertiary Filters
6. Disinfection
7. Solids Digestion

The purpose of the surge basin is to dampen the diurnal flow variations and limit their impact on the biological process. The incoming flow would come into a section of the plant isolated hydraulically from the aeration basin and flow would be transferred at a controlled pace to the treatment plant.

The wastewater system will be designed for biological nutrient removal in anticipation of total phosphorous limits. The biological process may include both anaerobic and anoxic zones for nutrient removal. Chemical precipitation and filtration will be required to meet the expected stringent treatment limits.

The influent and effluent values listed in Table 1 are the anticipated design conditions for the Chelsea Acres Water Reclamation Facility. The effluent quality expected at the discharge of the proposed treatment plant will be consistent with other treatment plants that are currently permitted to discharge in the watershed.

Anticipated values for influent and effluent wastewater characteristics are provided in Table 1 (following page).

Flow Characteristic	Influent	Effluent
Average Daily Flow @ Build-out (MGD)	0.0995	0.0995
5 Day Biochemical Oxygen Demand (mg/l)	250	< 15
Total Suspended Solids (mg/l)	250	< 15
Ammonia Nitrogen (mg/l)	25	< 3
Total Kjeldahl Nitrogen (mg/l)	40	< 4
Nitrate (mg/l)	0	< 15
Nitrite (mg/l)	0	< 1
Total Nitrogen (mg/l)	40	< 20
Total Phosphorous (mg/l)	8 to 10	2.0
Chloride (mg/l)	<75	< 75
Sodium Adsorption Ratio	N/A	3 to 6
Electrical Conductivity (mho/cm)	N/A	0.7
Metals/Priority Pollutants*	N/A	N/A

** This system will not receive any industrial wastewater or process water; therefore this information is not applicable.*

Alternative 4.05 Process/Treatment Alternatives has been selected as the best option for this system. This system will be similar in design to several successfully operating treatment facilities which currently discharge to the Coosa River or its' tributaries. The proposed system will feature an activated sludge process with biological nutrient removal capabilities. Chemical addition and tertiary filtration will be provided to enhance total phosphorous reduction and provide a physical barrier for solids capture. In addition, process redundancy and emergency stand-by power will be vital components of the new system.

Pinnacle
wastewater services
2025 First Avenue North, Unit 100 | Birmingham, Alabama 35203

October 10, 2018

Mr. Nicolas Caraway
Alabama Department of Environmental Management
Post Office Box 301463
Montgomery, Alabama 36130-1463

RE: NPDES Permit Application
Chelsea Acres Water Reclamation Facility
Chelsea, Shelby County, Alabama

Dear Mr. Caraway:

On behalf of Pinnacle Wastewater Services, LLC, we hereby submits the attached completed permit application Form 188 with Anti-Degradation Report, EPA Application Form 1, EPA Application Form 2A and NPDES Form 2D for a proposed surface water discharge to the Little Creek, a tributary to Yellowleaf Creek in Shelby County. Along with the permit application, we have provided a check in the amount of $10,755.00 to cover the following fees:

Greenfield NPDES Permit Application Fee.....$1,610.00
Minor Municipals or Private Permit Application Fee..... $4,290.00
ADEM's Desktop Model..... $4,855.00

If you have any questions or require any additional information, please do not hesitate to call me at 205- 403-9158.

Very truly yours,

David T. Stovall, P.E.
Pinnacle Wastewater Services, LLC

Attachments

Cc: Mr. Eric Shula, D.R. Horton
Mr. Rhett Loveman, D.R. Horton

FACILITY NAME AND PERMIT NUMBER:
Chelsea Acres Water Reclamation Facility

Form Approved 1/14/99
OMB Number 2040-0086

FORM 2S NPDES

NPDES FORM 2S APPLICATION OVERVIEW

PRELIMINARY INFORMATION

This page is designed to indicate whether the applicant is to complete Part 1 or Part 2. Review each category, and then complete Part 1 or Part 2, as indicated. For purposes of this form, the term "you" refers to the applicant. "This facility" and "your facility" refer to the facility for which application information is submitted.

FACILITIES INCLUDED IN ANY OF THE FOLLOWING CATEGORIES MUST COMPLETE PART 2 (PERMIT APPLICATION INFORMATION).

1. Facilities with a currently effective NPDES permit.

2. Facilities which have been directed by the permitting authority to submit a full permit application at this time.

ALL OTHER FACILITIES MUST COMPLETE PART 1 (LIMITED BACKGROUND INFORMATION).

FACILITY NAME AND PERMIT NUMBER:
Chelsea Acres Water Reclamation Facility

Form Approved 1/14/99
OMB Number 2040-0086

PART 1: LIMITED BACKGROUND INFORMATION

This part should be completed only by "sludge-only" facilities - that is, facilities that do not currently have, and are not applying for, an NPDES permit for a direct discharge to a surface body of water.

For purposes of this form, the term "you" refers to the applicant. "This facility" and "your facility" refer to the facility for which application information is submitted.

1. Facility Information.

a. Facility name: Chelsea Acres Water Reclamation Facility

b. Mailing Address: 120 Bishop Circle, Suite 300 Pelham, Alabama 35124

c. Contact person: David Stovall
Title: Partner
Telephone number: (205) 403-9158

d. Facility Address (not P.O. B ox): Liberty Road
Chelsea, Alabama 35043

e. Indicate the type of facility

_____ Publicly owned treatment works (POTW) ___✓___ Privately owned treatment works

_____ Federally owned treatment works _____ Blending or treatment operation

_____ Surface disposal site _____ Sewage sludge incinerator

_____ Other (describe) _____

2. Applicant Information.

a. Applicant name: Pinnacle Wastewater Services, LLC

b. Mailing Address: 120 Bishop Circle, Suite 300 Pelham, Alabama 35124

c. Contact person: David Stovall
Title: Partner
Telephone number: (205) 403-9158

d. Is the applicant the owner or operator (or both) of this facility?

___✓___ owner _____ operator

e. Should correspondence regarding this permit be directed to the facility or the applicant?

_____ facility ___✓___ applicant

FACILITY NAME AND PERMIT NUMBER:
Chelsea Acres Water Reclamation Facility

Form Approved 1/14/99
OMB Number 2040-0086

3. **Sewage Sludge Amount.** Provide the total dry metric tons per latest 365 day period of sewage sludge handled under the following practices:

a.	Amount generated at the facility	0.00	dry metric tons
b.	Amount received from off site	0.00	dry metric tons
c.	Amount treated or blended on site	0.00	dry metric tons
d.	Amount sold or given away in a bag or other container for application to the land	0.00	dry metric tons
e.	Amount of bulk sewage sludge shipped off site for treatment or blending	0.00	dry metric tons
f.	Amount applied to the land in bulk form	0.00	dry metric tons
g.	Amount placed on a surface disposal site	0.00	dry metric tons
h.	Amount fired in a sewage sludge incinerator	0.00	dry metric tons
i.	Amount sent to a municipal solid waste landfill	0.00	dry metric tons
j.	Amount used or disposed by another practice	0.00	dry metric tons
	Describe _____		

4. **Pollutant Concentrations.** 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 part 503 for this 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 four and one-half years old.

POLLUTANT	CONCENTRATION (mg/kg dry weight)	ANALYTICAL METHOD	DETECTION LEVEL FOR ANALYSIS
ARSENIC			
CADMIUM			
CHROMIUM			
COPPER			
LEAD			
MERCURY			
MOLYBDENUM			
NICKEL			
SELENIUM			
ZINC			

5. **Treatment Provided At Your Facility.**

a. Which class of pathogen reduction does the sewage sludge meet at your facility?

_____ Class A _____ Class B ✓ Neither or unknown

b. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce pathogens in sewage sludge:

The proposed facility will utilize aerobic digestion and will be hauled offsite for disposal.

c. Which vector attraction reduction option is met for the sewage sludge at your facility?

_____ Option 1 (Minimum 38 percent reduction in volatile solids)
_____ Option 2 (Anaerobic process, with bench-scale demonstration)
_____ Option 3 (Aerobic process, with bench-scale demonstration)
_____ Option 4 (Specific oxygen uptake rate for aerobically digested sludge)
_____ Option 5 (Aerobic processes plus raised temperature)
_____ Option 6 (Raise pH to 12 and retain at 11.5)
_____ Option 7 (75 percent solids with no unstabilized solids)
_____ Option 8 (90 percent solids with unstabilized solids)
_____ Option 9 (Injection below land surface)
_____ Option 10 (Incorporation into soil within 6 hours)
_____ Option 11 (Covering active sewage sludge unit daily)
✓ None or unknown

d. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce vector attraction properties of sewage sludge:

All waste sludge will be hauled offsite for disposal. Waste sludge will be stored and thickened in an aerated sludge holding tank for removal by septage haulers.

6. **Sewage Sludge Sent to Other Facilities.** Does the sewage sludge from your facility meet the Table 1 ceiling concentrations, the Table 3 pollutant concentrations, Class A pathogen requirements, and one of the vector attraction options 1-8?
_____ Yes ✓ No

If yes, go to question 8 (Certification).

If no, is sewage sludge from your facility provided to another facility for treatment, distribution, use, or disposal?
✓ Yes _____ No

If no, go to question 7 (Use and Disposal Sites).

If yes, provide the following information for the facility receiving the sewage sludge:

a. Facility name: Valley Creek WWTP

b. Mailing address: 3923 Clear Water Drive Bessemer, AL 35023

c. Contact person: Daniel White
Title: Deputy Director Jefferson County Environmental Services
Telephone number: (205) 325-5496

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

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

Waste sludge will likely be hauled to a Jefferson County (AL) Environmental Services Department WWTP for processing and disposal.

FACILITY NAME AND PERMIT NUMBER:
Chelsea Acres Water Reclamation Facility

Form Approved 1/14/99
OMB Number 2040-0086

7. **Use and Disposal Sites.** Provide the following information for each site on which sewage sludge from this facility is used or disposed:

a. Site name or number _____

b. Contact person _____

Title _____

Telephone _____

c. Site location (Complete 1 or 2)

1. Street or Route # _____

County _____

City or Town _____ State _____ Zip _____

2. Latitude _____ Longitude _____

d. Site type (Check all that apply)

____ Agricultural	____ Lawn or home garden	____ Forest
____ Surface disposal	____ Public Contact	____ Incineration
✓ Reclamation	____ Municipal Solid Waste Landfill	____ Other (describe): _____

8. **Certification.** Sign the certification statement below. (Refer to instructions to determine who is an officer for purposes of this certification.)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with the 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 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 and official title: WYNN ECHOLS, JR. PARTNER

Signature: [signature]

Telephone number: (205) 324-9140

Date signed: 11/21/2018

SEND COMPLETED FORMS TO:

PART 2: PERMIT APPLICATION INFORMATION

Complete this part if you have an effective NPDES permit or have been directed by the permitting authority to submit a full permit application at this time. In other words, complete this part if your facility has, or is applying for, an NPDES permit.

For purposes of this form, the term "you" refers to the applicant. "This facility" and "your facility" refer to the facility for which application information is submitted.

APPLICATION OVERVIEW — SEWAGE SLUDGE USE OR DISPOSAL INFORMATION

Part 2 is divided into five sections (A-E). Section A pertains to all applicants. The applicability of Sections B, C, D, and E depends on your facility's sewage sludge use or disposal practices. The information provided on this page indicates which sections of Part 2 to fill out.

1. **SECTION A: GENERAL INFORMATION.**

   Section A must be completed by all applicants

2. **SECTION B: GENERATION OF SEWAGE SLUDGE OR PREPARATION OF A MATERIAL DERIVED FROM SEWAGE SLUDGE.**

   Section B must be completed by applicants who either:

   1) Generate sewage sludge, or

   2) Derive a material from sewage sludge.

3. **SECTION C: LAND APPLICATION OF BULK SEWAGE SLUDGE.**

   Section C must be completed by applicants who either:

   1) Apply sewage to the land, or

   2) Generate sewage sludge which is applied to the land by others.

   NOTE: Applicants who meet either or both of the two above criteria are exempted from this requirement if all sewage sludge from their facility falls into one of the following three categories:

   1) The sewage sludge from this facility meets the ceiling and pollutant concentrations, Class A pathogen reduction requirements, and one of vector attraction reduction options 1-8, as identified in the instructions, or
   2) The sewage sludge from this facility is placed in a bag or other container for sale or give-away for application to the land, or
   3) The sewage sludge from this facility is sent to another facility for treatment or blending.

4. **SECTION D: SURFACE DISPOSAL**

   Section D must be completed by applicants who own or operate a surface disposal site.

5. **SECTION E: INCINERATION**

   Section E must be completed by applicants who own or operate a sewage sludge incinerator.

FACILITY NAME AND PERMIT NUMBER:
Chelsea Acres Water Reclamation Facility

Form Approved 1/14/99
OMB Number 2040-0086

A. GENERAL INFORMATION

All applicants must complete this section.

A.1. Facility Information.

a. Facility name: Chelsea Acres Water Reclamation Facility

b. Mailing Address: 120 Bishop Circle, Suite 300 Pelham, Alabama 35124

c. Contact person: David Stovall
Title: Partner, Pinnacle Wastewater Services, LLC
Telephone number: (205) 403-9158

d. Facility Address (not P.O. Box): Liberty Road
Chelsea, Alabama 35043

e. Is this facility a Class I sludge management facility? ____ Yes ✓ No

f. Facility design flow rate: 0.10 mgd

g. Total population served 1,400.00

h. Indicate the type of facility:

____ Publicly owned treatment works (POTW)
✓ Privately owned treatment works
____ Federally owned treatment works
____ Blending or treatment operation
____ Surface disposal site
____ Sewage sludge incinerator
____ Other (describe)

A.2. Applicant Information. If the applicant is different from the above, provide the following:

a. Applicant name: Pinnacle Wastewater Services, LLC

b. Mailing Address: 120 Bishop Circle, Suite 300 Pelham, Alabama 35124

c. Contact person: David Stovall
Title: Partner
Telephone number: (205) 403-9158

d. Is the applicant the owner or operator (or both) of this facility?

✓ owner ✓ operator

e. Should correspondence regarding this permit should be directed to the facility or the applicant.

____ facility ✓ applicant

A.3. Permit Information.

a. Facility's NPDES permit number (if applicable): _____

b. List, on this form or an attachment, all other Federal, State, and local permits or construction approvals received or applied for that regulate this facility's sewage sludge management practices:

Permit Number	Type of Permit
_____	_____
_____	_____
_____	_____

A.4. Indian Country. Does any generation, treatment, storage, application to land, or disposal of sewage sludge from this facility occur in Indian Country?

_____Yes ✓ No If yes, describe: _____

A.5. Topographic Map. Provide a topographic map or maps (or other appropriate map(s) if a topographic map is unavailable) that show the following information. Map(s) should include the area one mile beyond all property boundaries of the facility:

a. Location of all sewage sludge management facilities, including locations where sewage sludge is stored, treated, or disposed.

b. Location of all wells, springs, and other surface water bodies, listed in public records or otherwise known to the applicant within 1/4 mile of the facility property boundaries.

A.6. Line Drawing. Provide a line drawing and/or a narrative description that identifies all sewage sludge processes that will be employed during the term of the permit, including all processes used for collecting, dewatering, storing, or treating sewage sludge, the destination(s) of all liquids and solids leaving each unit, and all methods used for pathogen reduction and vector attraction reduction.

A.7. Contractor Information.

Are any operational or maintenance aspects of this facility related to sewage sludge generation, treatment, use or disposal the responsibility of a contractor? ✓ Yes _____No

If yes, provide the following for each contractor (attach additional pages if necessary):

a. Name: EOS Utility Services, LLC

b. Mailing Address: 2025 First Avenue North, Unit 100 Birmingham, AL 35203

c. Telephone Number: (205) 327-9140

d. Responsibilities of contractor: Wasting sludge during operations and contacting septage hauler to remove sludge as needed.

FACILITY NAME AND PERMIT NUMBER:
Chelsea Acres Water Reclamaton Facility

Form Approved 1/14/99
OMB Number 2040-0086

A.8. Pollution 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 Part 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 four and one-half years old.

POLLUTANT	CONCENTRATION (mg/kg dry weight)	ANALYTICAL METHOD	DETECTION LEVEL FOR ANALYSIS
ARSENIC			
CADMIUM			
CHROMIUM			
COPPER			
LEAD			
MERCURY			
MOLYBDENUM			
NICKEL			
SELENIUM			
ZINC			

A.9. Certification. Read and submit the following certification statement with this application. Refer to the instructions to determine who is an officer for purposes of this certification. Indicate which parts of Form 2S you have completed and are submitting:

✓ Part 1 Limited Background Information packet

Part 2 Permit Application Information packet:

✓ Section A (General Information)

✓ Section B (Generation of Sewage Sludge or Preparation of a Material Derived from Sewage Sludge)

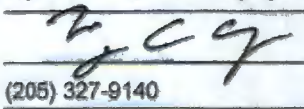
____ Section C (Land Application of Bulk Sewage Sludge)

____ Section D (Surface Disposal)

____ Section E (Incineration)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with the 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 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 and official title: Wynn Echols, Jr. Managing Partner Pinnacle Wastewater Services, LLC

Signature:  Date signed: 11/21/2018

Telephone number: (205) 327-9140

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

SEND COMPLETED FORMS TO:

B. GENERATION OF SEWAGE SLUDGE OR PREPARATION OF A MATERIAL DERIVED FROM SEWAGE SLUDGE

Complete this section if your facility generates sewage sludge or derives a material from sewage sludge.

B.1. Amount Generated On Site.

Total dry metric tons per 365-day period generated at your facility: 4.00 dry metric tons

B.2. Amount Received from Off Site. If your facility receives sewage sludge from another facility for treatment, use, or disposal, provide the following information for each facility from which sewage sludge is received. If you receive sewage sludge from more than one facility, attach additional pages as necessary.

a. Facility name: NA

b. Mailing Address: _____

c. Contact person: _____

Title: _____

Telephone number: _____

d. Facility Address (not P.O. Box): _____

e. Total dry metric tons per 365-day period received from this facility: _____ dry metric tons

f. Describe, on this form or on another sheet of paper, any treatment processes known to occur at the off-site facility, including blending activities and treatment to reduce pathogens or vector attraction characteristics.

_____

_____

B.3. Treatment Provided At Your Facility.

a. Which class of pathogen reduction is achieved for the sewage sludge at your facility?

_____ Class A _____ Class B ✓ Neither or unknown

b. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce pathogens in sewage sludge:

_____

_____

c. Which vector attraction reduction option is met for the sewage sludge at your facility?

_____ Option 1 (Minimum 38 percent reduction in volatile solids)
_____ Option 2 (Anaerobic process, with bench-scale demonstration)
_____ Option 3 (Aerobic process, with bench-scale demonstration)
_____ Option 4 (Specific oxygen uptake rate for aerobically digested sludge)
_____ Option 5 (Aerobic processes plus raised temperature)
_____ Option 6 (Raise pH to 12 and retain at 11.5)
_____ Option 7 (75 percent solids with no unstabilized solids)
_____ Option 8 (90 percent solids with unstabilized solids)
✓ None or unknown

B.3. Treatment Provided At Your Facility. (con't)

d. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce vector attraction properties of sewage sludge:
Sludge is stored in an aerobic holding tank for an average hydraulic residence time of 2 to 3 weeks

e. Describe, on this form or another sheet of paper, any other sewage sludge treatment or blending activities not identified in (a) - (d) above:

Complete Section B.4 if sewage sludge from your facility meets the ceiling concentrations in Table 1 of 40 CFR 503.13, the pollutant concentrations in Table 3 of §503.13, the Class A pathogen reduction requirements in §503.32(a), and one of the vector attraction reduction requirements in § 503.33(b)(1)-(8) and is land applied. Skip this section if sewage sludge from your facility does not meet all of these criteria.

B.4. Preparation of Sewage Sludge Meeting Ceiling and Pollutant Concentrations, Class A Pathogen Requirements, and One of Vector Attraction Reduction Options 1-8.

a. Total dry metric tons per 365-day period of sewage sludge subject to this section that is applied to the land: _____ dry metric tons

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

_____Yes _____No

Complete Section B.5. If you place sewage sludge in a bag or other container for sale or give-away for land application. Skip this section if the sewage sludge is covered in Section B.4.

B.5. Sale or Give-Away in a Bag or Other Container for Application to the Land.

a. 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: _____ dry metric tons

b. Attach, with this application, 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.

Complete Section B.6 if sewage sludge from your facility is provided to another facility that provides treatment or blending. This section does not apply to sewage sludge sent directly to a land application or surface disposal site. Skip this section if the sewage sludge is covered in Sections B.4 or B.5. If you provide sewage sludge to more than one facility, attach additional pages as necessary.

B.6. Shipment Off Site for Treatment or Blending.

a. Receiving facility name: Valley Creek WWTP

b. Mailing address: 3923 Clear Water Drive Bessemer, AL 35023

c. Contact person: Daniel White

Title: Deputy Director, Jefferson County Environmental Services Dept.

Telephone number: (205) 325-5496

d. Total dry metric tons per 365-day period of sewage sludge provided to receiving facility: 4.00

B.6. Shipment Off Site for Treatment or Blending. (con't)

e. Does the receiving facility provide additional treatment to reduce pathogens in sewage sludge from your facility? ✓ Yes ___ No

Which class of pathoger reduction is achieved for the sewage sludge at the receiving facility?

_____ Class A ✓ Class B _____ Neither or unknown

Describe, on this form or another sheet of paper, any treatment processes used at the receiving facility to reduce pathogens in sewage sludge:

Anaerobic digestion

f. Does the receiving facility provide additional treatment to reduce vector attraction characteristics of the sewage sludge?
✓ Yes _____ No

Which vector attraction reduction option is met for the sewage sludge at the receiving facility?

_____ Option 1 (Minimum 38 percent reduction in volatile solids)
_____ Option 2 (Anaerobic process, with bench-scale demonstration)
_____ Option 3 (Aerobic process, with bench-scale demonstration)
✓ Option 4 (Specific oxygen uptake rate for aerobically digested sludge)
_____ Option 5 (Aerobic processes plus raised temperature)
_____ Option 6 (Raise pH to 12 and retain at 11.5)
_____ Option 7 (75 percent solids with no unstabilized solids)
_____ Option 8 (90 percent solids with unstabilized solids)
_____ None

Describe, on this form or another sheet of paper, any treatment processes used at the receiving facility to reduce vector attraction properties of sewage sludge.

g. Does the receiving facility provide any additional treatment or blending activities not identified in (c) or (d) above? ✓ Yes ___ No

If yes, describe, on this form or another sheet of paper, the treatment or blending activities not identified in (c) or (d) above:

Blends with biosolids with other Jefferson County WWTP's prior to land application

h. If you answered yes to (e), (f), or (g), 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).

i. 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

If yes, provide a copy of all labels or notices that accompany the product being sold or given away.

Complete Section B.7 if sewage sludge from your facility is applied to the land, unless the sewage sludge is covered in:

- **Section B.4 (it meets Table 1 ceiling concentrations, Table 3 pollutant concentrations, Class A pathogen requirements, and one of vector attraction reduction options 1-8); or**
- **Section B.5 (you place it in a bag or other container for sale or give-away for application to the land); or**
- **Section B.6 (you send it to another facility for treatment or blending).**

B.7. Land Application of Bulk Sewage Sludge.

a. Total dry metric tons per 365-day period of sewage sludge applied to all land application sites: 4.00 dry metric tons

B.7. Land Application of Bulk Sewage Sludge. (con't)

b. Do you identify all land application sites in Section C of this application? ✓ Yes _____ No

If no, submit a copy of the land application plan with application (see instructions).

c. 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

If yes, describe, on this form or another sheet of paper, how you notify the permitting authority for the States where the land application sites are located. Provice a copy of the notification.

_____

_____

Complete Section B.8 if sewage sludge from your facility is placed on a surface disposal site.

B.8. Surface Disposal.

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

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

_____ Yes _____ No

If no, answer B.8.c through B.8.f for each surface disposal site that you do not own or operate. If you send sewage sludge to more than one such surface disposal site, attach additional pages as necessary.

c. Site name or number _____

d. Contact person _____

Title _____

Telephone number _____

Contact is _____Site owner _____Site operator

e. Mailing address _____

_____

f. Total dry metric tons of sewage sludge from your facility placed on this surface disposal site per 365-day period: _____ dry metric tons

Complete Section B.9 if sewage sludge from your facility is fired in a sewage sludge incinerator.

B.9. Incineration.

a. Total dry metric tons of sewage sludge from your facility fired in all sewage sludge incinerators per 365-day period: 0.00 dry metric tons

b. Do you own or operate all sewage sludge incinerators in which sewage sludge from your facility is fired? _____ Yes _____ No

If no, complete B.9.c through B.9.f for each sewage sludge incinerator that you do not own or operate. If you send sewage sludge to more than one such sewage sludge incinerator, attach additional pages as necessary.

c. Incinerator name or number: _____

d. Contact person: _____

Title: _____

Telephone number: _____

Contact is: _____ Incinerator owner _____ Incinerator operator

B.9. Incineration. (con't)

e. Mailing address: _____

_____

f. Total dry metric tons of sewage sludge from your facility fired in this sewage sludge incinerator per 365-day period: _____ dry metric tons

Complete Section B.10 if sewage sludge from this facility is placed on a municipal solid waste landfill.

B.10. Disposal in a Municipal Solid Waste Landfill. Provide the following information for each municipal solid waste landfill on which sewage sludge from your facility is placed. If sewage sludge is placed on more than one municipal solid waste landfill, attach additional pages as necessary.

a. Name of landfill _____

b. Contact person _____

Title _____

Telephone number _____

Contact is _____ Landfill owner _____ Landfill operator

c. Mailing address _____

_____

d. Location of municipal solid waste landfill:

Street or Route # _____

County _____

City or Town _____ State _____ Zip _____

e. Total dry metric tons of sewage sludge from your facility placed in this municipal solid waste landfill per 365-day period:

_____ dry metric tons

f. List, on this form or an attachment, 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
_____	_____
_____	_____
_____	_____

g. Submit, with this application, 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)

h. Does the municipal solid waste landfill comply with applicable criteria set forth in 40 CFR Part 258?

_____ Yes _____ No

Pinnacle wastewater services
2025 First Avenue North, Unit 100 | Birmingham, Alabama 35203

December 11, 2018

Ms. Sandra Lee
Alabama Department of Environmental Management
Post Office Box 301463
Montgomery, Alabama 36130-1463

RE: NPDES Permit Application
Chelsea Acres Water Reclamation Facility
Chelsea, Shelby County, Alabama

Dear Ms. Lee:

On behalf of Pinnacle Wastewater Services, LLC, we hereby submits the attached completed NPDES Form 2S. The permit application and a check for the fees were previously submitted.

If you have any questions or require any additional information, please do not hesitate to call me at 205- 403-9158.

Very truly yours,

D.S.

David T. Stovall, P.E.
Pinnacle Wastewater Services, LLC

Attachment

Cc: Mr. Eric Shula, D.R. Horton
Mr. Rhett Loveman, D.R. Horton